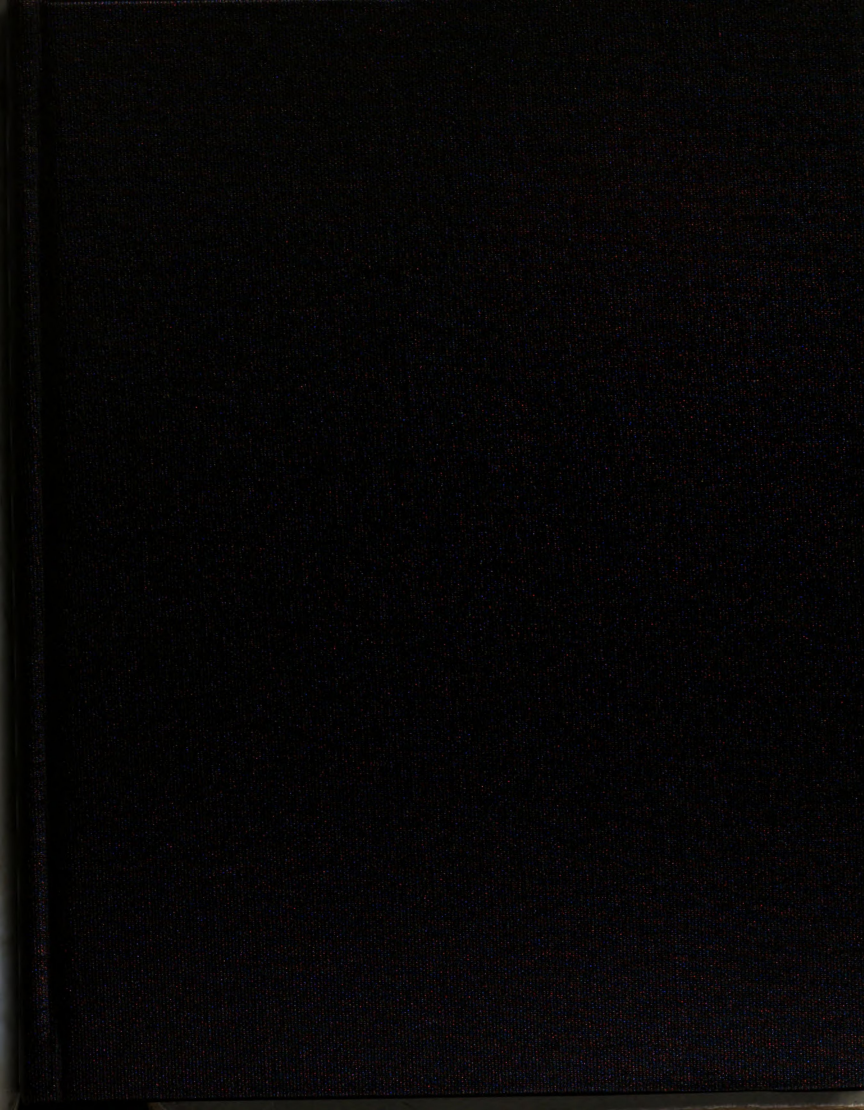




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THREE PROFESSORS TEACHING ONLINE:
THE REALIZATION OF TEACHING PERSPECTIVES

By

Kathryn Hershey Dirkin

A DISSERTATION

Submitted to
Michigan State University
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ABSTRACT

THREE PROFESSORS TEACHING ONLINE: THE REALIZATION OF TEACHING PERSPECTIVES

By

Kathryn Hershey Dirkin

Online learning is making immense inroads into higher education. By 2005 overall college and university enrollment in fully online courses reached 3.2 million, a nearly 35% increase from 2004 (Allen & Seaman, 2006). Most research on faculty teaching online courses has focused on the technical aspects of conducting online courses, the nature of changing faculty roles, barriers to getting faculty to teaching online, and faculty attitudes towards technology (Gunawardena & McIsaac, 2004). What has often been neglected is the critical role played by teachers in creating powerful educational experiences for their students (Coppola *et al.*, 2002; Goodyear, 2000). Specifically, there is little research on how faculty's teaching perspectives (the beliefs and values teacher bring to the teaching context) shape how they teach online.

An underlying assumption, or proposition, of this study was that one's beliefs and values about teaching and learning affect how one decides what to teach, how to teach, and how to assess student learning. This focus on beliefs and values helps us understand what an individual teacher brings to the classroom and the lens through which they envision the teaching process- what we call the teaching perspective. Understanding how teaching perspectives affect the online classroom is particularly important because teachers are not only contending with the complexities of classroom life, they are also dealing with new tools for communication and representation.

This study used a qualitative design with a multiple case study approach. Although each instructor was using the same course management system they all created very different courses. Several key issues emerged highlighting the transactional relationship between teachers and technology. In one case practices had to be re-envisioned to fit within the perceived zone of possibility defined by the tool. In the other two cases the professors repurposed the technology to create representations that were in line with their teaching perspective.

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To Ken, for your unlimited patience, love and support

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LIST OF ABBREVIATIONS

CMS	Course Management System
LMS	Learning Management System
TPCK	Technological, Pedagogical, Content, Knowledge

CHAPTER 1

INTRODUCTION

“Teaching, perhaps more than most professions, involves a high level of personal involvement” (Calderhead, 1996, p. 720).

Background and Statement of the Problem

During the 1990s, universities increasingly began to offer distance-education courses that were delivered wholly online. In 2000-2001 just over half of 2- and 4-year degree-granting institutions were offering distance education courses (U.S. Department of Education, 2003). Web courses promise access to a wider range of both traditional and nontraditional students by overcoming barriers of time and distance. Furthermore, the resourceful use of Internet technology could reduce the cost of education, making it available to an even wider audience (Moe & Blodgett, 2000). Moving higher education classrooms into a virtual environment provides a somewhat different context for learning. “Online instruction implies a connection to a computer system at a venue distinct from the learner’s personal computer; this venue can be across the world or across campus” (University of Illinois Faculty Seminar, 1999, p. 9). Students and teachers separated by distance and time rely on information and communication technologies to mediate their interactions and represent subject matter. Changing the context for teaching can have implications for how we teach and what we bring to the teaching context.

Unfortunately, research in online educational environments often has neglected the teacher’s role in creating an educational experience for students (Coppola, Hiltz, & Rotter, 2002; Goodyear, 2000). Much of the research related to online education has focused on learners and the design of learning environments rather than on teachers (Coppola et al., 2002; Goodyear, 2000). In conceptualizing environments as conducive

to student-centered learning (Bonk & Cunningham, 1998; Harasim, 1990), the role of the teacher often has been reduced to that of being the facilitator. In other instances, in an effort to make online education scalable, the faculty member is actually divorced from the actual teaching of the course, and merely serves as the designer and content specialist. Some designers of online courses even have argued that instructors do not need to have deep knowledge of the domains to be taught (Collison, Elbaum, Haavind, & Tinker, 2000). According to Collison et al., "The same well-crafted course, facilitated by a skillful moderator who is not necessarily an expert in the subjects learned and discussed, can still offer high-quality outcomes to its participants" (p. 8)

This situation is problematic because, by separating the faculty who design the course from the actual teaching of the course, an "expert's" knowledge of the pedagogical cannot be drawn upon during the teaching process. Pedagogical-content knowledge (Shulman, 1986) is the understanding of how to teach a particular subject, including awareness of the "ways of formulating the subject that make it comprehensible to others" (p. 9) and knowledge of common student misconceptions and how to address those misconceptions. Thus, this seeming "industrialization" of education has not only neglected the role of pedagogical-content knowledge in learning, but more important, it has ignored what a teacher does to facilitate learning. It is not surprising that a meta-analysis of online learning showed that the large variation in instructor involvement was "one of the most defining differences between traditional face-to-face education and distance educations" (Zhao, Lei, Yan, Lai, & Tan, 2004, p. 1846).

A few studies have been conducted on moderating, discourse, and participation that can inform our understanding of the actions involved in teaching online. For instance, in a study of online educational discourse patterns, An and Levin (2003) found

that a teacher's opening prompts, such as presenting readings or resources that students needed to read before discussion, asking students to discuss specific questions, and providing guidelines for the discussion, resulted in cueing patterns of discourse among students. Although that research shed some light on the ways that teachers can influence the focus of discussions, it is different from studying the ways that teachers interact with students around the substantive structures of content through discourse.

Purpose of the Study

In undertaking this study, I sought to bring the teacher back into the online learning experience. Ignoring the influence of the instructor prevents us from understanding how learning and teaching occur in online settings. An underlying assumption, or proposition, of this study is that one's beliefs and values about teaching and learning affect how one decides what to teach, how to teach, and how to assess student learning. This focus on beliefs and values helps us understand what individual teachers bring to the classroom and the lens through which they envision the teaching process--what I call the teaching perspective.¹

Understanding how teaching perspectives affect the online classroom is particularly important because teachers are not only contending with the complexities of classroom life, they are also dealing with new tools for communication and representation. As Coppola et al. (2002) wrote, "The factors (knowledge, attitudes, course design, communication, and interaction) that influence learning in the traditional classroom are present in the distance-learning situation. However, the media for

¹This is a more general definition of teaching perspective than the one used by Pratt and Associates (1998). They noted that beliefs, along with intentions and actions, define one's teaching perspective. Pratt and Associates wrote, "Perspectives, then, govern what we do as teachers and why we think such actions are worthy or justified" (p. 10).

transmission of these factors changes from direct contact to contact via telecommunication” (p. 172). Little is known today about how teaching perspectives (beliefs, values, and so on) influence an instructor’s use of technology for teaching. Therefore, my purpose in this research was to develop an understanding of the relationship between one’s teaching perspective and teaching with technology in the online classroom.

Overview

Chapter 2 is a survey of literature on teaching perspectives (beliefs, values, actions), the role of technology in pedagogy (particularly online learning), and the possible relationships between them. Following this review is a description of the conceptual framework for the study and a statement of the research questions. Chapter 3 presents the methodological framework for this study. My analyses of the participants’ reported beliefs and values are described in Chapter 4. Then, in Chapter 5, I present my analyses of how those beliefs and values were realized in their online teaching. In Chapter 6 I examine each case, looking for discrepancies or disconfirming evidence. Finally, in the last chapter I highlight the major themes and contributions of this study as well as its limitations.

CHAPTER 2

LITERATURE REVIEW

Two major areas of research literature provide background and context for the study. The first is literature on teachers' beliefs, values, and professional identities. At the beginning of each semester, teachers arrive at their classrooms with a perspective on teaching that influences their intentions and actions. This teaching perspective is forged from what they believe to be true about teaching and learning, the experiences they value for themselves and their students, and their own identities as educators. Together these elements create a lens through which instructors perceive what is important and necessary for teaching and learning in their classrooms--in other words, why it is that they do what they do. Therefore, to understand how teaching perspectives influence teaching, I examined research on teachers' beliefs, values, and professional identities.

Research on teachers has dealt primarily with teaching in face-to-face classrooms. A shift in focus to online teaching adds additional layers of complexity: Interactions between students and teachers are now mediated by technology, and the activities of teaching must be adapted to the new medium. For example, the bandwidth for communication often is limited to text and static images. How content is represented is limited by the available digital formats. Thus, the second major domain reviewed in this chapter is research on the relationship between teachers and technology, as well as construction of instructors' personas in online environments.

Our teaching perspective will dictate the demands we make on the technology. Therefore, when studying how a teaching perspective is manifested in the online classroom, we need to examine the literature regarding the transactional relationship between teaching and technology. This relationship is especially evident in the instructor

persona teachers are able to represent to their students. The construction of instructors' personas in online classrooms is mediated both by their professional identity, the type of instructor they want to project, and the communication channels of the technology. Thus, the research on instructor presence in technology-mediated environments will provide a focused examination of the transactional relationship between teaching and technology.

The complex interplay of issues related to teaching in online environments requires an examination of the literature on teaching perspectives, including teachers' beliefs, values, and professional identities. It also requires an examination of the scholarship related to the transactional relationship between teachers and technology, as well as instructors' online personas. This review of the literature then leads up to the research questions posed in this study.

Teaching Perspectives

“Beliefs and values are not minor; they are fundamental. They provide the submerged ‘bulk of the iceberg’ upon which any particular [teaching] technique rests” (Pratt & Associates, 1998, p. 16).

Pratt and Associates (1998) defined teaching perspectives as based on commitments to learners, teaching, content, context, and ideals. The authors identified five teaching perspectives in higher education: (a) the transmission perspective, (b) a developmental perspective, (c) an apprenticeship perspective, (d) a nurturing perspective, and (e) a social-reform perspective.

Each perspective is characterized by a set of beliefs, intentions, and actions. Intentions, beliefs, and actions are indicators of commitments. In his research with 253 practitioners, Pratt (2002) found “their comments revealed they were committed to uniquely blended combinations of actions, intentions, and beliefs” (p. 6) and that “educators show greater, or lesser, commitment to some elements than others when

talking about teaching” (p. 7). Thus, each practitioner is unique in the degree to which he or she is committed to the elements. The direction and intensity of one’s effort often depend on values central to one’s teaching identity.

In the online environment, acting upon one’s commitments to learners, teaching, content, context, and ideals is complicated because there is little, if any, direct interaction between students and instructors; interactions and actions are mediated by the tools of the environment. Thus, translation of one’s teaching perspective is not direct. Elements such as time available, knowledge of technology, personal theories of andragogy, and the cognitive demands of the discipline also can influence enacted teaching practices. At the same time, because online interaction with students is mediated by telecommunication technologies, those technologies can shape how teaching practices are realized. This same mediation of interactions with students also will affect how teachers represent themselves online. Instructors’ professional identity and their representation of that identity also are important parts of their teaching perspective. Thus, there is interplay among the goals of teaching, the instructors’ beliefs and values about teaching and learning, their professional identity, and the tools of the environment that results in the realization of teaching and technology.

Beliefs and Actions

The assumptions that faculty make about subject matter and how students learn it influence how they approach teaching tasks and how they interact with their students (Calderhead, 1996). For instance, whether an instructor has a transmission or socio-cultural view of teaching and learning will influence how he or she structures tasks and orchestrates interactions with and among students. In a study of college professors, Stark (2000) reported that teachers’ beliefs strongly affected how they enacted their

professional roles. In a review of literature on the role of knowledge and beliefs in the professional lives of experienced and novice teachers, Borko and Putnam (1996) noted that teachers' use of an instructional innovation was filtered through lenses constructed from existing knowledge, beliefs, and practices. Teachers' beliefs, having been shaped by years of schooling--and for experienced teachers, years of routinized classroom practices --can constitute an obstacle to instituting instructional reform (Borko & Putnam, 1996). Although Borko and Putnam focused their attention on instructional reform rather than technology, the overall argument still stands.

Beliefs, in this study, were defined as propositions held by an individual and judged by that individual to be true (Green, 1971; Pajares, 1992; Richardson, 1996). In the literature, researchers have written about teachers' beliefs in terms of personal agendas, implicit theories, conceptions of teaching, orientations to teaching, and teaching perspective. Beliefs are connected in complex ways within a single belief structure and among other cognitive and affective structures. Those beliefs that are more functionally connected to other beliefs are considered to be central beliefs. Central beliefs are stable; however, if they do change, that change will have a ripple effect throughout the entire belief system (Rokeach, 1968). Beliefs are formed out of one's interaction with the world and in turn shape how one perceives subsequent interactions. They can influence how one characterizes a phenomenon and even predict behavior (Nespor, 1987). It is important to note that a given belief does not necessarily translate directly into a given set of behaviors. There are different types of beliefs, some more influential than others on one's behavior (Rokeach, 1968). Also, one has to take into consideration the object of the beliefs and the context in which the object lies. Rokeach wrote,

How a person will behave with respect to an object within a situation will

therefore depend, on the one hand, on the particular beliefs or predispositions activated by the attitude object and, on the other hand, by the beliefs or predisposition activated by the situation.

We must thus postulate that a person's social behavior must always be mediated by at least two types of attitudes--one activated by the object, the other activated by the situation. (p. 126)

Thus the context in online classrooms may play an important role in how beliefs and values manifest themselves. Furthermore, as Fang (1996) noted in a review of literature on teachers' beliefs and practices, a teacher's ability to attend to his or her beliefs in the classroom can be constrained by the complexities of classroom life and school culture. Clearly, the advent of new technologies of online education could offer new challenges to belief structures.

In a study of four novice social studies teachers, Wilson and Wineburg (1988) found that the educators' approaches to teaching were heavily influenced by their "disciplinary lenses"--lenses forged not only from a knowledge base garnered in specific disciplines such as anthropology and political science, but also from previously held beliefs. Thus, the subject matter to be taught, and prior experiences, can influence which beliefs come to the forefront. In a sense, instructors' beliefs about what is important to know and how to go about teaching guide their acts of teaching. Beliefs differ in their influence on how we live our lives; beliefs that are more central to our identity are more influential than peripheral beliefs (Rokeach, 1968).

Scholars have viewed actions as interpretations of beliefs, although teachers may engage in instructional practices that contradict their espoused beliefs. According to current conceptions of beliefs and actions, the relationship is interactive, especially when practitioners engage in a study of their beliefs. "Beliefs are thought to drive actions;

however, experiences and reflection on action may lead to changes in and/or additions to beliefs” (Richardson, 1996, p. 104).

Confronted with new mediums for teaching, online instructors may find aspects of their teaching suddenly problematized, creating a rich context for understanding the interplay among beliefs, teaching, and the technology-mediated environment. Beliefs may be the lenses that give shape to our decisions and actions, but values, the evaluative side of beliefs, determine persistence and how one engages in an activity.

Values

Whereas understanding teachers’ beliefs helps us to know what they believe to be true, understanding teachers’ values helps us determine what they believe is important and which experiences are meaningful. Values can mediate the direction and intensity of choices and behaviors. “Beliefs may also become values, which house the evaluative, comparative, and judgmental functions of beliefs and replace predisposition with an imperative to action” (Pajares, 1992, p. 314). Our values are not static entities we are endowed with at birth. Rather, values--like beliefs--develop through our experiences with the world. When teachers perceive an element of the teaching process to be meaningful and satisfying, they are engaging in an activity that they value. Engaging in teaching practices that are consonant with one’s educational values also reaffirms one’s professional identity.

Values, particularly those that are strongly held, influence our choices and involvement in activities. Feather (1995) wrote,

The strength of a person’s values may affect how much effort a person puts into an activity and how long a person persists at an activity, the choices that are made between alternative activities, the way situations are construed, and the affective responses that occur when an activity is undertaken either successfully or unsuccessfully in terms of the standards that are set. (p. 1135)

Expanding the definition of teaching perspectives to include values allows one to address both what teachers believe about teaching and learning, and their motivation to act on those beliefs. Teaching online can be as time consuming as face-to-face teaching (if not more so), leaving instructors with critical choices about how their teaching is realized. Thus, along with the teaching context (e.g., a technology-mediated environment), teachers' motivation can also affect the eventual teaching that takes place. Another important motivational force for instructors is the affirmation of their professional identities.

Professional Identities

Identity theorists are beginning to incorporate beliefs and values into the moving target known as identity development. The current dominant view holds that one's identity develops through interactions with the environment and undergoes a constant process of reinterpretation (Beijaard, Meijer, & Verloop, 2004; Erikson, 1968; Gee, 2001). A hierarchy of values can be internalized through identification with other groups or individuals (Erikson, 1968), or even developed in opposition to the group or individuals. Theorists writing about teachers' "professional identities" are also beginning to incorporate into their definitions the idea that an individual's professional identity influences what that teacher values. Beijaard et al. (2004) quoted Tickle as saying,

Professional identity refers not only to the influence of the conceptions and expectations of other people, including broadly accepted images in society about what a teacher should know and do, but also to what teachers themselves find important in their professional work and lives based on both their experiences in practice and their personal backgrounds (Tickle, 2000). (p. 108)

If beliefs and values are lenses that shape our perceptions of the world, then they are forged from the grains of sand of our identities. A faculty member's professional

identity shapes what he or she values; at the same time, being able to teach in a manner consonant with those values helps to reaffirm her or his professional identity. Palmer (1997) wrote insightfully,

Here is a secret hidden in plain sight: *good teaching cannot be reduced to technique: good teaching comes for the identity and integrity of the teacher.* In every class I teach, my ability to connect with my students, and to connect them with the subject, depends less on the methods I use than on the degree to which I know and trust my selfhood--and am willing to make it available and vulnerable in the service of learning. (p. 16)

Beliefs and values that are more central to one's professional identity are more likely to have a greater influence on one's teaching. However, because identities are always being reinterpreted as one interacts with the world, values are also in flux. Although drastic changes may not occur, and certain values remain central, some values will move to the foreground and others to the background.

The issue of identity for online teachers is especially complex and rich. Of particular significance is what Turkle (1995) called the "decentered" or "fluid" nature of identities on the Internet. She wrote, "The Internet has become a significant social laboratory for experimenting with the constructions and reconstructions of self that characterize postmodern life" (p. 180). If teaching in a manner that is consonant with one's values reaffirms one's professional identity and creates a sense of satisfaction, what happens when one is teaching in an environment where old practices have to be reconceptualized and identities are communicated through text or other media? In an environment that is predominantly text-based and interactions are separated by time, how a teacher manages a class by interjecting his or her personality is complex and, for many, quite difficult. Unfortunately, there has been little discussion about how faculty's beliefs and values and the tools of the environment interact to mediate how teaching and

technology in the online environment are “realized.” Thus, there exists a need for research on how beliefs and values embedded in one’s teaching perspective interact with the tools of the environment to affect the “realization” of teaching and technology.

Teachers and Technology: A Transactional Relationship

In this dissertation I take a “post-technocratic” perspective (Burbules & Callister, 2000), moving beyond the technology-as-a-tool outlook. It is a framework for thinking about the transactional relationship we have with technology. This is a two-way relationship that affects us on many levels. However, it is not the technology tool that changes us but the relationship that gets established with and around the tool. This transactional or “relational” view acknowledges that as we create new technologies and use them for varied purposes, we are also being changed by the very technologies we shape. Various technologies throughout time have changed us culturally and psychologically. Changes in our physical environment caused by technology also have affected us physically, both in how we move in our environment and in how we think about our physical bodies (Burbules & Callister, 2000).

Bruce’s (1993) theory about innovation and social change takes into account how the beliefs and values of users, along with the functional structure of the technology or innovation, shape its eventual realization. His work is in the same vein as Burbules and Callister’s (2000) work on the transactional relationship we have with technology. Realization is the process by which social processes and contexts become the lens through which uses are perceived. Interestingly, when one thinks about the realization of technology along with what we understand about how beliefs and values are shaped, it seems that contexts and environments of our past and present and our experiences within those contexts shape what is possible and what is necessary. Bruce noted that

“participants interpret the innovation and then re-create it as they adapt it to fit with institutional and physical constraints, and with their own goals and practices” (p. 17). An innovation does not have to be a piece of modern technology; it can also be a new idea or instructional method.

In Bruce’s innovation and social-change model, the alignment of the beliefs and values of a social system and the perceived value of the technology mediate the relationship between users and an innovation. When the values of a social system are perceived to be consonant with the technology, it is adopted with minimal changes to the practices of the adopter and the technology itself. Dissonance between the values of the social system and perceptions of the technology can cause adopters to re-create the technology or change their existing practices and beliefs. “As an innovation comes into being in real settings, it acquires new and unexpected shapes. It is not only used differently, it is re-created to conform with the goals and norms of the people” (Bruce, 1993, p. 19). Dissonance can also cause a change in the individual or social system to realign with the perceived values of the technology. Bruce’s framework assists us in thinking about why beliefs and values are critical for understanding faculty’s use of technology. Technology in a sense becomes malleable. How and when technology is used becomes largely affected by surrounding beliefs and values.

The idea of the “realization” of technology can also be extended to the “realization” of teaching perspectives. Mishra and Koehler’s (2006) Technological, Pedagogical, Content, Knowledge (TPCK) framework for educational technology addresses the “realization” of teaching and technology. Within this framework, the realization of content, technology, and pedagogy results from the complex interplay among the elements, each constraining and defining the other. A decision concerning any

one element affects the other elements in the model. In one of their earlier studies supporting TPCK, Mishra and Koehler presented a case study of a design team that was creating an online course. The design of the course was mediated by the design team's understanding of the subject matter, pedagogical practices for teaching the subject matter as well as knowledge of students' misconceptions, and the affordances and constraints of the technology for representing content and designing learning opportunities for students.

In a study of technology innovations used by teachers in face-to-face classrooms, Zhao, Pugh, Sheldon, and Byers (2002) reported, "We found that the way an individual's pedagogical beliefs interacted with the technology they know and decide to use affected the likelihood of successful technology integration" (pp. 495-496). At the same time, the technology creates a context for what is possible and what is desirable. Also, one's knowledge of different technologies or online pedagogical practices may limit her or his instructional choices. Thus, a transactional framework is necessary for understanding the relationship between teaching perspectives and uses of technology.

Mishra and Koehler's TPCK framework, along with Bruce's innovation and social-change theory, creates a transactional framework for understanding teaching in online environments. The realization of teaching perspectives, for the purposes of this study, is the manifestation of instructors' beliefs and values in their acts of teaching in their online courses.

Teaching in a technology-mediated environment creates an interesting context for studying the relationship among teaching, technology, and beliefs and values. Because the online learning environment provides fewer opportunities to communicate with visual and paralinguistic cues, operates under different affordances and constraints on how knowledge is represented, and often occurs between students and instructors who are

separated by time and space, the ways in which teachers perform the key functions of teaching cannot be assumed to be the same as in a face-to-face (ftf) course. In a study of colleges and universities offering distance-education programs between 2000 and 2001, researchers reported that 90% of 2- and 4-year colleges offered Internet courses using asynchronous technologies, and 80% of institutions indicated that they were going to start having distance education programs or increase their course offerings. They also planned on providing Internet-based courses using asynchronous technologies (U.S. Department of Education, 2003). Thus, the majority of interactions between teachers and students will be technologically mediated and separated by time.

The technology becomes the conduit and regulator of communications, but it may also cause teachers to rethink their practices. As faculty gain knowledge and experience in teaching online, their beliefs and values may change. In a review of research on faculty roles and satisfaction in asynchronous learning networks, Dziuban, Shea, and Arbaugh (2005) noted that e-learning environments can change faculty's expectations for teaching because they create new demands for the faculty. Faculty now must be more concerned about the design of their courses, how to decrease ambiguity, and how to structure interactions. Asynchronous learning networks for faculty teaching online generally use the same course management system.

As Bruce (1993) noted, how closely the realized use of an innovation is to its idealized use "depends on the developer's assessment of the underlying social process in the context of use" (p. 18). If developers envision very different social processes and context of use than the actual ones surrounding implementation, the chances are great that how the technology is "realized" will be different from the way the developers idealized the use of their product. Furthermore, every educational software or program instantiates

within in it a theory of learning. Embedded are assumptions about the nature of learning (how learning happens) and the role of instruction.

For example, software applications such as the Knowledge Forum are based on conceptions of knowledge construction as a social and purposeful endeavor. In this environment students can contribute their ideas to a shared database. Once they have contributed an idea, the students and their community of learners can revise, critique, and build upon the idea. They can also link to other ideas and organize or reorganize their thinking. Specifically, the Knowledge Forum arose out of the theoretical work of Scardamalia and Bereiter (1994). Conversely, software that does not supply tools for exploring, problem solving, or communicating ideas but does provide opportunities to practice skills and demonstrate knowledge, as well as providing immediate feedback, is probably based on a behaviorist theory of learning. How information is represented, the manner in which students engage with the content, and how knowledge construction is supported and students are assessed are just some of the key indicators of an underlying theory of learning.

If a computer program presents students with practice problems and gives them feedback on their responses, those elements can be considered functions of the system. Allowing students to post conjectures about a science project also can be considered a function of a system. What functions are integrated into a software program or system and how they are integrated are under the purview of the designers of the system, designers who have their own assumptions about what sorts of processes are important for teaching and learning.

A Course Management System (CMS) incorporates many different functionalities for online teaching and learning into a single system. In a study of faculty's use of a

CMS, Morgan (2003) found that faculty whose use of a CMS decreased over time complained that it took too much time to design and redesign their courses. More important, they also noted that they found the system “inflexible” (p. 3). Faculty who were not able to adapt the system to meet their needs actually decreased their use of the technology. The system was designed for uses that did not include those envisioned by the faculty. A CMS is not the only example of a technology whose structure is based on the beliefs and values of the designers, causing users to accommodate to the structure of the technology. In an article on the use of Microsoft’s popular presentation program, PowerPoint, Tufte (2003) wrote,

This history [*of PowerPoint*] is revealing, for the metaphor behind the PP cognitive style is the software corporation itself. That is, a big bureau--engaged in computer programming (deeply hierarchical, nested, highly structured, relentlessly sequential, one-short-line-at-a-time) and in marketing (fast pace, misdirection, advocacy not analysis, slogan thinking, branding, exaggerated claims, marketplace ethics). (p. 11)

Designers of technology work within an organization that often has its own collective beliefs and values.

In the case of CMS, designers create these digital environments based on their own assumptions about how instructors will use their environment. The CMS used by instructors involved in this study was ANGEL™. In a review of comments posted in a 2003 campus wide survey of ANGEL, Banyas (2007) found that “ANGEL system designers have made significant assumptions about the faculty using the software that impact how these users interact with the software, students and their course content” (p. 6). If instructors use a CMS in which the processes for communication, assessment, and representation are programmed based on assumptions of teaching and learning that may be different from their own, they may experience dissonance with the technology. More

important, they will have to instantiate their teaching within an environment that has very different beliefs and values mediating the structure of the technology.

The Instructor's Presence in an Online Course

A CMS does not just mediate the process of teaching and learning in an online course. It can also influence how students perceive their instructors. In an educational context, the presence of teachers and students can affect the quality of interactions, student motivation, group cohesion, and the effectiveness of both verbal and nonverbal communication (Gunawardena & McIsaac, 2004). The importance of an instructor's being able to effectively communicate a sense of presence should not be undervalued. In a study of student evaluations, Jackson and Murray (1997) found that students perceived forming a relationship with the instructor and the instructor's enthusiasm when presenting material as more important than the instructional design of the course. Similarly, Gorham (1988) and Christophel and Gorham (1995) showed that instructor immediacy was enhanced by nonverbal interaction, and this in turn led to increased student motivation, instructional ratings, and learning. The key idea is that the social richness of students' interactions with their instructors affects students' impressions of their instructors and the course content. This, in turn, affects students' motivation to learn and their experience with the course.

Social richness can also be defined in terms of social presence (Lombard & Ditton, 1997). Short, Williams, and Christie (1976) developed the social-presence theory to identify the effect of different communication media on the perceived satisfaction with and efficiency of communication. They thought that a communication medium, such as those included in a CMS, could place constraints on the physical signals available during an interaction. Garrison, Anderson, and Archer (2003) focused their definition of social

presence on the ability of the people in the interaction to project themselves as “real people,” rather than the quality of the medium. Arguably, the person an instructor projects is who he or she is both personally and professionally, the individual’s instructor persona.

Garrison and Anderson (2003) expanded the conception of presence to include cognitive, social, and teaching presence within a “‘collaborative constructivist’ view of teaching and learning” (p. 12). Teaching presence is the instructional design and organization, facilitation, and direct instruction engaged in for the purpose of facilitating learning outcomes. An instructor presence is not projected solely through interactions with students during the course; it is also manifested in the design of the course. What students perceive is the persona projected by the instructor, a persona born of the instructor’s professional and personal identity. This professional identity can mediate what one values; those values in turn help to reaffirm the instructor’s professional identity. For an instructor, projecting an online persona through social presence can be a process of discovery and affirmation of his or her beliefs and values. However, the degree to which students perceive that presence is mediated by the communication channels of the online environment.

The online environment provides a unique context for studying how beliefs and values are connected with our uses of technology because the environment creates different demands on teachers, may require new pedagogical practices, and, more important, requires some use of technology. The new demands on teachers may have implications for the instantiations of their beliefs and values about teaching and learning.

Conceptual Framework

Calderhead (1996) had this to say about personal involvement:

Teaching, perhaps more than most professions, involves a high level of personal involvement. The act of teaching requires teachers to use their personality to project themselves in particular roles and to establish relationships within the classroom so that children's interest is maintained and a productive working environment is developed. The teacher relies on his personality and his abilities to form personal relationships in order to manage the class and ensure its smooth running. (p. 720)

Even the most fundamental elements such as projecting ourselves as educators and establishing relationships within the online classroom are all mediated by the technologies in a CMS. We "talk" with students via text in a discussion forum. We present static images of ourselves in our electronic profiles so they can "see" us. We adapt the technology to fit our needs, such as using discussion forums not to "talk" but to share documents. We adapt, re-purpose, re-see (and sometimes even do not see) the technology to meet our needs--needs that exist because we value an outcome, we believe the actions are necessary for learning, or they affirm who we are professionally, all elements of our teaching perspective. At the same time, we are forced to work within the functions allowed by the technologies in a CMS. Our relationship with technology is thus transactional.

Research Questions

By focusing on the relationship between teaching perspectives and online teaching, I explored not only how teachers interject their personality into their online courses. I also hope to shed light on the relationship between teachers' online teaching personas and their underlying beliefs and values about teaching and learning.

The review of literature spanned multiple research and scholarly areas in an effort to develop a better understanding of the complex process by which teaching perspectives are translated (mediated) through technology. The key research question posed in this

study has to do with the manner in which beliefs and values are realized when instructors move their teaching online:

Research Question: How are selected professors' beliefs and values about teaching, learning, and technology realized in their teaching and use of technology in their online courses?

This overarching question leads to the following sub questions:

- What are the professors' reported beliefs and values about teaching and learning?
- What are the professors' reported beliefs about technology?
- How do the professors' reported beliefs and values influence their actions and process of teaching an online course?
- What is the relationship between teaching and technology in an online course?

This literature review presented a survey of literature on teaching perspectives (beliefs, values, actions), the role of technology in pedagogy (particularly online learning), and the possible transactional relationships between them. In the next chapter the methodological framework for this study is presented.

CHAPTER 3

METHODOLOGY

In carrying out this investigation, I was interested in how professors' beliefs and values about teaching, learning, and technology were realized in their teaching and use of technology in their online courses. I assumed that the path from teaching perspective to teaching actions is not direct or unidirectional. In the process, one constructs perceptions of what is necessary, as well as perceptions of the affordances and constraints of the technological tools for teaching and learning. The alignment of the design of the medium or tool with professors' perceptions of affordances and constraints creates a context for enacting what one believes should be taught and how it should be taught. The alignment between pedagogical beliefs and perceptions of a technology can also affect its success in the classroom.

I designed a multiple case study approach to study professors' teaching perspectives and their relationships with planning and carrying out online teaching. In this study I looked closely at three committed and experienced instructors as they taught online.

Research Questions

The primary research question was, How are selected professors' beliefs and values about teaching, learning, and technology realized in their teaching and use of technology in their online courses? I also posed the following subquestions related to this primary question:

- What are the professors' reported beliefs and values about teaching?
- What are the professors' reported beliefs about technology?

- How do the professors' reported beliefs and values influence their actions and process of teaching an online course?
- What is the relationship between teaching and technology in an online course?

Method

In this study I used a qualitative design with a multiple case study approach. The case study approach is particularly well-suited to an exploratory study in which the researcher is attempting to understand a phenomenon for which there is little existing research. Early research on faculty teaching online courses or distance education courses focused on changing faculty roles, barriers to getting faculty to teach online, and faculty's attitudes toward technology (Gunawardena & McIsaac, 2004). Little research has been conducted on how faculty's teaching perspectives shape how they teach online. This study will provide the rich description needed for understanding teaching and learning in an online environment.

The case study approach also was appropriate for this research because of the importance of understanding the relationship between a phenomenon (teaching) and a context (online education environments). As Yin (2003) wrote, "You would use the case method because you deliberately want to cover contextual conditions- believing that they might be highly pertinent to your phenomenon of study" (p. 13).

Participants

The participants for this study were selected using a purposeful sampling technique. Purposeful sampling is "based on the assumption that the investigator wants to discover, understand and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 1998, p. 61). When using purposeful sampling it is important that a set of criteria be established for sample selection. As part of the sample-

selection criteria for this study, the instructors needed to have teaching experience at the secondary level, be teaching a master's level course online, and have prior experience with teaching online courses. Informal information was gathered about the participants' teaching perspectives to ensure that the participants selected would provide rich contrasts to each other.

The selected participants were experienced professors who had taught for more than 5 years. Experienced professors were chosen because they had developed a teaching perspective and were able to articulate it. Because I was interested in their perspectives as they pertain to teaching in the online environment, I also solicited participants who had taught online courses for at least 2 years. Another reason for choosing experienced online educators is that inexperience with technology can be a barrier to enacting one's goals and intentions for teaching online.

I selected three participants for this study. An important element of a case study approach is that it be conducted within a bounded system or context (Merriam, 1998). In this study all of the participants would be teaching an online master's-level course using the same course-management software (ANGEL). The instructors (pseudonyms are used for their names) also were chosen because of their commitment to student learning in an online environment and their potential to be rich contrasts to each other.

All of the participants had been teaching for at least 10 years, and had been teaching online courses for a large midwestern university. Dr. Parsons was teaching in nursing. Dr. Davidson and Dr. Cohen were teaching in educational administration. Initial discussions during the selection process revealed that these three individuals presented an interesting contrast of perspectives.

Selecting two participants in the same field with different perspectives and analyzing the cases for similarities and differences, helped to ensure that the inferences I would be making about the cases were more directly related to the enactment of a perspective, rather than a single perspective. However, by selecting participants from the same department and field, I could look across a field. I also selected another professor in a different department, but with an orientation toward teaching that was similar to that of one of the other two participants. Including this third participant allowed me to make observations across a single orientation but within a different discipline. These criteria afforded a rich set of cases, based on replication logic (Yin, 2003). This supported the generation of a theoretical framework for examining the relationship between one's teaching perspectives and the online classroom.

Replication logic (Yin, 2003), rather than sampling logic, is important for research based on a case study design. Replication logic is based on the idea that cases are selected because they meet the following criteria: (a) they are similar (or vary in only one or two variables) and are expected to support a proposition by yielding the same predictable results (a literal replication), or (b) they will yield contrasting results but for predictable reasons, thus supporting a theoretical proposition (theoretical replication).

Data Collection

To ensure internal validity, I collected data from multiple sources such as interviews, observations, documents, and electronic media. The data collected included (a) responses to semi-structured interviews, (b) archives of discussion boards, and (c) archives of course materials (including screen shots of the interface).

Data collection and data analysis were conducted concurrently. Interviews with the instructors took place before the course began or in the first week of the course,

during the middle of the course, and after the completion of the course. The first interview was used to gather information on the participants' teaching perspectives and intentions for the course. The interview could be divided into four sections: (a) the participants' teaching background, (b) beliefs about learning, (c) beliefs about teaching, and (d) beliefs about technology and teaching.

I began the interview by asking the instructors to talk about their backgrounds at the university and teaching online. Then I asked about their beliefs regarding how students learn. After talking with them about their beliefs about learning, I asked them to describe the types of experiences they thought were valuable for student learning. In order to elicit the participants' intentions for learning in their online courses, I asked them to explain how they created these types of experiences in their courses.

Once the participants had talked about their beliefs about learning, I asked them to talk about their beliefs about effective teaching. If they taught more than one course online, I asked whether their perspective varied across the online courses they taught. I then asked them what they thought were valuable teaching experiences. In order to elicit from them the connections they might have drawn between subject matter and teaching, I asked them whether they thought there were important considerations that were particular to teaching their subject matter. Then, I asked them what they believed were important roles and responsibilities for instructors and the type of teaching presence they thought would be important for them to convey in their courses. After talking about their beliefs concerning the roles and responsibilities of the instructor, I asked participants to talk about how they knew they had been successful with their teaching.

The last segment of the interview addressed the instructors' beliefs about the role of technology in teaching and learning. I asked whether they thought there were any

benefits and/or obstacles associated with technology particularly related to teaching and learning in online environments. (See Appendix A for the interview protocol.)

The second interview (see Appendix B) was conducted toward the middle of the course and was used to gather information about the instructors' teaching perspectives and how those perspectives were related to the way they were currently teaching the courses. After the first interview, the second set of questions was revised to include an opportunity for the participants to demonstrate what they did when teaching online. One of the participants, Dr. Cohen, explained his composition of feedback to the students. The other two instructors talked about the process of responding in the discussion forums and papers. I also added a statement asking the instructors to use a metaphor to explain their teaching. Dr. Cohen was the only participant who did not give a metaphor.

The second interview had a more flexible script than the first interview. I also decided to restrict the number of specific questions asked in the second interview and posed more open-ended questions. Some of these changes were based on my review of transcripts from the first set of interviews. At the beginning of the interview, I asked participants to talk about what was going well in their courses, as well as anything with which they were struggling. I also asked whether they had made any changes to their courses since the last interview and how they managed their time when teaching online courses. In the first interview, some of the participants brought up the demands on their time when teaching an online course. Thus, in the second interview, I asked them to talk about how they managed their time when teaching online. Finally, I asked them to talk about something that they thought was important from the last preceding interview in light of the current semester.

The third and last interview (see Appendix C) was used to collect data about the participants' reflections on teaching online. I began by asking them what had gone well during the semester and what had been some challenges. I also asked whether they had made any changes to the course since the last interview, based on an observation of the course. The instructors also were asked whether they had altered their intentions for the course and how the course was going that semester. Once again, they were asked to talk about important ideas they had mentioned in previous interviews in light of their online courses.

The transcripts of the discussion forums, and course materials (including screen shots of the course), were used to support or contrast the instructors' perceptions of how their actions were related to their teaching perspectives. Each course page was printed and archived. Screen shots also were taken of the main navigation page under what is called the Lessons Tab in ANGEL. These resources were used to document the instructors' specific teaching acts and to triangulate the findings from the other analyses.

Data Analysis

Data analysis and data collection occurred concurrently. After the first interview, the transcripts were briefly coded for participants' beliefs and values about teaching, learning, and technology so as to inform the second interview. In the second interview, I asked the instructors to talk about important ideas identified in this initial analysis in light of the courses. My analysis for the primary research question (*How are selected professors' beliefs and values about teaching, learning, and technology realized in their teaching and use of technology in their online courses?*) drew upon all of the data collected.

I coded each transcript for statements that contained expressed beliefs about teaching, learning, and technology. Value statements were also coded as beliefs. I then analyzed the coded transcripts for existing themes. This coding was done concurrently with an analysis of the instructional moves made in the content pages of the courses. To clarify how the instructors were teaching online, I coded the text of each page of their courses. A single unit consisted of one instructional move. The analysis of instructional moves was based on Shuell's (1996) definitions of interventions. They are "some intervention on the learning processes of students," in this case written text on a content page, "in an attempt to facilitate their acquisition of desired educational outcomes" (p. 731). In Chapter 5, I describe in detail how the coding scheme was applied, as it is necessary to talk about the application in the context of a course.

The pages were coded through an iterative process in which a first pass through each of the courses produced a set of codes that was then applied to all of the courses. During this process, new codes emerged and others were refined. I represented these codes visually to gain a general understanding of the ebb and flow of an online course and to facilitate an understanding of what types of actions occurred in the courses. The visual representation captured the quantity and variety of instructional moves made by the professors in the content of their online courses. The results of this analysis are presented in Chapter 5.

A visual representation of the data revealed information about the general sequencing of actions in an entire course. However, the analysis did not represent a cumulative view of the teaching actions in the course.

Next, the text and design of the courses were analyzed to determine what the instructors actually did and "said" in their courses. Patterns of speech, such as how they

referred to students or common statements, also were coded to indicate an instructor presence. Text in an online course is the “voice” of the instructor and helps to create an instructor persona. As in a face-to-face course, each teacher has his or her own unique voice. Two teachers might be trying to accomplish the same instructional goal, but the talk or discourse they use will be quite different.

Each instructor built his or her course within the same CMS (ANGEL). I analyzed how they built their courses within ANGEL and identified how course artifacts were organized. I also examined elements that were not easily achieved within the system or uses that might have represented some misunderstandings or gaps in knowledge of the system. The purpose of the analysis was to look for similarities and differences in course design and how these aligned with the instructors’ teaching perspectives.

By examining the instructors’ reported beliefs from the interviews, what they actually did in their courses as represented in their course pages, and how they felt about technology and how they used it, I was able to examine the relationship between one’s beliefs and values and technology.

The next two chapters provide details of the results of the data analysis. The analysis of each participant’s articulated teaching perspective is presented in Chapter 4. The analysis was used to create a profile for each instructor. In Chapter 5, I present the results of my analysis of the participants’ course content, course design, and course enactment. Each analysis is presented in light of the instructor profiles that were established in the previous chapter. In Chapter 6, I look within cases for discrepancies or disconfirming evidence. Finally, in Chapter 7 I pull together the ideas and themes that ran through Chapters 4, 5, and 6. In that chapter I also address the implications of the findings for our understanding of online teaching and learning.

CHAPTER 4

INSTRUCTOR BELIEFS

This chapter focuses on the primary research question of this study, How are selected professors' beliefs and values about teaching, learning, and technology realized in their teaching and use of technology in their online courses? This question was broken down and examined in four main parts: (a) the instructors' reported beliefs and values about teaching and learning, (b) their reported beliefs and values related to technology, (c) what they actually did and the beliefs reflected in those actions, and (d) the relationship between the instructors and their use of technology. In this chapter I focus on answering the first two questions. The third and fourth questions are considered in the next chapter. It is important to address the realization of the articulated teaching perspectives of instructors. "Because beliefs exist, primarily in tacit form (Kagan, 1992; Kane et al., 2002; Nespor, 1987), understanding teachers' beliefs requires making inferences based on what teachers say, intend, and do "(Ertmer, 2005, p. 29). Thus, in Chapter 5 I examine how the participants' articulated teaching perspectives were realized in their online courses and the relationship between teaching and technology. In this chapter I describe, in turn, each professor's articulated beliefs about teaching and technology.

Constructing a narrative of the articulated beliefs and values of three individuals is a complex task. Before writing this chapter, I examined the transcripts of taped interviews with the instructors before and during teaching. I also created a profile of each participant. Although reducing someone's teaching perspective to a few pages on a screen or in a book involves some sort of simplification, I endeavored to accurately reflect each instructor's point of view. In the latter part of this chapter, after each

instructor has been presented, I look across the cases, examining similarities and differences.

Before reporting on the instructors' beliefs about teaching, learning, and technology, however, I need to acquaint readers with each of these instructors—mainly because understanding their beliefs requires developing a better (and deeper) knowledge of each of these individuals. Thus, each instructor section begins with a profile. After the profile I describe how the instructor viewed learning and his or her goals for students. Next I address the role of the instructor and design of educative experiences.

Dr. Cohen

Dr. Cohen was a professor in the College of Education at a midwestern university. He had been teaching in the Educational Administration department since 1992. According to him, his background was not traditional for professors in the college. His undergraduate and graduate degrees were in English, and he had taught in English and American Studies departments at various universities. At another midwestern university he had been the director of the Department of Professional Development Programs. For 9 years he had been the executive director of the National Federation of State Humanities Councils, a nonprofit organization under the National Endowment for the Humanities. At the university at which Dr. Cohen currently was teaching, he had a joint appointment in the College of Arts and Letters. He had taught courses in that college, as well as serving as the director of Jewish Studies. Because much of Dr. Cohen's time at this university was split between teaching and holding an administrative position, he had taught fewer courses than other faculty members in his department.

Dr. Cohen taught his first online course, Adult Career Development, in the spring of 2004. This was a course that he had taught once in a face-to-face environment. Before

teaching online, Dr. Cohen participated in a master's-level course in which faculty and graduate students were brought together for the purpose of designing technology to help solve a problem of practice. All of the faculty in the course were in the process of developing an online course or improving a course already being taught online.

Dr. Cohen taught the Concept of the Learning Society, the course of interest in this study, for the first time in the fall of 2004. He had taught this course only online. In the spring of 2006, he began teaching another online course, called Curriculum in Its Social Context, offered by the Teacher Education department. At the time of this study, Dr. Cohen taught only online.

In the next section I identify Dr. Cohen's beliefs about student learning, his goals for students, the role of the instructor, designing educative experiences, and technology. In my analysis, two beliefs stand out:

- The "authority of instruction"
- A "teach the conflict" approach to teaching

In Chapter 5 I revisit these beliefs and address how they might have influenced Dr. Cohen's design of the course.

Student Learning

In the interview with Dr. Cohen, he stated that he was not tied to a theory of learning in the traditional sense. He did believe, however, that an important idea that had guided the design of his course was the role of self-directed learning, i.e., a belief that students should be allowed to progress at their own pace. Thus, his course was designed in such a way that students were not locked into a schedule, but rather they worked independently and regulated their own work. Besides believing that students should be allowed to progress at their own pace, Dr. Cohen also believed that the type of

intellectual activity students need to be engaged in as part of the learning process was very close to that of a debate, albeit a debate that was not about winning or losing, but rather an engagement with the dialectical process of reasoning and engagement with ideas.

Student learning happens by bringing them into the debate: “Teach the Conflict.”

Dr. Cohen exposed students to multiple perspectives by introducing them to different “voices” through the works of other authors, speakers, and texts. Dr. Cohen argued that exposing students to multiple perspectives served other functions, as well. By immersing students in well-crafted dialogue representing conflicting viewpoints, he followed a method he termed “teach the conflict.” At the heart of this idea is that students learn by being immersed in the intellectual conflict surrounding ideas. Evidence for this belief was drawn from the interview with Dr. Cohen and his responses to students’ work. This approach involves exposing students to conflicting ideas about the same topic. Students are expected to go beyond simply understanding one scholar’s viewpoint on a topic; they should evaluate their argument as well.

Dr. Cohen crafted the dialogues by purposely selecting different authors who brought unique perspectives to the same theme. “I’ve always liked what came to be called a sort of teach the conflict approach. Most important ideas or concepts are highly contested, and about the best thing you can do is sort of bring the student into the debate.” Part of Dr. Cohen’s instruction involved not only exposing students to the views of various scholars but also teaching them to think critically about the work of those same scholars.

Goals for Students

In bringing his students into the debate, Dr. Cohen wanted them to become “skeptics.” This is an important aspect of the “teach the conflict” approach. As he said in an interview,

I want them to know something about the subject. I want them to know that learning, in the case of the learning society, is a complicated and in part ways corrupted idea. I want them to know some of its history, some of the way it’s been used, and I want them to have some resources to position themselves critically. . . . I want them to become skeptics. But at the same time I am also eager that they learn some general things. They gain some pleasure and enthusiasm in using the web this way, and I’ve had terrific responses.

Dr. Cohen even asked students to view his own course skeptically. In Unit 3 he addressed the topic of online learning in a learning society. In this module he introduced students to the work of John Seely Brown. Brown’s recent views of literacy in a digital age were quite different from those held by Dr. Cohen that had guided his construction of the course. In his course he wrote,

Thus, I know that as part of Brown’s idea about “Learning Ecology” he recommends precisely what we are not doing in [Course Number], that is working in study groups to “construct” knowledge. By now you have already read my explanation of why. But Brown’s case is powerful, and one which deserves consideration depending on the condition of any particular course or other activity.

According to Dr. Cohen, he used various texts and multimedia materials to create a “network of materials” that would expand students’ understanding and push their thinking. This type of nonlinear association is difficult to do with text, but it is especially conducive to a web-based environment. In sum, one can argue that Dr. Cohen’s vision of a student was that of an individual scholar who seeks out knowledge in the scholarship of others.

Teaching: Role of Instructor

Dr. Cohen also believed in the “authority of instruction.” He clarified the word *authority* to mean a type of intellectual authority garnered from years of experience and scholarship.

I still believe in the authority of instruction, I’ve got something to teach them, that’s why I do it. I’m not as happy with their [*other instructors in the college*] constructivist ideas that promote that, as the saying goes, the guide on the side rather than the sage on the stage. I think guiding, if all we’re doing is guiding we’re all monstrosly overpaid. But I resist the notion that teaching is a form of facilitating, mentoring, guiding, whatever term you want to use instead of instruction. I have something to teach, something to get across, some beliefs I have about the subject matter that I think are important for the students to have.

This belief that good teachers are good because they have something to say about the subject matter stemmed from Dr. Cohen’s own educational experiences with educators and lecture-based courses. This was in contrast to what he viewed as the general approach to teaching in his college, which he argued was more aligned with a constructivist approach to learning. Part of his motivation for designing the course was to demonstrate a successful course that was in opposition to what he saw as the dominant teaching methods. Specifically, Dr. Cohen said,

I sort of came into this, all of a sudden I was in the College of Education surrounded by progressives. All of them believed, in one version or the other, the reigning progressive/constructivist orthodoxy, which was a mystery to me. I’m by temperament more conservative than my colleagues and it all, it sort of, it got stirred up into a motive to teach that was oppositional. So the online courses became a place in which I could actually practice or formulate and practice my opposition to the reigning orthodoxy.

Designing Educative Experiences

When asked about what he believed were the most valuable learning experiences for students, Dr. Cohen unequivocally replied, “The number one thing is reading and writing. That I don’t have any doubt about.” Such directedness was not uncharacteristic

of Dr. Cohen. He often spoke bluntly and was willing to take an opposing or “oppositional” viewpoint (as was made clear in the quotations above). Dr. Cohen used numerous autobiographical texts in his course, implying a belief in learning through the focused and thoughtful reflection of the experiences of others. Part of the reason that there was a focus on the experience of others, rather than reflecting on one’s own life experiences, was that Dr. Cohen believed that, in the short amount of time he had in the course, he wanted to see how students worked with the texts and resources in the course.

Despite his emphasis on reading and writing, Dr. Cohen was committed to exposing his students to nontraditional resources for learning. He expanded the meaning of texts students were reading in the classroom with videos, multimedia sites, and audio files, thus providing them with new types of experiences to deepen their understanding. It was also about “pushing” students. Getting students to become engaged with texts and pushing on ideas by expanding them into other areas was a valuable teaching experience for Dr. Cohen. An important rationale for including different types of media, especially web-based ones, was to push students to expand their thinking through the different types of experiences that various media could provide.

Beliefs About Technology

Dr. Cohen believed that for a set of online courses in a program it was important to have some sort of reflection on “the fundamental problems of teaching and learning online”: How is it that learning in this environment affects what and how we learn, as well as what new literacies become necessary? Because his course focused on the learning society, according to him, it was even more imperative to structure a reflective or critical questioning of teaching and learning online. He saw changes in technology closely related to economic and cultural changes and vice versa. He believed we have to

think very carefully, and even question the effect of those changes on a learning society. To establish a framework to support this reflection and critical questioning, Dr. Cohen purposely included conventional texts with each unit. At the same time, he introduced students to information in nonconventional formats that extended the texts. "At the same time I'm very fascinated with it, obviously sort of committed to the web and internet and all that. I like the idea of the image of the course trying to hold together very different conceptions of how to live and whatever the learning society is." At times, Dr. Cohen entertained conflicting views of which he was cognizant. He saw the web as threatening traditional reading and writing, and yet he understood the inherent tension of embracing the medium that was perhaps redefining the very things he held closest to his way of thinking.

Dr. Cohen also saw the web as somewhat liberating, allowing him to do things that would be difficult to accomplish with traditional texts. He believed that the web allowed him to make associations that would "push the activity in a different direction" or "towards a variety of experiences." For example, when students read the chapter from Mary Catherine Bateson's (Bateson, 1995) book *Peripheral Visions: Learning Along the Way*, in which she talked about the influence of color, they were also supposed to visit the website *Frogs: A Chorus of Colors* from the American Museum of Natural History. In doing so, Dr. Cohen provided the context for students to revisit the issue of color and even expand their understanding by experiencing color in a new way. In terms of teaching his course, he recognized the limitations of a mostly text-based medium, noting that certain instructional moves he commonly did in face-to-face courses would be difficult to do online. He said, "I think I miss something in this case of the classroom when I can use certain sort of oral habits to dramatize this. It's hard to do that on the

screen. . . . You're left with print." If video is used, then "You're shrunk to about a quarter of an inch. I don't think that's as effective. I like the spell of the no pictures, no voice thing."

Dr. Cohen was like a composer who had woven together the sounds from various sources to create a symphony. Like the composer, he directed students through the experience. Although he brought the dialogue to them, he did not dictate how it was experienced. The sources of this dialogue consisted of multimedia resources, traditional texts, narratives, and the written text of the instructor that oriented students to the content. Students could learn how to create their own "music" by observing the actions modeled by the instructor and by experiencing the music. This music was designed to be experienced by the individual. Although Dr. Cohen's belief in students learning from the experience of other scholars definitely suggests an apprentice view of learning, his belief in the authority of the instructor lent itself to viewing him as a composer, orchestrating the learning experience. Also, presenting contrasting viewpoints made it difficult for students to regurgitate content; thus, even in this more directed-instruction course, students had to actively construct meaning. Interestingly, this approach contrasted with Dr. Cohen's skeptical view of "constructivism, a theory that incorporates the idea that knowledge is actively constructed. By presenting contrasting viewpoints and writing personal introductions to each topic, he did exhibit some characteristics of the "guide on the side," which he vocally opposed.

Dr. Davidson

Dr. Davidson was an associate professor at the same institution. He had been teaching in the College of Education's Educational Administration department for the past 10 years. During three of those years, he had been the acting program director. Dr.

Davidson had advanced degrees in continuing and vocational education, with an undergraduate degree in medical microbiology. His specialization during his graduate education was adult learning. He had taught courses on adult learning at this institution ever since he was hired. He also had taught courses on adult learning at another university for 8 years.

Dr. Davidson began teaching online during the fall of 2000. In spring 2001 he participated in a master's-level course similar to the one attended by Dr. Cohen that brought together faculty and graduate students for the purpose of designing technology to help solve a problem of practice. Since that time, Dr. Davidson had taught only the adult learning course online, although he did have plans for developing other online courses dealing with teaching strategies and program planning.

Dr. Davidson began teaching his course on adult learning in the online environment in fall 2000. The course is an elective for students in different programs who work or will be working with adults in some capacity. Although the course is offered through the Educational Administration department, students from other programs also take it. Dr. Davidson said, "Most of the students who take it [the course] are not teachers. They are really working as educators in other capacities, as educational leaders, faculty/staff development people or people who are in charge of groups of . . . like directors, deans, who are in charge of faculty." The course is not intended to be about how to teach adult learners, but rather understanding the adult as a learner. Students do not need to have prior knowledge in the area of adult learning.

In the next section I identify Dr. Davidson's beliefs about student learning, his goals for students, the role of the instructor, designing educative experiences, and technology. In my analysis, two beliefs stand out:

- Learning is a transformation of the self through the content
- Learning is a collaborative experience

In the next chapter I revisit these beliefs and address how they might have influenced Dr. Davidson's design of the course.

Student Learning

Dr. Davidson believed that students learn best when they are confronted with situations in which their prior knowledge is "problematized" and they are experiencing some sort of cognitive dissonance. Specifically, they cannot depend on their prior knowledge to help them understand the situations, so they need to construct new understandings. More generally, achieving the goal of understanding oneself, the world, and being in the world involves acting more "wisely" in the world. One never really comes to a static understanding; rather, it is important to continue to question and reflect on the understanding one is constructing, and how one is engaged in this process. Furthermore, according to Dr. Davidson, "Learning is about understanding. Learning is about both making problematic and working through the problematic aspects of our being in the world." Dr. Davidson's description of his beliefs was complex and even philosophical, creating a vision of deep personal change that was at one level idealistic, whereas at another level it recognized the limitations of that vision. For example, at the end of the first meeting, he summarized his beliefs about learning as follows:

A lot of what I've talked about I think can be understood within a broader spiritual frame; it's not religious, I mean it does have something to do with religion but not in the traditional religious sense. It's all about the struggling with the problem of meaning in our lives and what our lives mean and what we're here for, particularly as adults.

Dr. Davidson also believed that learning takes place through self-directed learning and in collaborative learning environments. He viewed his role as a teacher as not to

transmit knowledge but rather to "foster constructions," to help students realize that what they know is a function of what they construct for themselves.

According to Dr. Davidson, "Content for me has always been a medium; it's been a means to an end, it has not been the end in itself." he used subject matter to make problematic worldviews that often are taken for granted. In his course, for example, he worked with students' preconceived ideas about learning, trying to make problematic their ideas of learning, using subject matter and his lectures to create a context in which they would begin to question their former conceptions. This problematized situation is also what Dr. Davidson referred to as a "novel situation" or "the experience of the novel." According to him, student learning begins with an "experience of the novel" that is rooted in a problematized situation. This experience of the novel in a classroom context is brought about through interactions with the content. When students are engaged in an experience of the novel, they undergo a transformation because prior knowledge and experiences that they used previously to help them interpret and explain situations and concepts are suddenly problematized by the interactions with the content, and new understandings need to be constructed. He commented,

Prior meanings, perspectives, ways of making sense of things no longer seem to hold or they don't seem to hold as effectively as they did before, and they can't live with that. I mean they can't ignore that tension. They have to work with it in some way, it has to be resolved or it has to be worked through. And that is the location for what I would call deep learning.

Goals for Students

Although the content was the "medium" and students were expected to have "problematized" experiences, Dr. Davidson still wanted those experiences connected to the content. He had a clear vision, however, of how experiences relate to students' understanding of the content as well as the role of the teacher.

What you're doing is getting people to realize that what they know is fundamentally the result of what they construct for themselves about what they think things mean to them. Even though they may be able to identify a piece of information, identify a fact of some kind of another, the fact only comes alive when they are, when they use that fact, that piece of information and some process of construction. And that process of construction, going back to what I said before, typically occurs in an attempt to deal with an experience of the novel. In an attempt to sort of make sense of something that doesn't make sense right now in their life.

So that's another part that makes effective teaching. So it's collaborative, it's constructive, and it's grounded fundamentally in their life experience so that teaching is always bringing the content back to who they are as a person.

Learning, according to Dr. Davidson, is a transformation of the self through the content. This personal transformation is also the product of students' engagement in an "experience of the novel." Another important element illuminated by this quotation is Dr. Davidson's belief that educative experiences are collaborative. His vision of the student was somewhat akin to an anthropologist mining his or her past experiences to make connections to the content.

Teaching: Role of the Instructor

Dr. Davidson served as a type of mirror, helping students understand how they were making sense of their experience in the course and, more important, how those experiences were related to the content. He said, "I use reflective activities, questions to drive them both back to the content of the subject matter but then to sort of bring that content forward into their experience, and so I'm always going back and forth between what it is that they're studying, you know it's propositions, it's assumptions, it's premises, and their experience." Thus his task structures in particular were designed to foster students' critical reflection on their learning experience. He hoped that his course would be a transformative experience for students, changing how they perceived themselves and the world. Integrating collaborative learning activities also entails a

greater commitment on the part of the students. They not only need to be responsible for their own learning, but they really should perceive a responsibility for their peers' learning. Thus, there was evidence of Dr. Davidson's belief in collaborative learning in how he structured his course. Students processed the content individually and collectively. After students had read or viewed the content, they often were required to respond to questions in their learning logs or share their responses in a discussion forum. He might also ask students to review their entries in their learning logs and share their responses in their group. At other times students were asked to process the discussion with their group members by going back to their learning logs.

Dr. Davidson also incorporated a problem-based learning approach in his curriculum. He used this approach for multiple reasons. It grounded students' work in real problems of practice. More important, it helped them build relationships with their peers. Collaborative learning activities often align with a view of learning as socially constructed. However, we can see that, in Dr. Davidson's course, he acknowledged both the individual and social construction of knowledge through his use of learning logs and discussion forums.

Dr. Davidson also tried to do this type of mirroring in response to students' journal articles. "I'm responding with empathy of some kind or another or mirroring, some degree of mirroring, what I think they seem to be saying or the sense they seem to be making of something. I'll just simply try to mirror an aspect of that for them. That's what I do." He also tried to create a sense of empathy when he responded to students. Thus a phrase that might aptly describe Dr. Davidson is *the teacher as mirror*. According to him, a particularly rich context in which to examine students' learning experiences was the course itself.

Dr. Davidson's beliefs and values about learning created a particularly "tall order" for him. Just in terms of his workload alone, his beliefs and values had implications for the quantity of student work that he had to grade and/or respond to.

Designing Educative Experiences

Dr. Davidson structured some of the tasks in his course to elicit students' previous experiences so that they could use the content to re-see those experiences. He assigned these tasks after students had read or viewed an article or presentation. Learning with and through the content involved reflective and collaborative activities. Dr. Davidson described how he set up valuable learning experiences in the following quotation. He began by assigning students readings or an online PowerPoint lecture.

I'll ask them to look at their own life and I'll ask them, for example, what do you see as the key historical trends over time and the ways in which our understanding of knowledge has changed? And then I'll ask them in what ways is this change reflected in your own life? To what degree have you seen our conception of knowledge, or society's conception of knowledge and learning change in the context of your own life? What has contributed to that? What has gone on within your own life and your own life experiences that have shaped and influenced these differing understandings of what counts as learning and knowledge and what it means to learn? I'll ask them in terms of really getting them to understand learning at a new level, rather than just sort of the mastery and recapitulation of information and performance of skill. I'll ask them to identify a significant learning experience that they've had recently, what I would call memorable learning experience. And then I'll ask them to sort of tell me about that. What went on, what made it exemplary, what made it memorable to you, and then we look at those within small groups.

This was not just an individual experience. After students thought about these questions individually, Dr. Davidson wanted them to examine the questions collectively and think about "What might we say now, given your collective experiences?" In conclusion he stated,

I use reflective activities, questions to drive them both back to the content of the subject matter but then to sort of bring that content forward into their experience.

and so I'm always going back and forth between what it is that they're studying, you know, its propositions, its assumptions, its premises, and their experience. Does it make sense within the context of your experience, does your experience verify, does it illuminate, does it make problematic aspects of what you formerly believed about aspects of yourself? So it's that work, both with the self, with one's practice, with the way one thinks about teaching and learning or education in general.

Dr. Davidson did not emphasize the text as the focal point for learning, but rather the collective and individual processes that occur with and around the content.

Beliefs About Technology

Dr. Davidson's concern about the relationships students developed in his course (relationships with self, others, and content--all related to each other) also shaped what he did online. At the same time, he was working within what he believed were the affordances and constraints of the online environment

Dr. Davidson saw the online environment as having the potential to bring people together in more "intense" relationships than occur in face-to-face environments. Even though students are physically present in face-to-face environments, they can still "check out" or be superficially engaged. Thus, in the face-to-face environment, it might take a little while to notice a disengaged student because he or she is still physically present. In online environments, when someone checks out there is no presence at all. There is no text. This lack of presence is noticeable to the instructor, who can then try to draw the student back into the course. This action, in turn, can foster more interactivity.

Dr. Davidson also believed that if you design your course to be interactive, to foster relationships and interactions between students, you will also foster a better understanding of a multifaceted sense of self and the relationship that sense of self has with others and the world. The technology supports students' being more reflective because they do not have to whip off a response; they can take time, step back from a

comment from their peers, and reflect on their response. This ability to take time has drawbacks, as well. “By creating this space for reflection, you run the risk of intellectualizing an aspect of the being, which then moves you away from self-realization and not towards it,” Dr. Davidson commented.

Thus the online environment, in a manner of speaking, places a magnifying glass on participation, provides opportunities to support more “intense” relationships, and gives students the space to be more reflective in their responses; yet there are disadvantages in this environment as well. For example, there is a drawback to the increase in response time. Interactions lose some of their “spontaneity.” This “spontaneity,” Dr. Davidson believed, is a better reflection of the “real self.” One of his teaching beliefs concerned valuing the process of learning. He said,

I place so much emphasis on process and the value of process in learning. The online environment is problematic for me in that regard. I’ve written some stuff on this, it’s the problem of making visible something in an invisible environment. . . . I mean, what is process in an online environment? What does that mean? You can talk about process in a face-to-face [situation], that sort of makes sense to people. But what does that mean to talk about process when people are not only not face-to-face, but they’re disconnected in space and they’re disconnected in time.

Finding a way to manifest or make more tangible the process of learning is not the only challenge in online environments, according to Dr. Davidson. He also found it more difficult in such an environment to get a sense of students’ thinking.

I think the main challenge for me in the online environment is really getting a handle on where they are at intellectually or cognitively. That just seems much more easy to do in a face-to-face environment than it does in this environment, and I’m always insecure about how much of the content that they understand, what do they understand and what don’t they understand, and how are they thinking about the ways in which they can use it?

Dr. Parsons

Dr. Parsons was an associate professor in the College of Nursing. She had been teaching at the midwestern university since 1977. During that time she had been a pioneer in distance-education courses for her college. The first distance- education course she taught was actually a hybrid. It was a managed-care course that she co-taught with another instructor. Dr. Parsons was also one of the first faculty members to teach a wholly online course in the Nursing department. One year Dr. Parsons received an SBC award for instructional technology. She was one of the honorable- mention winners for the wholly online course category. At the time of the study, she was teaching multiple online courses within the department.

Teaching was not Dr. Parsons's only responsibility. At the university she also served as a co-chairperson for the faculty advisory committee and was a member of an online task force in her college for faculty using the school's course management system. A certified pediatric nurse practitioner, she often traveled to rural areas in other countries as part of a medical mission team. When she was not teaching at sites across the state or on a medical mission, she worked out of her home, located 2 hours from the midwestern university's campus.

In the next section I identify Dr. Parsons's beliefs about student learning, her goals for students, the role of the instructor, designing educative experiences, and technology. In my analysis, two beliefs stand out:

- Students need to be socialized into their new role as master's-prepared nurses and as graduate students
- Online instructors need to humanize their learning environment

In Chapter 5 I will revisit these beliefs and address how they might have influenced Dr. Parsons's design of the course.

Student Learning

According to Dr. Parsons, teaching practitioners, administrators, and educators who are all a part of the health care system is challenging. This is mainly because new studies constantly are emerging that change how we view disease, diagnoses, and care. Her course was one of the first that many students would take for an advanced degree related to nursing. She believed that it was not just the knowledge they would acquire in this course that was important, but perhaps more important, it was the habits they acquired that would last beyond the scope of her course. Practitioners, educators, and administrators in the health care industry, in particular, need to have the skills and habits to find information on a regular basis. In their field, things change so rapidly. Hence they need habits that will help them actively search out information and apply it to their own experiences, as well as to the health care system in general.

I think there are two different levels of learning. I mean there's that interactive where you're feeding off each other and you're learning from one another and you're also helping others learn. And then there's that component that's really figuring out how is it that I as a person can not only learn now but learn forever. How am I going to learn how to learn? How am I going to learn how to continue to be updated constantly? And that's really an individual thing. It doesn't mean that you don't rely on others at some point, but they're really kind of two pieces.

Dr. Parsons believed that learning happens as a result of active participation in one's own knowledge development. An important component of active participation is applying course ideas to problems of practice and searching out information. The health care industry is affected not only by current medical research but also by changes in managed care and current events. Dr. Parsons believed that students who are professionals also need to be engaged with materials they view as applicable to their work environments. It is only when the information is applicable that students will be more likely to remember it for the long term. Her vision of the student was that of the

engaged, reflective professional. Such a student brings scholarship, inquiry, and reflection to his or her own profession.

Goals for Students

Each course in the nursing program has benchmarks that students have to meet. Beyond meeting the standards set by these benchmarks, however, Dr. Parsons had other goals for student learning. As this was the first course for many students in their particular program, Dr. Parsons hoped that students would be able to apply what they learned, in terms of both information and habits, in their other courses. She also wanted them to begin to define a philosophy of practice that they would fine-tune throughout their program of study. She hoped that they would find the course engaging and meaningful. “I feel good about when they succeed and when I find that the content is interesting to them and relevant to them.” Similar to the other instructors, her goal for students involved a type of transformation, a transformation into people who were thoughtfully engaged with their profession. They would develop the habits and skills of lifelong learners who not only sought out new and interesting information but used that information in thinking about their profession.

Teaching: Role of the Instructor

An important focus of Dr. Parsons’s course was what she, as an educator, could do to facilitate the learning process in her classroom. She believed she could support learning by providing a stimulating and unique environment.

Not meaning you have to have every bell and whistle, but you have to have something there that makes people want to come back and makes people want to be there at their computer when they could be off playing with their little kids or going out and seeing a movie or doing their housework or whatever. So you really have to make an environment that is a little bit unique.

Thus, the design of the course had to pull students into the environment. Another way to draw students into the course was to have current and up-to-date information. Dr. Parsons believed that an important teaching responsibility was to provide students with access to current content. This not only furnished students with information that was readily applicable to their practice, it also served the function of modeling active information-seeking behaviors for her students.

Another part of Dr. Parsons's role was to be a critical evaluator and to help guide students when they were off track. When asked to use a metaphor to describe her teaching, she noted that she saw her role as being more of a guide, or a catalyst, not telling students what and how to be, but *showing* them. Socialization is not only necessary for students' progress in a master's-level program, it also supports them in learning beyond the walls of the classroom.

Dr. Parsons also thought that an important part of her role as an instructor was to humanize the online environment. She did this by injecting humor, personally addressing students, acknowledging their contributions, and emailing them periodically about their work. Her contact with the students was also a type of reinforcement that kept students involved, active, and valued. When asked about her beliefs about effective teaching, she responded:

Students really need to feel as though they're a valuable part of the class, that the faculty person cares that they're even there, you know? Maybe this is part of me being a nurse, but that whole idea that we as humans want to be valued and I think that's true of many students, that they don't want to be an unknown entity sitting in the corner, even though some people do. They want to be acknowledged and they want their comments, their thoughts, to be seen as serious and important.

Dr. Parsons humanized the online environment not just by validating students' contributions but by interjecting an authentic aspect of her personality--

her humor. She noted, “I think that being able to chuckle about certain things is very important and that’s my personality, and I think it’s very important if at all possible to put your personality into the course.

A phrase that helps to define Dr. Parsons’s perspective on teaching and learning is *the teacher as bridge builder*. This metaphor for Dr. Parsons’s role as an educator makes explicit her teaching perspective that the instructor can help students connect current events and real-world issues, texts, their own work experience, and their own knowledge and make that information applicable to their own professional experience.

Designing Educative Experiences

Dr. Parsons’s students generally were older and, in her experience, often entered the program with educational experiences that relied on the transmission model of teaching and learning. Thus they had been shaped by years of passive learning experiences and needed to be socialized into more active, participatory roles. Specifically, they needed to be socialized into their new roles as master’s-prepared nurses and as graduate students. It was not just information-seeking behaviors that she seemed to want to encourage, it was also a way of talking and writing. She wanted them to learn professional written-communication skills, and to view issues in health care from different perspectives. Therefore, it was important for her students to have structured opportunities that would help them communicate with others in their profession. During the second interview, Dr. Parsons talked about the importance of students’ being able to write in American Psychological Association style. Her department also relied on the resources of the university’s writing lab to support those students who needed extra help with their writing.

Students not only need to communicate with others in their profession, they also need to be able to see issues from multiple perspectives. Dr. Parsons even expressed some concern that discussion forums that were separated by track made it more difficult to expose students to the different perspectives of their peers. When talking about this separation of discussion forums, she commented, “This course really isn’t to socialize them to their particular track, specialty track. It is to socialize them to a master’s level.”

Modeling was important to Dr. Parsons, who believed that a necessary component of her teaching was to socialize students into the master’s program and into the role of the master’s-prepared nurse. In the types of experiences she designed for students, she tried to provide them with access to what the engaged professional looks and sounds like.

When asked about the goals for the course, Dr. Parsons responded:

I think socialization to kind of this new role, it’s the chief thing in terms of content. And then in terms of the whole idea of master’s education, it’s setting the tone, I hope, for how one interacts in a classroom of any kind and the importance of collegiality and sharing ideas and learning how to, I guess, manipulate, maneuver through a very complicated health care system, and I guess set up a way to learn forever.

Beliefs About Technology

Dr. Parsons believed that the need for certain things was consistent in both online and face-to-face courses; however, in the online environment, those needs sometimes are amplified. For example, students need to be more active in their participation, and teachers need to work even harder to reach out to students. She said,

I think that whole idea of being connected human to human is very important, and when you’re in the online environment, that’s even more important to the point where I really, really, really try in most postings that when I reply to students’ postings to use their name.

When students are not engaged in the online discussion, it is harder for the instructor to sense that disengagement. The teacher cannot do it with a look, but has to wait until he or

she has observed a lack of participation. However, although technology made some things more difficult for Dr. Parsons, it also had some beneficial functions. It could be a resource to help her humanize the experience, and motivate and engage her students.

Multimedia technology also provided ways for Dr. Parsons to bring more of her presence into the course. She would post photographs from her missions in other countries on the front page (called the splash page) of a unit. This put students in touch with Dr. Parsons's professional life. She would also post pictures of herself engaging in a favorite activity with her dog, or scenes from her trips. At the beginning of her course, she had an audio introduction. In other courses she posted an audio file every week. Thus, she made an interesting choice. Unlike Dr. Cohen, she did not link out to other media files to expand the students' experience. Instead, she created her own media files, trying to bring a humanizing presence of the instructor into the course.

According to Dr. Parsons, technology brought several advantages to her teaching. Because her course was online, she could go on missions to other countries during the semester. She noted, "For me, clearly one of the advantages is that I can travel, you know, I do class while I'm in Ukraine. I come in from being in a little village that has no electricity or toilets and go online where I am." She also was able to work from home, rather than driving 2 hours to campus.

Technology also was a tool that made it easier for Dr. Parsons to enact practices she thought were important for teaching students in her program. Electronic databases provided access to a wide variety of medical journals. She could then link to those readings in her course. In addition, she subscribed to different listservs that she mined for up-to-date information to include in her course.

Dr. Parsons saw some disadvantages to technology, as well. Because technology provides the gateway to teaching and learning in online courses, if the CMS goes down, students no longer have access to the course. It is like showing up for class and finding the door locked. “I think there are some major disadvantages or hurdles. The first is, you know, if there’s a glitch in the system and for whatever reason the technology is not available for a period of time, bang you’re at a loss, you know, and it just puts people into a tailspin.” Thus, she had to have contingency plans and build those into her instruction. Furthermore, the accessibility that technology makes possible could also be a disadvantage. She said,

I literally am on the computer every day. I take it everywhere I go, I am probably too accessible. It’s hard to not check-in. Part of that’s because when I have 801, I have a course with 75 students, and if you don’t go in, just everybody post one posting, there’s 75 postings to read the next time you bop on, and most likely there are 150 because most everybody posts more than one thing. So if you don’t keep up with it, it can be incredibly overwhelming when you go in.

When talking about the difference between face-to-face teaching and online instruction, Dr. Parsons mentioned that one important difference was

the sheer bulk of conversation. It is a whole lot different to hear somebody say a little answer versus read it, and I don’t know if you have noticed, but I have some incredibly long-winded people. . . . The majority of them are really very good. . . . They are very thoughtful. . . . But in a real classroom I am pretty sure you wouldn’t be getting those kinds of responses, that long treatise kind of thing.

According to Dr. Parsons, one of the reasons this text-based interchange took a lot of time was that students had time to compose their thoughts and thus create longer, more in-depth responses.

Furthermore, teaching in the online environment places additional constraints on the instructor’s time. Dr. Parsons clarified her comments about technology by noting, “I don’t think it is the medium. I mean I don’t think it is working with the technology,

because to be totally honest I think in many ways it is so much easier to do stuff online in terms of putting content up and doing that.” Thus, she did not view learning the technology itself as being difficult, but it was what the technology enabled or demanded in terms of organization. For example, online courses are front-loaded. The content is put online before the course begins. Conversely, in the face-to-face classroom, “Many times in a lecture or discussion class you can go in with some kind of, with pretty minimalist notes, and make it through a 2-hour class just by virtue of the discussion that is going on.” Furthermore, teaching online can place additional stress on instructors because they do not get release time for front-loading the content. During the semester, keeping up with posts, updating information, and otherwise interacting with students are large parts of the instructor’s workload. When talking about the time commitment for an online course once it is up, Dr. Parsons noted, “Clearly, if you have a very connected, discussion- orientated, continuously updated kind of class, it takes a lot [of time].”

Looking Across the Cases

Each of the instructors in this study had his or her own reported beliefs about teaching and learning, as well as the role technology plays in that context. In this section, I look across the three individuals in an attempt to identify similarities and differences among these individual representations of the instructors’ reported beliefs. I examine their beliefs about student learning, their goals for students, their beliefs about teaching, and their beliefs about educative experiences.

Student Learning

All of the instructors viewed learning as a sort of transformation, not only in what students knew but in how they approached learning. Dr. Davidson and Dr. Parsons believed that the students’ peers played an important role in the learning process.

However, their emphases were different. Dr. Parsons focused on the learning that occurs as one makes connections between scholarship and one's profession. She also saw learning as something that is fostered by cultivating habits of mind and practice. The focus of this view is one's profession. Dr. Davidson saw content as the medium that fosters a transformation in the learner. This transformation goes beyond the habits students acquire; it is about seeing the world differently, more holistically. Learning happens when the text/content is combined with an examination of one's own experiences. The focus of this view is what one becomes--the personal transformation. Dr. Cohen's focus was on the rich fabric of scholarship woven in and among different media formats. Learning, to him, was about a careful analysis and a critical stance.

Goals for Students

A common theme that emerged for each of these instructors was an emphasis on "pushing" their students. This indicates that the instructors saw their role as being broader than offering information to their students, but rather helping move students into new areas, related to practice and ways of thinking. The metaphor of "pushing" is a loaded one, implying, as it does, the concomitant ideas of resistance (on the part of the students) and a sense of valuing "movement" within a discipline. Pushing involves more than just rote learning; it involves a transformation in learners and how they view, process, and perceive information. This idea of pushing their students into new areas, or a new way of looking at the world (or their field), did play out differently in the individual cases

Dr. Cohen tried to push his students beyond the meanings presented in the texts they read. He wanted students to be critical readers and writers by engaging them in an intellectual dialogue through and with text and electronic media. Dr. Parsons wanted to push her students to move beyond the walls of their practice, to relate to current events,

and to view health care issues from other perspectives. Dr. Davidson's intentions involved an even deeper transformation. His goals for his students involved not only how students perceived and processed information; he also wanted to push students inward. As students gaze inward they are questioning, examining their relationship with other elements in the world. It is the constructed self that is a type of lens that mediates learning, and by having a closer relationship with the self, one can have a deeper understanding of the world. So to push students to develop this deeper understanding of self, Dr. Davidson often acted as a type of mirror to students.

Teaching: Role of the Instructor

According to their articulated beliefs, Dr. Cohen provided a rich contrast to the other participants. He believed in the authority of the instructor, who is at the head of the classroom because he or she has "something to say about the subject matter." Dr. Davidson was quite different; he saw himself more as a mirror and coach helping students to facilitate the learning experience. Dr. Parsons saw it as her responsibility to provide an engaging environment for her students. Interestingly, this belief was closely tied to how she designed her course online.

In their interviews, both Dr. Davidson and Dr. Cohen talked about the tension of not wanting students to participate in learning due to coercion or because they had used their authority as instructor to push students into more active participation. They both seemed to think that adults should not need that, but they realized that the reality was that a portion of their classes would need that push. Dr. Parsons would email students who were not actively participating in discussions, as well. Addressing the issue of lack of participation or even just passive learners was a tension shared by all of the instructors.

Dr. Davidson mentioned that, because of our schooling, we are socialized into being passive learners. Dr. Parsons taught the first course in a master's program and also had to deal with students who did not seem to be actively engaged. She believed that she had to help "socialize" students into more active learner roles.

Designing Educative Experiences

An obvious difference regarding Dr. Cohen's view of learning, as expressed in his interviews, is that there was not a focus on learning with one's peers or learning through one's own life experiences. This perspective was in contrast with the views of Dr. Davidson and Dr. Parsons, who believed that engaging in discussions with their peers placed students in contact with multiple perspectives that supported the learning experience.

Dr. Cohen also seemed to value different types of experiences. The experiences for students that he valued, according to the activities in his course, were vicarious and virtual. His students read autobiographies and visited virtual museums. In the other instructors' courses, students were encouraged to bring to class their personal and professional experiences and examine them with their peers. On the same theme of the role of experience, Dr. Davidson focused on inner experiences. He focused on what the students were confronting intellectually and emotionally and what they were they learning from the process. However, although inner experiences are important, they still need to relate to the content. Both Dr. Davidson and Dr. Parsons remarked in their second interview that they did not want personal experiences to dominate the conversation because the conversation can devolve into something much less productive and not related to the content. Dr. Parsons used assignments and readings to push students to take on the perspective of administration and managed health care, perspectives they might

not necessarily have to take in their daily professional lives. Dr. Davidson assigned learning logs, journals, and papers, asking students to reflect on their experiences. Just like the other two instructors, he built the type of experience he valued into his task structures.

Although Dr. Cohen had a different perspective on the role of experience, he was like any instructor in that, when his beliefs were examined, they contained a wealth of contradictions. When talking about beliefs it is important to realize that humans can and often do hold contradictory beliefs. Considering the complexity of our world and the domains in which we teach, this is even less surprising. On the one hand, Dr. Cohen believed in the authority of the instructor, even the authority of more knowledgeable others, and yet he wanted students to be critical of what they read. This may seem contradictory because it sounds like a passive, transmission view of learning. However, upon closer inspection, one sees that Dr. Cohen constructed an intellectual atmosphere in which students had to actively construct meaning. He provided a well-crafted and structured context of a debate of ideas. As part of their apprenticeship, students learned through the experiences and internal struggles of various authors.

Beliefs About Technology

The instructors' beliefs about technology focused on the constraints of the communication bandwidth of the mostly text-based environment, the affordances and constraints of asynchronous communication, and the value of various media formats.

Constraints of a text-based environment. All of the instructors found limits to the mostly text-based environment in which they worked when teaching an online course. They recognized that there were certain moves they had a harder time making. They also did certain things, such as purposely using students' names and even making sure that

they signed their posts and emails, as in the case of Dr. Parsons. Although he realized the limitations of the environment, Dr. Cohen still thought that there was a beauty in the simplicity of text. When comparing video and a text-based presentation, he noted his preference for text. He said, “I like the spell of the no pictures, no voice thing.” Dr. Cohen was also writing in a different context. His writing to students, with the exception of emails, was more formal. He, like the other instructors, used a conversational tone; however, the context in which he wrote to students was in the form of course content or feedback on their assignments. He did not participate in a discussion forum. Thus, it is possible that he did not comment as much as did the other two instructors on the tension of text because he was not participating in a public, back-and-forth, text-based communication environment.

Also, in this situation, both Dr. Parsons and Dr. Davidson were dealing with participating in an environment in which the instructor was not the main figure. This left a grey area for them. They were supporting and guiding students, but they both also realized that their “voice” carried a different weight in the conversation. As we look at their teaching during the course, we will see how this created a context that necessitated a different type of balancing act. In terms of time management, it also added another item to their list of teaching activities. Thus, when talking about the advantages and disadvantages of technology, Dr. Parsons viewed it as necessitating a different type of organization. She had to front-load her course and managed her time to keep up with posts. Dr. Davidson viewed the interactivity, a lot of which occurred in the discussion forum, as enabling more intense relationships. He also had to work to keep up with student posts.

Affordances and constraints of an asynchronous environment. In terms of how technology creates certain affordances for learning, Dr. Parsons and Dr. Davidson believed that technology gives students time to compose their thoughts before expressing them. It also provides all students with the opportunity to express their ideas, thereby creating a context that possibly is more democratic. Dr. Davidson also believed that, at the same time, technology makes it difficult to understand what the students are thinking. It is difficult, he argued, in a somewhat intangible environment, to make other intangibles more evident.

Multimedia. The different media formats afford other advantages for learning, as well. Dr. Parsons had greater access to up-to-date information, and she could use different media formats to engage her students and humanize the online environment. Dr. Cohen purposely selected different formats to expand his students' learning experiences. Media became a new lens through which they could examine and think about an idea. Dr. Davidson also expressed interest in using different media formats in future instantiations of his course, although he had not done so at the time the study was conducted.

Conclusion

The similarities and differences among these individuals are what make the domain of teaching a rich one, and one worthy of study. In the next chapter, I look at how these differences and similarities manifested themselves in how the online courses were designed and how they were conducted.

CHAPTER 5

TEACHING ONLINE

Course design is a process that begins with ideas and intentions and involves a series of tradeoffs between these ideas and the constraints of curricula, time, audience, experience, knowledge, and materials. Chapter 4 provided an overview of the participants and their beliefs and values with regard to teaching and technology, and identified similarities and differences among the three instructors. This chapter focuses on the actual design and implementation of the instructors' courses—the enactment of their teaching perspectives within the framework of an online course. In some way, the available technology placed constraints on what the instructors could and could not do—irrespective of what their pedagogical beliefs and values were. Thus, the affordances and constraints inherent in the technology mediated (by necessity) the realization of the instructors' teaching perspectives. In this chapter I address how the two dominant beliefs from each instructor might have influenced the enactment of the course.

The Critical Mediating Role of Technology

An important constraint in the design of any curriculum is the materials and infrastructure within which the course functions. In the case of face-to-face classrooms, these could be the number of hours of face-to-face meeting time, the kinds of readings, assignments, discussions face-to-face classrooms afford, and so on. Instructors in conventional classrooms enact their beliefs and values within this frame of a physical space, the classroom, and the artifacts (papers, discussions, and so on.) that can be used for pedagogical purposes.

The framework within which an online course functions is quite different. Increasingly, online courses are built around what are known as Learning Management Systems (LMS) or Course Management Systems (CMS). These are websites that contain multiple functions required for teaching and learning, such as areas for posting readings, discussion forums, multimedia, grade book, chat functions, and so on. Many different CMS are available today, WebCT, Blackboard.com, Moodle, and ANGEL being some of the more prominent ones.

These CMS are critical mediators for the implementation of any course design. They afford certain moves while restricting others. Thus, it becomes important to understand the affordances and constraints imposed by this system if we are to grasp how individual teaching perspectives are realized in online classes. The CMS used at the university where all three instructors in this investigation taught is called ANGEL. In the next section I briefly describe ANGEL and the kinds of instructional moves that it supports. Following that is a detailed description of the course content and design as developed by each of the three instructors, concluding with a look at how their teaching perspectives were realized within the ANGEL system.

ANGEL: A Course Management System

ANGEL is the CMS that is supported by the university where this study took place. Like most other CMS, ANGEL includes the following main functionalities (Arbaugh & Benbunan-Fich, 2005): (a) content delivery: integrated document posting and web page creation; (b) communication: integrated mail system, chat rooms, and discussion forums; and (c) assessment: integrated electronic quizzes, surveys, and grade book. Additional functions allow the instructor to track students' work. Each of these

types of functions has its own virtual space in the system. Figure 1 shows an example of the ANGEL interface.

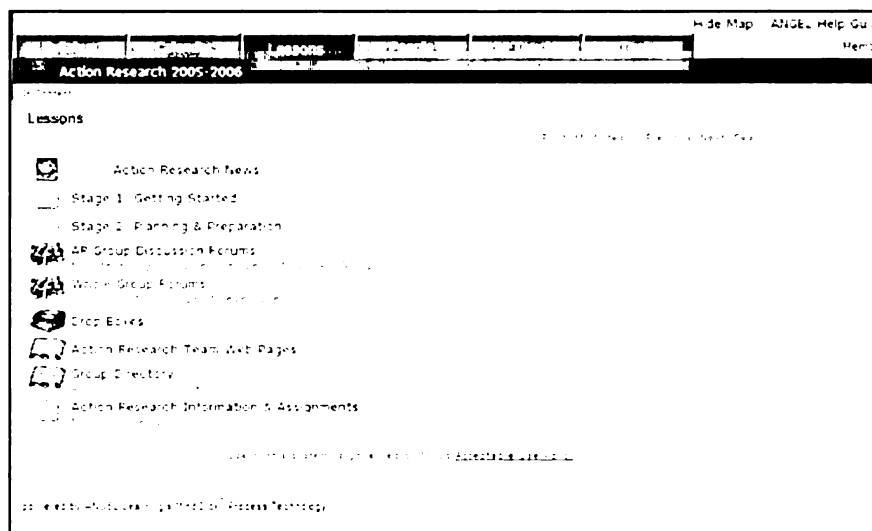


Figure 1: An example of an ANGEL course.

The main navigation in ANGEL is done by using tabs at the top of the screen: *Syllabus*, *Calendar*, *People*, *Lessons*, *In Touch*, and *Tools*. These tabs link to pages that are, in a sense, portals to the different functions within the system. Instructors also can create folders to add to the hierarchical structure of their courses. For the most part, all communication tools, such as discussion forums, are grouped under the *In Touch* tab. For instance, a discussion forum added under the *Lessons* tab will appear under the *In Touch* tab. Assessment items are integrated into the content (within the *Lessons* tab), and students monitor their grades from the *Tools* tab. Within the *Lessons* tab, instructors can add content and activities in the form of *learning objects* such as quizzes, web pages, files, discussion forums, or links to web pages. Learning objects can be defined broadly as any object, digital or non-digital, that can be used for educational purposes (Institute of Electrical and Electronics Engineers [IEEE], 2002). In the context of a web based CMS (such as ANGEL), a learning object can be seen as any reusable digital resource

that can be used to support teaching and learning (Wiley, 2001). Assessment items are integrated into the content (within the *Lessons* tab) but students monitor their grades from the Tools tab.

Like any instructional system, ANGEL by its very design incorporates a certain philosophy or approach towards teaching. In an analysis of ANGEL Banyas (2007) noted that the designers of the ANGEL system “...have made significant assumptions about the faculty using the software, [these assumptions] impact how these users interact with the software, students and their course content.” I argue that there are five critical assumptions inherent in the design of the ANGEL CMS (the first three identified by Banyas and the next two developed through my study and experience with the system):

1. The assumption that faculty have the same “system” perception as the designers of the system. (for example, they perceive ANGEL as a shell that will contain the content and interactions).
2. The assumption of linearity and hierarchy (objects should be organized hierarchically and navigated linearly).
3. The assumption that faculty have a universal grading scheme based on points and percentages (for example, the system does not support the use of rubrics).
4. The assumption that learning online is facilitated by partitioned spaces (meaning content is in one “space” and discussions are held in another).
5. The assumption that faculty are fluent in ANGEL terminology (for example, they know what terms such as *milestones* are, how to interact with the grade book, and how agents or action-scripts can automate tasks).

These assumptions formed the basis for design decisions made by ANGEL-system developers as they created the functions programmed into the technology. They shape the usability of the system and thus mediate such things as how subject-matter content is represented in courses and how instructors and students interact. The CMS also affects instructors' "personal involvement" and how they represent themselves as teachers.

Given this brief description of ANGEL, the rest of the chapter focuses on how the instructors manifested their teaching perspectives in their online courses. The data for this section came from course materials, discussion forums, comments on papers, and taped interviews about the course. For each instructor, in turn, I describe the course content, course design, enactment of the course, the manner in which the instructor created an online persona, and how, through all these moves, attempted to realize his or her teaching perspective.

In describing the content of each professor's course, I outline the topics for the course and clarify the combination of tasks and instructional moves comprising the course design. I look at course design from the perspective of how students' experience with the course was designed by the instructor.² I also describe in detail individual and social tasks that involved processing course content. By this I mean tasks (such as writing a summary, engaging in a discussion, or solving a problem) that the instructor assigns to the students. As is clear, some of these tasks were to be completed by individuals, whereas others were to be done by small or whole-class groups. After describing the initial design of the course, I focus on processes in which professors engaged while

²This does not in any way imply that the students' perceptions of the course (and their experience with the course content and the ANGEL system) will match what the instructors intend it to be. The focus of this study was on the instructor's point of view, and it is restrict to that. It is important, however, to acknowledge the fact that this is merely half the story of the enactment of the course. Addressing the students' end of things would necessitate a different study.

teaching the course. These processes included interacting with students, providing feedback, and representing themselves online. I conclude each section on the instructors with a description of how they realized their teaching perspectives in ANGEL.

Dr. Cohen: *The Concept of the Learning Society*

The Concept of the Learning Society was an elective course in the online Master of Arts in Education program offered by the College of Education. Students outside of the college (in Nursing, for example) also could enroll in the course. The course brought together various conceptions of the phrase *learning society*. Dr. Cohen attempted through a judicious selection of content to push students to think critically, even skeptically, about the very phrase *learning society*. This skepticism was fostered by Dr. Cohen's "teach the conflict" approach, which brought students into the debate by presenting them with text and multimedia artifacts representing divergent views. Over time and multiple iterations, the course increasingly has focused on what it means to live and work in a digital society.

Content

The course was divided into eight units, each devoted to a particular theme or topic in the learning society. The first unit, for example, introduced problems and issues related to defining the term *learning society*. It also presented students with various theoretical and conceptual resources to help them think critically about defining the term. The unit began by presenting a theoretical and historical view of the learning society, then moved into contemporary conceptions of the phrase. Other topics in this unit were theories of learning, learning across a lifespan, cultural views of learning, learning and technology, and models of the learning society. As in many of the units, students explored topics conceptually and then, through the reading and writing assignments, they explored the concepts biographically through narratives.

The second unit examined literacy as the primary activity of a learning society. This topic was explored within the context of various economic, social, and technological forces currently operating in society. Students compared and contrasted literacy in educational, work, and home environments. In the third unit, students examined learning in the specific context of online education. As in his other units, Dr. Cohen brought students into the debate about the promises and pitfalls of online education, grounding the debate in a historical context and connecting it to current economic, educational, and social issues.

In Units 4, 5, and 6, the course explored issues surrounding learning and the learning society through the eyes of three different authors. In Unit 4, Dr. Cohen moved from examining learning in a particular context to looking at multiple contexts and conceptions of learning through the eyes of anthropologist Mary Catherine Bateson and her book *Peripheral Visions: Learning Along the Way* (Bateson, 1995). Through this narrative Cohen brought students back into the debate from Unit 2 concerning learning in schools versus learning outside of school. In Unit 5 he kept a critical eye on learning in schools, but the content then moved students to think about learning in schools and learning in the workplace, focusing on a text that put students at the meeting of these two contexts--the teaching profession. The book was Andy Hargreaves's *Teaching in the Knowledge Society: Education in the Age of Insecurity* (2003). Unit 6 centered on Michael Pollan's book *A Place of My Own: The Education of an Amateur Builder* (1998). As students read Pollan's narration and reflection on a "personal learning project," they were encouraged to contrast Pollan's narrative with Bateson's autobiography. Students also explored how Pollan represented his experience. They then came back to view

Pollan's text through the lens of Emerson's writings on self-reliance, setting a foundation for examining the theory of self-directed learning at the end of the unit.

The last two units brought students back to thinking about learning in a digitized world and the future of learning and the learning society. Students once again were brought into the debate concerning the promises and pitfalls of learning with modern technologies and how this related to conceptions of literacy. Unit 7 focused on media literacy and how our immersion into a digital world has made it important to think about the concept of *media literacy*. The final unit looked at the interplay of globalization and digitization with conceptions of education, learning, and the learning society.

Dr. Cohen said that he became interested in teaching the *Concept of a Learning Society* course because he wanted to redesign the curriculum of the course and take a more critical view of the topic. He did this by presenting perspectives from different *locations* on the concept of a learning society, including historical, social, economic, and cultural views. His goals for students also reflected his expectation that students would explore different perceptions and conceptions of the learning society. Specifically, he wrote in the syllabus.

The goals of [course] online are to explore: 1) what is meant by the learning society as the phrase is used in the US and other nations, or how the phrase has come to mean several things in its brief history (or, the “genealogy” of the learning society); 2) primary domains and activities of the learning society in their historical, social, economic, and cultural contexts; and 3) the experiences and views of individuals living and working in the learning society.

Dr. Cohen also created a learning context in which students not only were confronted with information from different locations but also presented with evolving conceptions of the concept through personal narratives. He referred to this as *lifespan perspectives*.

Course Design

The course was designed so that students could progress through the content at their own pace, proceeding to the next unit only after completing the writing assignment for the previous unit. Except for the requirement that students complete all of the units before the end of the course, there were no due dates for the units. In one sense, the course was similar to a correspondence course in that it was self-paced, and opportunities for teaching and learning occurred through reading and writing.

Dr. Cohen's belief in the authority of instruction was evident in his curriculum and design of the course. Students were not asked to construct their knowledge from their personal experiences. Rather, they were expected to compare and contrast the knowledge of scholars. They even were expected to learn from the personal experiences of these more knowledgeable others, as was evident in the number of narratives and autobiographies that were part of the required-reading list. Furthermore, each unit began with a lecture by Dr. Cohen. In these lectures he introduced the unit topic through his own narrative writing.

This course departed from a traditional reading and writing course in the manner in which the information was conveyed through multiple media formats (often through links to websites, multimedia, and so on). Furthermore, the course involved more interaction with content than would be possible in a typical correspondence course. According to a paper Dr. Cohen co-wrote, his concept of interactivity was drawn from a basic model of interactivity in distance learning (Moore, 1989) in which three types of interactivity are identified: (a) student-student interactivity, (b) student-instructor interactivity, and (c) student-content interactivity. Dr. Cohen's course design gave less importance to student-student interactivity than the other two types. Although discussion

forums were set up for student-student interaction, these discussions were optional and carried no weight in the course grading. Student-instructor interaction was mostly one-on-one, through written assignments required for each unit. Student-content interaction played the most significant role; it included not only books and articles but also multimedia artifacts such as audio files and virtual museums. As Dr. Cohen wrote in the introduction to Unit 1 of the course, "The variety of media formats in online learning, and the ability to follow the multiplicity of electronic paths deriving from the resources, makes the potential for individual interactivity virtually endless, reflecting the interests of learners (including the instructor in the design and ongoing revision of the course units)."

Dr. Cohen wanted the design of the course to replicate the feel of a book. Pages within a unit were numbered like sections in a textbook. Each page began with a lecture by Dr. Cohen, followed by a list of required and optional assignments. The categories of assignments included reading, viewing, and listening. Optional assignments were labeled as opportunities instead of assignments. The materials in Dr. Cohen's course represented a diversity of perspectives and were presented in a variety of formats. These resources included assigned books and articles, as well as other media such as movies, streaming audio, and virtual museums. Students were encouraged to take their own "path" through the content by selecting from the assigned and optional resources.

Instructional Moves

Figure 3 shows the general pattern of instructional moves for a unit in Dr. Cohen's course. I created these visual representations for each instructor to depict the typical pattern of instructional moves in their course units, basing them on a more detailed coding of all the content pages in each course. The coding of instructional moves was based on Shuell's (1996) definition of teaching *interventions*: "Teaching, by its very

nature, involves some sort of intervention in the learning processes of students in an attempt to facilitate their acquisition of desired educational outcomes” (p. 731). For the online courses examined here, the interventions, or instructional moves, took the form of written text on course pages. Six types of instructional moves were salient for my analysis.³

1. *Meta course discourse*: This included text that listed objectives and expectations, or was an introduction orienting students to the content they were about to read.
2. *Management tasks*: This included reminders to students or an overview of the readings they would be assigned in the course. My analysis focused primarily on the types of tasks students were assigned.
3. *Presentation-of-content tasks*: When students were expected to read, view, or listen to content, including lectures written by the instructor, the move was coded as a *presentation-of-content task*. A new presentation-of-content move was coded when the subject matter or source changed.

Tasks that required students to process content—for example, through discussion, writing, or application—were coded as *processing tasks*. These processing tasks might have entailed the introduction of new content, for example, when students were researching a topic, but they were coded as processing tasks because they went beyond the simple presentation of content. Processing tasks could be *individual* or *social*, involving some kind of interaction with other students.

³This analysis was conducted for each of the courses. The methodology is described in detail with regard to Dr. Cohen’s course, although the results of the analysis are shown for all three instructors. I chose to include this description here, rather than in Chapter 3 (methodology), primarily because understanding this analysis requires contextual knowledge of the actual courses, something not available in Chapter 3.

4. *Individual tasks*: These were tasks that students completed by themselves. Individual tasks almost always involved writing. Occasionally, students were asked to complete an online survey or module.
5. *Social processing tasks*: These tasks played a role similar to the individual processing tasks, in that they were intended to get students to apply their knowledge or extend it. The difference here is that these tasks were to be completed socially, either in small groups or with the whole class. These tasks almost always were conducted in the discussion forum. Some of these social tasks were short, spanning just one unit or module of the course, whereas others spanned multiple units or the entire semester. These longer activities are indicated by a long yellow rectangle spanning the representation of the instructor's unit.
6. *Optional activities*: These were intended to cultivate habits of mind. These tasks were coded because they captured one instructor's emphasis on socialization.

To represent the sequence of instructional moves, a single instructional move is represented in the figure by a single-colored block, with each column of blocks representing a page of content in the course. (See Figure 2 for the legend.) As must be clear, this analysis is in some sense a “necessary fiction” or simplification that allows us, at a glance, to get a sense of how the three instructors designed learning experiences for their students.

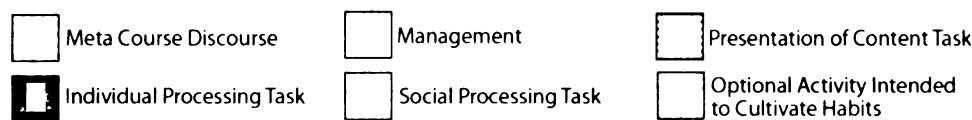


Figure 2: Legend for instructional sequences.

Coming back to Dr. Cohen, we can see in Figure 3 a representation of a typical unit from his course. This represents the average sequence of instructional moves in a unit. The typical unit represented in Figure 3 consisted of 11 pages, each with one to four instructional moves.

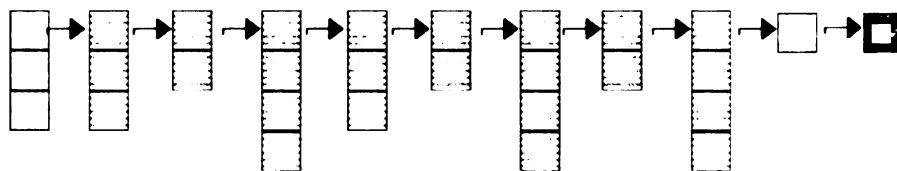


Figure 3: Dr. Cohen's instructional sequence.

As is clear from the figure, there was a strong focus on content, enveloped by some meta course discourse, at the very beginning and toward the end, and culminating in an individual processing task. The majority of student tasks thus involved the presentation of content.

Presentation of Content

Dr. Cohen provided an overview of the unit and an outline of topics at the beginning, but the bulk of the unit was devoted to student reading, listening, or viewing content. Each course page began with a lecture on a subtopic for the unit and ended with a list of reading, viewing, or listening assignments to expand students' understanding of that subtopic. The subsequent page approached the unit topic from another location. In

Unit 2, for example, the topic was *literacy in school and out*. The first content page addressed the broad topic of learning in and out of school. The second page addressed the subtopic of learning experiences of the individual.

Processing tasks. It was only after completing a number of such pages of content that, at the end of the unit, students engaged in an individual task that required processing of the content other than reading, viewing, or listening. There were no required social tasks in Dr. Cohen's course; there were discussion forums, but they were optional.

Individual tasks. At the end of each unit, students were required to write a 500-word essay. The last unit combined the writing assignment with a final exam by requiring students to write a 2,500-word essay. The focus of these essays varied by unit, but most required students to write about their thinking concerning important course concepts in relation to a particular artifact. These artifacts created a context and a focus for their writing.

Course Enactment

Thus far, I have looked at the structure of the course, describing the content and the combinations of assigned tasks. In this section I focus on the enactment of the course. As part of this examination, I address issues that the instructors struggled with during the course, their interactions with students, and the instructor personas they created within their courses.

Each instructor described an issue that he or she was struggling with in the middle of the course, something that was not going well. When I asked Dr. Cohen what was going well and what he was struggling with in the course, he responded, "I get to this point all the time, approaching halfway through, and only a handful are really halfway through." To motivate students, he admitted that he relied on the intrinsic interest of the

material. He did try various strategies for keeping students motivated while taking his course. These included different types of responses on their assignments. Dr. Cohen believed in self-regulated learning, and his course reflected that design. One obstacle that seems to arise with this type of instantiation is that students might not be motivated to progress through the material at a reasonable pace.

Teaching. Dr. Cohen's teaching was influenced by his belief in the "teach the conflict" approach. When he evaluated students' assignments, he paid special attention to comments by students that acknowledged conflict in an idea or viewpoint by one of the authors from their reading list. When evaluating students' written assignments, he looked for whether they could think skeptically about an idea or proposition by identifying both its merits and its flaws. During his second interview, Dr. Cohen talked about the process of responding to student papers while he was grading one of the papers in his course. In this portion of the interview he revealed a general pattern for responding to student work. In the example he chose, he demonstrated the importance he placed on the quality of the points made. He said, "But here's the point, this is overall not really a terrific paper. But on the other hand it does some fabulous things. To me, that's a 4.0. They don't have to solve every problem. So you'll see my response here. What I have to do is suggest the limits to what she did. At the same time I underline how terrific it was that she did something else."

Dr. Cohen often tried to begin his "letters" to students with a comment identifying positive or interesting element of their papers. Through the letters he tried to engage students in a dialogue by posing questions and pointing out specific elements in their papers. When commenting directly on a particular aspect of students' work, he would reference the exact paragraph in the particular student's paper. He thought that, "to

someone who has written the paper, that's a very welcome kind of remark. It's very specific." He also commented, "They [students] like the feeling that somebody is actually reading the thing."

Dr. Cohen also looked for paradoxes or contradictions in students' writing, just as he presented contradictions in his own course content. Looking for paradoxes and contradictions can be garnered from a "teach the conflict" approach. He then tried to point out these paradoxes to the students, hoping that they would be able to recognize the paradoxes and subsequently push their thinking on that subject and even, perhaps, negotiate a new understanding. Most important, he tried to juxtapose different perspectives. He said, "You can see I'm very inclined to do that. On the one hand this, on the other that. Do a lot of them take that up very seriously? No, I don't think so. That would be a key point for you because it's an essential part of my sort of pedagogical style."

Later on, when referencing the student's work, he once again mentioned how he focused on the student's ability to look at the subject matter from different locations.

What I'm drawing out is what is implicit here, but if she was a more practiced writer or done a heck of a draft, would have probably been represented in the structure. She would have written on the one hand this, on the other hand that in the paragraph. Now you don't see that too often. Some can do that, but what I'm trying to do is to guide her maybe for the next paper.

The structure Dr. Cohen was looking for represented a way of thinking about the content. He did not want students to regurgitate what they had read. Rather, he wanted them to synthesize and even question what the authors were saying. He constructed his feedback to students based on that belief.

In summary, Dr. Cohen tried to present a careful reading of students' work, hoping that they would internalize that critical view. "What I have to do is suggest the limits to

what she did. At the same time, I underline how terrific it was that she did something else.” Thus, he realized that he needed to be mindful of not just the limitations of students’ work but also what they had done well.

The presentation of self--The instructor persona. Dr. Cohen mediated students’ experience through his mini-lectures by posing reflective questions, orienting students to the upcoming material, connecting new to previous material, and presenting the viewpoints of other individuals and organizations. Interestingly, he often spoke through the voices of others.

In one of the units, however, Dr. Cohen stepped into his own shoes and wrote a page entitled “Interactivity in Online Learning--A Dissent.” Although the title foreshadowed a strongly worded piece, Dr. Cohen once again asked students to consider different conceptions of interactivity. He did place his finger on the scale by raising questions about interactivity and the content of the course. He wrote,

By posing the questions this way I mean to direct attention to the case for interactivity deriving from the students’ active and independent engagement with the course materials. . . . I am, as you can infer from the structure of [course], less keen on the virtues of interactivity among students being central to an online course. I think such interactivity to be fine as long as it is voluntary and thus reflects what I take to be the best of the Learning Society in so far as it represents the interests of mature adults. . . . I am skeptical too of the ability of a course to provide a “community.”

Dr. Cohen was clear about his views on interactivity. By telling students what he believed, it was possible that they might feel a greater degree of psychological closeness. It was also on this page that the authority of the instructor was evoked. Interestingly, in this same lecture, Dr. Cohen made his image of the individual scholar apparent. “I sometimes think that the only [learning style] that is not honored is the oldest--the solitary or autonomous learner seeking to make something durable from an opportunity to

do something new, or to reflect on an idea in a text or anything else that can influence living.”

One interesting linguistic move that Dr. Cohen made is that he would use the pronoun *we*. “We’ll return now to contemporary questions of the Learning Society.” “. . . as we will see later in this unit. . . .” “You may say that we are interested in the biography of learning. . . .” This discourse move can project a sense that students and instructor are engaging in a mutual learning experience.

Realization of teaching perspective with technology. In Dr. Cohen’s course, each unit contained a series of pages numbered like a textbook. Each page consisted of a mini-lecture that prepared students for their engagement with the reading, viewing, and listening assignments and optional links. Dr. Cohen viewed this approach as linear, but only on the surface. Figure 4 shows one example of the list of content pages in a unit.

Unit 1 The Learning Society: Definitions, Practices, and Dilemmas	
1.1 Welcome to EAD 860 Concepts of the Learning Society	
1.2 Introduction to Unit 1	
1.3 What is the Learning Society?	
1.4 Antecedents of the Learning Society	
1.5 Translating “Transformation”	
1.6 Theories of Learning: Beginning with Work	
1.7 The Lifespan Perspective on the Learning Society	
1.8 Learning Across the Lifespan: Types and Domains	
1.9 Whose Society, Whose Learning?	
1.10 Learning at the Computer: The Rewards and Risks of Technology	
1.11 Structures and Policies: Models of the Learning Society	
1.12 What’s Worth Knowing?: From Thomas Jefferson’s Library to Julia Child’s Kitchen	
1.13 Unit 1 Writing Assignment	

Figure 4: Dr. Cohen’s layout of content pages.

The presentation of Dr. Cohen’s content within the system appears linear, but as he described it, it actually was much more associative and even redefined conceptions of

a book. As he said, "The book on the screen is a little misleading because within each chapter there isn't the logic you would typically expect from a text. The freedom of working on the web allows me to associate in and around whatever . . . the subject of the unit is so that each unit is going to look a lot more diverse and various than a book chapter would be." In his writings about his course, Dr. Cohen described the format as a "bricolage" because it was not a fixed format. Rather, students could create and piece together their own meaning, drawing from the diversity of materials at hand. Figure 5 is a simplified image of Dr. Cohen's content.

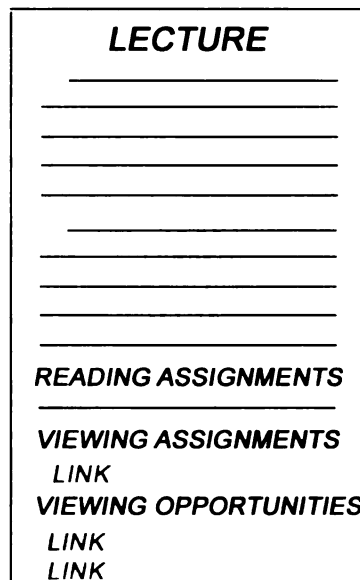


Figure 5: An outline of a page from Dr. Cohen's content.

Dr. Cohen was able to create this bricolage by drawing on a wealth of web and text-based resources and selecting resources, presented as assignments and opportunities, that would expand students' thinking.

Thus, through his "opportunities" and "assignments" at the end of each page, Dr. Cohen turned his book pages into portals. He brought together a variety of resources and information (some required) that students could peruse in their own order, picking and choosing from the options. He took the designers' assumption of linearity, and drew on

familiar scripts garnered from years of traditional education, scripts that associate learning with the linearity of books. He then subverted this by creating a series of portals.

At the same time, Dr. Cohen realized that by creating this portal, by providing links, he continued a sense of structure that, on the one hand, created a sense of security with its structuredness, and on the other hand challenged students' complete freedom to create their own meaning. "All these numbered passages and the appearance this gives of orderliness, offers a kind of ballast you could say for people who want to enter the net. They're not going from an unstructured place to another unstructured place. So maybe that's why some of them come back. This feels secure." He went on to say that he could design his course in a way much more representative of the web and the "scientific and scholarly hodge-podge that the web is." However, he did not think he was a good enough designer to be able to replicate this network of associations in the design of his course. He also pointed out the limits of providing links in the context of a course. In the context of the interview, Dr. Cohen framed his thoughts about the limitations of links within the context of the work of Nick Burbules.

But I think it's true. He said the link looks like it opens up, but actually the link closes more than it opens because once you've linked to something, to the run of the mill student, to them that's where this subject goes. But you've also foreclosed a lot of things by opening the one link. . . . But I thought the link was one of the best examples about the way this opens out into the world, but the way Nick draws the argument is very clever that you can look at the link as not quite a destructive force but as a constraining force.

Dr. Cohen realized that even though the web provided the ability for him to expand his content as well as furnish opportunities for students to select their own pathway through the content, this freedom was almost a mirage. Just as numbering web pages like a textbook gave the appearance of linearity, using links gave the appearance of

a freedom of choice. More important, the course was not as linear as it seemed because each mini-lecture ended with jumping-off points into the very nonlinear web.

Another interesting point is that Dr. Cohen's example of looking at the web as freeing him from the constraints of text and at the same time imposing a structure that limited students' freedom illustrates his affinity for identifying paradoxes. It was not only something he tried to help students do, but he did it himself in how he structured his content and how he examined ideas.

Manifesting one's beliefs in an online course can also be limited by one's knowledge of the system. Dr. Cohen, by his own admission, was still learning the language of ANGEL. Yet, he worked with his producer to develop solutions to perceived problems in the ANGEL system. For instance, Dr. Cohen did not like the manner in which the content and communication tools were separated from each other; i.e., the normal functionality of ANGEL does not allow one to view the contents of a forum on an ANGEL page. Dr. Cohen worked with his producer to further integrate the content and communication tools—by having his producer create a new code that would “pull” the discussion forum and display it within a frame on the page. Thus, students in his class did not have to leave the content to participate in discussions. Clearly, this is an instance in which the manner in which ANGEL defined the “space” for students' interaction with content or with each other did not match Dr. Cohen's sense of the same space. It is possible that he had an integrated perception of the space, rather than a compartmentalized view with which it was designed. Thus, he manipulated the interface (with help from his producer) for that more integrated perception and to maintain a focus on the content, something that Dr. Cohen valued immensely.

Dr. Davidson: *Adult Learning*

Dr. Davidson's course, *Adult Learning*, like Dr. Cohen's, was an elective in the online Master of Arts in Education program. The goal of Dr. Davidson's adult learning course was to help students develop a better understanding of adult learners and how to use this knowledge of learning in adulthood to help them design and implement learning experiences for adults. He used a problem-based learning (PBL) approach as the main vehicle of instruction. The basis of this approach was analysis of a problem or set of problems in a small group. It involved four main phases. In phase one, students developed a tentative definition of the problem, a tentative hypothesis regarding the source of the problem, and a plan to research the problem. In phase two, they researched the problem. In phase three, students brought their research together to propose a solution to the problem. They wrote up the solution in a report. In the last phase they reviewed and reflected on the team's product "as it relates to their experience and their understanding of the problem area" (Dr. Davidson, course materials). Dr. Davidson emphasized that the activity was not just about the product or solution to the problem, but that the process students engaged in when studying the problem was equally important. The course was divided into seven units. Three of the seven units involved a PBL activity.

Content

The course began by orienting students to online learning and the PBL approach. Once students had a general background knowledge of learning online and PBL, the course moved into the philosophical foundations of adult learning theory, including the historical and social contexts for adult learning. The rest of the course addressed the

nature of adult learners, participation in the learning process, andragogy, self-directed learning, and other theories and perspectives on adult learning.

Once students had been introduced to online learning and the PBL method in the first unit, the next unit provided them with an overview of the forms of adult learning, the influence of historical and social contexts, and philosophical issues.

As students moved into the third unit, they began studying adult learning through the exploration of practice problem scenarios. They also began to develop a working definition of the adult learner and a deeper understanding of the nature of the adult learner. The unit also addressed the difference between adult learning and learning in childhood or adolescence. Students also looked at age-related biological factors that affect adult learning.

The fourth lesson focused on participation and the adult learner. This included participation in various contexts such as higher education, training, and informal learning, as well as obstacles to participation. The lesson addressed the different patterns of participation and motivation to participate versus motivation to learn. After examining the person in context, including both social and psychological aspects, the course looked at key research and theoretical ideas that have been advanced to understand how it is that adults learn. Topics included andragogy, self-directed learning, the role of experience and reflection, the role of social context and community, transformative learning, "brain-based" research, and critical, feminist, and postmodern perspectives on the adult learner.

Dr. Davidson believed that students develop new understandings when an event or experience occurs that makes their prior knowledge problematic and they are forced to construct new understandings. His main focus was not as much on the knowledge that gets constructed but on the process and students' awareness of and participation in the

process. To help students focus inward to make connections to the content and reflect on their own process of knowledge construction, he designed his course to integrate a variety of reflection activities.

Course Design

Dr. Davidson, like Dr. Cohen, had designed his course to be like a book, with students progressing through the units by clicking the Next button and going to the next page. Hyperlinks to other files and web pages were located throughout the lesson pages. The nature and sequencing of tasks in Dr. Davidson's course, however, were very different from those in Dr. Cohen's course.

Instructional Moves

Figure 6 depicts the general unit structure in Dr. Davidson's course. In addition to completing individual tasks, students participated in discussions that spanned the entire unit, represented in the figure by yellow across the top. Striking in Dr. Davidson's unit structure was the amount of meta-course discourse. At the beginning of the unit, he was making explicit the objectives, expectations, and assignments. Most pages concluded with a *Next Steps* section, which informed students what they should work on next. At the end of the unit, Dr. Davidson provided expectations and guidelines for individual and student group work and a checklist of what students should have completed during the unit. The distribution of presenting-content moves and processing moves was also quite different from that in Dr. Cohen's course. It was difficult to create a typical representation for Dr. Davidson's course because there was less consistency in how his course pages were designed. Figure 6 represents the typical moves made in a single unit for Dr. Davidson's course, as well as the coding key.

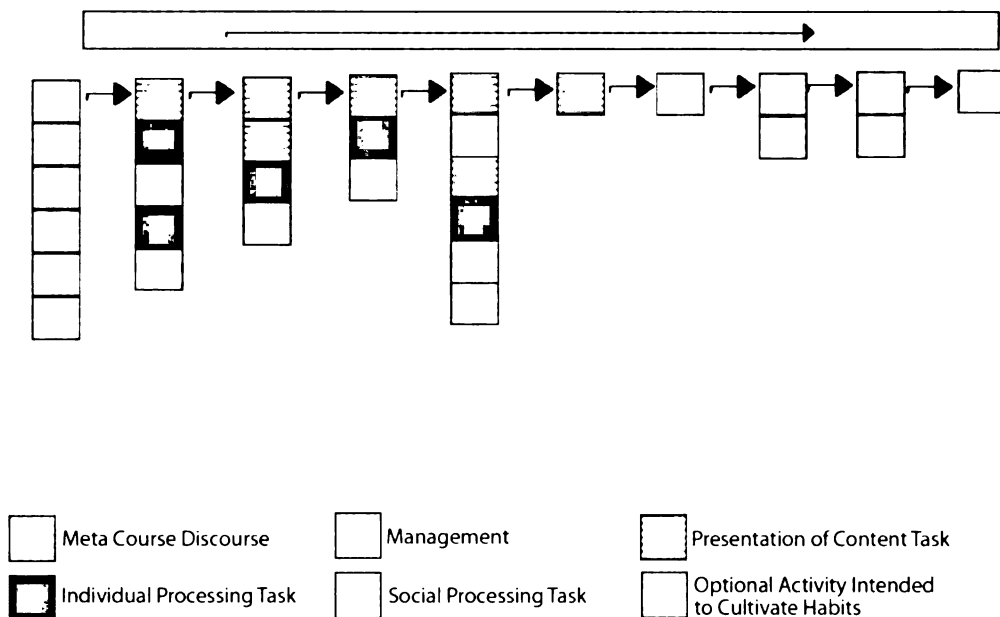


Figure 6: Dr. Davidson's instructional sequence.

Presentation of Content

Before content was presented, the first page of the unit often provided an overview and listed expectations, objectives, an outline of topics, and products assigned for the unit. Dr. Davidson would also provide another overview for a specific page. For example, before students began the content of one of his lectures he wrote,

Before we turn to an examination of more specific theories and ideas related to how adults learn, it may be helpful to go back to Lesson 2 and review the material in this lesson that speaks to philosophical ideas of adult learning. In particular, I am interested in your revisiting the major philosophical schools of thought.

Dr. Davidson's arrangement of content and processing tasks was less consistent than Dr. Cohen's. What is important to note is that a common pattern for Dr. Davidson's course was the assignment of an individual-reflection task after content had been presented. Occasionally, students did not reflect in their learning logs before sharing their observations with their group. The overall presentation of content was interspersed with

individual and social tasks. Before students went on to the next page of content, Dr. Davidson would tell them their next steps.

Processing tasks. Most presentation-of-content tasks were followed by individual and social tasks that required students to reflect on what they had read. Typically, students completed an individual-reflection activity and then reflected collectively through some form of discussion. Reflection activities are an important instructional tool for helping students process information that is part of the curriculum and that emerges from discussions with their peers.

In his reflection activities, often required for students' learning logs, Dr. Davidson asked students to make connections to their own educational experiences and to write about how they were making sense of the content. Because this was a class of adults learning about adult learning, they also were asked to address how concepts, theories, or ideas applied to them. For example, when addressing the topic of self-regulated learning, Dr. Davidson asked students to write in their learning logs about whether they would describe themselves as self-regulated learners and, if so, in what ways they would describe themselves as such. Then he asked students to think about their own experiences as adult learners and to write about whether "the notion of self-directed learning as a goal, a process, or an attribute" made more sense to them. Finally, he asked them to think about whether they saw elements of self-directed learning in individuals in other texts.

Following are some examples of the types of reflective tasks that Dr. Davidson's students were required to engage in:

Individual Work: Think of an adult learning experience that you have recently had that was particularly positive for you.

- Describe the situation in some detail; What was the context? Who was involved? What happened?

- What made it an especially positive experience for you?
- What contributed to helping you learn in that situation?

In your learning log, write out a brief description or story of this incident, using these questions as guidelines for your narrative.

In other activities, he asked students:

- Given your own lifespan, what ways can you identify in which learning in adulthood or how we think about learning in adulthood has changed?
- In what ways do you see yourself as an adult learning in these historical trends? With what historical trends do you see your own growth as an educator most consistent?
- In what ways is your social and cultural context influencing the ways in which you think of yourself as a learner, in what you learn, and how you learn?
- Using what you have learned about philosophical foundations for adult learning, what school of thought do you feel best reflects or represents your overall views and beliefs about adult learning? How does this school of thought compare to your dominant teaching perspective on the Pratt TPI?
- How would you characterize yourself in terms of the following theories and why?
- What biological changes in yourself or others have you noticed that may be affecting the learning process?
- Would you describe yourself as a self-directed learner? Why or why not?
- In what ways might you describe yourself as a self-regulated learner? Is it similar or different from your sense of yourself as a self-directed learner?
- When thinking about your own experiences as an adult learner, does the notion of self-directed learning as a goal, a process, or an attribute make more sense to you?
- Think of a recent time when you believe you have learned something significant or important from your experience. Briefly describe the nature of this experience.
- In what ways has the context of your learning experiences influenced or shaped the nature of your learning. In what ways would what you learned from these experiences be different in different contexts?
- Think back over your experiences as an adult learner. . . . Do any of these learning experiences reflect characteristics or attributes of transformative learning, as it has been described here and in your text readings?

In these activities, where students were asked to retrieve prior experiences, they were required to see how those experiences aligned with a theory, a concept, or an idea. Dr. Davidson also used those experiences to help students identify with the content or make sense of it. When students were asked to contrast their experiences, it was in the context of identifying similarities and differences. However, in tasks in which students' prior knowledge was activated, it is difficult to see how this knowledge was elicited in a

context to help students engage in an “experience of the novel.” Instead, the tasks were used as a way to help students identify with and assimilate the content.

Students’ grades were based on two individual-reflection papers, three group reports, an individual capstone project, and an individual journal. Responses in their individual learning logs were not graded.

Individual tasks. Students were required to maintain a reflective journal in which to record their cognitive and affective responses to the course at least once a week. They also maintained a learning log for all of the units. This was a more structured activity as students were prompted with questions and reflection activities throughout a unit. For example, in their learning logs, at different points they were asked to reflect on a recent positive educational experience, how they would characterize themselves in terms of different theories of development, and their participation experiences within an educational program. In their reflective papers, they were expected to demonstrate what they had learned and describe how they would use that knowledge in the future. In their capstone paper at the end of the course, students needed to articulate their own theory of adult learning and explain how it applied to the context in which they worked.

Social tasks. In the representation above, an individual-reflection activity often preceded a social activity. This is because, as part of the reflection assignment, students were asked to post the observations they wanted to share from their learning log to the discussion forum. At the end of Lessons 3, 4, and 6, students wrote with their small-group members a solution to the problem-based scenarios. As part of the process of a problem-based unit, the group might be asked to turn in an action plan. In this unit, students worked collaboratively to identify and define the problem, as well as to create a tentative hypothesis; research the problem, using the research and hypothesis to create a

formal report describing how they would address the problem; and, finally, engage in individual and collaborative debriefings about the process. Besides the group work that students engaged in for their problem-based units, they were also asked to participate in whole-class and team discussion forums during the unit.

Course Enactment

In the preceding section, I described the structure of Dr. Davidson's course, looking closely at the content and course design. In this section I discuss the issues Dr. Davidson faced when teaching, how he interacted with students, and his instructor persona.

When I met Dr. Davidson for the second interview, he started by talking about some of the difficulties in his course. He was having problems with group participation.

So far I think I've mixed feelings, I guess, about the experience so far. . . . I think a couple of the teams, they're right into the problem-based units now pretty heavily and getting used to working with one another . . . But two or three other teams, and one of the teams maybe in the middle there somewhere, a couple of the teams are not working quite as well as I would hope. So that's been a concern. I don't know if I told you, but initially I was quite worried about people just sort of getting on board; they weren't really seeming to buy into the whole team thing like some of the courses in the past have.

To address some of the participation issues, Dr. Davidson sent emails to the class and to individuals stressing the importance of being clear about expectations, and developing plans and timetables. When addressing specific issues, he tried to think about how students would perceive what he had said. He noted, "I said it as gently as I could, not to sort of cause them to feel guilty."

Teaching. During the second interview, Dr. Davidson also talked through how he responded to students in the discussion forums. He began the exercise by talking about a post from a student. That student had posted some comments about the problem they

were addressing in a PBL exercise. Dr. Davidson talked about the process he went through when responding:

What I'm doing when I'm looking at her post, I'm asking is she thinking about it in a sort of an open way, in a way which is going to allow her to sort of lead naturally to thinking about what might be some underlying factors that are contributing to the problem. So in other words, is it a reasonable way to go about thinking about this initial problem? And then, do they provide evidence? So here, for example, she states some propositions about the problem, but there's no facts to support. I mean, she's not citing. She says that, and then I will respond. That's sort of a fairly typical kind of an exchange.

He tried to get students to have a clear understanding of the underlying issues of a problem. He specifically wanted them to develop their statement and analysis of the problem before going on to solutions. When students were discussing a reading during the problem-based unit, Dr. Davidson wanted to check to see whether they had a basic grasp of the reading. He would also pose questions that directed students to see how the readings related to the problem they were addressing in the unit. Like Dr. Cohen, Dr. Davidson would copy parts of students' work and include it in his feedback so that they would know exactly which section he was referencing. This also gave students the perception that he was doing a close reading of their work.

When I asked Dr. Davidson where in his course he tried to help students resolve gaps in their prior knowledge, or to work through problematized learning experiences, he said that usually happened in the learning logs. He also noted that the PBL process possibly gave a certain view of learning that constrained this because it presented a specific perspective on the learning process. He noted that his responses to the learning logs were not very lengthy, partly because he had limited time. When he responded, he tried to affirm what students had said and then push them a little bit. He said that, in the formal reflective papers, he gave more extensive feedback. Time management had been

an issue for Dr. Davidson because of the bulk of discussion forums and written assignments, as well as other obligations such as dissertation defenses, committee work, and conferences. He had tried routines, but they were difficult when one was out of town.

When Dr. Davidson was grading assignments such as papers, just like the other instructors, he looked at the criteria of the assignment and used them as a guide. First he looked at whether students had addressed the “substantive dimension” or heart of the assignment. He looked at what was developed well and what was missing. If students evidenced a misunderstanding, he tried to be sensitive to how they would perceive his comments: “I will try to gently provide an alternative way of thinking without sort of saying, ‘Oh, that’s wrong.’”

In Dr. Davidson’s response to a student who had done very well on an assignment, he pointed out that the paper was well written and organized and effectively integrated the concepts and ideas from the course. Then he said,

It is not always easy for public school teachers to see the direct relevance of adult learning for their own practice, but you do an excellent job of providing insights into how this content has been helpful to you. These are some very interesting ideas and are clearly described and documented. This discussion also makes use of several different concepts and ideas studied, including age-related differences, gender differences, and developmental influences. Very nicely done! I would suggest that, as you identify and make use of specific concepts and ideas, you first carefully define your terms as they are discussed in the literature.

In response to a student who had a slightly lower score, he also began with the positive aspects of the person’s writing. In this case he started by giving several specific examples of what the student had done well:

I like the way in which you use here a specific case from within your own practice to illustrate some of the ideas you are focusing on here. Specifically, you refer to the notion of the influence of context in how you shape and form ideas and actions around particular experiences of learning. I also like your use of the modeling idea, and your brief excursion into the history of a couple key philosophical ideas. You describe an interesting insight into the connection

between religious themes in adult learning and your own experiences of commencement.

He then went on to make specific suggestions for improvement that were slightly more direct than his response to the previous student. He wrote,

In general, I would like to see more development of specific ideas. Your discussion, for the most part, remains at a fairly general level and it is not clear to me how specific ideas or concepts are being used or thought about. . . . Also I would like to see reflections on the process of learning—online and group work—and what you are learning about learning and about yourself from this process.

The quality of student writing was not the only factor that mediated Dr.

Davidson's feedback. His knowledge of the students had an influence as well. When asked about whether his comments varied from student to student, he replied,

Yeah, I think about that, and again that's hard to get a handle on, especially in the online environment, but over time you get a sense for how gentle you have to be with people I think. There's one guy who's very fragile, I think, and so I'm very gentle in making sure I don't sort of fracture his state of consciousness or something. So I get a tentative sense of people who seem to be quite vulnerable and people who can handle it, can handle a little bit more hard-hitting critique. So that tempers my feedback. There are people who have less experience or there's less evidence that they understand the academic content in light of their experience. It sort of remains out there as academic content, so from time to time I tend to provide, I think, more examples for them, and I know I spend more time trying to make connections for them, whereas with others I might be more direct about sort of directing questions to various aspects of their practice or their prior experiences or something. So I take into account the level of experience they have and if I know and some I don't and some I do. I can tell. I think those are the two main things.

Dr. Davidson began his course with a belief that teaching and learning involve fundamental changes in how students view the world and their relationship with it and within it. He was, however, realistic about his perspective. At the end of his first interview, at the beginning of the course, he said, "I think it's harder to do, and I've been teaching for a long time now, and I realize how difficult it is to act on this perspective or this set of perspectives, and it's hard in the online environment to do that. It's not about

technique, it's not about strategy, and I think I would agree with Palmer. It is about being with the student."

At the end of the interview, Dr. Davidson lamented the limits of what he could do in his course.

You can see that with some people. . . . They will go on, they will sort of elaborate, they just sort of sit down and think out loud while they're typing. You can watch, you can see how they're thinking about it. They're being thoughtful and reflective and all that sort of thing, and then there are others who feel their responses are answers to questions, you know, and then they're not going beyond the answer to the question. . . . I'm not sure that there's much growth there in in the 16 weeks that we're together, you know? I honestly don't. If someone comes in with a pretty rudimentary ability to reflect and analyze, I have a sinking suspicion that they're going to leave my course in 16 weeks with not much more than that. Maybe a little more content, a deeper appreciation for the nature of the adult learner, but not terribly more sophisticated in terms of their capacity to analyze and critically engage in content. I mean, that's pessimistic.

When asked to talk more about how he dealt with this reality he responded,

All I can do is pose questions to them, you know: What is your evidence, what is your support? Do you feel you got the strongest support of this? What do you mean by that? Can you state that more clearly? I mean, I suppose maybe they begin to pick up on those things over time. I don't know. It's hard to. That's all I can do. I'm able to sort of coach them through a process of thinking carefully and writing in a way that communicates what they're thinking in a careful manner. And I don't know what else to do.

Dr. Davidson expressed some frustration about the limitations of what could be accomplished in one semester with a group of students who had come together temporarily. A partial source of this frustration might also have been the high expectations set up by his teaching perspective—that of achieving deep personal transformation.

The presentation of self--The instructor persona. During my interviews with Dr. Davidson, he talked about his beliefs in a soft-spoken and somewhat deliberate voice, at times reflecting on his own comments. He took each question seriously and spoke in

earnest. Of all of the instructors I interviewed, he spoke the least about his personal life and topics outside of the interview. He projected this same demeanor in his course. During the interview I also asked Dr. Davidson if there was a metaphor that he thought described his role as an instructor. He said that he was “probably more like a coach.” According to him, this metaphor represented his teaching because he modeled how to think about a problem and frame it as well.

Like a mirror that reflects only aspects of the person gazing into it, Dr. Davidson did not develop a competing persona. It must also be noted that when he acted as a mirror for students’ ideas, he did not just reflect. Instead, he reflected specific aspects to focus, clarify, and push students’ understanding; It was a selective reflection that was not static. Unlike Dr. Parsons, on his *Meet the Instructor* page, he did not share his personal hobbies; rather, he shared his professional history. One personal footprint he did leave on two pages was a picture of himself on a bike. He had lessened the focus on himself in his content, but he had not entirely removed himself from it. It is possible that, in the process, he was keeping a distance to help students draw upon their own experiences. Then, through his tasks like the learning logs, he was able to create a stronger sense that students were interacting with him.

I will use a series of directions and direct them back to the text or the Power-Point, and then I give them an opportunity to respond to those questions directly to me as opposed to their team members so they don’t have to feel like they have to tell everything to their team or post everything to them. And that gives them, I think, more of a feeling of sort of being, again it’s sort of a presence thing of being in touch with me, talking directly to me.

At the end of the lesson he might say something like, “If you are comfortable with your understanding,” or “When you feel you have a good grasp of the overall scope of this lesson,” or “When you feel comfortable with your knowledge and understanding of.”

He asked students to move on to the next step when they were comfortable. This was not an authoritarian voice, it was not a humorous voice, but it was thoughtful and understanding.

How would I describe my voice? Hmm, well, things that come to mind would be questioning, not always, there's a kind of wondering, questioning, empathizing, showing them that I'm trying to understand what it is that they're saying about themselves and that I'm understanding it. But a voice that is nudging them, pushing a little bit. I don't want to be perceived as a kind of a rubber stamp presence and that, "Oh, he just says that about everybody," you know? "That's just his way of saying, 'Attaboy.'" He didn't really read it very carefully."

Part of creating an instructor presence online is about creating a presence that will help accomplish your goals based on your own beliefs and values, but it is also about creating a persona that is an authentic aspect of your identity.

Realization of teaching perspective with technology. Although both Dr. Davidson and Dr. Cohen had created a "book on a screen," Dr. Davidson's worked very differently and appeared different from Dr. Cohen's. In Dr. Davidson's course, as in Dr. Cohen's, students could progress through the content linearly. That said, at another level, progressing through the subject-matter content could be a very nonlinear experience. In Figure 7, one can see all of the digital objects in a unit. Students were actually supposed to begin their work in the unit by clicking on "Begin Lesson 5 here: Overview of the Lesson," located midway down the list. At other times the beginning page was at the top of the list and discussion forums were at the bottom. Dr. Davidson used internal links to connect students from a content page to a discussion forum. Figure 7 shows the order of the contents in a single unit.

Lesson 5: Oct. 23 - Nov. 6	
Theories of adult learning: Andragogy, self-directed learning and experience-based learning	
1	Lesson 5 Learning Log
2	Lesson 5 Classwide Discussions on forum
3	Andragogy, self-directed learning and experience-based learning
4	Learned source on forums for Lesson 5
5	Dropbox for Lesson 5 Assignment
6	Dropbox for Lesson 5 Assignment
7	Begin Lesson 5 with a review of the lesson
8	Adult learning theory
9	Review of philosophical foundations to adult learning theory
10	The idea of andragogy and its critiques
11	The role of self-directedness and self-regulation in adult learning
12	Understanding the role of experience on how adults learn
13	Expectations for written products for Lesson 5
14	Analysis of the quiz content
15	Feedback for Lesson 5
16	Checklist of tasks for Lesson 5

Figure 7: Dr. Davidson's layout of content pages.

Thus, the surface linearity of the structure could actually be quite nonlinear.

Another issue adding to nonlinearity is the fact that the content of the lesson's tabs and folders was not used consistently. For instance, these tabs and folders could be rearranged to align more closely with a linear navigation scheme, but Dr. Davidson did not always do that. Discussion forums could be directly below the content page in which they were assigned. When students exited the content pages, they were entering discussion forums, typing offline, or submitting individual assignments. Because students were exiting the content pages to engage in these activities and then coming back to where they left off in the content, their experience in the course was actually nonlinear and fragmented.

Unfortunately, the designers had designed the CMS with the understanding that students should progress through the content in a linear fashion, a structure that seemed to be working against Dr. Davidson's instantiation of his teaching perspective, which required

a more seamless integration between interacting with content, reflecting on it as an individual, and then bringing the results of this reflection back to the whole group.

The manifestation of a linear design in a CMS that encourages this layout in conjunction with a curriculum and teaching perspective that do not lend themselves to linearity can put instructors in a position in which they are, in a sense, working against their own design inclinations and the organization of their curriculum.

I initially started out thinking that I really wanted to maximize the hyperlink quality of online learning. . . . I think that became really much more confusing to students; I wanted to get away from the design of the course as sort of going through a book page by page. I wanted it to sort of use your imagination, just go wherever your imagination takes you. That was sort of like the myth I suppose that was animating my initial thinking about design and that was awful to students. I mean, they just got so mixed up and then I got mixed up trying to keep track of all the links. . . . So I went to . . . more of a sort of linear design. Start with this page and sort of go through.

Instantiating his own ideas about how the course should be designed by using a more weblike approach, linking topics and letting students create their own course, was difficult for Dr. Davidson. Thus, he turned to a linear format so that students would not struggle to figure out how to progress through the course.

An instructor's sense of design is not static, an assumption that Banyas (2007) found in her study. When Dr. Davidson reflected on his own design evolution he said,

I think my knowledge and ability to design online courses is evolving. I have a long ways to go, I think. I have an image in my head of what this would be, which is quite different from where I am right now. . . . I would like to make much more use in my design of video and audio, and, you know, I want to learn how to do that. And I think it'll not only make the course more interesting, but it will allow me to do things that I'm not able to do now or do things more effectively that I'm less able to do.

Dr. Parsons: *The Role of the Master's-Prepared Nurse
in Contemporary Health Care*

The Role of the Master's Prepared Nurse (MSN) in Contemporary Health Care

was a two-credit core seminar course in the master's-degree program. Originally, the course was a face-to-face discussion-based seminar for the nurse practitioner program. It was a core course and one of the first courses that all students, despite their specialty, took in their master's program. Thus, the course had a large enrollment of 75 students. An important goal of this introductory course was to socialize students into the program. By the end of the course, students were expected to understand the role, characteristics, and functions of the MSN, as well as the influence of economic and organizational factors, and productive collaboration. They also were expected to be able to identify quality performance indicators. The multiple roles of the MSN examined in this course included the MSN's role in collaborative care, managed care, and the evaluation of the individual's impact on quality health care. Students were also expected to look outside of their roles and examine the cost and value of the MSN in contemporary health care organizations.

At the time of the study, students from three different tracks in the master's program were required to take this online course. The course continued to be heavily discussion based. Some of the students were in the traditional nurse practitioner's track. Students who wanted to go straight from their baccalaureate program to a doctorate degree were part of the "fast track." Although they were not receiving a master's degree, they still were required to take the course. An education track had been added for nurses who wanted to teach at the community college level or work on staff education.

Dr. Parsons was co-teaching with two other instructors in this course. They were new to online teaching. Dr. Parsons was the lead instructor and was helping to mentor the other two professors.

Content

The course was divided into 14 core units. The first few units concerned the characteristics of various roles played by the MSN, and the use of advanced clinical judgment. Advanced clinical judgment involves decision making, critical thinking, and clinical judgment in practice. The next set of units covered issues and definitions related to primary care. This included defining the goals of primary health care, the role of these services in an integrated health care system, and outcomes of primary care. Also included were the role and breadth of primary care services. The course then moved on to explore role development, role theory, and issues related to the role of the Advanced Practice Nurse (APN) and the MSN. It then covered in depth issues related to managed care.

Midway through the course, students learned about disease and case management, looking at the effect of chronic illness on the health care system and implications for their practice. The next set of units examined the MSN's role as a collaborative team member, how these teams function, and the leadership characteristics of the MSN. The last set of units discussed the evaluation of care, what counts as quality care, and the direct and indirect effects of the MSN on patient care.

Course Design

The Role of the Master's-Prepared Nurse (MSN) in Contemporary Health Care was designed with a consistent format that rarely varied. Each unit in the course began with an introductory newspaper page. This page was intended to capture students' attention and also expand their thinking about current events, teaching, learning, and research, as connected to the course content.

Whereas Dr. Cohen and Dr. Davidson talked about the metaphor of a book on a screen as representative of their course design, Dr. Parsons employed the metaphor of a

newspaper. As mentioned before, Dr. Davidson's and Dr. Cohen's metaphor of the book evoked scripts associated with a linear style of learning, of moving from one page to the next. The metaphor of the newspaper implied timely, up-to-date information, offered in short snippets with the option to follow up on any (or all) of them to receive more information. Often when one reads a newspaper, it is a non-linear experience.

Newspapers are not designed for readers to read an entire page and then move on to the next. They follow a single story, jumping to a different section, then perhaps going back to the front page to follow up on another leading story.

The front-page newspaper format was not just a portal to other information and resources; it was a visual representation of a familiar artifact evoking scripts for extending one's own line of inquiry in a nonlinear manner. Dr. Parsons argued that she chose this format because she believed that reading a newspaper is important for nursing professionals. As she said,

I have the students starting to read the paper, the newspaper. Every week I want you guys, everybody needs to post something that you either saw in the news, read in the paper, you know, read in *Ladies' Home Journal*, I don't care, that's going to impact your practices, and that's pretty much everything. I mean gas prices, that's going to impact health care 'cause, you know, the cost of plastics is going to go up with the cost of gasoline, and three quarters of the stuff you use in the health care environment is plastic. Okay, so what's that going to mean? It's going to mean they can't transport people in ambulances without a \$500 extra charge. I mean everything.

Decisions about course instruction are not always driven solely by course objectives. They are also driven by our experience both inside and outside of school. When trying to motivate other students, we also draw upon those motivations we know best--our own. Thus, Dr. Parsons's selection of the newspaper metaphor was also based on her personal enjoyment of newspapers.

That little front page, the newspaper thing. I mean I really. I'm so glad when we

came up with that because . . . I always look forward to reading the paper in the morning, if I have time. But every morning is different; you don't always have the same headline, thank God. Well, lately we kind of do. But you don't always have the same picture or, you know, there's always something kind of interesting, and I think that's why I'm setting the courses up with that. Every week you see a different thing.

By using the newspaper design, Dr. Parsons capitalized on the potential effect that the front-page metaphor could have in terms of pulling students into her online classroom. Within the design of her newspaper page, she had created standard sections (see Figure 8).

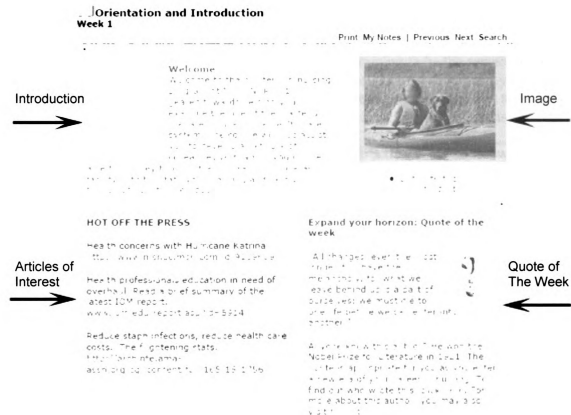


Figure 8: Dr. Parsons's page design.

The introduction always contained a brief, one-paragraph introduction to the unit.

Next to the introduction was an image with a caption. Many of the images had been taken

during Dr. Parsons's trips to Ukraine to provide health care and education to people often living in impoverished conditions. The images and captions often modeled a genuine concern for the people she served. This section is an example of how her belief that the online environment needs to be humanized was manifested in her course. In the lower left section of the "paper," Dr. Parsons had links to Internet sites or articles about current events of interest both within and outside of the health care industry. In the fourth section, in the lower right corner, was a mystery quotation with a link to its author. These quotations generally were taken from people outside of the health care industry and were intended to inspire students and expand their thinking in a fun and entertaining manner.

Like the first week is, and I can't remember the exact quote, but it basically says, you know, that you're never going to be the same again. I mean, it's a change-oriented thing and that it's hard and we're never going to be the same; and that's always, I mean whenever you start something new, a new adventure, you'll never be the same. So it's trying to get them, number one, to recognize that there are people besides nursing and medical theorists and sociological theorists and that there's actually philosophers and if you haven't heard of _____ or some of those folks in your past, then probably it's time that you know at least someone's name.

Dr. Parsons drew students into her course through the newspaper design. She then used this design to model the behaviors she was trying to socialize into the students. Thus, her belief that it was important to socialize students into their new roles as master's-prepared nurses and graduate students was manifested in the newspaper design of her course. She wanted students to seek out information that was pertinent to their field. This was modeled in the *Articles of Interest* section (see Figure 8). She also wants students to explore people and ideas that would generally expand their knowledge. This behavior was modeled in the *Quote of the Week* section.

After the newspaper page, the next page briefly listed the objectives for the unit. The objectives page was followed by a list of the reading assignments. Before students

continued to the discussion or discussions, they read a brief lecture, generally prepared by Dr. Parsons.

Instructional Moves

Figure 9 shows the general structure of a single unit in Dr. Parsons's course. Each unit consisted of four main pages. There are a couple of reasons that her units were smaller than the other professors'. She had a larger number of units (14), and this was a two-credit course. Each unit began by providing an introduction to the unit and then using the layout of the newspaper page to motivate students, cultivate habits of thought, and model the engaged professional. Page two listed the objectives and page three listed the readings. The introductions to her content, however, often were scenarios that set the tone for the content and/or stressed the importance of the topic. See Figure 9 for a representation of a typical unit in Dr. Parsons's course.

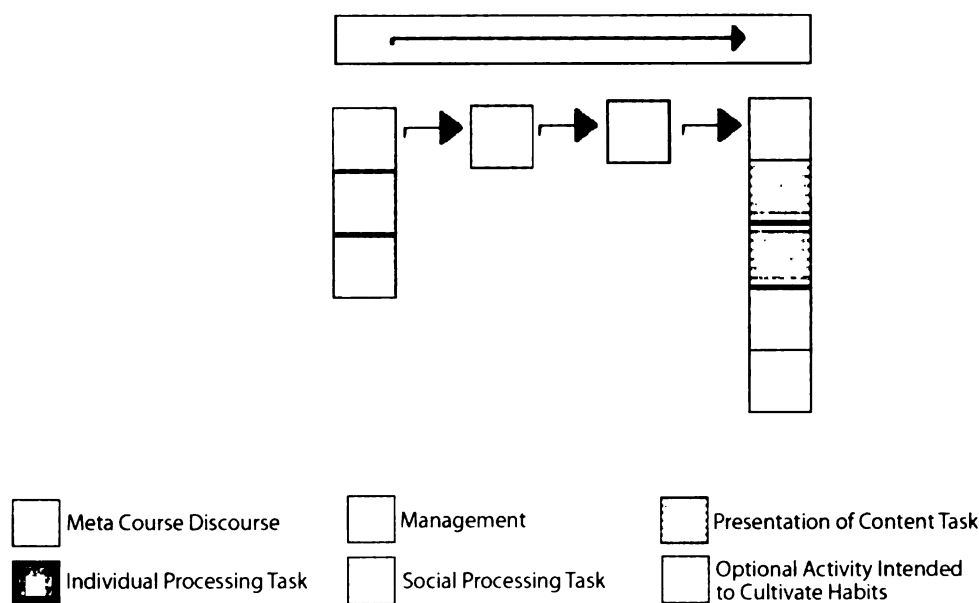


Figure 9: Dr. Parsons's instructional sequence.

The social task spanning the unit was the whole-class discussion forum in each unit, where students shared news of the week and related it to their practice. It is

important to note that the image in Figure 9 of a single unit does not capture the two paper assignments and final text at the end of the course. Dr. Parsons stated that she had intentionally created this simple and clear design:

I think in terms of making sure that it's clearly presented, put together in a way that's interesting, that flows well, that's organized. If there's one thing that I am, I'm organized when it comes to content because I think that it makes students crazy if they have to jump around; it makes me crazy, so I guess I'm assuming too much, but I think to have it organized, to have it make sense, to be logical and consistent and particularly, and it's true in the live classroom too.

Presentation of Content

The presentation of content aligned with Dr. Parsons's belief that learners need to feel that the material is relevant. Thus, preceding her lecture, she would generally write a couple of paragraphs emphasizing the importance of the topic. Sometimes she did this by setting up a scenario. During and after her lecture, she would make connections to the readings for that unit. At the end of the lecture, she would provide guiding questions for students' discussion-forum tasks. She motivated and engaged students, presented them with a clear list of what they would be doing and reading, and then she provided the tasks engaging them with the content. Finally, students were expected to share their responses to the guiding questions in their discussion forums.

Processing tasks. A large portion of students' grade in this course was based on their work on three assignments; however, students were expected to be active participants in the discussion forums, as well. The three assignments included two papers and a final exam.

Individual tasks. Students were required to submit two papers and a final exam that included multiple-choice, short-answer, and essay questions. Everyone had to take the exam online during the same 2-hour time frame. The first paper, *The Cost of the*

MSN, was due approximately a month after the start of the course. There were slight modifications to the assignment for students in each of the different tracks. This was a highly structured writing assignment. Students were directed to divide their papers into four parts. They were asked to address specific issues in each of the four sections. The second paper was longer and less prescribed. For the second paper, students were asked to select a health care issue to explore in depth. Students also needed to discuss the role of the MSN in relation to this issue and conduct a literature review. Learning to write professional papers was an important goal for this course, and the instructor had intentionally selected a highly structured shorter paper as the first assignment.

Social tasks. Every lesson had a dedicated forum for students in each of the three tracks. In the introduction or lecture notes, Dr. Parsons would pose questions and ideas for students to discuss in the forums. Each unit also contained additional non-graded forums. In each lesson there was a forum dedicated to current events related to students' practice. Students were asked to look through journals, magazines, and newspapers to post responses to articles they had come across that related directly or indirectly to their practice or health care in general. Additional forums sometimes were added to address special topics such as health care models. Midway through the course, students were asked to reflect on what they had learned about managed care. An optional forum also was open throughout the semester, called "*Just for Fun.*" This forum was "for things you would talk about during break in a 'regular classroom.'"

Course Enactment

When I met Dr. Parsons for the second interview and asked about some of the difficulties she was having, she noted that one of her biggest difficulties was a lack of participation on the part of the other two instructors. They had both participated in the

discussion forums only a few times. These instructors were new to this format, and one of them even had had a family tragedy that interfered with her participation. In a large class of approximately 75 students, this could place a burden on the one instructor participating in the forums.

Teaching. When I asked Dr. Parsons to demonstrate what she did when she taught online, she noted that she was currently in the process of reading students' posts. When she talked about the process, what she generally went through when choosing whether to respond to a comment or what to say to a student, she revealed the grey area of unclear boundaries that can exist when teaching with online discussions.

She commented that, immediately when she opened the forum,

I think the biggest thing when I am reading through these things, because obviously there is just tons of stuff, is to think about "Do I really need to answer?" "Do I really need to say anything about this or is it really, or do I need to correct anything that they have said, or should I just let them talk?" You know, that is that clinical judgment or that teacher judgment--whatever you want to call it. I don't always want to respond to the same person, and I have to kinda catch myself because a few of the students are just so darn engaging. . . . You really have to be careful.

Just like in a face-to-face course, a teacher in an online class has to make sure that she or he does not constantly pick on the same student, sending the message that *this* particular student's contribution is valued, without sending that same message to other students. In the online environment, there may be an additional reason for instructors to pause.

At that point in the curriculum they were discussing managed care. Dr. Parsons said that particular week tended to be very value laden because many of the students often thought of managed care as the pariah of the health care industry. Therefore, the conversation tended to be skewed negatively toward managed care. In such cases, when

Dr. Parsons knew that the students had strong opinions, she let them vent and then challenged them to consider the bigger picture. She said,

Really I have been biting my tongue not to put in a little note that says, "You know, the fee for service isn't exactly the best either." You know. Not that I am a huge advocate of managed care. But I am just going to give them a while and at the very end, probably mid next week, I am going to go in and say, "Now that you have given all of these examples of these awful things, now let's look at it within the context of what happens in the health care system."

The timing of her comments was just as important as the content. Sometimes she thought she needed to wait before she challenged students to think more broadly.

Dr. Parsons also occasionally liked to play the devil's advocate to push students' thinking in the discussion area. In one of the discussion forums, students were having a conversation about how education could solve so many problems. She replied that if education was all we needed, then everyone would be exercising, have the perfect weight, and so on, but this was not the case. She commented,

They really took off on that. I just feel like every once in a while you need to kind of get them to where they are not comfortable or something because "Oh yeah, health promotion, that's like apple pie . . . yeah," but it is easy to say the words but what does that mean.

During this specific conversation, Dr. Parsons had a couple of exchanges with the students, so I asked her to further explain her participation in the conversation. In commenting about the interchange, she said,

I really wanted to reinforce that educating is important and I didn't want to downplay it. And again when we think about their theory course. You know it is kind of like, "Okay, remember what I said a few minutes ago? Well, I mean it," and that's really why. And then I thought, you know, we really maybe need to look at giving them some examples versus just saying, "Yeah, you know education is important and learning theory is important," but then to apply it to their real live life. So how do we put that in the context of the patient, how do we include other people in the decision making, how much do you teach in a single visit when you see them in the clinic? . . . because I really wanted them to see how it affects them, how those learning theories actually come into play.

Dr. Parsons went on to say that her comments were intended to remind students that they were still novices and that their thinking would change as a result of this program. Also, their role would change as they moved from BSN to MSN.

Specifically, after Dr. Parsons posted her comment about education not equaling behavioral changes, the student commented that it was frustrating that educational efforts were not always enough to change behavior. Dr. Parsons once again tried to expand the conversation. She did this by focusing the student on effective practices, including other stakeholders in decision-making and the role of theory, and reemphasizing the importance of education. She also foreshadowed the importance of work students would be doing later in the program and again emphasized the idea of role change as an outcome of this course and the program. Students started expanding the conversation by talking about assessing effectiveness and reevaluating practices. They continued to focus on personal experiences. In response, Dr. Parsons replied with an example of her own:

As a peds nurse practitioner, I rely heavily on providing anticipatory guidance, which is teaching the parent/caregiver/family about what to expect at each stage of child development . . . in order to prepare, etc. Sooo, bottom line, education is part of my being. HOWEVER, merely giving info is not enough. One must be continuously assessing, evaluating, and reforming plans based on patient/family factors (readiness, ability to learn, desire to have info, etc.).

Dr. Parsons went on to give an example from when she was working in Ukraine. She noted that the Romanians she was working with believed that air currents caused people to get sick, so they did not ventilate their homes, thereby creating a perfect environment for bacteria to grow. Dr. Parsons modeled for students how she acknowledged their beliefs and used her knowledge of the community to help them change their behaviors. In a posting to students she wrote,

I talked to them first about how I know how important cleanliness is to them (it is a major major part of their culture . . . no matter how poor, they try to maintain a

very clean house to the point of even sweeping the dirt floors). This acknowledged that I was considering their beliefs. I then approached the discussion of fresh air by talking about how they "clean" the unseen environment (air) much like they clean their floors. . . . I put the teaching within a context they could relate to and into a context with which they could behave without going against their beliefs. It was amazing to see the women of the village all nodding their heads and saying "Yes, yes." We must do the same with patients we see who are trying to change behaviors like cigarette smoking or overeating. It is not enough to merely give them the info, but we must find a way to do it that makes sense and fits within their context of living. [Student's name], you are so right that planning for some sort of programming is vital for the folks who will be coming through the bariatric center. Behavior change is such a difficult, difficult task.

Dr. Parsons's interactions with students in the discussion forums demonstrated that she was making decisions about when to respond based on the comment, the student, and the evolution of the conversation. Through these interactions she also modeled the engaged, thoughtful practitioner.

Dr. Parsons also talked about responding to students' papers. The first thing she talked about was the quality of students' writings and their unfamiliarity with the formatting and style of writing required for papers in their field. In fact, her first assignment was designed to ease them into the writing format.

When I asked Dr. Parsons to talk more about what she did when grading a paper, she went back to a specific student who was really struggling with writing. She said,

This needs to be a good learning experience for this student, A-number-one, because this is her first paper in this program and I don't want to totally deflate this person. Because clearly, there is a reason she is here; obviously, she had the qualifications to be here.

She went on to say that if this student was going to be an educator in the field, Dr. Parsons really needed to work face-to-face with her so that she would have the skills she would need in teaching others.

When students had good writing skills, it was easier for Dr. Parsons to evaluate the paper. She would add comments to show that she had read the paper. She would also

make other comments that validated the student's analysis. In terms of middle-of-the-road students, Dr. Parsons would correct writing errors, help them clarify terminology, and help them be more realistic about their analysis. She viewed correcting terminology as part of the socialization process.

In the third interview, Dr. Parsons talked about the differences between face-to-face and online instruction, and how she would like to improve her own online teaching. This was another teaching dilemma for her: deciding on how to have a presence in the course in a manner in which she could help guide students and at the same time not dominate the discussions.

My greatest challenge is when do you speak up and when do you just sit back. And partly it is a bit like in a real classroom--but not. It is a little different because you have the luxury of time and I don't mean, you know, just because it is online I have so much extra time with my life--that I don't mean obviously. It's that I can sit there and mull over things a little longer than if the student asked the question in the classroom. . . . Online at least you can think about it and maybe wait a few days. . . . I don't want to be too chatty. I don't want to interject things all the time because I think that quiets the students or stops the conversation. So I want them to go unless they are blatantly going off the deep end.

The presentation of self--The instructor persona. My first interview with Dr. Parsons took less than an hour. The next two interviews were much longer. She was very personable and strongly believed in supporting her students by socializing them into their new and different roles as master's-prepared nurses. During our interviews she interjected light-hearted humor into the conversation, thus contributing to a sense that she was personable and approachable. When asked to give a metaphor for her beliefs about her role as an instructor, Dr. Parsons said,

I am like a little catalyst in this little reaction of their learning, and I want to make that reaction more binding. . . . They are really the entity that has to make themselves grow and change. I am just the little spark to do that. I can offer them a little banquet to eat from, but I can't figure out what they are going to pick.

Much of how Dr. Parsons constructed her persona within her content pages was done through her interface. One reason that her beliefs and values, as well as her own personality, were more easily visible within her interface might be that she had been working with the CMS for a longer period of time than the other two instructors in this study. Another is that she intentionally interjected her personality into the course.

I'm a firm believer in the power of humor in learning, and so I intersperse that fairly often, hopefully not inappropriately. But I think that being able to chuckle about certain things is very important and that's my personality, and I think it's very important if at all possible to put your personality into the course. Not that students are going to like the course more because they like the prof per se, but, you know, we're all different and that's kind of the joy of being in college--to have exposure to people that you might not necessarily have exposure to in your real life and to have that variety and that diversity and stuff of ways that people try to interact with you. I'm a very personable person, I think, at least face to face, and I try to do that as much as I can online as well, so that is where humor comes in.

Dr. Parsons even extended this personable and humorous personality into the content of her lectures. In her lecture during the second week she wrote,

I have to laugh as I look back over the last couple of decades of my nursing career. Not only has the terminology changed, but so has the way in which I have had to write my **credentials** (and sign my name!). I have been . . . Sarah Parsons, RN MS, PNP.; Sarah Parsons RNC MS PNP; Sarah Parsons RN, MS, CPNP. Most recently, I have become Sarah Parsons MS APRN, BC. PNP (the APRN BC stands for Advanced Practice Registered Nurse, Board Certifiedphew). Again, can you see why the world wonders about us??????????

At the same time she interjected humor and personality into her discourse with students, she was clear about her knowledge and passion for her profession. The preceding quotation also illustrates that Dr. Parsons incorporated her own experiences into her lectures. This, once again, assisted in humanizing the online environment.

Realization of teaching perspective with technology. Dr. Parsons, the instructor who had been using ANGEL for the longest time, like Dr. Cohen, had reinvented the system with the help of her producer. ANGEL's web page editor did not support the users

in designing web pages with any advanced layout functionality. However, in her course, Dr. Parsons and the support staff at the university had designed the first page in a week's unit to resemble a newspaper. This involved re-envisioning a web page designed within ANGEL. The CMS at that time had a simple WYSIWYG (what you see is what you get) editor who did not facilitate creating web pages with an advanced design. Despite that, Dr. Parsons persevered and, with help from the technology support staff, created these custom newspaper-like pages.

Dr. Parsons used the website not only to project a personable persona, but also to exhibit and model a genuine concern for the health care of everyone. In the image section of her newspaper page, she displayed pictures of herself on her missions or enjoying a personal hobby such as kayaking. Through these images she was able to connect with her students on a personal and professional level. She was also modeling an image of a health care professional who cared for both patients and their communities. Figure 10 shows two examples of images from Dr. Parsons's newspaper page.

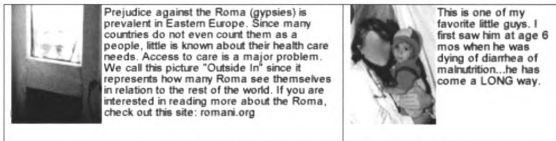


Figure 10: Images from Dr. Parsons's newspaper page.

Dr. Parsons's newspaper-page layout instantiated her belief that professionals need to be committed to service and patients. It also represented her belief that students need to develop lifelong-learning skills that help them become active learners of information that both relates directly to their profession and expands their horizons.

Looking Across the Cases

It is interesting to see just how differently the three instructors implemented their courses. Some of these differences clearly were consistent with the instructors' understanding of the content and what in that subject matter needed to be taught. In their use of the CMS, they all reinvented the system in a manner that aligned with their own beliefs, values, and experiences.

Course Design

The differences among the three instructors can be seen most clearly by placing the three diagrams of their course designs side by side. The courses differed not just in surface features (such as number of credits, number of modules, and so on) but at a deeper level in how each of the instructors viewed students' interacting with content, with the instructor, and with each other as they progressed through the class.

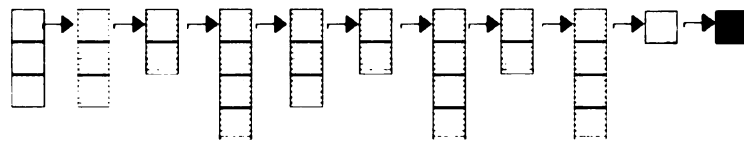


Figure 11: Dr. Cohen's instructional sequence

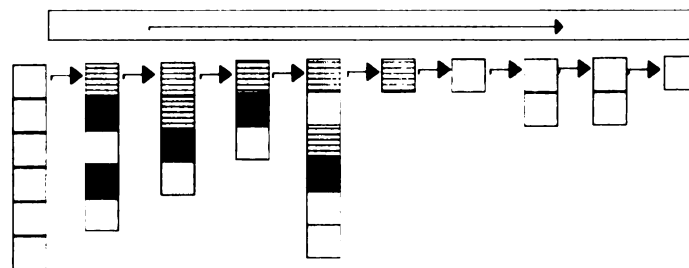


Figure 12: Dr. Davidson's instructional sequence

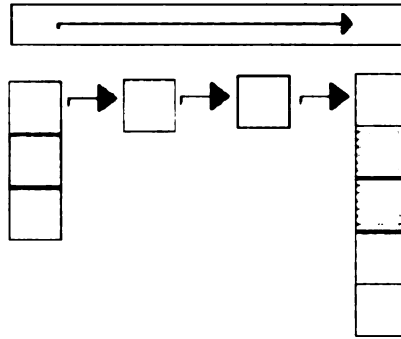


Figure 13: Dr. Parsons' instructional sequence

Dr. Cohen's design of his course did embody the view of the student as an individual scholar, with a minimal (and optional) requirement for student-student interaction. Students often were engaged in a relationship with "text." However, Dr. Cohen's conception of text expanded, facilitated by the affordances of the web, to include audio recordings, interactive web sites, and online articles. He immersed students in the contestable nature of course ideas by placing them at different locations or viewpoints on the idea through his selection of content. Ironically, his use of mini-lectures to provide overviews of different conceptions of the learning society made it seem like Dr. Cohen was acting like the "guide on the side," a role that he resisted, and he even saw the web as a place to work in opposition to this image of the instructor. As noted previously, he said,

I resist the notion that teaching is a form of facilitating, mentoring, guiding, whatever term you want to use instead of instruction. . . . So the online courses became a place in which I could actually practice or formulate and practice my opposition to the reigning orthodoxy.

Students' interactions with the content and multiple perspectives on an idea were so important that it was not until the end of the course, when multiple viewpoints had been presented, that students engaged in a processing task, one that they performed individually and submitted to Dr. Cohen. Dr. Cohen, in turn, spent a great deal of time

and effort in getting feedback to the students on their writing. But none of this interaction was shared with other participants in the class.

Dr. Davidson's emphasis on reflection and shared understandings can be clearly seen in his course design, particularly the use of discussion forums and personal-reflection activities (both individually and in groups). The educative experience for students came from making connections with their previous experiences and thinking through these connections collectively and individually. The manner in which students interacted with the content (and each other) could appear fragmented because students had to "exit" the "book" to participate in a discussion forum or reflect on the content or activity. This situation was partially brought about because the design of the CMS did not necessarily align with Dr. Davidson's own practices and approach.

Another important difference in the participants' manifestation of their perspectives can be seen in how they realized their beliefs about self-regulated learning. In Dr. Cohen's class the students worked independently, ungoverned by due dates, which sometimes led to problems when students waited until late in the course to complete their assignments. Although Dr. Davidson also believed in the important role played by the "self" in guiding learning, the design of his course required that a given student's progress be linked to that of his or her peers. This led to a tension between these two beliefs (i.e., in self-regulated learning *and* the social nature of learning), creating a context in which students had to progress through the course at a similar pace so that they could work together. Therefore, the instructor needed to create due dates so that all students were working on the same unit at the same time. The problem here, of course, is that Dr. Davidson had to deal with a greater number of group-related problems than Dr. Cohen did.

Dr. Parsons's course was similar to Dr. Davidson's in that discussion played an important role in students' sharing their understanding of the content. In her course, however, the emphasis was on getting students to internalize habits of the engaged professional. Thus, students often were asked to connect the content to their work, not necessarily their personal experiences.

Teaching

An important part of the teaching experience for all three instructors was the manner in which they provided feedback to their students. All of these instructors realized that just telling students what they needed to improve and providing leading questions did not ensure that the students would take their feedback seriously. They realized that they had to demonstrate that they had taken the students' work seriously, that they had "seen" them and validated their intellectual contributions. The goal for each of them was to model for their students certain specific ways of thinking and being with respect to the content being covered. It was also important to all three of them to communicate to their students that they were paying close attention to their work. That said, they differed from each other, both in the specific purpose of feedback and in how they used the technology to provide that feedback.

One instructor, Dr. Cohen, just used the assessment functionality within ANGEL. Students did not have to attach additional Word documents, and he responded in the response field for the assignment. He provided targeted feedback by using phrases from the students' work, thus addressing specific sections of their writing. In his feedback, Dr. Cohen modeled for students a skeptical approach to information. Dr. Davidson, on the other hand, added in-line comments on students' papers and then attached them to his feedback to students. After identifying the positive aspects of a student's work, he

focused on areas that needed clarification--a strategy similar to Dr. Cohen's. If students needed more direction, he would prompt them with questions to help them clarify their thinking and point out areas on which they needed to focus. There was a sensitivity and concern, in the case of Dr. Davidson, not just with the individual quality of the work but also the student's personality.

Dr. Parsons's commitment to supporting and developing engaged professionals influenced the kind of feedback she sent to her students, focusing not just on the content, but also on how they represented themselves professionally. She used her comments on their papers to guide students in correctly using the terminology related to their profession, and in constructing analyses that were grounded in the realities of their industry, seeking to develop their ability to communicate in a format that was accepted in their field. Despite her experience in using ANGEL, Dr. Parsons did not employ any of the assessment tools provided in the program. Instead, she delivered feedback on students' papers via the traditional postal service mail system.

The Presentation of Self--The Instructor Persona

The social presence of an instructor in an online course is a complex negotiation between the rich personality of the instructor and the limited capabilities of the technology. In face-to-face courses, faculty can project a sense of who they are through the design of their classrooms and through their lectures to students. Instructors sometimes share anecdotes, use props, or move through the audience. In online courses, in which instructors' personal delivery of content is done mostly in text, it can be more challenging to project a sense of presence. When one's text is also supposed to provide subject matter content and serve as a foundation for other learning activities, there is a tendency to deliver this information with an objective voice, one less imbued with

presence. Yet, at the same time, instructors want to “connect” with their students. The participants in this study projected different instructor personas within the same environmental constraints.

Dr. Cohen’s presence did have an element of distance as he often would speak through the voices of others. At the same time, he created a sense of intimacy by using the pronoun *we*, enabling students by constructing a sense that they were exploring ideas together. Dr. Cohen occasionally would step out of his “objective” voice and offer his opinion; however, he did not stray too far. His persona appeared to be greatly affected by his belief in guiding students through multiple locations on a concept, or as he would say, teaching the conflict. The web affords opportunities for placing students at different locations. At the same time, this type of person who would so highly multiple perspectives is very different from one who would embody the “authority of instruction.”

Dr. Davidson also used a collective pronoun in his teaching; however, he did not use it as casually and often switched to referring to students as *you*. Also, he did not deliver his own perspective on a topic like Dr. Cohen did, nor did he share stories of his work outside of the classroom like Dr. Parsons did. He did, however, cultivate a sense that he was understanding about students’ own progress through the course, attempting to construct a nurturing personality that demonstrated sensitivity to students’ experience in the course.

Dr. Parsons’s course site seemed to be consistent with her personality—professional and yet humorous. Through the images in her course and her interactions with students, she constantly modeled an image of the engaged, thoughtful professional. For example, each of her units began with a page that was intended to project a model of

her as a caring and compassionate professional, draw students into the course, and draw students out of their profession into other current events.

Dr. Parsons and Dr. Davidson created online personalities that were similar to the ones they presented in the interviews. Dr. Parson was personable and humorous, and Dr. Davidson was thoughtful and reflective. Dr. Cohen's personality was somewhat different from the one that appeared during the interviews. Rather than making unequivocal statements, he composed a narrative that entertained different perspectives.

Realization of Teaching Perspective With Technology

All three instructors used the same CMS to instantiate their course design, project an instructor persona, and engage in acts of teaching such as providing feedback and engaging in discussion forums. What is interesting is that, using the same CMS, the instructors created three very different courses. In each case the design (and instructional activities) reflected their reported beliefs and values.

All three instructors also expressed some frustration with the technology, indicating that there were aspects of their beliefs and values that did not easily translate into the design and teaching of their specific classes. One could almost feel this inherent tension between the beliefs and values of the instructors, the imperatives of the content, and the affordances (or constraints) of the technology.

All of the instructors drew upon images of objects for the design of their courses that were familiar to students, seeking to draw on familiar scripts that evoked a sense of familiarity and identification with a learning object. All three of them used metaphors (either explicitly as in the case of Dr. Parsons or implicitly in the case of Drs. Cohen and Davidson). Moreover, these metaphors were all related to information delivery and learning—books and newspapers. Dr. Cohen and Dr. Davidson were guided by the image

of a book, hoping that students' prior schooling experience in which they learned how to "navigate" through a linear text could help them navigate through this new medium. Dr. Cohen, on one hand, designed his course with the surface appearance of something familiar and even straightforward; however, at a deeper level, through links to web and multimedia resources, he expected students actually to experience the course quite differently. By orchestrating a scenario in which students could select their own pathway among the ideas and concepts of the course, yet be guided by his overarching framework, Dr. Cohen had created a context in which students could experience the content with a sense of learner autonomy. This use of a guiding framework was in line with his belief in self-regulated learning. However, the fact that students could navigate away from the framework could in some ways undermine his belief in the "authority of instruction," making him more of a "guide on the side" (something he had talked about as being troublesome to him). That said, Dr. Cohen believed that the technology truly supported individual learning.

It's up to them, they're adults. So whether they do the--what I call the opportunities, the units have reading opportunities, viewing opportunities, listening opportunities--it's all up to them. They can get a light version or a thinner version of the class. But if they're committed to online teaching and learning, it offers opportunities for individual initiative in a way that the face-to-face class doesn't.

Dr. Cohen was also the person who worked with his producer to develop new solutions that were not originally envisioned in the design of the ANGEL system. This was prompted by a belief in the value of having an uninterrupted interaction with the ideas of the course (as opposed to the fragmented approach that ANGEL supported).

The fragmentation caused by ANGEL was something that bothered Dr. Davidson a great deal. Although he also relied on the image of the book in designing his class, the

actual implementation was quite different. A part of this difference in implementation could have been his emphasis on PBL as an educational strategy for learning and engaging with the content. PBL, particularly the group-based approach endorsed by Dr. Davidson, requires a great deal of negotiation and coordination among members of a group, something that is difficult to accomplish online, and it often requires a great expenditure of time and effort by the instructor. Dr. Davidson found himself having to adapt the design of the course to fit the technology. He had started with a more hypertextual format but felt pushed to move toward a more linear format because he thought there was too much confusion when he created a more hypertext course.

Dr. Parsons was guided by a different metaphor, that of a newspaper. The newspaper is a different but equally familiar script. It evokes a sense of timely information and self-guided discovery of information. Thus, the newspaper image was an instantiation of her belief that master's-prepared nurses need to be self-guided learners who keep up to date on information directly and indirectly related to the health care industry. She was able to design her course to draw students in. There is another fundamental difference between a book and a newspaper. A book is usually a reasoned, extended argument focused on a particular topic. A newspaper, on the other hand, by its very nature, is fragmented, having no particular focus, but rather seeking to point to multiple and somewhat equally important ideas.

The instructors' choice of these metaphors, or their teaching perspectives, led to different decisions as to how they would use the technology they had, i.e., the ANGEL system. Even though all three instructors were teaching within the same CMS, they all had made decisions that resulted in very different instantiations of their courses. In some

cases, the flexible and creative use of ANGEL required a redefinition and redesign of the technology itself.

Conclusion

This chapter addresses what the instructors actually did when teaching their courses and how their reported beliefs were reflected in those actions. It also addressed how other factors such as knowledge of the CMS mediated the instantiation of their courses and how they may have redefined the technology itself. By addressing how technology (or one's knowledge of the technology) results in changes in how one teaches online or how one repurposes technology the transactional relationship between instructors and technology is made apparent. The next chapter presents a within case analysis that looks at any possible discrepancies within a single case.

CHAPTER 6

LOOKING WITHIN CASES

Beliefs and values are subjective lenses that color how teachers perceive and define their work (Nespor, 1987). They also filter teachers' perceptions of an innovation (Borko & Putnam, 1996). Yet, despite their influence on teachers' perceptions, beliefs are not always easily translated into classroom behavior. Teachers' ability to transfer their beliefs into classroom practice can be constrained by the complexities of classroom life and school culture (Fang, 1996).

Nespor (1987) outlined four features, based on the work of Abelson (1979), that tend to differentiate beliefs from knowledge. These features include existential presumption, alternativity, affective and evaluative aspects, and episodic structure. Identifying these features in the actions of teachers helps one to identify manifestations of beliefs.

Existential presumptions are assumptions held to such a degree that they have become concrete entities that are beyond falsification and, more important, beyond the control of the teacher. The feature of alternativity helps to explain strongly held beliefs that are not grounded in previous experiences but rather represent idealized conceptions that, despite their alignment with present realities, also serve to define goals and tasks.

Beliefs tend to be more dependent on affective and evaluative aspects than knowledge systems (Nespor, 1987). Teachers' feelings about the content and their students, as well as their subsequent subjective evaluations, can determine how much energy and effort they put into an activity.

Episodic structure refers to the fact that beliefs often are derived from personal experiences. Nespor (1987) quoted Shank and Abelson (1977) as stating, "A stronger

and narrower claim is that beliefs often derive their subjective power, authority and legitimacy from particular episodes or events” (p. 320). These critical episodes then continue to influence or frame people’s comprehension of events at a later time.

In his article, Nespor tended to focus on the differences between “beliefs” and “knowledge”; however, it is possible that these features also represent contrasting and at times conflicting features of individual beliefs. In Chapter 5, I gave a general description of the three professors and their beliefs and values. In this chapter I explore the contradictions existing in each case. These contradictions, I believe, will also highlight the contradictions existing between features of beliefs.

Looking Within Cases

In their interviews, the study participants all talked about beliefs that were important to them. These beliefs were manifested in different ways in the individual courses. In this section I am going to look within cases and address any within-case discrepancies. Although a clear framework has been presented, it is important to look for contradictions and disconfirming evidence because, due to their richness, cases do not fit neatly into a single framework. Thus, it is important to seek out discrepancies and inconsistent evidence for they also will contribute to our understanding of these three cases.

Dr. Cohen

Dr. Cohen encouraged his students to look for paradoxes because one can learn much from a paradox or inconsistencies. The previous chapters focused on describing each instructor’s beliefs about teaching, learning, and technology and how these beliefs were manifested in their courses. Dr. Cohen is an interesting case because, as mentioned previously, he pointed out paradoxes in his own beliefs when talking about them.

Dr. Cohen also wanted his students to become skeptics. In previous chapters, I addressed how he immersed students in an intellectual dialogue. He believed that learning happens through reading and writing. He mentioned that students need feedback and that it is an important aspect of instruction. In my analysis I mentioned that although Dr. Cohen's approach sounded like passive transmission, he had designed his course to support students' active construction of knowledge.

Meaning is constructed not only through the process of reading, but also through skeptical thinking, searching for paradoxes, and formalizing those ideas through the writing process. In the course, students were expected to engage in this type of thinking in 500 words or less. Five hundred words is approximately one page of writing. There are many reasons to set a limit. Setting this limit might have forced students to be concise. Dr. Cohen also might have been concerned about students' lack of motivation, a concern he voiced in an interview. By decreasing the length of the writing assignment, Dr. Cohen might have increased students' motivation to complete the assignment thoughtfully.

Although the construction of meaning from text can be an active process, formalizing their understanding through the process of writing engages students with the content on another level. It also yields one of the few types of evidence the instructor has for how students are making sense of the content. If Dr. Cohen was trying to develop students as individual scholars, then it appears he was placing more emphasis on students' gaining the skills they would need to be individual scholars by observing how he and "more knowledgeable" writers thought carefully and critically about various phenomena related to literacy. He was placing less emphasis on helping students develop these skills through writing because there was no sustained writing exchange between himself and his students.

Dr. Davidson

Dr. Davidson stated that he wanted students to engage in transformative experiences, which were rooted in what he called an “experience of the novel.” His view of learning was very personal. He noted that learning is “fundamentally the result of what they construct for themselves about what they think things mean to them.” He stated that his view of learning could be viewed as “spiritual.” “It’s all about struggling with the problem of meaning in our lives and what our lives mean and what we’re here for, particularly as adults.” Upon examining Dr. Davidson’s course, one might note that the design of the course seemed to contradict what an “experience of the novel” would imply, as well as a perspective that learning is very personal. His task structures were set up to help students perceive an alignment between their beliefs and experiences. Furthermore, his course design was structured and his comments in discussion forums focused on helping students familiarize themselves with the process of problem-based learning.

As noted previously, Dr. Davidson included multiple opportunities for students to reflect in their learning logs and with their group members. The format was a question-and-answer format in which students were asked to recall personal experiences and compare and/or contrast those experiences with some of the course ideas, sometimes selecting a theory or idea that best reflected their beliefs or personal experiences. Thus, he provided guiding questions and tasks to elicit their prior knowledge, beliefs, and experiences. By asking students to compare and contrast their beliefs with the content, Dr. Davidson was helping them become cognizant of how those beliefs and experiences could be lenses for interpreting the content. More important, these experience and beliefs became ways for students to connect with the content and personalize it as well. In a

previous chapter, however, it was noted that these activities seemed to support students' assimilation of the content rather than eliciting experiences of the novel.

Another element of his course that contrasted with the idea that students should be engaged in an "experience of the novel" was the structured nature of his course. The format of his course was slightly prescribed. Students had a fairly detailed and consistent format for each lesson. In an effort to reduce ambiguity and confusion in the online format, Dr. Davidson was explicit about what students must do and the module expectations.

Each lesson began with a course introduction and an overview of the concepts to be learned in the module. Occasionally, the overview and introduction were presented separately. Dr. Davidson also would present a list of the products and assignments expected in the module, often differentiating between group and individual products. Each unit also generally contained a page devoted to listing the objectives for the unit. The unit also would end with a checklist of what students needed to learn and tasks they needed to complete.

In his interview, Dr. Davidson mentioned that the loss of spontaneity in discourse affected the atmosphere of the discourse. It is possible that a structured experience for students also would affect spontaneity and openness, which would support the type of self-exploration he wanted students to engage in during the course.

Another important belief of Dr. Davidson's that emerged from this study was that collaboration is an important aspect of learning. What is interesting is that Dr. Davidson continued to firmly hold this belief despite its inconsistent success in his own classroom. According to the features outlined by Nespor (1987), this belief exhibits an element of

alternativity. Evidence for this belief stemmed from Dr. Davidson's interviews and the structure of his course.

I get a little bit upset with people who sort of dismiss collaborative learning, for example, as a kind of, a lot of extra effort for nothing and it's overrated and we should just let students do their own thing. If they just want to be by themselves and be self-paced and self-directed, you know, that's what we should do. And I don't accept that for a minute. That actually angers me a little bit because I think that's a kind of moral stance that is fundamentally causing problems in the global society to the extent that we educate people with the belief that they are only responsible for themselves and that they are responsible for their own learning and their learning is the product of their own effort and nobody else's effort. We're doing damage to this broader understanding of their being in the world.

Dr. Davidson actually had reduced the number of collaborative activities since he first started teaching the course.

So I think in the first few times, several times I've taught the course, I was directing them back to their teams too much and I wasn't giving them enough space to be on their own. So this semester, for example, I created something called a learning log, which is something different than the journal. The learning log is a place where they respond to questions that I give them in the lesson.

Dr. Davidson had made some adaptations to accommodate students' frustrations with the collaborative learning activities. However, he admitted that he would continue to incorporate these types of activities into his course because of his fundamental belief that collaborative learning is a necessary learning experience.

Dr. Parsons

Dr. Parsons believed that socializing students into their new role as master's-prepared nurses was an important aspect of her course. A lot of the socialization occurred through the modeling she did on her splash page. Another important avenue for socializing students was the discussion forums. Her course consisted of 68 discussion forums. Four of the discussion forums were designed to serve a social function. "Patty in the Ukraine" and "Just for Fun" are examples of social forums. In the "Patty in the

Ukraine” forum. Dr. Parsons wrote about her experience doing mission work abroad. Six forums served a managerial function. An example of a managerial forum is the “Working Out the Kinks” forum,” in which students posted questions they had about ANGEL or the course. Forty-eight forums were designed to facilitate discourse about course ideas or content. Ten forums were dedicated to news of the week. One of Dr. Parsons’s objectives for the course was for students to make connections between their professions and work environments and current events. These were included in a separate category, entitled Expanding Horizons, because the task did not dictate that students address the course content. However, the tasks still helped students meet an important objective of the course.

An analysis of the number of postings by Dr. Parsons revealed that 42% of her postings were in managerial forums. Although there were only four social forums, 16% of her total postings were in those forums. Thus, 58% of her postings were in 15% of the forums. Neither of these forums was content centered. Of those 58%, most of the postings were managerial. These data do not present a stark contrast to what Dr. Parsons commented on in terms of her goals for the course. According to her interview, one might predict a high number of comments in social forums. However, she also noted that it is important not to stifle student voices by dominating conversations. This might explain the lower number of postings in the content-area forums. The high number of comments in the managerial forums might not reflect where she believed she should be allocating most of her online discourse, but it may have necessitated it. Dr. Parsons already mentioned that the technology, the medium, was a more time- intensive environment than a face-to-face classroom. Furthermore, when students needed clarification on an assignment, it was not as if they could grab the instructor at the beginning of class. Most clarification was

done in text-based mediums such as discussion forums and email. Students were accustomed to the routines of a face-to-face classroom, but the online environment was new and might have needed further explanation. Still, an instructor has a limited time to allocate to discourse. In the case of Dr. Parsons's course, the emphasis for her discourse seemed to be management and social talk.

Conclusion

Looking back at the work of Nespor (1987), many of the inconsistencies noted in each of the cases also helped to identify beliefs of the instructors. Dr. Davidson, for example, believed in transformative experiences that changed what students believed about themselves, the world, and more specifically, adult learning. He held onto these beliefs despite classroom realities. According to Nespor, this would indicate an element of alternativity, a feature of beliefs that differentiates them from knowledge. During my last interview with Dr. Davidson, he remarked that this class had been his least satisfying so far. Students were not working well in their groups and were struggling with the PBL process. He commented, "It's caused me to . . . question the effectiveness and value of the group work." He even mentioned that at some point he was ready to do away with the PBL process. Students seemed to be having an especially hard time with the consensus group work. However, Dr. Davidson ended up remarking, I don't think I'm willing to let go of the consensus group work because it's so important. At some point you just say as a teacher, "Look. I know this is painful. I know this is frustrating. I know you don't like it, but it's important, dammit. It's really, really important, and you may not see it now, but my guess is in 2 years or 3 years from now when you're working with these kinds of situations, you'll understand what we're trying to do here."

Despite feeling that the consensus group work was unsuccessful in his classroom, Dr. Davidson was going to continue to include it in his curriculum because he thought it reflected a critical skill in today's society.

Dr. Cohen's course structure seemed to reflect the episodic feature of beliefs. His course reflected his belief that this was an effective way to teach. Students interacted with him and others through the content and even his responses to their papers. Yet, little back-and-forth interaction emerged through sustained discourse.

In the case of Dr. Parsons, the complexities of online classroom life had affected how she could allocate her efforts and energies (Fang, 1996). The reality was that she ended up spending a disproportionate amount of time on managerial discourse. In the online environment, clarifying tasks, assignments, policies, and even how to "use" the classroom all became important priorities for students.

Looking within cases revealed some inconsistencies. These inconsistencies, however, helped me further identify important beliefs of the instructors.

CHAPTER 7

CONCLUSION: THE REALIZATION OF TEACHING PERSPECTIVES—A MATTER OF TRANSACTIONS

Online learning is making immense inroads into higher education. By 2005, overall college and university enrollment in fully online courses had reached 3.2 million, a 35% increase from 2004. In 2006, more than 96% of large universities had online offerings available, and approximately two-thirds of these institutions offered fully online graduate or undergraduate courses (Allen & Seaman, 2006). Most research on faculty teaching online courses has focused on the technical aspects of conducting online courses, the nature of changing faculty roles, barriers to getting faculty to teach online, and faculty attitudes toward technology (Gunawardena & McIsaac, 2004). What has often been neglected is the critical role played by teachers in creating powerful educational experiences for their students (Coppola et al., 2002; Goodyear, 2000). Specifically, there has been little research on how faculty's teaching perspectives (the beliefs and values teachers bring to the teaching context) shape how they teach online.

An underlying assumption, or proposition, of this study was that one's beliefs and values about teaching and learning affect how one decides what to teach, how to teach, and how to assess student learning. This focus on beliefs and values helps us understand what individual teachers bring to the classroom and the lens through which they envision the teaching process--what I call the teaching perspective. Understanding how teaching perspectives affect the online classroom is particularly important because teachers not only are contending with the complexities of classroom life, they also are dealing with new tools for communication and representation.

Unfortunately, classrooms, especially online classrooms, are not a direct manifestation of the instructor's beliefs. CMS are built by designers with their own assumptions about learning in an online classroom. These assumptions help to establish a "zone of possibilities," limiting what can and cannot be done within the technology-based system. When the structure and capabilities of the CMS align with the instructor's beliefs and values, it is easier to teach in a manner that is consistent with those beliefs and values. In this transactional relationship between the technology and the user, both the technology and the instructors influence the actions of the other; they co-constrain each other. This dialectical relationship between humans, specifically teachers, was also outlined by Mishra, Koehler, & Zhao (2006) in their list of the four principles of technology integration.

1. Teachers' ability to use technology must be closely connected to their ability to teach; that is, good teachers-with-technology must be good teachers.
2. Technology, like language, is a medium for expression, communication, inquiry, and construction.
3. The implementation of technology is the reinvention of technology. The realization of technological potential in educational settings is socially constructed and highly situational
4. The relationship between technological innovation and established educational practice is dialogical.

The first two principles state that good teaching with technology begins with a good teacher and that technology can be used for different purposes. The last two items, however, note that what happens when we use technology is an organic process. It is not

static; as we act upon technology, it acts upon us. Uses of technology are mediated by social processes and situations.

In this study I examined how three instructors' perspectives about teaching and learning were manifested in their online courses and the social processes and situations that surrounded those manifestations. In the process of understanding this issue better, I identified the three instructors' articulated beliefs and values about teaching, learning, and technology. Then I looked across the cases for similarities and differences in their perspectives. To understand the instructors' relationship with technology, I observed how they manifested their beliefs in their courses, examining closely how they may or may not have changed the technology to fit their needs and how the technology may have changed them.

Specifically, my primary research question was: How are selected professors' beliefs and values about teaching, learning, and technology realized in their teaching and use of technology in their online courses?

This led to a series of subquestions:

- What are the professors' reported beliefs and values about teaching and learning?
- What are the professors' reported beliefs about technology?
- How do the professors' reported beliefs and values influence their actions and process of teaching an online course?
- What is the relationship between teaching and technology in an online course?

All of the instructors had been teaching online for at least a few years and had years of teaching experience. They all used the same CMS.

Summary of Teaching Perspectives

Pratt and Associates (1998) identified five teaching perspectives in higher education: (a) the transmission perspective, (b) a developmental perspective, (c) an apprenticeship perspective, (d) a nurturing perspective, and (e) a social reform perspective. My purpose in this study was not to examine how someone identified as having one of these perspectives manifested it in his or her online course. Elements of multiple perspectives could be found in all of the instructors. Instead of fitting each instructor into the confined boundaries of Pratt and Associates' categories, I defined each of the instructor's perspectives as unique to that individual.

Teaching Perspectives

Dr. Cohen taught a course called *Introduction to the Learning Society* in a large midwestern university's Educational Administration department. When he talked about his teaching perspective, he spoke of it in a confident and strong voice. He came from a traditional liberal arts background, which had framed his views about teaching and learning. The two most prominent beliefs held by Dr. Cohen were:

- A firm belief in the "authority of instruction"
- A belief in a "teach the conflict" approach to teaching

Dr. Cohen's belief in the authority of instruction was demonstrated through the central role he played in his course. He limited student-to-student interactions and began each unit with a lecture from the instructor. He also believed in the central role of reading and writing in learning. His view of the student that guided the types of experiences he constructed for them was that of the individual scholar--the student who is self-regulated and seeks out knowledge in the scholarship of others. He also believed that part of this individual scholarship involved developing a healthy skepticism; therefore, he relied heavily on an approach called "teaching the conflict" developed by Gerald Graff.

When Dr. Cohen perceived his own beliefs and values to be out of sync with his department's, he was energized to create a successful example of his vision of a course. Dr. Cohen viewed technology as affording him the ability to create more opportunities and varied locations from which students could approach a concept.

Dr. Davidson was in the same department as Dr. Cohen, but he had very different beliefs and values about teaching and learning. He talked about his teaching perspective in a quiet, calm, reflective voice. The two most prominent beliefs held by Dr. Davidson were:

- A belief that learning is a transformation of the self through the content
- A belief that learning is a collaborative experience

Dr. Davidson believed that learning should be transformative and that this transformation should result in fundamental changes in how one perceives the world and his or her relationship to it. He knew that students entered his classroom with previously held beliefs and ideas about adult learners and learning. He believed that by problematizing these prior conceptions, students would be confronted with an "experience of the novel" and through critical, inward reflection, as well as working with their peers, they would, he hoped, come to new understandings. Thus, they would experience a personal transformation. Interaction with one's peers, the instructor, and the course content are all important parts of making problematic previously held beliefs and conceptions. The emphasis is not on the eventual understanding, but rather on the process and collaborative activities that are critical aspects of the process. The main instructional method in Dr. Davidson's course was problem-based learning, which emphasizes the process, product, and collaboration.

Dr. Davidson saw technology as both constraining and facilitating learning in the online environment. Technology brings people into more “intense” relationships with each other because it is difficult to hide in this environment and students have time to reflect on their writing. This more thoughtful reflection can also support a deeper understanding of the self. On the other hand, in this environment it is harder to get a sense of students’ thinking. If one were to categorize the type of student Dr. Davidson envisioned, it would be a student as an anthropologist, mining his or her past experiences to make connections to the content.

Dr. Parsons’s beliefs were similar to Dr. Davidson’s. She also believed that interaction with one’s peers was important for learning. During my interviews, she often interjected moments of light-hearted humor. The two most prominent beliefs held by Dr. Parsons were:

- Students need to be socialized into their new role as master’s-prepared nurses and as graduate students
- Online instructors need to humanize their learning environment

Dr. Parsons was clear about her beliefs about learning. Students entered her course having been socialized by previous experiences that often contributed to passive learning dispositions. In graduate school and as master’s-prepared nurses, they needed to be active learners. Thus, she believed strongly that students needed to be socialized into their new roles. Her course really was the first course that students took in the master’s program in nursing. She believed it was important to socialize students into this new role of the master’s-prepared nurse. Part of this socialization involved helping students become active, engaged, lifelong learners. Understanding multiple perspectives is important because it helps students develop balanced perspectives.

One way of helping students develop into more active learners is to include course materials that are relevant and applicable to their professional experiences. Sometimes part of the learning process involves helping students make connections and see the relevance between current events and the health care system. According to Dr. Parsons's perspective, part of the learning process involved getting students to look at the health care industry from multiple perspectives and to ground their ideas in the realities of such a large and complex system. Her vision of a student was as the engaged, reflective professional.

Dr. Parsons believed that technology plays an important role in supporting the development of the engaged professional. It provides opportunities to model the compassionate, thoughtful professional. It also provides access to up-to-date information. Like Dr. Davidson, Dr. Parsons believed that technology supports thoughtful reflection. More important, she believed that, when teaching in an online environment, it is even more critical for teachers to humanize the environment. She wanted to give students the sense that they were being seen and heard. It was not just about validating student contributions, which in turn may help them feel as if they are more than just text on a screen, but it was also about bringing to life her own presence. By communicating personal aspects of herself, such as her sense of humor, she was helping students perceive their instructor as more than text on a screen.

In the preceding section, I addressed my first two subquestions.

- a. What are the professors' reported beliefs and values about teaching and learning?
- b. What are the professors' reported beliefs about technology?

In the next section, I address the final two research questions

- a. How do the professors' reported beliefs and values influence their actions and process of teaching an online course?
- b. What is the relationship between teaching and technology in an online course?

Summary of How Teaching Perspectives Were Realized in the Courses

All three of these instructors created courses that reflected their reported beliefs and values. Using the same CMS, they created three very different courses. Dr. Cohen's image of the student as an individual scholar was clearly evident in the design of his course, the written assignments at the end of the units, and his interactions with students. He designed his course to look like a textbook on a screen, even going so far as numbering the web pages like pages in a textbook. This metaphor was very much in line with his own traditional educational experiences that he valued, and embodied an image of the lone scholar learning from text. The notion of text, however, had been expanded in his course, due in part to the affordances of the technology. Each page served as an introduction to the assigned and/or recommended "texts." His assigned "texts" were not always articles or books; he also included websites, videos, and audio files. After learning from the content, students were expected to complete a writing assignment. When Dr. Cohen graded these assignments, he looked for students to display a healthy skepticism of the materials by being able to say things such as "on the one hand" and "on the other hand that." Interactions with one's peers were not required for his course. However, interactions with more knowledgeable others such as the instructor or other authors were an important feature of the course.

Dr. Cohen's view of the student as the individual scholar was clearly evident in the textbook design of the course, the required assignments, and the structured

interactions. His belief that people learn by being able to entertain and even evaluate conflicting views was evident in how he viewed students' work and in the content he selected. His reported beliefs were evident in how he designed the course, how students engaged with the content, and the types of interactions that occurred.

Davidson's course looked quite different from Dr. Cohen's. He designed his course with the same metaphor of a book in mind, but it still looked quite different. Although it was designed to be linear, it was not quite as linear as Dr. Cohen's because students often exited the content area of the course to engage in discussions or offline reflections. Because of this different structuring of his content, the location for learning was not the content itself. It was in the discussion forums and individual reflections. Specifically, when students left the content, they often would be asked to reflect on what they had learned and how it connected with their own understandings and experiences in writing (learning log, journal, paper) or with their classmates in a discussion forum. It was through his task structures that Dr. Davidson's belief in the importance of reflection and personal sense-making were evident. However, this resulted in a nonlinear experience within the course.

When Dr. Davidson was teaching online, he responded on students' written work and in the forums. In these responses, Dr. Davidson tried to help students internalize a process for approaching problems thoughtfully. He used his questions and comments to clarify students' understanding of the problem and to support their observations and recommendations.

Dr. Parsons had been teaching online longer than the other participants. She instantiated her belief that it was important for her students to become engaged, reflective professionals throughout many aspects of her course. When she designed her course she

changed the typical appearance of the first page in her modules. She re-designed it to look like a newspaper, an image that she personally found very inviting and engaging. She used this page to encourage students to become familiar with up-to-date information, model the compassionate practitioner, and have a curiosity for information. Students did not spend a lot of time on course pages. They were either out searching for information, reading course assignments, talking with their peers, or researching and writing. The structured writing activities in her course supported students in communicating in a professional format and using terminology in ways consistent with their field. Developing professional writing skills was another important objective of Dr. Parsons's course and an important aspect of the engaged, reflective professional. Once again, the beliefs and values of the instructor influenced students' educational experience in the course as the instructor's beliefs mediated the tasks they were required to complete and the processes they engaged in during the course.

Summary of How the System and the Instructors Co-Constrained Each Other

Sometimes it is difficult to instantiate one's beliefs within the confines of a technological system. When a dissonance exists between the structure of the system and the beliefs and values of the user, the system can constrain and force the user to adapt his or her beliefs or change or repurpose the system. All three of the instructors in this study either repurposed the system or even adapted their beliefs to fit with the system. As Banyas (2007) pointed out, developers of CMS in part instantiate their own assumptions about online learning in the design and structure of their programs.

Dr. Cohen's course did not just depart from the traditional classroom he knew by including multimedia. He had expanded his conception of the book by working with technology to "recreate the book." What he had done was turn the traditional pages of a

book into a series of portals. He also changed exploring the scholarship of others by moving his class into a technology-mediated environment. Scholarship no longer was a property of thoughtful, critical, reflective individuals who made public their ideas in the pages of a book. It also was a property of the technologies--technologies that take students into the kitchen of Julia Child or have them explore the concept of color by surfing a website on frogs. As Dr. Cohen said in the interview, expanding his course like this would be difficult, if not impossible, in a face-to-face course. Working within this technologically mediated environment had changed his conception of the book. Perhaps, however, by offering a plethora of possibilities, it also had changed the authority of the instructor. In his course, Dr. Cohen used his mini-lectures to set students up for their engagement with the content.

Dr. Cohen also repurposed the technology. Reading a book generally is a linear experience. Readers can hop back and forth from a table of contents, but often they experience text linearly with everything they need being in the same "space." Dr. Cohen recreated this unified sense of space by changing how and where students engaged in conversations with their peers in the course. He pulled the discussion forums into the same window as the content, a use of the technology not originally intended by the designers. Dr. Cohen did not require interactivity or discussion between students. By pulling the optional discussions into the content, students were not leaving the content to discuss their ideas with their peers.

When Dr. Davidson first designed his course, he used a less linear approach and tried to create a more hypertext experience. However, he found that although this design aligned more with the type of experience he wanted to design into his course, both he and the students often were confused when navigating through the course. He now had a

more linear design to his course. Thus, technology had had a constraining effect on the design of his course. He was forced to move from a networked presentation to a linear presentation in order to alleviate confusion. He was the single instructor who explicitly stated how he was forced to reconcile his beliefs in order to address the constraints of technology. It should be noted that this design, however, was linear only on the surface as students often left the content area to engage in discussions or reflect on their work individually. Dr. Davidson's use of the technology is an example of the instructor's design of the course being mediated by the structure of the technology.

Dr. Parsons's newspaper page is an example of how a user repurposed the system to meet her own views on engagement, motivation, and learning. She and her producer worked together to edit the standard html of a page produced in ANGEL to create the different sections of the page. One aspect that was constraining was the amount of communication she now had to deal with as an instructor. In the text-based environment of online courses, all students' contributions are recorded and available for the instructor to access. Furthermore, instructors have more time to compose longer responses, creating more communication between the instructor and the students. In the case of all three instructors in this study, the realization of their teaching perspective was either affected by, even changed by, the technology they used, or they made adaptations to the existing technology. Thus, the realization of their perspectives was the result of a co-constraining relationship with the technology they used.

What Do These Findings Mean for Our Basic Understanding of Online Learning?

Online learning is a fairly new arena in higher education. There is still much that needs to be understood about teaching and learning in this environment. What this study has made clear is (a) that instructors really do matter as their beliefs and values are

evident in many aspects of the course and (b) that the manifestation of these beliefs is affected by the co-constraining relationship that exists between technology and instructors. Each instructor had a unique view of teaching and learning that was woven throughout his or her course. Thus, when we ascribe to an industrial model for online courses, we may find that we have the unique perspectives that teachers bring to the process of teaching.

The three instructors in this study used the same CMS. This system, designed to facilitate course delivery, communication, and assessment, not only became their online classrooms but these tools now mediated how content was represented, how individuals communicated, and how students were assessed. By creating separate tools and spaces or pages where these events occur, CMS have compartmentalized the learning experience and even attempt to impose a structure on this experience for students and teachers. However, the instructors in this course all adapted this structure to conform to their own beliefs and values. In some cases, the instructor had to reconcile his or her beliefs with use of the technology. Thus, when we talk about online learning, we must also take into account the structure of the CMS and how it mediates what happens in an online course.

Implications

Technological determinism comes in two flavors. Technocentric discourse focuses on the power of technology to change and determine what we do regardless of the context of use. This deterministic perspective does not take into account the influence of the social system on the design of technology. Moreover, variations in use are explained as implementation failures (Bruce, 1993).

Those who focus on the social system, viewing it as the determinant, often neglect to consider the power of the technology and the processes facilitated by the

functionalities of the technology. These two flavors of determinism color much of the discussion on online learning. This is reflected in research that is either technocentric (where the capabilities of the newest and latest technology override everything else), or tech-neutral (i.e., assuming that different content or LMS instantiate teaching in the same way). In either case, what is often missing from the dialogue (or the equation) is the role of the instructor and the transactional relationship that exists between the context of use and the technology.

Three groups of people contribute to the context created in an online course. The developers design the structure and functionality of the system that enables communication, assessment, and the representation of content. The instructors create and implement the course. They create the curriculum, task structures, assessments, course structure, and opportunities for interactivity. Students are the intended audience and the main users of the system once the course begins. The course and system typically are designed to support their learning. This study, even though it was focused primarily on the second group, has implications for all of the stakeholders.

Recommendations for Future Students

This study was limited to the perspectives of the instructors so that I could follow the thread of their beliefs and values as it was woven throughout their courses. It is important to acknowledge that what happens in an online classroom is not solely the result of what instructors do and believe. It is equally affected by the students. Students will interpret and approach the content with their own beliefs, values, intentions, and expectations. The student experience, however, was beyond the scope of this study and is an important topic for further research.

Recommendations for Instructors

Even with the design of more intuitive, flexible, and user-friendly CMS, instructors' knowledge of the system can act as a barrier not only to what they can actually do but also what they perceive as possible.

First, instructors need to have more advanced knowledge of CMS. Take, for example, the case of Dr. Davidson, who wanted a more hypertext experience in his course but was forced to construct a more linear design. ANGEL hosts all of the content under the Lessons tab. Directly below the Lessons tab, one can place content such as folders, pages, discussion forums, or links, but one cannot display html content such as an image used as a site map. This site-map diagram or image could be used as an organizer for a more hypertext navigation through the course. However, if he Dr. Davidson had more advanced knowledge of the CMS, he could redirect the link for the Lessons tab to go to a folder. Folders not only “hold” digital objects but they can also display html content. They can give the appearance of a web page. Even if instructors do not know how to make a change, having more knowledge of the system can help them imagine the possibility, and thus they might know what questions to ask and what design suggestions to make. At that point, if they have a technology-support person (producer) for their course, that person could make the changes for them.

Second, the university needs to continue to furnish the support that producers provide so that instructors are not limited by their knowledge of the system. They need help in repurposing the technology to support their vision of teaching and learning. As part of this support, universities should select CMS that do not have high learning curves.

Third, instructors need to clarify just what it is that they believe about teaching and learning. By clarifying their beliefs and values, instructors have a guide for what they want to do and what is important for learning in their courses. They can then have a vision for how they might want to repurpose the technology. If they do not have such a vision, the CMS could push them to design courses that do not align with what they believe is important for teaching and learning. Rather than their making the system, the system will make them.

Recommendations for Designers of CMS

Designers need to build flexibility into their CMS. Systems like ANGEL or Blackboard/WebCt generally are adopted universitywide. A single CMS is used to teach everything from nursing courses to education courses. The system needs to be designed to support different conceptions of learning as well as different types of content. CMS treat content, whether it is a web page, discussion forum, or media file, as objects that are stacked together like Legos within a single space. This is a limited perspective. Instructors might want a more unifying experience in which multiple objects can be experienced together. In this study, one of the professors brought a discussion forum into the design of a content page, creating a more unifying experience. Another professor might want students to compare and contrast videos, looking for similarities and differences, so that they develop more flexible thinking. As part of the experience, the professor might not want students to visit different web pages but to view the videos side by side.

CMS need to be brought up to date with current practices for website design so that instructors are less reliant on course designers who are not as familiar with the content and pedagogical strategies best suited to a particular course. Although the type of

CMS used by a university might not be under the purview of designers, as the main technical support for the design of online courses, their opinions about the CMS should be expressed to the university. The less reliant faculty are on course designers, the more courses designers can support. Some examples of functions of a CMS that could support the independence of faculty would include the use of web-page editors who do not require advanced knowledge of html and are current with guidelines for accessibility. Most html editors in a CMS will include functions that support the use of tables to organize content such as text or images. Tables no longer are the standard for controlling website design. Designers build “containers” that control the placement and display of the content. Instructors should not have to know advanced html to customize how their content is displayed and how students interact with the system and other users. Designing a system that lets instructors who do not have advanced knowledge of website design integrate advanced and customized features would facilitate a more harmonious relationship with the technology. Even if designers create templates that demonstrate different approaches to integrating and displaying content, the choices will provide new opportunities for instructors to envision the manifestation of a course that is more in line with their beliefs and values related to teaching their course. More important, it will also help them realize their own beliefs and values about teaching and learning in their online courses. As they work with the technology, their more peripheral beliefs may change. The students they have in their course could also necessitate a change. Thus, continued support for faculty is important. As Rokeach (1968) wrote,

How a person will behave with respect to an object-within-a-situation will therefore depend, on the one hand, on the particular beliefs or predispositions activated by the attitude object and, on the other hand, by the beliefs or predisposition activated by the situation.

We must thus postulate that a person's social behavior must always be mediated by at least two types of attitudes--one activated by the object, the other activated by the situation. (p. 126)

Because situations (such as teaching online) and objects can mediate the actions of an individual, it is important to design a flexible system.

Recommendations for Future Researchers and Scholars

Earlier I noted that Palmer (1997) wrote insightfully,

Here is a secret hidden in plain sight: *good teaching cannot be reduced to technique: good teaching comes for the identity and integrity of the teacher.* In every class I teach, my ability to connect with my students, and to connect them with the subject, depends less on the methods I use than on the degree to which I know and trust my selfhood—and am willing to make it available and vulnerable in the service of learning. (p. 16)

All instructors have unique identities and in the service of good teaching they try to make those identities available to their students. They do this by projecting their instructor presence. This presence also reflects aspects of their beliefs and values about teaching and learning. Dr. Cohen, although believing in the authority of instruction, projected himself as someone who was learning with his students. Dr. Davidson used a voice that was relaxed and acknowledged the students' own awareness of their learning, which supported a collaborative environment that he valued so highly. Dr. Parsons used her natural humor to make herself more personable. This action helped to manifest her belief that it is important to humanize the online environment.

Knowing the social identity or persona of the participants in a conversation also helps to establish a frame for making interpretations based on that conversation (Goffman, 1974; Tannen, 1994). Furthermore, in their study, Ruberg, Moore, and Taylor (1996) found that the teacher was the most influential participant in online discussions. "To some extent students learned from and modeled the method of thinking and

responding they saw represented by their instructor in class and in the online discussions” (p. 264).

The instructor’s presence is not just what is manifested in classroom discussions, emails, and feedback on student work. As Garrison et al. (2003) noted, teacher presence manifests itself in the design and organization of the course, facilitation of discourse, and direct instruction. The presence that is projected is an aspect of the instructor’s professional identity. Constructing a presence, whether through course design or interactions with students, that is consonant with one’s perceived beliefs and values can validate one’s professional identity. Presence is perceived when individuals interact and information is exchanged via the available communication channels. Garrison et al. noted the influence of instructor presence throughout the course. However, they may have more narrowly conceived of interactivity. Their model focused on the main elements in any classroom: the students, the teacher, and the content.

Hillman, Willis, and Gunawardena (1994) also focused on those elements, but their framework included a learner-interface category. Although these categories broaden our view of interactivity, they have elements of being technocentric, focusing on what technology has enabled, or they view interactivity as something that occurs in a vacuum, unaffected by the environment. They could be viewing it more organically, so that one can see how elements of the instructor’s beliefs and values can be manifested in many aspects of the interaction in an educational experience.

Dewey (1938) wrote that,

The conceptions of situation and interaction are inseparable from each other. An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment. . . . The environment, in other words, is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had. (pp. 43-44)

Whereas it is the student's needs, desires, and purposes that are critical to students' experience, an aspect Dewey said is too often neglected by traditional educators, he also acknowledged that educators to a certain extent regulate the "objective conditions."

It includes what is done by the educator, and the way in which it is done, not only words spoken but the tone of voice in which they are spoken. It includes equipment, books, apparatus, toys, games played. It includes the materials with which an individual interacts, and most important of all, the total social set-up of the situations in which a person is engaged. (p. 45)

All of these aspects of the environment regulated by instructors reflect their beliefs about teaching and learning in the online environment. At the same time, manifesting their beliefs is mediated by the design of the CMS as well as their knowledge of the technology. In all of their interactions in the environment, students are coming into contact with manifestations of the instructors' teaching presence and their beliefs and values about teaching and learning. Researchers and scholars need to entertain more holistic approaches to understanding teaching and learning online.

Limitations

Other elements influence how faculty teach online, including subject-matter knowledge and knowledge of online communication technologies. Because this study was focused on the specific role of teaching perspectives in teaching online, participants were selected who were accomplished in their fields and had been teaching in those fields for more than 5 years. Also, they all had experience teaching online. As I noted at the beginning of this dissertation, teaching with technology has been described as a transactional relationship. The study was missing the voices of other critical stakeholders in the development and implementation of online courses--students and course designers. Due to the limitations of the data collected and most notably the duration of the study, I

was unable to determine whether the technology changed the participants. To detect a change in practices that are not reliant on self-reports, it would be important to look at an instructor's actions across multiple courses.

Conclusion

The findings of this study clearly indicate that instructors' teaching perspectives have an important effect on teaching and learning in their online courses. CMS like ANGEL may be designed with specific patterns of use envisioned by the designers. However, as instructors bring to bear their own perspectives on the creation of their courses, this technology is redesigned and reinterpreted. Clearly, the nature of the technology plays a critical role—instructors have to work within the “zone of possibility” defined by the tool. This zone of possibility allows for instructors to reclaim their authority in the manner in which they interpret, instantiate, and realize their visions. This will be different for each instructor, for each content area, and the affordances (and concomitant constraints) of the technology available. Thus, teaching an online course is not a simple transference of face-to-face practices. Practices sometimes have to be reconceptualized and personalities translated into text. At the same time, functionalities of technology are reconceptualized when instructors repurpose technologies to align with their teaching perspective.

APPENDIX A

PROTOCOL FOR FIRST INTERVIEW

This is a semi-structured interview. The questions below were used to guide the interview with the instructor but were not read verbatim.

Hello, I want to begin by thanking you for participating in this study. I want to talk with you today about your experiences with teaching online courses. The purpose of my study is to understand more about the teaching process for online instructors. I would like to begin by giving a general overview of your background with teaching online courses.

Background:

I'd like you to begin by telling me a little about yourself and your teaching experiences at the university level.

Possible follow-up questions:

1. How long have you been teaching at the university?
2. What kinds of courses? Which of those have been online courses? Which of those have been face-to-face courses?
3. How long have you been teaching online?
4. Do you teach hybrid courses?
5. When did you start teaching online? (Please describe both the course and the context around this first experience.)
6. Please describe the course you are teaching now (for this study)
 - a. How does it fit into a program of study at the college?
 - b. What is the general make up of students in this course?

Assumptions about teaching and learning:

In this segment of the interview I would like to ask you a few questions about your beliefs about teaching and learning.

Please describe your beliefs (assumptions, conceptions, personal theories) about how students learn.

- What do you feel are valuable learning experiences?
- How does this play out in your online course?
- What do you believe are the general learning needs of students in your course?
- How do students go about learning your content?

Please describe your beliefs about effective teaching.

- What do you feel are valuable teaching practices?
- How does this play out in your online course?
- What is your approach to teaching?
- What are important considerations for teaching your particular subject matter?

Please describe what you believe is your role (responsibility) as an instructor

- In relation to your students.
- In relation to content.
- How has it influenced your design of this course?
- What type of teaching presence do you feel is important to convey in the online environment? Why? How do you convey such a presence?

Please describe your beliefs about the role of technology in teaching.

- What do you feel are valuable uses of technology?
- How does this play out in your online course?

Please describe what you believe is important for students to learn from this course and how you would assess their learning.

- How does this play out in your online course?

Closing:

In the course of this interview, you may not have had the opportunities to address certain issues, and before we conclude I would like to open up the conversation to give you the chance to address any issues or topics that you feel are relevant to this discussion but have not had the opportunity to address.

APPENDIX B

PROTOCOL FOR SECOND INTERVIEW

This is a semi-structured interview. The questions below will be used to guide the interview with the instructor but will not be read verbatim. Also, many of the questions will be adapted to address information presented in the first interview or observations made of other course artifacts.

Hello, I want to begin by thanking you for participating in this study. I want to talk with you about your course (*insert name*).

I would like you to begin by describing what has happened thus far in your course.

1. Please describe how what has happened thus far in your course is or is not related to your perspective on teaching.
2. During our last interview you mentioned that How do you see this reflected or enacted in your course? (*This question may be repeated*)
 - a. Have you changed your view on this? If so, how?
3. Please describe how you have interacted with the students.
 - a. What type of tone do you use?
 - b. What is the main tool you used?
 - c. How have you assessed student learning or provided feedback?
4. How have you been using the different tools within this course management system?
 - a. How have you used different multimedia artifacts?
 - b. How is this use related to your teaching perspective?
 - c. How has it facilitated the realization of your intentions for this course?
5. I noticed that (*insert observation of tool use, or teaching of course, if applicable*). How is this related to your intentions for this course or your teaching perspective?

Closing:

In the course of this interview, you may not have had the opportunities to address certain issues, and before we conclude I would like to open up the conversation to give you the chance to address any issues or topics that you feel are relevant to this discussion but have not had the opportunity to address.

APPENDIX C

PROTOCOL FOR THIRD INTERVIEW

This is a semi-structured interview. The questions below will be used to guide the interview with the instructor but will not be read verbatim. Also, many of the questions will be adapted to address information presented in the first and second interview or observations made of other course artifacts.

Hello. I want to begin by thanking you for participating in this study. I want to talk with you about your course (*insert name*).

I would like you to begin by describing your impressions of this course. What are your general reflections on this course?

6. Please describe how what has happened in your course is or is not related to your perspective on teaching.
7. During our last interview you mentioned that How do you see this reflected or enacted in your course? (*This question may be repeated*)
 - a. Have you changed your view on this? If so, how?
8. Please describe how your intentions for the course have or have not been realized for the course.
 - a. Have you changed or altered your intentions for this course?
 - b. If yes, how? Why?
9. Please describe how you have interacted with the students.
 - a. What type of tone do you use?
 - b. What is the main tool you used?
 - c. How have you assessed student learning or provided feedback?
10. How did you use the different tools within this course management system?
 - a. How have you used different multimedia artifacts?
 - b. How is this use related to your teaching perspective?
 - c. How has it facilitated the realization of your intentions for this course?
11. I noticed that (*insert observation of tool use, or teaching of course, if applicable*). How is this related to your intentions for this course or your teaching perspective?
12. How was this course different from previous versions of this course that you have taught?
13. Is there anything you would do differently? Why? Are you planning on making these changes the next time you teach this course?

Closing:

In the course of this interview, you may not have had the opportunities to address certain issues, and before we conclude I would like to open up the conversation to give you the chance to address any issues or topics that you feel are relevant to this discussion but have not had the opportunity to address.

REFERENCES

- Abelson, R. (1979). Differences between belief systems and knowledge systems. *Cognitive Science*, 3, 355-366.
- Allen, E., & Seaman, J. (2006). Making the grade: Online education in the United States, 2006. Retrieved February 12, 2007, from http://www.sloan-c.org/publications/survey/pdf/making_the_grade.pdf
- An, J., & Levin, J. (2003). *Online discourse patterns: Building an instructional framework for designing educational discourses on networks*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago.
- Arbaugh, J., & Benbunan-Fich, R. (2005). Contextual factors that influence aln effectiveness. In S. R. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous learning networks* (pp. 123-144). Mahwah, NJ: Lawrence Erlbaum Associates.
- Banyas, P. (2007). *Basic assumptions of the ANGEL cms about its faculty users*. Unpublished practicum.
- Bateson, M. C. (1995). *Peripheral visions: Learning along the way*. New York: Harper Paperbacks.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20, 107-128.
- Bonk, C. J., & Cunningham, D. J. (1998). Searching for learner-centered, constructivist, and sociocultural components of collaborative educational learning tools. In C. J. Bonk & K. S. King (Eds.), *Electronic collaborators: Learner-centered technologies for literacy, apprenticeship, and discourse* (pp. 25-50). Mahwah, NJ: Lawrence Erlbaum Associates.
- Borko, H., & Putnam, R. T. (1996). Learning to teach. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 673-708). New York: Macmillan.
- Bruce, B. (1993). Innovation and social change. In B. Bruce, J. Peyton, & T. Batson (Eds.), *Network-based classrooms: Promises and realities* (pp. 7-32). New York: Cambridge University Press.
- Burbules, N., & Callister, T. (2000). *Watch it: The risks and promises of information technologies for education*. Boulder, CO: Westview Press.
- Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709-725). New York: Macmillan.

- Christophel, D. M., & Gorham, J. (1995). A test-retest analysis of student motivation, teacher immediacy, and perceived sources of motivation and demotivation in college classes. *Communication Education*, 39, 323-340.
- Collison, G., Elbaum, B., Haavind, S., & Tinker, R. (2000). *Facilitating online learning: Effective strategies for moderators*. Madison, WI: Atwood Publishing.
- Coppola, N. W., Hiltz, S. R., & Rotter, N. (2002). Becoming a virtual professor: Pedagogical roles and asynchronous learning networks. *Journal of Management Information Systems*, 18(4), 169-189.
- Dewey, J. (1938). *Experience and education*. New York: Collier.
- Dziuban, C., Shea, P., & Arbaugh, J. (2005). Faculty roles and satisfaction in alns. In S. R. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous learning networks* (pp. 169-190). Mahwah, NJ: Lawrence Erlbaum Associates.
- Erikson, E. H. (1968). *Identity, youth, and crisis* (1st ed.). New York: W.W. Norton.
- Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, 53(4), 25.
- Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Researcher*, 38(1), 47-64.
- Feather, N. T. (1995). Values, valences, and choice: The influences of values on the perceived attractiveness and choice of alternatives. *Journal of Personality & Social Psychology*, 68(6), 1135-1151.
- Garrison, D. R., & Anderson, T. (2003). *E-learning in the 21st century: A framework for research and practice*. London: Routledge.
- Garrison, D. R., Anderson, T., & Archer, W. (2003). A theory of critical inquiry in online distance education. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of distance education*. Mahwah, NJ: Lawrence Erlbaum.
- Gee, J. P. (2001). Identity as an analytic lens for research in education. In W. G. Secada (Ed.), *Review of research in education* (Vol. 25, pp. 99-125). Washington, DC: American Educational Research Association.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA: Harvard University Press.
- Goodyear, P. (2000). Online teaching. In N. Hativa & P. Goodyear (Eds.), *Teacher thinking, beliefs and knowledge in higher education*. Dordrecht: Kluwer.

- Gorham, J. (1988). The relationship between verbal teacher immediacy behaviors and student learning. *Communication Education*, 37, 40-53.
- Green, T. (1971). *The activities of teaching*. New York: McGraw Hill.
- Gunawardena, C., & McIsaac, M. (2004). Distance education. In D. Jonassen (Ed.), *Handbook of research on educational communications and technology*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Harasim, L. M. (1990). Online education: An environment for collaboration and intellectual amplification. In L. M. Harasim (Ed.), *Online education: Perspectives on a new environment* (pp. 40-64). New York: Praeger.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York: Teachers College Press.
- Hillman, D. C., Willis, D. J., & Gunawardena, C. N. (1994). Learner-interface interaction in distance education: An extension of contemporary models and strategies for practitioners. *The American Journal of Distance Education*, 8(2), 30-42.
- IEEE. (2002). Draft standard for learning object metadata. Retrieved June 14, 2007, from http://ltsc.ieee.org/wg12/files/LOM_1484_12_1_v1_Final_Draft.pdf
- Jackson, L. A., & Murray, M. (1997). *Inside the college classroom: What students really think of their professors*. Lampeter, Ceredigion, Wales: The Edwin Mellen Press.
- Lombard, M., & Ditton, T. (1997). At the heart of it all: The concept of presence. 3(2), Available: <http://www.ascusc.org/jcmc/vol3/issue2/lombard.html>.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A new framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- Mishra, P., Koehler, M. J., & Zhao, Y. (2006). Communities of designers: A brief history and introduction. In P. Mishra, M. J. Koehler, & Y. Zhao (Eds.), *Faculty development by design: Integrating technology in higher education* (pp. 1-22). Charlotte, NC: Information Age Publishing.
- Moe, M., & Blodgett, H. (2000). *The knowledge web*. New York. Merrill Lynch.
- Moore, M. G. (1989). Three types of interaction. *The American Journal of Distance Education*, 3(2), 1-6.

- Morgan, G. (2003). Faculty use of course management systems. *EDUCAUSE Center for Applied Research (ECAR)* Retrieved February 17, 2007, from <http://www.educause.edu/ir/library/pdf/ERS0302/ekf0302.pdf>
- Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies* v. 36 no2 (Mar./Apr. 2004) p. 133-271 *Journal of Curriculum Studies*, 19(4), 317 - 328.
- Pajares, F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62, 307-332.
- Palmer, P. (1997). The heart of a teacher: Identity and integrity in teaching. *Change*, 29(6), 15-21.
- Pollan, M. (1998). *A place of my own: The education of an amateur builder*. New York: Delta.
- Pratt, D. (2002). Good teaching: One size fits all? *New Directions for Adult and Continuing Education*, 93(Spring), 5-15.
- Pratt, D. D., & Associates. (1998). *Five perspectives on teaching in adult and higher education*. Malabar, FL: Krieger Publishing.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), *Handbook of research on teacher education* (2nd ed., pp. 102 - 119). New York: Macmillan.
- Rokeach, M. (1968). *Beliefs, attitudes, and values*. San Francisco: Jossey-Bass.
- Ruberg, L. F., Moore, D. M., & Taylor, C. D. (1996). Student participation, interaction, and regulation in a computer-mediated communication environment: A qualitative study. *Journal of Educational Computing Research*, 14(3), 243-268.
- Scardamalia, M., & Bereiter, C. (1994). Computer support for knowledge-building communities. *The Journal of the Learning Sciences*, 3(3), 265-283.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London: Wiley.
- Shuell, T. J. (1996). Teaching and learning in a classroom context. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 726-764). New York: Macmillan.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15, 4-14.
- Stark, J. (2000). Planning introductory college courses: Content, context and form. *Instructional Science*, 28, 413-438.

- Tannen, D. (1994). *Talking voices: Repetition, dialogue, and imagery in conversational discourse*. Cambridge, MA: Cambridge University Press.
- Tufte, E. (2003). The cognitive style of PowerPoint. Retrieved February 17, 2007, from <http://www.edwardtufte.com/tufte/powerpoint>
- Turkle, S. (1995). *Life on the screen: Identity in the age of the internet*. New York: Touchstone.
- U.S. Department of Education. National Center for Education Statistics. (2003). *Distance education at degree- granting postsecondary institutions: 2000–2001*. (No. NCES 2003-017), by T. Waits and L. Lewis. Project Officer: Bernard Greene.: Washington, DC.
- University of Illinois Faculty Seminar. (1999). *Teaching at an internet distance: The pedagogy of online teaching and learning (report of a 1998-1999 University of Illinois faculty seminar)*. Retrieved February 17, 2007, from http://www.vpaa.uillinois.edu/reports_retreats/tid_final-12-5.pdf
- Wiley, D. (2001). Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy. *The Instructional Use of Learning Objects* Retrieved March 5, 2007, from <http://www.reusability.org/read/chapters/wiley.doc>
- Wilson, S. M., & Wineburg, S. S. (1988). Peering at history through different lenses: The role of disciplinary perspectives in teaching history. *Teachers College Record*, 89, 525-539.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousands Oaks, CA: Sage.
- Zhao, Y., Byers, J. L., Pugh, K., & Sheldon, S. (2002). Conditions for classroom technology innovations. *Teachers College Record*, 104(3), 482-515.
- Zhao, Y., Lei, J., Yan, B., Lai, C., & Tan, S. (2004). What makes the difference? A practical analysis of research on the effectiveness of distance education. *Teachers College Record*, 107, 1836-1884.

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