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Online Professional Development: The Experiences of a First-Time Facilitator

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ONLINE PROFESSIONAL DEVELOPMENT: THE EXPERIENCES OF A FIRST-TIME FACILITATOR

By

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Donmoyer (1990) suggested that knowledge gained from our own experiences or that of others may be applied to the improvement of practice. The purpose of this study was to provide insight into the experiences of a first-time online facilitator. The research question for this study was: How does a first-time facilitator understand the process of delivering instruction in an online environment?

A case study design was applied to this research. The researcher/participant was the case under study in the context of the delivery of online instruction. The researcher who was also the online instructional facilitator experienced the process of delivering online instruction for the first time. The use of this method provided a first-hand perspective of the experiences of an online facilitator.

The study was conducted in two phases. During Phase I, the researcher/participant participated in a train-the-trainer program that was delivered using the Blackboard®

learning management system. During Phase II, the researcher/participant facilitated an online professional development session created during the training. Data were collected from a variety of sources, including journaling, interviews with a master trainer and other online facilitators, and analysis of course materials and completed assignments. Three themes emerged from the data. The themes were: (a) time, (b) adherence to standards, and (c) absence of physical presence.

Recommendations included: (a) alignment of training and evaluation with professional development and content standards, (b) awarding of credit based on demonstrations of learning and student achievement, (c) facilitator awareness of non-instructional responsibilities, (d) training and support for the efficient use of technology to manage administrative and support tasks, (e) enforcement of completion deadlines, (f) provision of feedback on assignments, (g) implementation of additional opportunities for collaboration, (h) participant and facilitator awareness of time and paper needed for learning and record-keeping tasks, (i) training for participants without demonstrated technology proficiency, (j) implementation of a blended training approach, and (k) investigation of web-based publications for use in the delivery of online professional development.

DEDICATION

This research is dedicated to my children, Casey and Caitlin Crimm, and to my parents, Gerald and Johnnie Gammill, who offered the understanding, encouragement, and support that allowed me to attain a lifelong dream. Your belief in me was an inspiration. This degree belongs to all of us.

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CHAPTER I

INTRODUCTION

The concept of distance education has evolved over time, from the invention of the printing press and the beginning of the postal service, which allowed for the mass printing and distribution of multiple copies of learning materials to individuals. Correspondence education developed toward the end of the 19th century, and technologies developed in the 20th century, which provided for new methods of distributing education: radio, telephone, cinema, television, programmed learning, computers, and the Internet (Daniel, 2000). Early in the 21st century, distance education has become a means for providing flexible learning opportunities to transcend time, distance, and space.

Online learning is one type of distance education in which learning management software is used to provide access to instruction via the Internet. Ally (2004) defined online learning as

> the use of the Internet to access learning materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience. (p. 5)

Technology is changing education, as evidenced by the tools commonly in use: electronic mail, computer conferencing, and the World Wide Web. Study groups, collaborative learning, problem-solving, and assignment discussions are facilitated by online communication among students. Technology provides new ways for students to learn, involving them in active learning and engaging them in more authentic outcome- and performance-based learning (Johnson, 2003). This chapter begins with a review of the literature related to professional development and the online delivery of professional development. It concludes with a discussion of the purpose of this study and the research question to be addressed.

Literature Review

Professional Development Training for Mississippi's Career-Technical Educators

Historically, career-technical education in America has focused on preparing high school students to begin entry-level jobs immediately upon graduation. Career-technical programs have provided training for service occupations in fields such as agriculture, business, automotive, construction, food service, and cosmetology. Advances in technology and the advent of global economic competition have changed the modern workplace dramatically. Current jobs in fields that provide a living wage require technical and academic skills, technology proficiency, and education and training beyond high school. For success in the current economy, students must acquire the advanced skills required by today's employers (Charting a new course, n.d.). In today's world, "every U. S. student needs to complete high school with a high level of academic skills

and be prepared to take advantage of education and training beyond high school" (*The Carl D. Perkins Secondary and Technical Education Excellence Act Summary*, 2004, p. 1).

The Carl D. Perkins Vocational and Technical Education Act of 1998 (*The Carl D. Perkins Vocational and Technical Education Act, Public Law 105-332*, 2002) is the federal law which provides funding for career-technical education across America. This legislation is scheduled to be brought before the 108th Congress for reauthorization in an effort to "modernize the federal investment in vocational and technical education…" (*The Carl D. Perkins Secondary and Technical Education Excellence Act Summary*, 2004, p. 1). The proposed reauthorization supports increased academic achievement and attainment of technical skills for students to prepare them for the transition from high school to postsecondary training to the workforce.

The Perkins reauthorization legislation was built on the key principles of the *No Child Left Behind Act of 2001* (*The Carl D. Perkins Secondary and Technical Education Excellence Act Summary*, 2004). *No Child Left Behind* was enacted with the intent for all students to achieve academic proficiency, regardless of ethnic or economic background (*Public Law 107-110*, 2002). The proposed Perkins legislation calls for more challenging academic and technical content for career-technical students and provides for a clear pathway to education and training beyond high school to prepare them for success in today's technological workplace (*The Carl D. Perkins Secondary and Technical Education Excellence Act Summary*, 2004).

Bowen (2002) observed that the Mississippi Professional Development Model, in accordance with Perkins, was designed to assist educators in meeting the needs of learners in a challenging, technologically-advanced society. Professional development is essential to school improvement, and the model was designed to promote lifelong learning among educators and to provide support for the development and improvement of their skills through self-evaluation, collaboration with other professionals, and the acquisition of new knowledge.

In another approach to professional development, the International Society for Technology Education (ISTE) (2000-2005) has published National Educational Technology Standards (NETS) (ISTE, n.d.) for teachers and students that define the concepts, skills, and attitudes necessary for applying technology in educational settings in grades K-12. The standards outline broad requirements for application in the areas of technology operations, social and ethical issues, productivity, communications, and assessment and evaluation. Bowen (2002) noted in her review of the Mississippi Teacher Exchange website that Mississippi developed standards and performance indicators based on the skills outlined in the ISTE standards in effect at that time. Mississippi set as a goal that every teacher in the state would effectively integrate technology in the learning environment to benefit students.

Amid the pressures of changes in federal legislation, budget concerns, and time constraints, the Office of Vocational and Technical Education (OVTE) of the Mississippi Department of Education (MDE), in partnership with the Research and Curriculum Unit for Workforce Development (RCU), investigated new ways to provide training resources

for career-technical educators (P. S. Abraham, personal communication, July 15, 2004). Mississippi's career-technical educators currently use the Blackboard® learning management system for curriculum development and revision, as a teacher communication tool to share instructional resources and teaching ideas, and to open classrooms to parents (Gammill & Bowen, 2004). In the fall of 2004, use of the Blackboard® learning management system was expanded to include online professional development training for career-technical teachers (M. D. Bowen, personal communication, October 5, 2004).

In response to changes in today's global marketplace, career-technical education is in a period of transition, and the State of Mississippi is developing new ways to provide professional development for teachers. To earn a living in the current economy, students must be properly equipped with academic and technical skills, technology proficiency, and training beyond high school. Pending federal legislation challenges career-technical educators to provide training that equips students with the skills necessary to successfully enter the workforce in a technologically advanced society. To provide the flexibility for career-technical instructors to obtain the skills to meet these changing demands, Mississippi expanded the use of the Blackboard® learning management system to offer online professional development opportunities.

The Online Learner

Muirhead (2004b) named three key characteristics of successful online students: (a) a positive work ethic, (b) the ability to work with others, and (c) reflective thinking

skills. Successful participants in online learning must be actively engaged in the learning process and must be taught to engage one another in learning. Students should be prepared to become collaborative learners (Palloff & Pratt, 2001). They must also be self-disciplined and self-motivated to take responsibility for learning, to manage time and work with technology in order to take advantage of the available learning opportunities (Nir-Gal, 2002). The successful online learner is independent, self-motivated, and has an internal locus of control (Muirhead, 2004a).

Johnson (2003) said that for success in an online course, participants must be able to use e-mail and send attachments, use chat rooms, conferencing, electronic bulletin boards, and the cut-and-paste features of word processing software. They should also be able to submit class assignments electronically and navigate the software used for online learning. For online learning to be successful, participants must be trained to use the technology (SREB, n.d.).

Adults are the fastest-growing demographic segment in distance education (Gallagher & Newman, 2002). Adults have a unique set of characteristics and bring their experiences, personal goals, and needs to the learning environment (Thompson, 2004). Adult learners need a sense of control in the learning environment, and they want the instructor to consider their needs, goals, and expectations. They seek to relate learning to their life's experiences and to apply new knowledge to practical applications. They need to identify learning goals early in the course, and their learning must be applicable to their work or other responsibilities. The learner-centered methods that are beneficial to

adult learners are well-suited to the online instructional environment (Brookfield, 1986; Knowles, 1984).

Successful online learners exhibit a variety of personal qualities and skills. Learners in the online environment must be independent and self-motivated. They must possess the electronic communication skills needed to navigate the learning management system and prepare and submit assignments. Most online learners are adults, and their learning needs are best met when learner-centered methods are used and when learning objectives and activities are related to their life experiences.

Online Professional Development

McLaughlin (2001) noted that the purpose of professional development is to enhance learning and increase educators' ability to serve students. According to Sparks (2001), the most challenging task for school systems is the development of a culture that promotes professional learning and collaboration that will improve student achievement. Salpeter (2003) believed that professional development should be sustained and collegial. She noted that collaboration among colleagues through readings, activities, and facilitated discussions aids in the development of strong learning communities.

In order to improve practice, teachers must be intellectually engaged and collaborate with others in their field so that they may develop new approaches to working with their students. Professional development programs impact practice only when they are focused and intense and when they provide for follow-up and continuity as teachers integrate new strategies into their practice (Corcoran, 1995). Ongoing professional

development opportunities allow participants to develop lessons, put them into practice, and then reflect on the results within a learning community of colleagues (Treacy, Kleiman, & Peterson, 2002). Such reflection provides an opportunity for participants to share and experience best practices, so that they may improve their practice, as recommended by Hogarth, Day, and Dawson (2004).

Treacy et al. (2002) noted that "vibrant interactive communities of educators can be built online and have significant effects on classroom teacher practice" (pp. 42-3). The online format provides opportunities for instructors to collaborate with colleagues and extend learning over a period of time. Online learning provides access to experts and opportunities for dialogue with participants from diverse backgrounds and teaching situations (Treacy et al., 2002).

Learning results from the use of effective instructional practices (Moallem, 2001). An online learning environment can be designed to maximize the potential for student learning (Ascough, 2002). Distance education compares favorably with traditional instruction, and learning outcomes in distance education settings are similar to those in traditional classroom settings (Tucker, 2001).

Online professional development reduces training costs in terms of release time, travel, food, and equipment needed. (Treacy et al., 2002). Cost effectiveness is increased because travel and meeting space costs are eliminated and there is a reduced need for teacher release time and substitutes (Why use the web, n.d.).

Research has shown online instruction to be as effective as instruction delivered in the traditional setting and provides a mechanism for convenient communication among

colleagues separated by distance. The online format also allows access to students, colleagues, and experts who might otherwise not be available due to geographic limitations. Course materials, discussions, and interactions may be archived for later access by participants or by those who were unable to participate in the session at the time that it was conducted. Online training eliminates travel expenses, the cost of meeting space, the cost of substitutes, and the need for teacher release time from the classroom.

Standards for Online Professional Development

The Southern Regional Education Board (SREB), a consortium of 16 states, has developed standards for online professional development. These standards are based on *The Standards for Staff Development* published by the National Staff Development Council (2001b), which were developed for face-to-face professional development. The *Standards for Online Professional Development* have been extended to include elements that are characteristic of online learning (SREB, n.d.).

The standards outline three areas of concentration for quality online professional development courses and programs: (a) e-Learning Context Standards, (b) e-Learning Process Standards, and (c) e-Learning Content Standards. The e-Learning Context Standards address the importance of building learning communities, school leader involvement, and the provision of resources and support for the online professional development program. The e-Learning Process Standards address data-driven, research-based goal setting, program evaluation, and the use of technology to present materials and design learning that meets participant needs and contributes to the development of

learning communities. The e-Learning Content Standards address the quality and equity of access, including the consideration of learner differences and effective implementation of online pedagogy. The SREB standards encompass several elements of an online professional development environment, including: (a) the use of design and evaluation techniques, (b) the implementation of instructional strategies, and (c) the use of technologies to facilitate learning (SREB, n.d.).

Elements of an Online Professional Development Environment

Design and Evaluation

Ascough (2002) emphasized that quality online instruction must be based in sound principles of pedagogy. He noted that online instruction is very similar to instruction in the face-to-face setting. He believed that course design is the most important element of online course delivery. He proposed a four-step process of online course design: (a) undertake analysis, (b) set goals and objectives, (c) select and implement appropriate teaching strategies, and (d) administer evaluation. A course designer should undertake analysis to determine need for the course and the institutional goals to be met through online offerings. In addition, learner characteristics, as well as instructor characteristics and style should be identified. Course goals and objectives should be determined by identifying what students should know and be able to do. Appropriate teaching strategies provide for learning, engagement, and motivation. Course evaluation should be conducted through formative evaluation by inviting feedback from students and from professional colleagues. Guskey (1998) suggested that evaluation of

professional development training should go beyond simple formative evaluation from participants and peers. Participant learning, organizational support and change, participants' use of new knowledge and skills, and student learning outcomes are essential measures of training effectiveness.

Instruction, whether delivered online or face-to-face, must incorporate sound pedagogical principles. To plan for quality instruction, the instructor must identify learner characteristics as well as his or her personal instructional style. Appropriate learning objectives are based upon what learners know and should be able to do. Appropriate teaching strategies should be implemented to engage students and motivate them to learn. Instructional effectiveness should be evaluated on the basis of student learning outcomes, as well as feedback from students and professional peers.

Strategies for Learning and Instruction

Ascough (2002) stated that "online distance education provides opportunities for quality education" (p. 17) when appropriate pedagogical practices are implemented. Online instructors should implement instructional design strategies and pedagogical practices that have been proven over time to be most effective (Moallem, 2001). When technology is used effectively to create an environment conducive to learning, online students can be successful (Young, 2003). Online learning should focus on the learner and the learning process (Ally, 2004), and technology should be used as a cognitive tool to promote critical thinking and higher order learning (Jonassen, n.d.). Treacy et al., (2002) noted that interactive communities could be developed in an online professional

development setting to improve teaching practice. Therefore, it can be seen that appropriate course design and instructional practices, as well as opportunities for interaction are to be implemented in the online environment.

According to Wenger (n.d., Introduction section, ¶ 1), "communities of practice are groups of people who share a concern or passion for something they do and who interact regularly to learn how to do it better." Wenger described three essential characteristics of communities of practice: (a) the domain, (b) the community, and (c) the practice. The community of practice is defined by a shared identity and domain of interest. Members value the knowledge, skills, and proficiencies that they have in common, and they learn from one another. Members of the community participate in mutual activities and discussions, provide assistance, and share information; their relationships provide access to peers that assist with learning. Wenger (n.d., Introduction section, ¶ 2) emphasized, "A website in itself is not a community of practice." By definition, a community of practice requires that members interact and learn together over a sustained period of time. Its members are practitioners who develop a shared practice that includes experiences, stories, tools, and ways of addressing recurring problems.

Palloff and Pratt (1999) believed that "without the support and participation of a learning community, there is no online course" (p. 29). Rovai (2002) stated that interaction among learners is an essential element in developing a sense of community. Community occurs when participants analyze and reflect upon practice to create shared knowledge from common experiences. In a learning community, participants learn

through a process of reflection, interpretation, and negotiation (Stein, 1998). Kearsley (1998, Making the Most of Online Learning/Teaching section, ¶ 1), suggested "that the single most important element of e-learning is interactivity among participants." According to Dabbagh (2004), "in online learning environments, communities of practice include learners and instructors who interact with each other and other experts via online learning technologies to build a reciprocal interchange of ideas, data, and opinions" (p. 45). Online learners must build a strong learning community, which is an essential element of an online course, by sharing ideas and reflecting on their teaching practice with colleagues in the online learning environment.

In Dabbagh's (2004) model, control of learning is shared among participants, including teacher and learners. A single instructor or expert is not in total control of learning. Learners participate and are committed to generating and sharing new knowledge. Learning activities are flexible and negotiated, and participants exhibit high levels of collaboration, dialogue, and interaction. A shared goal, problem, or project provides a common focus and an incentive to work together as a community. To Dabbagh, in a successful learning community diversity and multiple perspectives are valued, and innovation and creativity are encouraged and supported.

Harmon and Hirumi (1996) stated that "learning must be seen as a dynamic interaction among students, teacher, and the environment" (Student-Centered Distance Learning section, ¶ 2). Moore (1989) described three types of interaction, including: (a) learner-content, (b) learner-instructor, and (c) learner-learner. Learner-content interaction occurs between the learner and the subject being studied. In an environment that is

exclusively learner-content interactive, learning is entirely self-directed, with one-way communication of information and no interaction with an instructor or other subject-matter expert. In an environment that centers on learner-instructor interaction, the instructor works with the student to provide motivation, direct learning, and assist in knowledge application. Environments that employ learner-learner interactions provide opportunities for learners to collaborate to gain knowledge. Interaction may be the key to transforming a teacher-centered environment to one that is student-centered (Kleiman et al., 2000). Interaction is an integral component of a student-centered learning environment, and the instructor must employ techniques that provide for learner interaction.

In a student-centered environment, the learner becomes the focus of instruction, and the instructor becomes a facilitator who diagnoses learning difficulties and provides opportunities for students to become independent, active learners, who are free to make decisions concerning the learning process (Nir-Gal, 2002). The instructor guides students to new sources of information and helps them understand difficult concepts as they retrieve, interpret, organize, and apply information to solve authentic problems (Hootstein, 2002). Students learn how to learn as they gain content knowledge. The instructor facilitates discussions in which students are encouraged to share their ideas and reflect on what they have learned (Palloff & Pratt, 2001). Learners are challenged through self-directed learning activities in which they work in teams to complete projects or resolve problems. Learning teams build community relationships, teach reflective thinking, and promote understanding (Hootstein, 2002).

By incorporating a variety of approaches, the instructor can motivate and involve students in learning (Palloff & Pratt, 2001). Instructors may ask students to read and participate in online discussions, participate in simulations, solve case studies, conduct Internet research, and participate in collaborative group experiences. Discussion questions, case analyses, and application activities promote dialogue and allow learners to put theory into practice (Gibbons & Wentworth, 2001). Motivation and involvement is improved when learners interact with one another and apply their knowledge in a student-centered learning environment.

The online instructor should encourage participants to introduce themselves, model interactive behaviors, and encourage courtesy and interaction by praising students who demonstrate appropriate online behavior (Berge, 1995). These behaviors will assist in building a sense of community among learners and will help humanize the experience for learners, as recommended by Palloff and Pratt (2001). Instructor responses to initial introductions may provide a basis for discussion, connect previous experiences to course content, and bring new questions into consideration (Kleiman et al., 2000). The instructor may post a list of course participants and a biography which outlines personal interests outside the classroom environment (Palloff & Pratt, 2001). In addition, students might create personal pages with visual and auditory elements that briefly present biographical information (Howell, 2001). Such online biographies provide a reference point and an online identity to promote sharing among learners and encourage more in-depth discussion (Muirhead, 2001). Special forums may be designated for casual chat to create a means for students to discuss social topics unrelated to the course or to provide

assistance with technical issues, in order to foster interaction among learners (Nir-Gal, 2002).

The online instructor must be able to use the course delivery technology, skillfully facilitate learning, and provide appropriate course content (Willis, 2004). New instructors should be trained online so that they learn under the same conditions as their students. Through online training, instructors practice online strategies and online course delivery and gain empathy and understanding of the challenges faced by online learners (Gibbons & Wentworth, 2001). Instructors are most likely to teach in the same way that they are taught, therefore it is imperative that they experience appropriate instructional methods as learners (NSDC, 2004).

The use of appropriate pedagogy is vital to the success of learners in an online environment. Communities of practice and interaction among learners, the instructor, the environment, and with technology are essential elements of successful online learning. The instructor should select the instructional strategies that are best-suited to the online environment. Student-centered learning is ideal for promoting interaction among online learners, and collaborative assignments take the place of traditional classroom lectures. As in the face-to-face classroom, the online instructor must provide an equitable learning environment which reflects the diversity of learners. The successful instructor uses a variety of instructional approaches and tools to engage learners.

The successful online instructor effectively uses course delivery technology, skillfully facilitates learning, and provides appropriate course content. Instructors that are trained online experience learning from the student perspective. Practice improves when

instructors experience appropriate instructional methods and gain an understanding of challenges faced by students in an online environment.

Technologies for Learning

Learning management systems such as WebCT® or Blackboard® provide the means for instructors and participants to interact online. Bowen (2002) observed that according to the commercial website, Blackboard.com®, the designers of the Blackboard® learning management system had the vision to create a powerful, interactive, online environment that would support high-quality teaching by providing educators with the means to foster group collaboration and communities of practice to deliver exceptional student outcomes.

Learning management systems provide a virtual space where participants can access learning materials, participate in discussion groups, chat, exchange e-mails, complete assignments, take tests, and create personal homepages (Palloff & Pratt, 2001). These course tools provide a mechanism for interaction, facilitation of collaboration, and the building of learning communities.

Summary of the Literature Review

Mississippi's Professional Development Model was designed and implemented to equip educators to teach students in a technologically advanced society. The model promotes the development of instructional skills through self-evaluation, collaboration with colleagues, and lifelong learning.

In response to societal and economic changes, career-technical education is in a time of transition. Career-technical education is changing to meet modern workplace requirements for workers with strong academic and technical skills. To provide appropriate instructional skills and the flexibility needed for teachers to obtain these skills, the Mississippi Department of Education expanded the use of the Blackboard® learning management system to provide online professional development opportunities for the state's career-technical educators.

Online instruction based on sound pedagogical principles is as effective as instruction delivered in the face-to-face environment. The main advantage of online instruction is convenient communication among colleagues over a wide geographic area, as well as savings in training costs and time. The Southern Regional Education Board (SREB) has developed standards for online design and evaluation and for the use of instructional strategies and technologies for online learning.

Instruction, whether delivered online or face-to-face, must incorporate sound instructional principles. Instruction must be based on learner characteristics and desired learning outcomes. Strategies must be implemented in ways that engage and motivate learners. The evaluation of instructional effectiveness should be based primarily on learning outcomes. Online instructors who are trained online experience learning from the perspective of their students, thus improving their practice.

Successful online students are motivated, independent learners. They have the skills required for navigating the online learning environment and communicating electronically. Most online learners are adults who learn best in a learner-centered

environment where learning outcomes are related to their life experiences. Learner-centered approaches that provide for collaboration and promote interaction and the building of strong learning communities are an essential element to learning in an online environment.

Learning management systems provide an online environment where learners can access course materials and interact with others. Learning management systems provide a variety of tools that allow learners to access course materials, interact with other learners, and complete and submit assignments. Such tools provide the means for learner interactions, collaboration with colleagues, and the building of learning communities.

Purpose of the Study

The Training of Online Professionals (TOP) program was developed in response to the need to provide high-quality online professional development for Mississippi's career-technical educators. The program was designed to prepare instructors to develop and deliver online professional development courses using the Blackboard® learning management system. For a 10-week period, a master trainer used Blackboard® to train facilitators to provide online professional development by modeling delivery techniques based on the *Standards for Online Professional Development*, developed by the Southern Regional Education Board (n.d.). During the training, the facilitators developed online professional development courses.

All career-technical educators who completed professional development training in the use of the Blackboard® learning management system were invited to participate in

the TOP training program. The TOP training program was delivered using the Blackboard® learning management system. Educators who successfully completed the TOP training used the courses developed during the training to provide professional development training to career-technical educators across the state. Completion of the TOP training was a requirement for facilitators who wished to deliver online professional development for Mississippi's career-technical educators.

Donmoyer (1990) suggested that knowledge gained from our own experiences or that of others may be applied to the improvement of practice. The purpose of this study was to provide insight into the experiences of a first-time online facilitator. Several areas of online professional development were investigated in the study, including (a) the use of design and evaluation techniques, (b) the implementation of instructional strategies, and (c) the use of technologies used to facilitate online learning. The reader must make a judgment whether the research findings may be applied to or adapted for use in a particular situation.

Future online facilitators may apply the findings from this study to the improvement of practice. Individuals who are considering whether to become involved in delivering online professional development may find this research beneficial. Those who deliver training for online professional development facilitators may also benefit from the findings of this study.

Research Question

The research question for this study was: How does a first-time facilitator understand the process of delivering professional development in an online environment? In order to provide insight and direction for the study, a research protocol developed from the elements of high-quality online professional development was used. Areas of investigation included: (a) the use of design and evaluation techniques, (b) the implementation of instructional strategies, and (c) the use of technologies to facilitate online learning.

Definition of Terms

The following operation definitions were used in this study:

Blended instruction – a training approach in which online and face-to-face instruction are combined

Facilitator – one who delivers instruction in an online learning environment

Learning environment – the setting in which instruction takes place; refers to both the face-to-face classroom environment as well as the online classroom environment

Learning management system – Internet-based environment used for communication and delivery of course materials and information

Master trainer – one who trains others to deliver instruction in an online environment

Online learning environment – a virtual classroom that is accessed through a learning management system

Online professional development – teacher training delivered through a learning management system

Participant – one who receives instruction in an online learning environment

Phase I – the time period in which the participant/observer participated in the Training of Online Professionals

Phase II – the time period in which the participant/observer delivered professional development online

Training of Online Professionals (TOP) – training provided to facilitators to prepare them to deliver online professional development

CHAPTER II

RESEARCH METHODS

In this chapter, research methods are presented. First, the research design is explained, and the researcher is introduced. Next, the methods used for the collection of data and data analysis are described. Finally, the steps taken to establish reliability and validity are stated.

Design

A case study design was applied to this research. The researcher/participant was the case under study in the context of the delivery of online instruction. Yin (2003) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context" (p. 13). A qualitative case study provides a deep, detailed, contextual, holistic description of the case being studied (Merriam, 1998). Case study research is especially helpful for understanding a particular problem or situation in great depth (Patton, 1987). Case studies include rich, thick description (Merriam, 1998) drawn from multiple sources of evidence (Yin, 2003). They are used to present detailed narratives in ways that promote understanding (Stake, 1995). The quality of a case study is dependant upon the richness of the data presented (Donmoyer, 1990). Case study

research lends itself well to applied fields of study such as education, because it allows for the examination of processes, problems, and programs to provide insight for the improvement of practice (Merriam, 1998).

According to Yin (2003), a case study is used to study a phenomenon in its context in order to answer the questions of "how" and "why" (p. 6). Yin stated that the case study method is particularly well-suited to the investigation of real-life situations that are too complex for survey or experimental designs. He noted that "single cases are a common design for doing case studies" (p. 45) and that the use of a single case study design is valid when the case being studied is representative of a typical case (Yin, 2003).

The case study method was used to investigate and analyze the experiences of an online professional development facilitator. The case study was the method most appropriate for collecting the desired data because the researcher who was also the online instructional facilitator experienced the process of delivering online instruction for the first time. The use of this method provided a first-hand perspective of the experiences of an online facilitator and was similar in design to studies conducted by Sewell (1999) and Disla (2002). As an experienced educator comfortable with technology, the researcher represented the case of a facilitator of online instruction. The case study method was used to provide the depth and detail necessary for promoting understanding of the processes experienced by a facilitator in providing instruction in an online learning environment.

The Researcher

In qualitative research, the researcher is the instrument for data collection (Merriam, 1998). In this study, I was the researcher who was a facilitator delivering online instruction for the first time (see vitae in Appendix A). I served as a secondary career-technical Business and Computer Technology teacher for almost 10 years. The curriculum for the career-technical business program included instruction in a variety of technology-related topics, including use of the Internet, electronic presentation design, electronic communication, and automated accounting. I am also a National Board Certified Teacher in Career and Technical Education. I hold bachelor's and master's degrees in Secondary Education with an emphasis in Technology and an Educational Specialist degree in Educational Leadership. Previous experience in distance education includes participation as a student in a course in school law taught through an interactive video network and completion of a course in industry training design taught via the WebCT® learning management system. At the time of this study, I was employed at the Research and Curriculum Unit for Workforce Development (RCU) at Mississippi State University. I was a curriculum writer for secondary and postsecondary career-technical business and marketing programs in Mississippi.

Data Collection

Qualitative data can be collected through various methods, including interviews, observations, and the examination of documents or artifacts. Triangulation of data collected from multiple sources improves the validity and reliability of qualitative studies

(Merriam, 1998). This study included data from a variety of sources, including journaling, interviews with other online facilitators, and analysis of course materials and completed assignments. This study was conducted in two phases. During Phase I, I participated in a train-the-trainer program designed to prepare participants to facilitate online professional development for Mississippi's career-technical educators. The 40-hour training program, which was known as Training of Online Professionals (TOP), was designed to be completed over a period of 10 weeks. Each week, participants were assigned activities that were designed to require up to a total of four hours to complete. Peggy Dawson (pseudonym), a professional development specialist at the Research and Curriculum Unit for Workforce Development (RCU) at Mississippi State University, developed and administered the program, which was delivered online through the Blackboard® learning management system. Peggy was an experienced user of technology who had been teaching online since 1999. She held a Doctor of Philosophy degree in Educational Technology from Mississippi State University, which she received in December 2002. At the time of this study, she and I were professional colleagues employed at the same level within the RCU organizational structure.

In TOP, Peggy demonstrated strategies for online instruction and classroom management and presented techniques for instructional design and evaluation. Each participant in the program developed an online professional development training session. Participants who successfully completed the TOP program were given the option to facilitate the professional development sessions created during the training. I interviewed a facilitator who served as the master trainer in the TOP certification

program and two facilitators who were concurrently enrolled with me in the TOP training and who facilitated online instruction at the same time that I did (see protocol in Appendix B).

Brookfield (1995) advocated a critically reflective process in which teachers view their practice from multiple perspectives, including autobiographical reflection and the perceptions and experiences of colleagues. Cranton (1996) suggested that teachers who work to develop a philosophy of practice through critical reflection have the most potential for growth. By identifying the assumptions underlying their practice, teachers may begin to develop a well-defined philosophy that assists in their development as educators. In Phase I of the study, data were collected through journaling and the analysis of assignments completed to fulfill the requirements of the TOP training program. Data analysis was conducted throughout the collection of data, until the final report was completed, as recommended by Miles and Huberman (1994).

During Phase II, I delivered online professional development for a three- to five-week period. Data were collected through journaling, interviews, and observation of a master trainer and two other facilitators who delivered online instruction during the same period of time as the researcher.

Listed below were the data collection procedures used:

1. Journaling by me while in the role of a participant in an online training course in the delivery of online instruction.
2. Interviews with a master trainer who provided the online training through the TOP certification program (see protocol in Appendix B).

3. Interviews with two facilitators who delivered online instruction at the same time as the researcher (see protocol in Appendix B).
4. Journaling by the two facilitators who delivered online instruction at the same time as the researcher (see format in Appendix C).
5. Observation of the three previously mentioned facilitators in the role of online learning facilitator, advisor, and colleague (see procedures in Appendix D).
6. Instructional materials used in the TOP training.
7. Assignments that I completed in the course of completing TOP training.
8. Instructional materials that I used in delivering online professional development.
9. Instructional materials used by the participants in the study who delivered online instruction at the same time as the instructor.
10. All interview sessions were recorded on videotape and transcribed verbatim. Written notes were also taken during observations and interviews.

Data Analysis

Analysis involves identifying important examples, themes, and patterns in the data (Patton, 1987). Through analysis, the researcher begins to make sense out of the data by developing hypotheses, then collecting and analyzing additional data to refine or verify the hypotheses. The constant comparative method of analysis involves the comparison of incidents found in the data. From the comparisons, the data is sorted into categories based upon common themes or similarities found within the data (Merriam,

1998). To produce high-quality analyses, the researcher must consider all of the data, present the evidence separate from its interpretation, and explore alternate interpretations (Yin, 2003).

In this study, I conducted data analysis as the data were collected as suggested by Merriam (1998). I recorded analytical insights that emerged during data collection, and I sought to identify alternative insights as new data were collected to improve the quality of the study (Yin, 2003).

Yin (2003) stated that the researcher may introduce bias to the study by seeking to confirm the emerging findings as new data is collected. He emphasized that remaining open to alternative views is crucial to the validity of a study. As he recommended, I attempted to enhance validity by remaining open to alternate interpretations of the data.

In this study, data were analyzed using the constant-comparative method and triangulation. Using the constant comparative method, I collected and compared data from multiple sources to identify themes or categories from the research to generate findings and conclusions based on the data, as recommended by Merriam (1998). I identified personal biases and preconceptions in an attempt to reduce the possibility of introducing bias to the research findings. As data were collected and analyzed, I reviewed the data from various viewpoints and solicited input from critical colleagues and informants in an effort to identify opposing views or alternative explanations of findings, as suggested by Yin (2003).

Reliability and Validity

Validity is the extent to which research findings match reality (Merriam, 1998). Before starting a case study, the researcher must be aware of personal biases that may result in findings that are based on preconceptions and are not supported by the data (Yin, 2003). Member checks in which participants in the study review the findings for plausibility should be conducted continuously throughout the study (Merriam, 1998). Additionally, the researcher should test tolerance for contradictory findings by submitting preliminary findings to critical colleagues who may offer alternative explanations for the results (Yin, 2003).

In this study, data were collected in two phases. During Phase I, Training of Online Professionals, which lasted for 10 weeks, I participated in an online training program designed to prepare me to facilitate online instruction. During Phase II, PowerPoint®, which lasted 5 weeks, I facilitated an online professional development training session.

I served as the participant, the interviewer, and the observer. Validity could be threatened due to bias, subjectivity, and perceptions. Multiple data sources were used to provide for triangulation of data, and data analysis was conducted with no expectations. Preconceptions and personal biases were identified, and I invited input from critical colleagues who reviewed preliminary findings and made comments that provided insight into opposing views. Member checking by informants was also used to test the plausibility of research findings. Informants were given copies of interview transcripts and their case studies to check for accuracy.

Reliability refers to whether results from the study are consistent with the data collected. To strengthen reliability, the evidence from multiple sources must be analyzed and integrated by citing connections between the evidence collected and specific, relevant issues. Triangulation provides holistic understanding by using data from a variety of sources and multiple methods for confirming findings (Patton, 1990). A chain of evidence should be used to build a case by providing a cross-reference between procedures and results (Yin, 2003). To further enhance reliability, the researcher may also provide an audit trail by describing in detail the data collection methods, the rationale for the particular categories that were developed, and the decision-making process used throughout the study (Merriam, 1998). To enhance reliability in this study, I collected data from multiple sources including journaling, observation, interviews, and artifacts. A chain of evidence was maintained to build a case by providing a cross-reference between procedures and results, as recommended by Yin (2003).

CHAPTER III

PHASE I: TRAINING OF ONLINE PROFESSIONALS

Introduction

As a career-technical business teacher in a face-to-face high school classroom, I used the Internet, electronic presentations, and other technology to teach my students. As a graduate student, I participated in distance education courses delivered through an interactive video network and via a web-based learning management system. Because I enjoy using technology to learn and to teach others, I became interested in delivering instruction in an online environment.

My experience with online learning began in the summer of 2003, when I enrolled as a student in my first online course. As an educational technology major, I decided to take an online class so that I could experience online learning and earn credit for three semester hours without having to attend class each day throughout the 10-week semester.

The course was taught using the WebCT® learning management system. Although WebCT® provided the means for communication within the training site, the facilitator did not use these features. I seldom communicated with the facilitator except for occasional e-mails and periodic updates to the site when new assignments or announcements were posted. The course was managed much like a correspondence

course. Each week, the facilitator posted assignments to the training site, and I completed them independently. Course participants were listed on the site only by user name, and we never communicated with one another.

This experience as an online student was very frustrating. At the same time that I was enrolled in the online course, I was taking a face-to face course that required members of the class to make presentations to demonstrate how to use WebCT® to develop an online class. By making the presentation and observing the presentations of others, I became familiar with the communication features of the system, and I could see the potential for making the online course more meaningful by requiring communication among learners.

In my position as a curriculum specialist at the Research and Curriculum Unit for Workforce Development (RCU) at Mississippi State University (MSU), I received training in the delivery of online instruction using Blackboard®, a learning management system similar to WebCT®. I was interested in participating in the program to learn how to implement teaching pedagogy in an online environment. A facilitator is a person who delivers instruction in an online learning environment. After I completed the training, I facilitated an online professional development session designed for Mississippi's career-technical educators who taught classes to prepare students in grades 9-12 either to enter the workforce immediately upon high school graduation or to receive education and training beyond high school to prepare them for the workforce.

Because the TOP training was a pilot project, there was a need to conduct research that could be used for further development of the training program. The research

could also be used by individuals who might be interested in facilitating online professional development, by online facilitators for the improvement of practice, or for the development of other training programs for online facilitators.

The purpose of this study was to share my experiences as a first-time facilitator of online professional development. In order to share with others, I kept a journal, which proved invaluable as a record of my online learning experiences. In addition, I interviewed three other online learning facilitators and reviewed documents from online training sessions that they developed and facilitated. Their contributions enabled me to better understand my experiences as a first-time facilitator in an online environment. To protect their privacy, throughout the study, I used pseudonyms for each of them.

I interviewed Peggy Dawson (see case study in Appendix E), a professional development specialist at the RCU who developed and administered Mississippi's training program for online facilitators. Peggy trained facilitators who taught online in Mississippi's online professional development program. I also interviewed Lisa Wheeler (see case study in Appendix F) and Amanda Jones (see case study in Appendix G), who participated in the training program with me and facilitated professional development sessions online at the same time that I did.

Like me, Lisa and Amanda were first-time facilitators of online learning. Lisa taught an introductory session to the Blackboard® learning management system entitled Basic Blackboard®. Her session was a prerequisite to the Advanced Blackboard® training facilitated by Amanda. The session that I facilitated was entitled Microsoft®

PowerPoint®; no prerequisite was required. All three sessions provided training in the use of software applications.

Because I was employed at the RCU, I received no additional compensation above my annual salary for facilitating the training. The other training facilitators were paid according to the length of the training sessions they facilitated. All of the TOP participants who successfully completed the TOP training received continuing education units (CEUs) for licensure renewal. All training sessions were free to educators employed by the state of Mississippi who wished to enroll.

The Mississippi Department of Education requires teachers to acquire continuing education units (CEUs) for licensure renewal (Mississippi Department of Education, n.d.). For each clock hour estimated for completion of an approved professional development training session, participants earn .1 CEU, whether the training is conducted online or face-to-face (M. D. Brook, personal communication, March 30, 2005).

This case study describes my experiences in two parts. Phase I presents my experiences in the Training of Online Professionals (TOP) training program. I was required to complete TOP training before teaching in Mississippi's online professional development program for career-technical educators. Phase II presents the phase of the study in which I taught Microsoft® PowerPoint® online.

Training of Online Professionals

In 2004, the state of Mississippi launched an online professional development program designed for career-technical educators (P. S. Abraham, personal

communication, July 15, 2004). Peggy Dawson, a professional development specialist at the Research and Curriculum Unit for Workforce Development (RCU) at Mississippi State University, developed and administered the program. The first phase was a train-the-trainer program designed to prepare participants to facilitate online professional development for Mississippi's career-technical teachers. This 40-hour training program, which was known as Training of Online Professionals (TOP), was to be completed over a period of 10 weeks. Each week, participants were assigned activities that were designed to require up to a total of four hours to complete. Peggy facilitated the TOP training, which was delivered online through the Blackboard® learning management system. In TOP, Peggy demonstrated strategies for online instruction and classroom management and presented techniques for instructional design and evaluation. Each participant in the training was to develop an online professional development training session. Participants who completed the TOP training were given the option to facilitate the professional development sessions created during the training.

Introduction to TOP

Because of the time constraints and loaded schedule brought about by the demands of family, work, and graduate school, I was initially concerned that the TOP training was going to be too great a challenge for me. Ten weeks of professional development training, with an estimated 4 hours work each week was a huge commitment. I thought that I might not be inclined to finish the training because of my other responsibilities. At the beginning of the session, because I enjoy learning online, I

was motivated to complete the TOP training. I looked forward to checking the site each week and completing the learning activities. Over time, I became less motivated.

On Friday, October 22, 2004, Peggy launched TOP training by sending an email to everyone who had enrolled in the training to provide instructions for accessing the site. The following Friday, after being out of the office for four days with no email access, I panicked when I read the email announcing the start of TOP. It read, "All activities will be due by Sunday night at 8:00 p.m." I thought that I had missed the deadline for completing the first week's work, and I felt like a failure before even getting started. After I logged in to the site I realized that the starting date for the first week's assignments was Monday, October 25, which meant I was still within the time frame to meet the deadline. This short-lived panic helped me realize how I must be careful as an online facilitator to carefully communicate with learners.

The training was presented using the Blackboard® learning management system. The first time I accessed the site, I saw that several buttons were vertically displayed on the left side of the screen. A button is a control that appears on the computer screen; it is shaped like a rectangle, with a title centered inside. The title describes an action that will happen when the computer user clicks the button with the mouse.

Two buttons were used to introduce participants to the TOP session and to Peggy Dawson, the instructor. One was titled TOP Overview; the other one was titled Staff Information. When training participants clicked on the TOP Overview button, the screen displayed several text links. A text link is an underlined word that the user can click to display a document, presentation, graphic or video. The first link displayed a digitally

recorded video of Peggy welcoming learners to the class. The second link displayed a training overview, created in Microsoft® Word, which included a training description and a list of training objectives. This button also included links to the National Staff Development Council's Standards for Staff Development (NSDC, 2001b), the Southern Regional Education Board's Standards for Online Professional Development (SREB, n.d.), and an article related to online education. When clicked, the Staff Information button displayed Peggy's contact information and picture, providing quick access to her email address and telephone number.

Clicking a third button, entitled Week by Week, displayed an electronic folder. An electronic folder is a small graphic that looks like a paper file folder. When the user clicks on the electronic folder, the screen displays a list of related links. The folder was labeled with the name of the first module (instructional unit) in the session. Inside the folder, there were links to training documents, presentations, and websites. Each week throughout the training, Peggy would post a new electronic folder labeled with the name of the module.

Assignments would be posted to the training site every Monday and were to be submitted by the following Sunday. Four hours was the estimated completion time for each week's activities. Participants would complete the training activities at their convenience, within a specified time frame.

Communication in the session was to be primarily asynchronous, which meant that communication involved a time delay. Participants would not be required to be online at the same time to communicate with each other or with the facilitator. The

Discussion Board button linked to an area of the training site where participants could discuss designated topics in various forums. A discussion forum is an area where participants may hold discussions by reading and posting comments related to the topic designated by the facilitator. The first time I clicked on the Discussion Board button, the computer screen displayed links to two discussion forums, entitled Introductions and Questions. The Introductions forum was intended as an area for participant introductions. We were to assist each other with assignments and technical issues in the Questions forum. Each week, Peggy was to add links for new forums that would be used to complete discussion activities related to the current module.

Some assignments would direct participants to read training materials or search for related information and complete assignments independently. Others would direct us to participate in discussions in which we shared ideas with one another. Peggy would participate in the discussions and relay additional information to us via email and announcements, which were listed on the opening screen of the training site. We were to communicate with her and with each other via email, instant messaging, and posts to the discussion board.

During the first week of the training, I created electronic folders for each week. The main folder was named TOP. Inside the TOP folder, I created a subfolder for each week. These folders were named Week 1, Week 2, etc. Each week, I would download the current electronic slide presentation and saved it in the appropriate folder. Then, I would print a copy of the presentation in handout format with three slides per page.

As I completed each assignment, I would save an electronic copy in the appropriate folder, submit it, and then check it off the assignment list. I organized a three-inch, three-ring binder with an introduction section, a section for email, and separate sections for each week. In the introduction section, I filed the initial emails from the instructor that outlined enrollment information. Throughout the training, I would print hard copies of all presentations, assigned readings, and completed assignments. These would be filed in the appropriate sections designated for each week. I would also print emails that included questions or instructions related to assignments. These were to be filed in the section designated for email.

Module 1: Overview and Introduction to Online Professional Development

When I opened the electronic folder for Module, I found a message of welcome from Peggy, and an electronic slide presentation. The message and the presentation were written informally, in first person. The presentation contained objectives, key points related to the topic of study for the week, links to related information, and instructions for completing assignments. After viewing the presentation, I created an assignment list in Microsoft® Word as an aid for keeping track of completed assignments.

The objectives for Module 1 were: (a) to determine how learning theories, learning styles, and learning models can be applied to online professional development; (b) to evaluate personal learning styles and conclude how online professional development can meet them. The instructions for the first assignment directed participants to read two websites entitled *What Makes a Successful Online Facilitator?*

(2005) and *What Makes a Successful Online Student?* (2005) and then "jot down a few notes in Microsoft® Word." After printing, reading, and highlighting information from the websites, I debated whether to type the items I had highlighted. I thought I'd just copy and paste my highlighted notes from the articles. When I checked the Questions forum on the discussion board, I found that another participant had faced the same challenge. In her post, she stated that she had printed the articles and highlighted as she read. She asked Peggy if we were going to use the notes for anything other than personal use and stated that if not, she would continue to print and highlight assigned readings. She said if necessary, she would create a document in Word® after highlighting a hard copy of the article. Peggy responded by telling her to use the strategy that best met her needs and stated that she might ask us to submit the notes later in an electronic file. The instructions were confusing because documents that have been printed and highlighted cannot be submitted electronically.

I added a post to the discussion board that explained that I also found it easier to highlight a hard copy, instead of typing notes using word processing software. In the post, I commented that I had typed my highlighted notes, but that I might decide to copy the entire text of the article into a word processing document, and then use the electronic highlighter within the software to highlight key points. She responded with a posted comment that stated both of us had good ideas.

After this discussion, I decided to highlight hard copies of the articles and keep them for reference so that I could type the handwritten notes from them in the event that Peggy directed us to submit them to her electronically, as she had stated on the discussion

board that she might ask us to upload our notes. I planned to create an electronic document only if directed to submit it for credit.

For the next assignment participants were to compose an essay which discussed our view of ourselves as students and as facilitators in an online environment. In the essay that I composed, I evaluated my qualities as an online learner and as a potential online facilitator. I described the previous online course that I had taken and stated that I did not enjoy it because there was little interaction among participants. I was interested in experiencing the benefits of being involved in an online learning community. I stated that I believed that online learning is time-consuming and I would encourage an online student to stay on schedule in completing assignments, because students easily fall behind in an online course when they fail to check the site frequently and complete assignments regularly.

When I evaluated my ability as an instructor, I realized that I needed to learn to facilitate critical thinking among students. As a face-to-face teacher, I had frequently presented problem-based assignments to my students. I seldom lectured, and used short, 20-minute lectures only when information could not be presented in other ways. I wrote that I believed that my prior teaching experience would be beneficial as I made the transition to teaching in an online environment.

The second assignment within Module 1 directed us to read three articles related to learning theories: (a) adult learning theory, (b) constructivist theory, and (c) experiential learning theory. The electronic slide presentation contained links to websites. Our instructions were to click on the links, read the material, and type notes from the

material in Microsoft® Word. These instructions were the same as for the previous articles; I ignored the instructions and highlighted the printed articles.

When I clicked on the links to the web pages, I encountered a minor technical issue. When I opened the electronic slide presentation within Blackboard® then clicked a link in the presentation, the web page opened within Blackboard®. When I tried to use the back button to return to the presentation, the Blackboard® system closed the presentation. Each time this happened, I was forced to reopen the presentation and start over, causing me to repeatedly lose my place. Through trial-and-error, I discovered that I could download the presentations to my hard drive, and then open them using Microsoft® PowerPoint® software.

The final part of the assignment was to answer the question, "How do you see online professional development meeting the criteria of the three learning theories you read about?" In my response, I presented ideas associated with the theories of adult learning, constructivism, and experiential learning. I stated that a professional development facilitator could incorporate elements of all three theories in an online learning environment. I stated my belief that professional development participants are generally teachers who are interested in learning and applying knowledge in their classrooms. As a facilitator, I planned to direct them to work together online to develop solutions to carefully constructed case studies based upon true-to-life classroom scenarios.

For the third assignment, Peggy provided a link to an online learning styles inventory for participants to complete. Then, we were directed to introduce ourselves on

the discussion board and share the results of the inventory. As I read the introductions posted to the discussion board, I noticed that they were written very informally in a conversational style and included slang expressions such as “hey” and “ya’ll.” Some participants also included *emoticons*, which are sequences of printable characters such as :) or :(that look like a human face when the viewer’s head is tilted to the left. Emoticons are used in the most informal electronic communications to convey emotions or the use of irony, which can be lost in online communication. In my introduction, I stated that I am a former business technology teacher and high school principal. I noted that the assessment indicated that I am a visual, applied, verbal, independent, and pragmatic learner. I stated that I enjoy taking online inventories such as these, and that this one provided an accurate assessment.

For the fourth assignment, Peggy sent an email assigning participants to one of three discussion groups. She also posted the list of group assignments on the Week by Week button within the training website. Each participant was to search online for information on the topic assigned to their group: constructivism, collaborative learning, or experiential learning. Then we were to discuss our topics using the discussion forum assigned to our group. Finally, we were to read the discussions posted by the three groups. When I read the discussion forum for Group 3, I noticed that Peggy had uploaded a .gif file that contained a graphic of a blue ribbon. She commented, “Great work group!” and then instructed them to click on the attachment to receive their blue ribbon. I laughed when I saw the blue ribbon, and I wanted one, too!

I was assigned to the group that discussed constructivism. When I searched the Internet for information related to constructivism, I found a website entitled *Using WebQuests for Constructivist Learning* (Martin, 1999). The site included a brief description of WebQuests, a link to a site on WebQuests (Dodge, n.d.), and links to sites related to the development of web-based constructivist learning environments.

WebQuests are websites that consist of a series of steps that introduce the students to a problem, and then guide them in completing a project or activity. WebQuests present an organized set of links to information on the Internet that has been evaluated by the facilitator for appropriate content related to the given task. WebQuests provide a way for facilitators to structure participant use of online resources, and may be designed to guide participants to construct their own knowledge as they learn.

In my post to the constructivist group discussion, I included a link to the website I had found. Another participant responded to my post, saying that the site I submitted was helpful and that she found several WebQuests she could use with her students. I was excited that I had contributed something useful to the discussion. Up to this point, I felt that I had not made any valuable contributions to the class discussions.

After reflecting on constructivism, I completed a survey by clicking on the Evaluations button. This activity demonstrated how we could use the online survey feature of Blackboard® to collect participant opinions concerning training materials, the amount of time spent completing training activities, and participant progress in the training.

The electronic survey included four essay questions:

1. Did the reading materials and applications meet the objectives for the Week 1 module? Please explain your answer.
2. Did completion of the module take about 4 hours? If not, please explain.
3. Was the Week 1 module easy to follow and navigate through? Please explain.
4. After this first week, are you glad that you signed up, and are you are looking forward to next week's module? Please explain.

I answered each question affirmatively and briefly explained my answers. I completed all of the activities for this module within the estimated completion time of four hours.

Module 2: Building Online Learning—Instructional Design

At the beginning of the second week of training, I accessed the training site and saved electronic copies of the materials that were posted to the Module 2 folder. I printed copies of the presentation and handouts, which I filed in the binder I had prepared the previous week. Then I created a list of assignments for Module 2.

The electronic slide presentation for Module 2 provided a definition of instructional design; module objectives were not listed. In the first assignment, we were instructed to read an article entitled *7 Principles for the Use of Instructional Technology* (Chickering & Ehrmann, 1996) that presented principles for educators to follow when implementing technology in the learning environment. After reading the article, participants were to “add to the electronic notes” we had been directed to prepare in the previous module.

Because Peggy again directed participants to take electronic notes, I felt that she was likely to require us to submit them. I wanted to be prepared ahead of time to save a last-minute scramble to produce a document for electronic submission; therefore, I made a second attempt to take electronic notes. After I printed and highlighted the reading assignments and summarizing what I believed to be the key points, I created an electronic document that contained notes for the reading assignments made in Modules 1 and 2. I completed the electronic note-taking task only because Peggy had stated the previous week that she might direct us to submit the notes.

This activity was frustrating. Based on previous experience, I believed that I was more likely to remember what I read when I highlighted ideas from an article and then recorded my own reflections, questions, and conclusions in the margins. I came to consider the electronic note-taking assignment a waste of time, and my focus should have been directed toward applying the principles to my teaching practice.

To complete the next assignment, the presentation for Module 2 directed us to read an article that outlined instructional strategies for online courses. The article explained how various face-to-face strategies could be adapted to the online environment. The strategies included learning contracts, discussion, lecture, self-directed learning, mentorship, small group work, projects, collaborative learning, case studies, and forums. We were directed to create an electronic slide presentation to highlight key points from the article.

I created a presentation that contained 15 slides. Because I am accustomed to designing electronic presentations, this assignment was not difficult. However, I realized

that in completing this assignment, I focused on designing slides instead of learning the strategies.

Next, we were directed to locate a website to support the topic of instructional design, and then add a link to the website and a short summary of information from the site to the Online Resources forum of the discussion board. When I accessed the discussion board, I found that another participant had posted the same website that I had found. I added my comments about that website, and then posted the link for another one. Both of the websites that I selected described various ways to facilitate online discussions. I chose them because I believe that interaction among participants is a critical component of online learning, and I wanted to develop skill in this area.

When I read Peggy's response to my post, I was encouraged because I believed that she had taken time to read an article I had posted. Her reply said, "Great article. I will add the concept of asking questions in the next discussion board assignment. How do you think the participants [in TOP] will respond?" She ended her reply with an open-ended question, which was a technique described in one of my articles.

Seven participants posted a total of 12 links to related articles on the discussion board. Four participants posted one article each; another one posted three articles, and two of us posted two articles each. I went to each site and printed a copy of each and added these to my notebook. However, I did not take time to read all of them; I felt overwhelmed by the massive amount of information.

In my journal, I stated that I felt that the tendency not to take time to read assignments was related to a lack of time to carefully read and study the information

presented. At times, I was overwhelmed because there was so much to read! At times, I did not take time to read all of it. There were assigned readings, discussion board posts, links to websites posted by other participants, and links to websites that I found through online searches for information.

In my journal, I also noted that most of my comments on the discussion board seemed to relay my personal opinions or my reactions to the comments of others, rather than making contributions that came directly from assigned readings. By giving my opinion, I could contribute to the discussion without putting time into learning the training content.

On the Week by Week button in Blackboard®, in the electronic folder for Module 2, Peggy posted instructions for joining a list server. The instructions explained how a list server works, then listed and described several to which we could subscribe. A list server is an electronic mailing list that distributes messages to users who subscribe to the list. To subscribe, a user must email a message to the list server to request a subscription. Directions for subscribing may be posted on the list server website and may also be included in each email distributed through the server. I decided to use a free web-based email service to create a special account to be used only for list server subscriptions because Peggy advised that list server subscriptions might generate an enormous amount of email and recommended that we create a special account to use for this activity. After subscribing to the list server, we were instructed to create a three-paragraph summary that explained what we learned, how we interacted, and responses that we received. Then, we

were supposed to post the summary to the Listserv forum on the discussion board by November 7.

I checked email every day and received nothing from the list server. On November 7, I checked the discussion board and discovered by reading the Questions forum that several other participants had not received any messages through the list servers, either. Five of us got involved in the discussion and worked together to try to assist each other through the process. Peggy posted an encouraging message to our discussion. It read, "**APPLAUSE!** Thank you for taking care of each other." When I read this message, I knew that she was pleased that we were trying to help each other. She followed this statement with a comment that it might be necessary to respond to an email sent by the list server requesting us to confirm our membership before receiving messages. I was disappointed that the list servers did not deliver information to me.

On the discussion board, I learned that I could search for articles on one of the list server sites called MERLOT. Because I had not received any emails from the list servers, and I was impatient to complete the assignment by posting a summary to the Listserv discussion forum, I searched MERLOT, and then posted a summary of the information I found. All four of the sites that I selected from MERLOT contained information related to online instruction. The first site provided a free online survey to be used for course evaluation. The second one explained how to prepare an online course, retain students, and assess learning. The third site described how to design online instructional materials, and the fourth site outlined guidelines for designing project-based learning activities.

After I had posted my summary of the information, I was ready to complete the final activity for Module 2.

In the final activity, Peggy instructed us to make changes to a slide from a Microsoft® PowerPoint® presentation. The slide presented three comments that could describe our experience in the training. We were supposed to copy the slide to a new presentation, keep the comment that best described our experience, save the changes, and email the new presentation to Peggy as an attachment.

During the second week of training, a participant withdrew from the training. She left a post on the discussion board to let us know that she was withdrawing because the training was too time-consuming. She stated that she did not think she would have time to facilitate a training session when she couldn't find time to complete activities as a training participant. She did not mention how much time she had spent completing training assignments. I could relate to her comments. I noted in my journal that I understand why students quit online courses. I felt that learning online was time-consuming. Online students have to remember to check the site daily and make time to complete assignments. Additionally, there are no immediate consequences for neglecting to complete assignments. Success in an online course requires self-discipline and motivation.

I am a goal-oriented person, and at this point in the training, I was beginning to wonder how the assignments would be evaluated. I had not found any criteria on the site that explained Peggy's expectations, and I was confused. At the outset of a project, I like

to know exactly what will be expected so that I can plan early in the process for optimum efficiency. I am goal-driven, not process-oriented.

Module 3: Teacher Activities in the Online Environment

At the beginning of Week 3, I accessed the training site and saved electronic copies of the documents posted in the Module 3 folder. I then printed each document, filed it in my training binder, and then prepared an assignment list.

The Module 3 presentation began with a list of the objectives for the module, a brief summary of the information presented during the first two weeks of training, and a brief introduction to the module. The objectives for Module 3 were: (a) identify online teacher activities and (b) compare face-to-face learning activities to online learning activities. The presentation included four slides that summarized *Five Principles of Good Course Design* (Fink, n.d.). The presentation focused on Principles 2 and 4 from Fink's criteria of a well-designed course and explained that active learning results in higher level learning. The presentation emphasized that to learn to solve problems, learners must practice solving problems. To learn to think critically, learners must practice thinking critically. The presentation also highlighted the idea that learning activities should be sequenced so that early classes provide a foundation for more complex, higher-level learning tasks in later classes. The presentation did not include information related to Principles 1, 3, and 5.

The first assignment directed participants to read an article called *Online Pedagogies for Active Learning* (Stacey, 2003) and then browse Bernie Dodge's web site

on WebQuests (n.d.). We were also directed to look at a website called *Intelligentsia: A WebQuest about Multiple Intelligence Training* (Tanner, 2003). Then, we were directed to participate in an activity called Ask an Expert. In the literature, I had read that an advantage of online learning is that the online environment provides access to experts who might not otherwise be available. When I read this, I was not sure how to include experts in an online environment and was interested to see Peggy demonstrate this technique.

We were directed to email Paul Stacey or Bernie Dodge, introduce ourselves, then ask a question or request tips that might help us as we prepared to design a website for an online course. Because I was interested in learning more about Dodge's WebQuest concept, I decided to email him. I felt extremely nervous and a bit intimidated about contacting someone I had never met. I thought: What if he is too busy to respond? What if he thinks I am stupid? I have no idea what I should even ask. Finally, I decided to just do it. In my email to Dr. Dodge, I briefly described the TOP program and told him that I was excited about learning more about WebQuests. I ended the email with two questions: (a) Do you have any tips for implementing a WebQuest in an online learning environment? and (b) What are some of the difficulties I might encounter in using WebQuests with my students?

Dr. Dodge responded to my email within 45 minutes! In his email, he explained that he had used WebQuests online with great success and cautioned that extra care is needed to enable interaction within student groups. He said that he used Moodle™ instead of Blackboard® and that it allowed him to easily set up a forum for a group of three

students working on a WebQuest. I later learned that Blackboard® also allows the setup of forums for small-group collaboration. He also recommended QuickTopics℠ as an alternative means for online interaction. He noted that most WebQuests end in a whole-class debriefing led by the instructor, accompanied with student presentations. He suggested that in an online environment the debriefing might be held in a discussion forum and students might submit a written product instead of making presentations. He said that a more high-tech solution would be to use Macromedia® Breeze® software to hold a virtual meeting so that students could make the presentations online. I was impressed with his quick, thorough response and appreciated that he took time to share his knowledge with me, and I responded with an email thanking him for the information.

After I emailed Dodge, I found that Peggy had posted a copy of an email that she had sent to Paul Stacey to explain the project and request permission for us to contact him for information. In his reply, he explained that he was unable to respond directly to student questions due to a full-time workload and his enrollment in two courses in an online graduate program.

The next assignment directed us to describe three learning activities we had used in the face-to-face classroom, and then explain how we would implement them in the online environment. We were also directed to describe the outcomes we would expect from the students. I described three learning activities that I had used as a high school business teacher with students in grades ten to twelve.

The first activity that I described was a career research project. The learning outcome of the career research project was for students to develop a career goal, then

research opportunities and training requirements in the selected career field. In the face-to-face classroom, I directed students to choose a career and prepare a report that included educational requirements and salary range for the selected career. The report would also include a career plan, reasons for choosing the career, and the name and a description of a college or training program where the student might receive career training. They were also instructed to provide a copy of an advertisement for a job in this career field.

Students used the online version of the *Occupational Outlook Handbook* (2005) to research educational requirements and salary. They then used the Internet to locate training opportunities and job advertisements. A keyboarding textbook was used as a reference for the report format.

After students researched the career, they used spreadsheet software to develop a budget based upon the salary for their chosen careers. They used the Internet to research living expenses (housing, transportation, groceries, clothing) and calculated mortgage and vehicle payments based on credit calculators found on the Internet.

The activity would be the same for online participants, with minor modifications. As in the face-to-face classroom, online participants would use various websites to research the information. On the training website, I would include formatting and content guidelines for the report (an outline and example) and sample websites where participants might locate job advertisements and training and career information.

The second activity that I described was a travel simulation project that directed students to plan a vacation to Walt Disney World® as an end-of-unit activity that

incorporated a variety of skills including: (a) Internet research, (b) budgeting, and (c) making travel arrangements. The learning outcome was for students to create a budget and an itinerary from information they located on the Internet. Students used an example from a keyboarding textbook as a guide for formatting the itinerary.

I instructed face-to-face students to pretend to be a travel agent planning a $3,000 trip for a family of four. They were to create an itinerary and a budget for the trip, with the following considerations: The family would stay in a Disney World® hotel and eat at least one meal with Cinderella. How many days/nights would the vacation last? How would the family travel—by plane or by car? How many tickets would be needed for the family? What would be the cost of the hotel? What would be the cost for a meal with Cinderella?

Online participants would complete the same activity. On the course website, I would post instructions, the link to the Disney® website that was provided to the face-to-face students, and a sample itinerary and budget. In either environment, this activity could be completed in teams so that students could support and assist one another.

In my description of the third activity, I stated that students would provide three examples of non-verbal communications. They were to include at least one gesture from a foreign country and explain its meaning. The learning outcome would be for students to interpret non-verbal communications for international applications. To adapt this activity for the online classroom, I would introduce non-verbal communications through a slide presentation that included various websites. Students would use a search engine to

research examples of non-verbal communications and international customs and provide pictures and explanations of each.

In my journal, I noted that I found that the assignments that I had used in the business technology classroom were easy to adapt to the online format because I had used the Internet extensively in the classroom as a face-to-face teacher. I believed that developing training content would be time consuming, because after the documents are developed, they must be posted to the online site. Also, assignments, documents, and communications must be thoughtfully planned to minimize misunderstanding and clearly convey expectations. In the face-to-face environment, participants can ask questions when an assignment is made, and the facilitator can respond at that time. In the online environment, participants can email questions when the assignments are read, but the facilitator may not read the email for some time.

The presentation for Module 3 concluded with a reminder to check the discussion board. As I read the discussions for this module, I noted that Peggy responded in some way to almost every comment posted on the board. Sometimes she commented briefly, with an encouraging “Yay!” or “All right!” or “Good point!” At other times, she wrote lengthy responses, asked us open-ended questions, or made note of a point from one of the articles that one of us had posted. Her responses were encouraging to me, because I believed that she had been online reading our discussion posts.

During the third week of training, I created a student homepage in Blackboard® by posting my contact information, resume, and photograph. Although participants had not been directed to create a homepage, I found a button marked Get to Know Me!,

which I clicked out of curiosity. Although it was easy to figure out how to upload the information necessary to create the homepage, some features of Blackboard® are not as user-friendly, and I discovered that I did not know how to access the homepage that I had created. I emailed Peggy to ask for instructions, and she did not respond immediately. I felt a bit impatient that she had not responded promptly, and then I realized that it had only been a day since I had requested the information. It was difficult for me to wait for an answer, because I wanted to see the homepage I had posted. Within two days, Peggy had emailed the instructions to me, and she also posted the instructions as an announcement within the training site.

Although participants were not directed to take electronic notes for the readings assigned for Module 3, I was concerned that we might be asked to submit them; therefore I decided to try a new approach to the ongoing issue of electronic note-taking. I copied and pasted an entire article into a word processing file, and then used the highlighting tool to highlight what I believed to be the most important points. The process took one hour, and was tedious. I decided that after this week, I would abandon the electronic note-taking task altogether for the remainder of the training.

During the third week of the training, I found it difficult to schedule time to carefully read and think about the material presented. I considered setting aside a specific time twice a week to study the material. I realized that I was reading just enough to complete the assignments, but did not feel that I was really learning anything. In my journal, I noted, “I find it very hard to have time to really interact with the material.”

Toward the end of the third week of training, Peggy posted an announcement that we should check the grade book. She stated that by Sunday evening, she would post marks beside our names to indicate which assignments were complete. She did not indicate an exact time that she would complete the grade book updates. Assignments would be graded on a pass/fail basis. I felt as if she had read my mind; I was becoming very concerned over my progress in the training session.

During the third week of training, I realized how much I depend on the auditory element of learning; I enjoy discussing my ideas with others in order to make sense of new information. While learning online, I missed the audible discussions of a face-to-face learning situation. My enthusiasm and motivation began to lag. I lost interest in completing the assignments and was often distracted by email, chat, and news sites available on the Web. Because I was not being held accountable for learning, other activities began to crowd out the online training. Work, family, and social activities took priority over TOP.

At this point in the training, I lost motivation to continue with the training and seriously considered withdrawing from the training. During the fourth week of training, although I printed and organized the presentation and handouts for Module 4; the only assignment I completed was a discussion board activity called Tag…You are it!

The presentation for Module 4 explained the rules for the discussion board game called Tag…You are it! Participants were instructed to use the discussion board to answer a question about the article, and then post a question for someone else to answer. The rules stated that our questions must be related to copyright and intellectual property

in online learning environments. The instructions stated that we could answer more than one question, but were to post a question before exiting the discussion.

I chose to participate in the Tag…You are it! game because I enjoyed communicating with Peggy and the other participants on the discussion boards. Reading the posts made by others and replying to them provided a way for me to discuss my ideas with others, and helped me feel less alone online.

During the fourth week of training, Peggy posted a notice on the training site that no new assignments would be made for the week of Thanksgiving. When I read Peggy's notice, I felt a sense of relief that I had an excuse not to work on assignments for a week. During the Thanksgiving holiday, I made no attempt to catch up with the missed training assignments.

At the start of the fifth week, I received an email from Peggy that announced that it was time to get "back to work" after the Thanksgiving holiday. At this point, I was a week behind in the training. After reading the announcement, I felt pressured to catch up with missed assignments; I checked the training site later in the day and downloaded the Module 5 presentation.

The presentation for Module 5 directed participants to: (a) prepare an essay on the topic of classroom management in TOP, (b) participate in a discussion of how classroom management was accomplished in TOP, and (c) submit a professional development session topic and provide a list of units to be included in the session we would develop and facilitate.

I skipped the written activities and accessed the discussion board to post my thoughts about classroom management in TOP. My comments were the first to be posted in the forum designated for the discussion. In my post, I stated that the facilitator should keep learners involved by providing feedback, encouraging discussion, and reminding them to submit overdue assignments. I stated that online students may feel isolated and alone, as if no one is taking notice of the work that has been completed.

Another participant continued the discussion by stating that she agreed with me and elaborating on my comments. She commented that the facilitator should communicate clearly and provide consistent feedback related to expectations, goals, and assessment to help eliminate the fear and anxiety that an online learner may face. She recommended the use of collaborative activities to help learners become involved, learn from each other, and remain interested in learning. As I read her comments, I realized that as an online learner I had experienced the anxiety caused by a lack of feedback concerning expectations and assessments.

At the start of the sixth week of training, I received an email from Peggy that announced she would be facilitating the training from Vancouver, Canada. She attended the National Staff Development Council 36th Annual Conference that was held December 4-8, 2004 in Vancouver, British Columbia, Canada.

In the sixth week of the training, I also received an email from a fellow TOP participant. I was confused by this email because I was now two weeks behind in completing assignments. The email said that Peggy had appointed her to organize an activity called Contact a TOPmate. Peggy later explained that she had asked the

participant to organize the activity because none of the participants had initiated the process of developing a plan for contact among the group, as she had directed in the instructions for the activity. The email included an alphabetical list of the eight participants who were still enrolled in the session and instructed us to contact the person whose name came after ours in the list. I ignored the email, but did not delete it because I thought that I might need it if I decided later to continue the training.

I continued to fall further and further behind. I did not complete any assignments during the sixth week of the training. The following week, the seventh week of training, I received an email from Lisa. She stated that she was behind, as we were in the seventh week of training, and she was completing assignments for Module 6.

She had just completed an assignment called Contact a TOPmate, which was an activity included in Module 6. Peggy used the word *top* as a theme throughout the training, and she referred to participants as TOPmates. The presentation directed participants to contact one of our TOPmates and ask questions about previous online learning experiences and any reservations to online learning. Also, we were to share questions and strategies to be used with participants in the sessions we would facilitate and come up with a plan so that each participant would be contacted by another.

Lisa stated that she had not communicated with any of the other participants concerning this activity. She included the questions for discussion, as Peggy had directed in the instructions.

I responded to Lisa's email and answered the discussion questions. I explained that my reservation about online learning was the time involved in completing

assignments. I noted that I wasn't sure how to handle participants who might be reluctant to complete assignments or take part in discussions.

I was interested in hearing her thoughts about the questions, especially about how she would encourage reluctant participants. I also stated that I was excited to have email contact with other training participants. I explained that I was two weeks behind in the session and was unsure about the requirements for this assignment because I had not accessed the training site recently.

In her reply, Lisa explained the assignment to me. She stated that I was supposed to send the questions to the next TOPmate on the list, rather than replying to her email, but that she would answer the questions for me. She described her previous online experience and stated that for her, the hardest part of taking a course online was the pressure caused by procrastinating. She stated that if she had just done the assignments when she received them, she would have "saved herself some headaches!"

The email that was sent to launch the activity indicated that at this point, 8 of the remaining 11 participants were still enrolled in the session. Lisa wondered if knowing that some participants had fallen behind would have been enough to motivate others to stay in the class. She also encouraged me to continue working because there was not as much work to be done as she imagined I was probably thinking. She had spent a few hours getting caught up and was almost back on schedule. Lisa stated that she had thought about withdrawing from the session, but had decided not to, if Peggy would accept the late assignments.

At this point, I was ready to quit the training because I was so behind in completing the assignments. I was encouraged by Lisa's reply because I realized that I was not the only person who had fallen behind, and she had completed the overdue assignments within a few hours. When I talked to Peggy about my concern over being behind in the training, she assured me that she would allow me to catch up. The time was close for the winter holiday break from training. At the end of the seventh week of training, we would break for two weeks for the holiday. Since I would have time during the holiday to make up the assignments, I decided to continue with the training. I emailed Lisa to let her know that Peggy had indicated that she would allow me to catch up and thanked her for the encouragement. To complete the activity, I sent Lisa's initial email and my reply to the next participant on the list, whose name was Tracy (pseudonym).

Lisa, Tracy, and I exchanged several emails. Through this exchange, I learned that Tracy was also behind in the session. She commented that she was concerned about the amount of time needed to complete the training activities, and stated that "communicating with Lisa and me had relieved her anxiety about keeping up."

At the beginning of the seventh week of training, I downloaded the presentations for Modules 6 and 7. However, I did not complete any activities for either module, because I planned to catch up on assignments during the two-week winter holiday period that followed Week 7. I spent New Years' Day completing assignments for Modules 4 through 7.

Module 4: Copyright and Intellectual Property

On the morning of New Years' Day, I accessed the training site and opened the training binder to plan the task of completing the unfinished assignments. At the beginning of Week 4, I had accessed the training site, saved electronic copies of training materials, and then printed and organized the printouts in my training binder. After I organized the printouts, the binder was full, so I organized a second 3″ binder to be used for printouts in Modules 5 through 10.

The Module 4 presentation directed us to read two articles, one entitled *Copyright Law for Distance Education: The Meaning and Importance of the TEACH Act* (Crews, 2002) and another published by the American Library Association (2005) entitled *TEACH Act Best Practices using Blackboard®*. These articles presented an overview of the TEACH Act and its application to a web-based learning management system. By reading the articles, I learned that the TEACH Act revised federal copyright law to include regulations for the educational use of copyrighted materials in distance learning environments. I also learned how to use features of the Blackboard® learning management system to follow the provisions of the TEACH Act.

Next, the presentation explained the rules for Tag…You are it! Because I had already completed these activities, I continued to the next slide, which contained links to several sites that presented copyright-related information. One of the sites was an interactive website, which showed a cartoon of a classroom of students. When I clicked on a student, a question and answer about copyright appeared in a bubble above the student's head.

The final assignment directed participants to give an example of copyrighted material to be used in our online session. Then, we were to use *The Copyright Site* (n.d.), which presented information related to fair use of copyrighted materials, to determine whether the material we selected could be used under fair use guidelines.

The instructions for the assignment, which were presented on a slide in the presentation for the Module 4 said, "Give me one example of a material that you want to use in your module, but it has a copyright…" I was confused by the instructions because participants had not been assigned session topics.

I was not the only participant who was confused by these instructions. On the training website, Peggy posted an email that she had received from another participant who wrote, "I am not sure what you want. On wrap up you are talking about a module. What module? Did I miss something?" When the participant used the words *wrap up* she was referring to the heading on the slide in the Module 4 presentation, which listed instructions for the assignment. In the response that Peggy posted, she stated that we were to "pretend [we were] creating an online module for something [we] might be teaching right now in a unit," choose materials to be used in the course, and then answer the questions from the online article and explain whether our use of the materials met the guidelines for educational fair use of copyrighted materials.

I chose to create an online session for teaching Microsoft® PowerPoint®. Information from tutorial sites related to PowerPoint® would be used to create a new tutorial that incorporated the best elements of each site. By using information from *The Copyright Site* (n.d.), I concluded that the copyrighted material was a creative work that

would be used for education. The site indicated that if more than 10% of the material was used, permission from the author would be needed in order to comply with copyright laws. I noted that my use of this material would not harm the market for this product because the sites were posted on the Web for teacher use. Several of the sites selected stated that the materials could be used in the classroom at no charge, provided that they included a copyright statement.

In this module, we were instructed to read nine articles. I felt overwhelmed at the volume of information. Printing and organizing the materials took over an hour, and I did not read them.

Module 5: Classroom Management

Early in the afternoon on New Year's Day, I started work on the assignments for Module 5. The first assignment for Module 5 directed participants to "describe in a two page article how this TOP course has handled classroom management in these three areas: tips, communications, and content delivery." I was confused by the directions for this assignment. In my mind, classroom management was synonymous with student discipline. I could not imagine why a facilitator would need to discipline online learners. Therefore, I was puzzled as I read the information in the presentation. First, it listed classroom management tips such as setting virtual office hours, facilitating discussions, delegating authority, posting weekly announcements, and creating a list of frequently asked questions. Next, it defined synchronous and asynchronous communication and listed communication tools such as email, listservers, instant messaging, and video/audio

conferencing. Then, it discussed techniques for managing training content by providing up-to-date information, ongoing assessment, fostering collaborative learning and active participation, and focusing on content mastery. Then it listed ways to promote appropriate online behavior by clearly stating expectations and providing interesting, relevant instruction, and using various instructional strategies.

I started the assignment by developing a list of the topics covered in the Module 5 presentation. The topics included: (a) classroom management, (b) communication, (c) content, and (d) instruction. After listing each topic, I listed aspects of TOP training that were related to each area. As I worked, I realized that classroom management referred to all of the strategies used for building an environment that promotes learning.

The final slide of the presentation directed participants to submit topics for the training session we planned to develop. The email stated that for each submitted topic, Peggy would create a training site within the Blackboard® learning management system. The topics posted to the site included Microsoft® Excel®, Classroom Management, Basic Blackboard®, Advanced Blackboard®, and Partnerships. The topic that I submitted was Introduction to Microsoft® PowerPoint®.

I chose the PowerPoint® training topic for several reasons. As a high school business technology teacher, I had enjoyed teaching students to use the software, and for years, I had developed teaching materials and presentations using PowerPoint®. Because of my experience, I felt confident in my ability to train teachers to develop instructional materials using PowerPoint®.

In the initial outline, I planned for a 15-hour course that would be taught for three weeks. The course outline that I submitted was divided into three sections: (a) Week 1: Overview and Introduction, (b) Week 2: PowerPoint® Tutorial, (c) Week 3: Application Activities. As a course overview and introduction, I decided to provide an electronic slide presentation, an assignment checklist, and a short syllabus with course objectives.

For the first week, I planned to present information related to presentation design and delivery. Student activities for the first week would include reading assignments and discussions. I also planned to post an article related to copyright and facilitate a discussion about copyright issues, modeled after the Tag…You are it! activity demonstrated in TOP.

During the second week, participants would complete a tutorial to learn how to create slide presentations using Microsoft® PowerPoint®. Then, I planned for them to locate 10 websites related to electronic presentation design, PowerPoint® lesson plans and student activities, and rubrics to be used for evaluating slide presentations and speaking skills. They would use this information to develop an electronic slide presentation that could be used to teach a unit of study for their class. In the third week of the session, participants were to create a lesson plan, a student activity, and an evaluation that could be used to teach students to develop and deliver electronic slide presentations using PowerPoint®.

Module 6: Preparing Participants for Online Learning

After completing Module 5, I continued with Module 6. The first activity included in the presentation for Module 6 was to find or create a survey to be used to collect

information from participants about their computer equipment and their technology skills. We were instructed to upload the survey to the discussion board for peer review. I located a website that contained a survey of technology skills and adapted it for use in my session. The survey asked respondents whether they had Internet access, their Internet connection speed, and their level of proficiency in using email, search engines, word processing software, web browsers, and chat software.

After uploading the survey to the discussion board, I returned to the presentation and printed a link entitled *Preparing Students to Join the Online Learning Community* (Differding, 2004). This article presented tips for involving learners in an online learning community. As I read, I noted that Peggy had demonstrated the tips included in the article.

The article stated that the facilitator should welcome learners to class on the first day and immediately provide course materials and activities. The first day of training, Peggy sent an email welcoming us to class. It directed us to the training site where materials and activities were posted.

The article said also that the first exercises in a course should be designed to help participants learn the functions of the learning management system and to force conversation among small groups of learners. In the first two weeks of class, Peggy instructed us to introduce ourselves to each other on the discussion board, and then she facilitated small group discussions related to various learning theories.

The article also recommended the use of an informal communication style that reflects the facilitator's personality. Peggy's personality definitely came through in her

interactions with participants. She exhibited a positive, upbeat attitude and made an effort to keep us involved and motivated. She used an informal, conversation style in her personal communications with us. In one of the class discussions, I stated that as an online facilitator, I would look for ways to keep learners engaged as Peggy had in the Tag…You are it! game. In the same discussion, another participant said that Peggy made her feel comfortable online and that she had a positive, encouraging attitude and generated excitement about learning. Completing the training was a struggle. Peggy worked patiently with participants to allow extended time and to keep us encouraged and interacting with her and with each other.

Throughout the training, Peggy responded to every post and to every email inquiry that I sent her. Response times ranged from the same day to several days. She did not set virtual office hours.

Throughout the training, as recommended in the article, we were directed to interact through small-group and whole-group activities, and some of our work was posted for peer review. A variety of collaborative activities were assigned, and we were directed to critique and comment on one another's work. The Contact a TOPmate assignment and the Tag…You are it! activity were innovative and provided a unique means of collaboration.

Next, the presentation directed our attention to the first article that we read in TOP, entitled, *What Makes a Successful Online Student?* (2005). The presentation recommended that we have participants who enrolled in the sessions we were developing read the article as an introduction to the training. I decided to include this article in my

session and have participants consider their traits as online learners. I planned to have them discuss the following open-ended questions:

1. What traits do you possess that are well-suited to online learning?
2. Are there traits that you might need to develop in order to be a successful online learner?
3. How do you plan to develop these traits?

I added this activity to the session outline as a reminder to include it in the training.

The presentation then directed us to read and discuss an article entitled *Preparing for Distance Learning* (Bozarth, Chapman, and LaMonica, 2004). In the article, a group of college students were directed as a class project to develop an online orientation course for new online learners at a university. They conducted two surveys to collect data from online participants and facilitators. Facilitators were asked to identify skills to be included in an orientation course and the areas in which participants encountered problems. Participants were asked to identify skills needed prior to beginning an online course, changes in their assumptions about online learning, the most difficult aspect of online learning, and advice they might give to first-time participants.

Findings revealed that facilitators and participants agreed that there was a need for first-time participants to understand the time commitment necessary in an online course and possess strong time management skills. Responses of the two groups differed in that facilitators reported technology skill deficits to be a large problem for first-time participants, while participants reported that unclear instructor expectations and time management concerns were their greatest problem. The most frequent technology deficit

reported for both groups was the use of the discussion forum. Even though survey results indicated that most participants were deficient in their online learning skills, few indicated that they would enroll in an orientation to online learning course offered for academic credit at no cost.

Based on the survey results, the group who conducted the research recommended that an orientation to online learning course should be developed to address the expressed needs of facilitators and participants. They also recommended that the orientation should be mandatory or well-marketed so that participants would make a commitment to complete it.

To start the discussion, Peggy posted questions on the discussion board. In the discussion, we were to note key points from the article, and then discuss their impact on our thoughts concerning training participants and our plans for assisting participants with issues related to online learning. In response to the discussion questions, I outlined points from the article, and noted that that as a facilitator, I would need to determine learner skill deficiencies, provide clear instructions, and be available for communication to clarify misunderstandings. I also stated that I would provide participants with tips for organizing their work, post assignments weekly, plan for participant interaction early in the session, and provide contact information so that I could be reached via email, instant message, or telephone.

The Module 6 presentation concluded several pictures from Peggy's trip to the National Staff Development Council conference in Vancouver. The last slide had the caption, *Goodnight from Canada* and a picture of a full moon over water. I liked that

Peggy shared the pictures with us and subtly made the point that online learning can be facilitated from anywhere with Internet access. By late afternoon on New Years' Day, I had completed all of the assignments for Modules 5 and 6.

Module 7: Challenges of Online Learning

After taking a two-hour dinner break, I continued with Module 7. The presentation for Module 7 included information related to the challenges of online learning, including weak content and pedagogy, assessment, technology use, and preparation by the instructor and the participants. We were instructed to explain how we would address these challenges in our online sessions. To complete the assignment, I used information from a website and an article that participants had been directed to read the previous week.

In my response to the assignment, I noted that I would prepare for instruction by aligning curriculum, standards, and assessments. I stated that to provide a framework for the training, I would develop a syllabus with training objectives and other related information. I would then develop content by researching information relevant to each module.

I assumed that the strategies demonstrated in the TOP training were sufficient to effectively deliver instruction, and I planned to employ them in the training session I would deliver. Early in the session I would teach, I planned to schedule time for participants to practice with the technology, make introductions, and become comfortable in the online environment. Content would be delivered after the initial phase of

introduction and orientation. I wrote that I would encourage learner interaction and collaboration through discussion, chat, e-mail, peer assessments, group activities, and by pairing learners. I planned to provide a discussion forum for learners to assist each other with technology issues. I would provide an opportunity for learners to become aware of the need for self-motivation and self-learning strategies and would provide strategies for organizing their work for success. I would provide handouts that contained guidelines for assignments and include opportunities for peer assessment, as well as formative and summative evaluations. I completed the last of the Module 7 assignments at 9 o'clock. After spending New Years' Day working, I had finally caught up.

Module 8: Online Collaboration

On January 3, Peggy greeted us with an email announcing the start of Module 8, which I completed during the eighth week of training. Instead of providing a presentation for Module 8, Peggy posted links to three articles on the training site. The articles were related to the use of online computer conferencing to promote learner engagement and directions to read and take notes on the articles. I printed the articles and highlighted information from them.

On the site, Peggy also posted a date for the class to discuss the articles as a group in a synchronous, online conference using Yahoo!® chat software. She also posted directions for downloading and installing Yahoo!® Messenger, a free instant messaging software application that allows synchronous, real-time communication among users. To use the software, users must register a screen name on the Yahoo!® website. A screen

name is a nickname by which they are identified in the messaging system. Users must obtain the screen name for other users with whom they wish to communicate. To communicate in real-time using Yahoo!®, two or more users must be online at the same time. Users type messages which are immediately displayed in a message box on the computer screens of other designated users. I did not need to download the Yahoo!® software because it had been installed on my computer at the time I started working at the RCU.

I was unable to participate in the conference because of a previously scheduled business trip. Peggy planned to post a transcript of the conference on the training website, but she accidentally closed the file while trying to save it to her computer, and the transcript could not be procured.

During the last three weeks of TOP, I modified and expanded the session outline, searched for related websites, and developed activities and learning materials to be used for building the training site. I added notes to the outline with my ideas for course design and links to be used for learning activities. I used the TOP training site as a guide to develop a list of the learning activities and teaching strategies that Peggy had modeled. I selected activities from the list for use in the session I was developing.

In my search for learning activities, I found several links to PowerPoint® tutorials, and I asked Peggy to help me choose one for the session. She told me that the RCU had previously offered an online session in PowerPoint® and gave me access to it through the Blackboard® system so that I could use it as a guide. The session included an

online tutorial designed for pre-service and in-service teachers. I decided to use the tutorial for my session.

Module 9: Benefits of Online Learning

There was no presentation for Module 9. On the Week by Week button Peggy posted a link to information on the commercial site Blackboard.com®, with instructions to write a paper, with references, on the benefits of online professional development. When I called Peggy to ask a question related to the assignment, she told me that I would not be expected to complete the assignment, because the proposal for my dissertation research would fulfill the requirements of this assignment. I chose to call her because it was simpler to ask the question over the phone rather than via email.

Module 10: Elements of Success

The presentation for Module 10 provided a link to an article called *Tips and Tricks for Teaching Online: How to Teach like a Pro!* The presentation directed us to read the article, add questions related to the article to the discussion board, and then answer the questions posted by other participants. The article recommended that the instructor should use a grading rubric to allow students "to grade each other individually, as well as [a] group" (Shelton & Saltsman, 2004).

In my post to the discussion board, I noted that self-assessment is important in online professional development and in other learning environments. From my training and experience as an educator, I knew that self-assessment provides opportunities for students to learn by evaluating their performance. I also liked the idea of using peer

assessment, because it allows for multiple sources of feedback. However, sometimes adults are reluctant to critique someone else's work or to have their own work critiqued by peers. As a student, in some settings, I have felt incompetent in a particular subject and did not feel comfortable sharing my completed assignments with classmates.

I noted that in the online session I was to teach, I was considering including peer assessment as an evaluation tool, but did not want to make participants uncomfortable. I concluded the post with the question, "As an adult learner enrolled in an online professional development session, how would you feel if you were asked to evaluate the work of other participants or have them evaluate your work?" My post was the first on the discussion board, and several participants added their views on peer evaluation.

At this point in the training, I felt more confident about contributing to the discussions. After having more practice at participating in online discussions, my posts were longer and more detailed. I no longer felt excited or surprised when others posted their reactions to my comments. During this module, I collected additional instructional materials for the training that I was to facilitate, and I found it easy to make contributions to the discussions because I was commenting on the material that I had collected.

The final assignment for the module directed us to locate and post a link to a website related to developing a web-based course. I located and posted a link to a website that presented a timeline for course development and posted it to the discussion. I also posted links to websites that included an end-of-course evaluation to be completed by participants and a rubric for evaluating interaction in a web-based course.

During Week 10, the last week of the training, the rubric for the final project was posted to the TOP website (see rubric in Appendix H). When I saw the rubric, I wished that it had been provided to me at the time that I had initially planned the training I would facilitate, so that I could have included activities designed to meet the requirements. The rubric specified that the online training session that I would develop and deliver must include three activities to facilitate interaction, collaboration, and individual learning. It also directed that the session must include at least four projects and/or assignments. After the rubric was posted, I modified the session outline to meet the requirements.

At this point, I was ready to create content for the online PowerPoint® training. I followed the outline that I had developed and used activities from an online PowerPoint® session that had previously been developed and facilitated by an RCU professional development specialist. I also frequently referred to the TOP training site and notebook that I had compiled during the training. The TOP materials were a helpful aid in designing the session and planning for instruction, and I modeled many of the PowerPoint® training activities after those used in TOP. Not all of the activities were applicable to the PowerPoint® training because the intent of the TOP training was to train participants to apply teaching pedagogy in an online environment, while the PowerPoint® training was designed to train teachers to use software.

Before I created the documents to be used in the session, I prepared a file folder for each week that the session would be facilitated. On the computer, I created folders that corresponded to these file folders. As I worked, I printed and filed each document for easy reference and made notes on the printouts.

I initially planned to deliver the training for three weeks and include weekly modules that would require up to five hours each to complete. As I developed activities, I reviewed what I had learned in TOP and decided to change this approach. I revised my plan so that the final design covered a five-week period of time. I estimated that Module 1 would require two hours for completion, and that completion of Module 2 would require three hours. Module 1 included activities designed to introduce participants to the session and to each other. Module 2 included a lesson in basic PowerPoint® techniques. I estimated a completion time of five hours each for Modules 3 and 4. Module 3 presented a tutorial of advanced PowerPoint® techniques. Module 4 provided guidelines for a summative project in which participants were to create a lesson, a slide presentation, and an assessment for classroom use. The remaining week in the session was to be used to allow time for participants to complete unfinished assignments and the summative project.

The structure of the TOP training was easy to follow, and the design was consistent so that I knew when to expect new assignments and where to find these within Blackboard®. When I designed the PowerPoint® training site, I used the design of the TOP training site as a model.

Each module in the PowerPoint® training would include an assignment checklist, an electronic slide presentation that would guide learners through the module, and documents that would provide instructions for each assignment or activity. Each module would include a short questionnaire for learners to complete to provide information to me concerning their progress in the training. Each discussion activity would include

discussion starter questions to provide a framework for keeping the discussion on topic. On the assignment checklists and in the presentations, activities were presented in the order in which they were to be completed. On the training site, the links to the assignments would be arranged in the same order. Participants in the PowerPoint® session were expected to complete all activities in the order in which they were presented.

According to the TOP evaluation rubric, we were to use a theme for the session. Using Peggy's references to TOPmates as a cue, I decided to use *power* as the theme of the PowerPoint® session. I selected slide backgrounds that included elements that represented power including athletes, light bulbs, and electric blue designs. The name of each module included a reference to the word *power*, and the button that provided links to enrichment activities would be called Power Up!. In emails and on the discussion boards, I referred to participants as Powermates.

After I had created electronic slide presentations and assignment handouts, I developed the training website within Blackboard® by creating buttons, folders, and links to organize and present the course content. As I posted information to the website, I followed the plan that I had developed for a consistent design.

As a face-to-face teacher, I had collected and posted motivational quotes in my classroom, and I wanted to continue this practice in my online training site. When users logged in to Blackboard® and accessed the training site, the first page would display several motivational quotes obtained from a website which contained such quotes (http://www.toinspire.com). For example, one quote attributed to Mark Twain, stated,

"The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and then starting on the first one." I included this quote because it had proven to be true in my experience as someone with a tendency to procrastinate when faced with a large task. Another one, attributed to Lee Shulman, noted, "Only when we have something to value, will we have something to evaluate, and we cannot value something that we cannot share, exchange and examine." I included this quote because, in my thinking, I related it to effects of learning communities that encourage collaboration and reflection among colleagues upon improving teaching practices.

After posting the quotes, I created several buttons within Blackboard® to introduce myself and to provide a session overview. On the Contact Information button, I posted my photograph and contact information including email address, telephone number, mailing address, and Yahoo!® Messenger screen name. I also posted a schedule of the times that I planned to be available online. On the Course Information button, I posted a link to a one-page description of the session, which included course objectives and teaching methods and a training schedule. On the Meet Your Facilitator button, I posted a short curriculum vitae and a family photograph.

From the literature review I conducted in preparation for this study, I had learned the importance of establishing an online identity by including photographs and biographical information. I included the short curriculum vitae and the family photograph in an attempt to present an online identity that was to provide a reference for learners and promote sharing and interaction.

Next, I created two buttons that would contain training content. On the Assignments button, I created a folder for each module. Within each folder, I posted an electronic slide presentation and an assignment checklist that listed all module assignments in the order in which they were to be completed. I also posted documents that described each assignment or activity and links to websites containing information that participants were to read. On the Power Up! button, I posted links to supplemental resources related to Modules 2 and 3 for participants who were interested in learning more about a given topic.

Finally, on the Discussion Board button, I created forums to be used for each discussion. The first forum was called Questions and was to be used by participants for posting questions related to assignments or technical issues. The other forums were listed in the order in which they were to be used in the training. The name of each forum included the module number and the name of the activity to which it was related.

After I completed the online training site, I sent an email to Peggy to let her know that it was ready for her evaluation. After she evaluated the website, she placed a checkmark in the electronic grade book to indicate that I had completed the final TOP project. No comments or suggestions for improvement were returned after the training website was evaluated. If I had received suggestions for improvement prior to facilitating the training, I could have made changes to the training based on the evaluation. As it was, the session was facilitated as I had designed it during the TOP training.

Summary

As a veteran career-technical teacher of business and computer technology, I used technology in the classroom. As a graduate student, I participated in distance education courses. Because I enjoyed using technology to teach and to learn, I became interested in delivering instruction in an online environment.

When I began working at the RCU as a curriculum specialist, I participated in an online train-the-trainer program called Training of Online Professionals (TOP). The TOP training, which was designed to train educators to facilitate online professional development, was delivered online over a 10-week period. I participated in the program to learn how to implement teaching pedagogy in an online environment so that I could develop skills that might be useful for future career opportunities.

As an online learner, I perceived that completion of online activities was time-consuming. When I started TOP, I felt that I might not complete the training because I believed that online learning required significant amounts of time. Comments made in assignments and journal entries revealed my perception that online learning is time-consuming for learners and facilitators. In one journal entry, I commented that I believed that participants quit online training because learning online is time-consuming. In another entry I noted that I believed that developing training content would be time consuming because of the time required for developing materials, posting them to the online site, and editing all communications to ensure that they were easily understood. In third entry, I stated, “I find it very hard to have time to really interact with the material.” In response to an assignment, I stated that I believed that online learning is time

consuming, and I would encourage online students to stay on schedule in completing assignments.

At the time I developed the PowerPoint® training session, I had never facilitated online training, and I assumed that the methods and materials used in the TOP training were sufficient to effectively deliver training. For this reason, I used the TOP training site and activities as a model when I developed materials and content for the PowerPoint® training. Selection of instructional materials was not addressed in TOP, and I chose activities and assignments for the PowerPoint® training based on my personal preferences.

Several of the TOP training assignments directed participants to apply knowledge from their classroom experiences to create online learning activities. Because my teaching experience had been with high school career-technical business technology students, the assignments that I completed throughout the training were created for learners in grades 9-12. The assignments were not designed for training teachers to use PowerPoint® software to develop instructional materials.

The TOP training modeled participant collaboration in pairs and teams through participation in games, small-group discussions, and email exchanges. The training that I facilitated included small- and whole- group discussions, games, and team activities. Participants were encouraged to respond to those who posted questions on the discussion board.

In the TOP training, electronic slide presentations were used to present training content. When I developed the PowerPoint® session, I believed that in an online

environment, electronic slide presentations replaced face-to-face lectures. I assumed that instructional videos were inappropriate for online environments, because I believed that participants would likely use dial-up Internet service to access the training site from home via a telephone line. I knew from experience that viewing instructional videos over a dial-up connection would be extremely difficult. When I tried to view videos over a dial-up connection, the files were slow to display, and playback was sporadic. The software would play a 30-second segment of the video, pause for about 30 seconds, and then begin to play another 30-second segment. This process would continue through the end of the video.

Several times during the TOP training, I became confused by instructions and assignments. An email that I received shortly after the training began caused me to think I had missed the deadline for submitting the first week's assignments. When I completed an assignment related to classroom management, I had difficulty understanding the concept of classroom management as it applied to an online professional development session because my previous teaching experience had been in a face-to-face classroom.

When participants were given instructions to take notes electronically a participant used the discussion board to ask Peggy whether we were going to use the notes for anything other than personal use and stated that if not, she would continue to print and highlight. She added that if necessary, she would create a document in Word™ after highlighting a hard copy of the article. Peggy responded by telling her to use the strategy that best met her needs and stated that we might be directed to upload the notes later in an electronic file. The instructions were confusing because they were

contradictory; documents that have been printed and highlighted by hand cannot be uploaded. Peggy did not ask for the notes to be turned in.

In an assignment related to educational fair use of copyrighted materials, participants were directed to select copyrighted materials to be used in our training sessions. These instructions were confusing because the term *module* had not been defined. I assumed that the term referred to the training session I would develop, and I had not been assigned a topic for the session.

I became very frustrated as I made several attempts to compile electronic notes from assigned readings as directed in various TOP assignments. After trying different approaches, I decided to ignore the directions because I felt that the electronic note-taking was a waste of time. Instead of taking notes electronically, I printed hard copies of assigned readings, highlighted key points, and made handwritten notations on the printed documents.

Assessment was mentioned, but not modeled in the TOP training. Participants were not trained to implement assessment techniques in the sessions they developed and facilitated. Throughout the TOP training, there was a lack of feedback concerning my progress in the course and the quality of the assignments I submitted. The electronic grade book was periodically updated with checkmarks to indicate that assignments had been submitted. No grades were given, and no comments or suggestions for improvement were made.

Because I received no feedback concerning my performance, I lost motivation to complete assignments. I did not complete all of the assigned readings and did not put

much thought into my contributions to discussions or the assignments I completed. I was frequently late in submitting assignments, and some assignments were incomplete. I did not participate in an online conference that was part of the training. I received credit for the training despite what I consider the poor quality of my completed assignments and my lack of participation.

CHAPTER IV

PHASE II: FACILITATING AN ONLINE PROFESSIONAL DEVELOPMENT SESSION

Introduction

Early in 2005, Mississippi's online professional development program for career-technical educators began. In February, Peggy, the TOP facilitator, sent an email to the TOPmates who were interested in teaching the online professional development sessions they had developed in TOP. She attached a copy of her biography that described her professional experience and directed us to develop our own to be posted on our training websites as an introduction to participants in our sessions. I posted a copy of my biography to the Meet Your Facilitator button.

In March, Peggy sent an email to Mississippi's career-technical educators to announce the start of the online professional development program. A copy of the email was also sent to facilitators who would be delivering the training sessions. The email included a list of available sessions and registration procedures. She instructed potential participants to send her an email to indicate the sessions in which they were interested. She advised them that they would receive an email from the training facilitator announcing the exact dates for the training.

Later the same day, Peggy sent an email to facilitators that stated that within two hours of the announcement, several teachers for grades 9-12 had enrolled in various sessions! The email also stated that our sessions would be taught within the time frame from March 25 to May 9. For most Mississippi schools, these dates fall after Spring Break and before the last day of school, therefore in most cases, school would be in session during this time period. Facilitators were to determine the number of weeks and hours for the training and specify exact beginning and ending dates within that period of time. She directed us to review our sessions to ensure that we provided opportunities for communication among participants. She also directed us to locate research articles related to our sessions and post these for our participants to review. In closing, she expressed her excitement over the start of the online professional development program.

Throughout the month of March, I reviewed the online training site and checked the Internet links for each learning activity to ensure that they were still active. Based on my experience, information which can be accessed using the Internet is usually not permanent. Over time, links to websites may change or disappear entirely, and I wanted to be sure that all of the links that I had used on the site still worked. I added related research articles to the site and uploaded my vitae, biography, and family photographs. As I searched for articles, I located one related to classroom management, which had been published in *Educational Leadership*, a publication of the Association for Supervision and Curriculum Development. The journal included research-based articles related to current educational issues. One of the other facilitators was delivering an online session on classroom management, and I emailed the reference to Peggy with a request to

forward it to the appropriate facilitator. Peggy responded with an email thanking me for sharing the article. I was motivated to share resources with my TOPmates because I felt a sense of ownership in the online professional development program.

Registration

The last week of March, Peggy sent an email that included instructions for the administrative tasks of enrolling participants in the site and notifying them that we were ready to begin the training. She instructed facilitators to include her as a recipient of the emails we sent to participants in our sessions. As directed, I logged into the Blackboard® site for the PowerPoint® training I would facilitate, printed the participant list, and enrolled 14 participants in the training.

The RCU used the Blackboard® system in a variety of ways to provide information and resources to career-technical educators who were enrolled as users in the system. Because the software licensing agreement for Blackboard® requires that the RCU pay for the number of users entered in the Blackboard® system, only Mississippi teachers were permitted to enroll in online professional development training sessions sponsored by the RCU. To validate their eligibility to enroll in the training, teachers were assigned a username and password so that they could access the system. Due to a limited number of RCU staff available to manage user enrollment, training facilitators were directed to enroll users in the training sessions (L. F. Long, personal communication, September 26, 2005).

Because the Blackboard® learning management system was used by the RCU to provide information and resources to career-technical educators in Mississippi, most of the participants in the online professional development program had previously been assigned a username and password. To enroll participants with a username, I was directed to find them in the Blackboard® database and add their username to the PowerPoint® training site. For those who did not have a username, I created a username and password so that they could access the system.

Then, I sent an email to the participants to provide information about the PowerPoint® training. In the email, I introduced myself and provided my contact information and a description of the PowerPoint® training. I also included beginning and ending dates for the session, directions for accessing the online training site, and a description of the layout. In the email, I explained that 1.5 CEUs would be awarded to participants who completed the training, because the PowerPoint® session was designed to require 15 hours to complete. The calculation of CEUs was made in accordance with the Mississippi Department of Education guidelines for the awarding of CEU credit.

I closed the email with an invitation to contact me via email, instant message, or telephone for assistance. A due date of April 8 was set for completion of Module 1. So that I would know whether participants had started the session, I directed them to email me after they accessed the site for the first time.

Module 1: Introduction

Because one of the TOP activities emphasized the importance of preparing participants to learn online, early in the PowerPoint® training, I attempted to provide an orientation to the online environment by scheduling time for participants to practice with the course technology. I also provided an icebreaker and an opportunity for participants to make introductions and get to know each other. I directed them to read information related to traits of successful online learners, complete an assessment of their readiness for online learning, and then discuss their strengths and weaknesses as online learners. They were then to discuss how they would develop the skills needed for success in the online learning environment. I directed them to complete a survey of their skill and experience in using technology.

An electronic slide presentation described the communication technologies to be used in the class, including the discussion board, email, Yahoo!® instant messaging software, and the telephone. In the electronic slide presentation included in the module, I encouraged participants who might have difficulty using the various Blackboard® technologies to seek assistance by calling or emailing me or by posting a question to the discussion board.

The first activity for the module was a survey of technology skills that was to provide information about participants' technical skills and prior experiences with technology. The survey included two questions to determine whether participants had Internet access at home or at school or both and the speed of the connection. Of the 14 participants, 12 indicated that they were experienced technology users. The other two

noted that they would seek technical assistance from students or teachers in their schools who were familiar with the technology needed to complete the training.

The survey was designed to identify the technical skills of participants so that I could offer assistance with the technology needed for online learning. However, during the training session, participants who needed technical assistance called, sent email, or posted questions to the Question and Answer discussion forum. I believed that their questions were more useful than the survey in identifying their level of skill in using the technology.

For the next assignment, learners were instructed to complete an activity called Getting to Know You, which would serve as an introduction to other participants in the training. Icebreakers are often used in training sessions to introduce participants and provide opportunities for them to get to know each other, create a comfortable environment, encourage interaction, and evoke laughter and fun. As an icebreaker, the slide presentation included a link to an eight-question personal preference profile that was designed to be a fun way to develop a broader understanding of the basic personality types that help determine an individual's vocational interests. Because it was presented in a tongue-in-cheek format, with cartoon pictures, I believed that it would be an excellent icebreaker for participant introductions. I also liked that the profile was career-related, because the session was designed primarily for career-technical teachers. Participants were directed to complete the online questionnaire, and then post a personal introduction on the discussion board. In their introductions, participants were instructed to include a

photograph, information about themselves, and a brief summary of their assessment results.

I started the discussion by posting an introduction of myself and a brief description of my experience as an educator. I also shared the results of my personality assessment. I did not post my picture on the discussion board because it was posted in the staff information area of the training site. The learners followed my lead. I had directed them to post a photograph on the discussion board, but only three of them did. I posted comments on the discussion board to acknowledge the posted photographs; however, I did not comment on the fact that most of the participants had not posted photographs.

The next two activities directed learners to participate in class discussions. In the discussion of teaching styles, participants were directed to access a given website and take a 40-question teaching style inventory (Grasha & Riechmann-Hruska, 1996). They were also provided with a link to a website that described the various styles of teaching; they were to describe classroom activities that would be suited for the various styles. The activity was designed to help them discover their teaching styles and apply the various teaching styles to classroom situations. After taking the teaching style inventory, I started the discussion by posting the results and describing activities I had used during my teaching career.

In the second discussion, participants were to assess their ability to be successful in an online learning environment. The slide presentation directed them to read information posted on two websites related to traits of successful online learners. After reading the articles, they were instructed to complete an assessment of their readiness for

online learning, and then discuss their strengths and weaknesses as online learners. They were also directed to discuss how they would develop the skills needed for online learning. On the discussion board, I responded to the posted comments.

Through the discussions, assignments, and emails I came to know the training participants, even though we were not meeting face-to-face. As participants completed assignments for Module 1, several of them let me know that they were enrolled in multiple online professional development sessions. Two of them were enrolled in two online sessions, one was enrolled in three, and another was enrolled in four. Through our interactions, I learned their level of skill in using technology, viewed pictures of and read comments about their families, and learned about some of the activities they used in their classrooms. They shared their teaching styles and feelings about online learning, and some even made jokes about their personality quirks. I learned which ones were procrastinators and those who were quick to submit the assignments, because one or two of them would submit all of the assignments early in the week, while others waited until the due date or after. They posted comments related to their organizational skills, writing abilities, and personality traits such as a lack of patience or a sense of humor.

Next, the slide presentation directed learners to download the tutorial files to be used to complete the PowerPoint® lessons. They were also directed to download and install the WinZip® utility which is a software utility that compresses files to save file storage space and to increase the speed of file downloads. The tutorial files were uploaded to Blackboard® in a compressed format so that participants in areas with access only to a dial-up Internet connection could quickly download them. WinZip® was

required to decompress the downloaded files so that they could be used. Although I expected some of the participants to have difficulty downloading and decompressing these files, none of them requested my assistance in completing this task.

The final assignment in the guide directed learners to answer a four-question evaluation of the module, similar to the first evaluation that Peggy used in TOP. The first question asked whether the reading materials and applications met the module objectives. The second one asked how long participants spent working through the module. The third asked whether the module was easy to follow and navigate. The fourth asked whether participants were glad they had signed up for the session and whether they were ready to begin the next module. Overall, the responses to this evaluation were positive. All of the participants agreed that the materials and activities fit the objectives. Three of them stated that they had not kept track of the time spent working on the module, so they could not answer the second question. The others indicated that they had completed the assignments within the two-hour estimated completion time. Two of them expressed that they were eager to get past the introductory activities and get started in PowerPoint®. All of them indicated that they were glad they had signed up for the training and were looking forward to the next module.

During the first week of the training, I felt overwhelmed by the number of assignments and emails and instant messages I was receiving. Emails came frequently from participants seeking answers to various technical issues. They encountered a variety of issues. Another participant had limited computer access due to a virus that disabled his laptop and his home computer; he planned to use the school's computer lab to complete

the assignments. One had problems downloading files from the training site, likely due to network issues at her school; I emailed all of the session files to her. Two had limited typing ability; I recommended a touch-typing tutorial designed to be completed in four hours. Several had difficulty using the Digital Dropbox within Blackboard®. I emailed step-by-step instructions for using the Digital Dropbox. After I emailed the instructions, documents began to appear in the Digital Dropbox, leading me to believe that all participants had mastered this technology.

This week, I sent two emails to the entire class in response to requests and questions that I had received. I referred to the PowerPoint® participants as Powermates, in keeping with the theme chosen for the training. In the first email, I sent a reminder of the due date for completed assignments and directed those who had not contacted me to do so to notify me that they had started completing the assignments. I stated that I would be available online from 2:00 to 4:00 p.m. each weekday. I encouraged them to start early on their assignments in case they needed my help because I would not be available on the day the assignments were due because of work-related travel. I also reminded them to use the discussion board to seek help from their Powermates. I directed those who had completed the assignments to check the board daily and offer assistance to those who requested it.

In the second email, I let them know that I had posted a progress update for those who had submitted completed assignments. I explained that assignments were evaluated on a pass/fail basis; no numeric or letter grades would be assigned.

By the end of the first week of the training, six participants had not submitted any of the Module 1 assignments. I was concerned about their lack of communication with me and felt responsible for establishing communication with them. At the end of the week, I emailed the participants who had not contacted me. One of them responded with an email message stating that she had decided to withdraw from the training because she did not have time to complete the assignments. Another responded by submitting some of the assignments for Module 1.

A colleague of one participant notified me by email that she suspected my emails were being sent to a free, web-based account the participant was no longer using. In the email, she provided another email address to be used for communication with the participant. I responded by re-sending the emails to the account specified by the colleague. After this communication, most of the participant's assignments were submitted to the Digital Dropbox or from the email account specified by the colleague. Some assignments were sent from the colleague's email account with an explanation that the participant had asked her to email these for him.

Another participant called while I was out of the office and left a message. When I returned her call, she told me that she had limited technology skills and had enrolled in the training at the insistence of her career-technical director. I answered her questions and encouraged her to get started on the assignments. Later, I was excited to discover that after our conversation, she had introduced herself on the discussion board and uploaded her picture. She was one of the few participants who included a picture with their introductions. I found this remarkable because she had described herself as having

limited technology skills, yet she had successfully transferred a picture from a digital camera to a computer and then uploaded it to the training site, a task that some of the more skilled participants had not completed.

Module 2: Designing Powerful Presentations

Because I wanted to be available for participants, throughout the first module, I responded to their communications as soon as I received them. Even though I had established virtual office hours when I would be available online to communicate with them, I felt obligated to respond immediately to every request, no matter when it was received. Whenever I received an assignment, I immediately sent an email to notify the participant that I had received it. Even though I had provided an assignment checklist, several participants asked me to record their completed assignments before the end of the week, so they would know what they had left to finish. In response to their requests, I checked their completed assignments and updated the electronic grade book several times during the first week so they could view my record of their progress. I also checked the bulletin boards several times a day and responded to every message posted.

By the beginning of the second module, I was exhausted from the continuous communication with participants. I decided to establish routine times for checking the training site and communicating with participants. I checked email and the training site to answer questions from participants who had been working on assignments the night before. I checked again after lunch, and again in the late afternoon. I also decided to update the grade book once each week, instead of checking learner progress on demand.

After I posted Module 2, I emailed participants to help establish the new routine. The email stated that the module was available on the site and would be due the following Friday. It also stated that a progress update would be posted in the grade book by the end of the day. The email directed them to print the Module 2 assignment list and use it to keep track of completed activities. It also stated that the grade book had been updated and explained the symbols used to indicate incomplete and missing assignments, as these were not originally available in the grade book.

The Module 2 slide presentation presented the objectives for Module 2, as well as a guide for completing the activities. In this module, participants were directed to build a basic PowerPoint® presentation, using presentation design techniques. They were to discuss ways to use electronic presentations and evaluation rubrics for instruction and assessment. In addition, they were to use rubrics to evaluate learning activities.

For the first activity, the slide presentation directed participants to download and complete a tutorial that introduced basic PowerPoint® features. It was intended for participants to learn how to build a presentation, add sound and graphics, and create a presentation outline. They were to use timings, custom color schemes and animations, and then add action buttons and hidden slides to their electronic presentations.

For the second activity, the slide presentation directed learners to read an online article about designing effective slides for electronic presentations. The article explained how to use key words to support the presentation's message, how to use color effectively, and outlined principles for selecting font sizes and styles. It also addressed the use of animations and graphics. I included this article because it explained how to use the

features of the software to create an electronic presentation that would support its message instead of distracting the audience.

Next, the slide presentation directed participants to access and four websites that I had posted on the training site. Each website presented information related to fair use of copyrighted information. After reading the websites, participants were to create a presentation containing five slides. Their presentations would include a title slide and four summary slides to present information from each website. This assignment was designed for participants to apply the design techniques they had learned, while reviewing fair use guidelines for copyrighted works.

For the next assignment, on the training site I posted a link to a handout that I had created to explain an activity that would help the group learn to use Yahoo!® messaging software to communicate with each other. Although the Blackboard® system provided chat capabilities within the training site, I decided to use Yahoo!® software instead, because the virtual classroom feature of Blackboard® is a JAVA applet that requires that the JAVA Run-time Environment (JRE) be downloaded and installed prior to use of the virtual classroom. JRE is software that is required to load and execute code written in the JAVA programming language. Because Yahoo!® is widely used for instant communication among computer users, I believed that most participants would have access to the software. Additionally, participants must be logged in to the Blackboard® site in order to use the virtual classroom, while the Yahoo!® software can be set to automatically launch when the computer is powered on. Then, when one user contacts

another using Yahoo!®, a message box appears on the screen to allow instant communication.

The previous week, I had directed participants to download the Yahoo!® software to prepare for this activity. I had provided a link to the Yahoo!® website, which included a step-by-step tutorial for downloading and installing the software. I considered active participants to be those who were on schedule in submitting assignments and posting comments to the discussion board. Three of the nine active participants notified me by email that they were not permitted to download messaging software on their school computers due to network security concerns.

At this point, 14 participants were enrolled in the training; nine of them were active participants. Two participants were behind in their assignments, but they were making progress. The remaining three had stopped submitting assignments, but had not notified me whether they intended to withdraw from the training. This made me realize only two-thirds of the class was actively participating.

In this week's instructions for the online conference activity, I assigned each participant to one of three groups and designated a leader for each group. Two groups contained 5 members, and one group included 4 members. Those who were selected as leaders were active participants who had completed all Module 1 assignments before the due date. Each group contained 3 active participants, and one or two participants who were behind in the training or had stopped submitting assignments. I purposefully assigned groups so that each contained enough active participants to hold a discussion.

The instructions explained that in the online conference, group members would introduce themselves, and then communicate with each other to choose a group name that would represent all the members. Because I wanted to meet with each group, I would coordinate a meeting schedule, and then email each group to notify them when the group would meet online using Yahoo!®. I instructed them to login to Yahoo!® a few minutes before the conference was scheduled to start. After receiving permission from the 6 participants with access to Yahoo!®, I sent an email with a list of their screen names to all training participants.

The instructions directed those without Yahoo!® access to email an introduction of themselves and give suggestions for a group name to all members of the group prior to the meeting. Designated group leaders were directed to post the name chosen by the group on the discussion board designated for the group so that the class would know the group's name. I planned to meet with each group online at the appointed time.

When I attempted to coordinate meeting times for the group conferences, 3 of the 7 participants who had Yahoo!® access emailed to let me know that after-school obligations prevented them from staying online for an afternoon conference. Because three participants lacked access to Yahoo!® and three had scheduling conflicts, only three active participants remained to participate in the online conference. I sent an email to the class to cancel the conference and directed them to communicate using the discussion board or email to choose group names. A representative from Group 1 emailed to tell me that the group had chosen the name The Rubric Cubes because their discussion

topic was on rubrics; I thought their idea was clever. Groups 2 and 3 did not post their group names.

For the next assignment, the electronic slide presentation directed participants to read three articles, and then discuss one of the articles in the small groups to which they had been assigned in the previous activity. I provided open-ended discussion starter questions which were intended to help participants generate ideas for applying information from the articles to their teaching practice. Group 1 discussed an article on using rubrics for assessment. One participant in Group 1 uploaded a rubric that she used for assessing student posters. Group 2 discussed innovative ways to use PowerPoint® in the classroom. Group 3 discussed design techniques for electronic presentations. One of the members of Group 2 contributed to Group 3's discussion by uploading an example of a student-created slide presentation. Even though each group included one or two non-participants, there were enough active participants in each group to carry on a discussion. Those who did not participate in the discussion did not earn credit for the assignment.

The handout for this activity included links to examples of inventive ways to use PowerPoint® for educational games and tutorials. It also provided a link to a presentation that was created using poor design techniques to demonstrate why certain techniques are inappropriate.

Next, the electronic slide presentation directed participants to click on the Power Up! button for additional information not included in the required reading assignments. The supplemental resources located on this button included several links related to presentation design, plagiarism, and copyright. I included these links for those who

wanted to learn more about a given topic; they were not part of the required reading assignment. Blackboard® provides a mechanism for tracking the number of times a link within the training site is viewed by participants. I did not set tracking for these links; therefore, I could not use this feature to determine whether these links were viewed.

The final activity was a self-evaluation of participant progress in Module 2. Participants were instructed to modify a PowerPoint® slide and keep only the statement that best described their experience in the module. The evaluation served a dual purpose by providing participant feedback to me about their progress in the module and as an assessment of their presentation design skills.

Each statement was preceded by a related graphic. The first graphic contained a stick figure playing a trumpet; the second was a graphic of a stick figure climbing out of a hole; the third included a stick figure scratching its head in confusion. Participants could choose from the following statements:

1. Hear ye! Hear ye! I am having a successful POWER experience.
2. I am going uuunnnddeeerrrr in this course. No way to get it all done!
3. I am a bit confused with where we have been, where we are going, and why we are going there!

Participants were instructed to add additional comments if they chose. All nine of the active participants responded and indicated that they were having a successful experience, and several of them made additional comments. One stated that the class was going great. Another expressed her excitement over how much she had learned about using PowerPoint® in her classroom. Another stated that although the module was well

organized and presented, it took from 5 to 7 hours to complete the module, well over the 3 hours estimated for completion.

During the second week of training, I emailed the participant who had enrolled at the insistence of her career-technical director, to follow up our telephone conversation. She had mentioned on the discussion board that she lacked typing skills. To assist her, I provided ordering information for a tutorial called *Touch-Type the Keyboard in Four Hours* (Donnelly, 1996) which was available through an online bookstore for $12.00 plus shipping. I closed the email by telling her that I was proud of her hard work and her perseverance, in spite of the challenges she had faced in completing the training online. During the second week, she submitted activities for Modules 1 and 2.

When I telephoned the other two participants with whom I had had no contact, one of them told me that she would begin completing the assignments soon. After our conversation, she submitted the assignments for the first two modules. The other one did not return my phone call.

Module 3: Planning for Powerful Instruction

The Module 3 electronic slide presentation presented objectives for this module. In this module, participants were to learn to create non-linear presentations. Additionally, they were to read and research information related to presentation design, assessment, and the use of PowerPoint® for instruction. Then, they were to create instructional materials, including a presentation and an evaluation rubric. They were to use the rubric to assess their presentations.

The electronic slide presentation directed participants to download and complete a tutorial that presented activities to help them learn to create non-linear presentations. In a linear presentation, information is presented slide-by-slide, in sequential order. A non-linear presentation is one that uses hyperlinks to present information to a student according to the student's interaction with it, very similar to navigation in a website. For example, a non-linear presentation can be used to create interactive quizzes. Students are presented with a question, and then they click on an answer. If the answer is correct, the presentation moves to a new question. If the answer is incorrect, the presentation moves to a slide that directs them to answer the question again.

The electronic slide presentation stated that at the end of the module, participants were to create an electronic presentation, game, or classroom activity using PowerPoint®. It directed participants to review activities which included ideas for creating interactive presentations listed at the end of the lesson. They were instructed to choose one of the activities from the list or to use an original idea to design a presentation that could be used in the classroom. The list of activities included several uses for electronic slide presentations. They could be used as a means for teachers to introduce themselves to their students at the beginning of the year, to review basic concepts such as grammar rules, to teach students how to create interactive presentations, or to create an Internet scavenger hunt in which a question is presented with a link to a website where students could find the answer.

For the next activity, the electronic slide presentation directed participants to investigate a presentation on using PowerPoint® to maximize student performance on

fact-based tests. After reviewing the presentation, participants were to go to the discussion board and play Tag…You are it!. I started the game by posting a comment that I was surprised by some of the information in the presentation, and then asked participants if they were surprised by anything in the article. I also directed them to name a design strategy that they would implement when designing presentations.

Next, the electronic slide presentation directed participants to read the handout on designing rubrics, investigate several related websites, and create a rubric. The handout defined and described rubrics, and provided links to examples and guidelines for creating rubrics. It also included a sample presentation rubric that participants could use as a guide. It directed those who needed more information to explore the Power Up! button on the training website for additional resources. The participants submitted rubrics that were suited for evaluating presentations, and some of them commented that they planned to use their rubrics in the classes they taught.

For the next activity, the electronic slide presentation directed participants to use a search engine to locate 10 Internet resources. Each resource was to be related to one of eight categories, related to presentation design and delivery, listed in the presentation. A handout provided assignment details. Resources could include examples of clip art/templates, design tips, public speaking tips, innovative ways to use electronic presentations in the classroom, sample rubrics or checklist for evaluating slideshows and presentation delivery skills, and tutorials/materials for teaching PowerPoint®. I provided links to websites to be used as examples of appropriate resources in each category.

Participants submitted their websites, and then posted two of the examples to the discussion board on the training website.

The final learning activity for the module directed participants to develop a PowerPoint® activity, presentation, or game for classroom use, and then evaluate the presentation using the rubric created in a previous Module 3 assignment. In an attempt to provide individualized instruction, I modified the assignment for the one participant who was a career-technical counselor. At her request, I allowed her to submit a presentation to be used for student recruitment because she wanted to produce a product related to her work assignment as a school counselor.

The electronic slide presentation concluded with a reminder to participants to check the Power Up! button for additional resources and complete a module evaluation. The module evaluation was presented in the form of a PowerPoint® slide. Participants were instructed to modify the slide to keep the statement that most closely matched their progress in the training and add additional comments if necessary. They could choose from the following statements: (a) I'm right on target!, (b) I've fallen a little behind, (c) I need some encouragement—I'm beginning to think I'll never catch up! Nine participants responded to this activity. Six of them indicated that they were on target. Two mentioned that they were having problems with Internet or computer access at school. One mentioned that she was rushing to complete the assignments because she would be out of school for a few days for a field trip.

During the third week of the training, I emailed the participant who had enrolled at the insistence of her career-technical director with a request for an update of the progress in the training. She did not respond.

Also in the third week, I still had not received all of the assignments for Modules and 1 and 2 from two of the other participants, so I called each of them. I left a voice mail message for one participant. She did not return my call, but did submit some of the Module 1 assignments. In a comment on the discussion board, she mentioned that she was enrolled in four online sessions simultaneously because she needed Continuing Education Units (CEUs) to renew her teaching license. When I called the other participant to check her progress, she informed me that she was withdrawing from the session because she did not have time to complete the assignments.

Also in the third week, another participant sent an email that stated that he was withdrawing from the session. After he had completed the first two modules, a virus corrupted his classroom server and his laptop, leaving him without computer access. He could use the Internet only in the school office or in the computer lab after school and could not stay after hours due to a lack of childcare in the afternoons.

In the third week, I also received an email from an external evaluator that stated that she would be enrolled in the training for evaluation purposes. During the remainder of the session, she explored the PowerPoint® training site, completed and submitted some of the assignments, and added a few comments to the discussion board.

Module 4: Power Project—Making Connections

In the project assigned in Module 4, participants were directed to apply the skills they learned throughout the session by developing a lesson for teaching students to use PowerPoint®. They were to create an electronic presentation, a student activity, and an evaluation to assess student progress. On the Assignments button, in the Module 4 folder, I posted a lesson plan template and a rubric which they were to use to assess the lesson plan and evaluation.

On the last day of the training the participant who was enrolled in four online training sessions contacted me to ask if I would allow her to complete the session so that she could earn the CEU credits she needed for licensure renewal. I agreed to allow a three-day extension beyond the final due date. For the next three days, I watched in amazement as she rapidly submitted assignments and posted comments to the discussions. My perception was that she worked diligently until she had completed every assigned activity.

Performance Evaluation

After I finished facilitating the PowerPoint® session and submitted a list of participants who were to receive CEU credit for the training, I received an email from Peggy with a copy of my performance evaluation attached. The evaluation addressed several performance areas including: (a) learning environment, (b) instructional materials/resources, (c) participant participation, and (d) facilitator characteristics and presentation skills. Each of these areas is discussed below.

The form included a scale that was used to rate facilitator performance in each area. Each section of the form contained performance indicators for which a score was given. Scores for all of the performance indicators within a section were averaged to provide an overall rating for each section. Scores for each section were averaged to give an overall performance rating. My overall performance rating was 3.8; the highest possible rating was 4.0. An appraisal scale near the top of the form indicated that a rating of 1 was used to indicate that performance was *Not Acceptable*, a score of 2 indicated *Marginal*, a score of 3 indicated *Quality*, and a score of 4 indicated *High Quality*. Some sections of the form provided space for a score and evaluator comments (see evaluation form in Appendix I).

I received a score of 4 for the learning environment section. In the comments for this section, the evaluator stated that she liked the quotes and the use of color in the links. She stated that she had mixed feelings about [the] estimated time of completion for assignments. She also noted that I had included too much personal information and that personal information should be posted in one place.

I received a score of 3.8 for instructional materials and resources. In her comments about the instructional materials and resources used in the training, the evaluator stated that she did not like topics on the discussion board such as rubrics and learning styles because she understood this to be a subject-related class. When I read this comment, I thought that my intention had been for teachers to implement PowerPoint® in their classrooms, not simply learn the software, therefore I felt that these discussion topics were relevant to the training. She also noted that I needed to set deadline dates for

each module, and that the training included “a lot of work for the amount of credit received.” She noted that there was “good” discussion board participation, and that she “liked” the printable check sheet, grouping, tag, and chat.

I received a score of 3.33 for the participants section, which indicated that participants felt comfortable and were interacting with the presenter and that they were stimulated and engaged in the process. The score also indicated that participants demonstrated understanding and enlightenment. This section did not include space for comments.

The facilitator section of the form was divided into three sub-sections: (a) personal characteristics, (b) presentation skills, and (c) delivery methods. For personal characteristics, I scored a 4. The rating indicated that I was flexible, enthusiastic, poised and confident and available to participants through email, chat room, discussion board.

For presentation skills, I scored 3.88. The rating indicated that I was adequately prepared to conduct training and that I displayed sufficient knowledge of the content and that activities were varied and presented at a relevant pace, that I used familiar terms and provided numerous examples and that I used a variety of teaching delivery methods.

The form also included a section which indicated the teaching delivery methods used in the training. In this section, the evaluator indicated that the training had included a variety of teaching delivery methods including lecture, demonstration, large-group discussion, small-group discussion, and games/simulations. She indicated that the training did not include role-play or the use of case studies. In the comments for this section, the evaluator stated that I did a great job; however she thought the training

required “a lot of work for [the] amount of credit received” and that I “need[ed] to consider download time as part of anticipated time of completion.”

Several indicators throughout the evaluation were marked with the letter *N*. When I asked Peggy to explain the meaning, she explained that the items marked with an *N* did not apply to an online learning environment. The form was one that was used for all professional development training, whether delivered online or face-to-face.

Prior to facilitating the training, I was not made aware of the skills I would be expected to demonstrate. The evaluator’s comments were subjective and did not provide specific feedback on my performance. In cases where my performance was praised, specific examples were not cited. The evaluator used vague words such as *liked* and *good* to describe my teaching performance, which did not communicate why the performance was positive. The form did not indicate the meaning for scores between numbers on the scale.

In cases where my performance did not meet the criteria for the highest rating, no guidance was provided for improvement. In addition, the evaluator did not indicate how she gauged participant comfort, interaction, understanding, enlightenment, stimulation, and engagement in the process. Specific examples could have been cited to indicate that these attitudes were evident. CEU credits were awarded based on the estimated time for completing the training; therefore I was surprised by the suggestion that I should consider download time as part of anticipated time for completion.

In addition to the performance evaluation, participants in the training completed a survey to evaluate the training. In the fourth week of the PowerPoint® training, Peggy

emailed facilitators a link to the online survey, and directed us to have participants complete it. The survey included 56 questions. Participants were instructed to respond to statements about the training using a Likert scale which included the following choices: (a) strongly agree, (b) agree, (c) neutral, (d) disagree, and (e) strongly disagree. When a participant clicked the link to the survey, instructions were displayed on the screen. When the participant clicked on a button displayed on the screen, the first question was displayed. Beneath the question was a space designated for comments. To encourage participants to make comments, the survey was designed so that the next question would not be presented until the participant typed a comment in the designated space. I emailed the link to training participants and then posted it to the training site.

After the training was over, Peggy gave me a copy of the survey results. The survey results for all of the training sessions in the online program were intermingled, because the survey had not provided a means for respondents to indicate which online session they had evaluated. I found it difficult to determine which comments were made by participants enrolled in the PowerPoint® session.

As I scanned the survey results, the comments made by one participant caught my attention because they were similar to those made by the PowerPoint® training evaluator. As I read them, I wondered if they referred to the training I facilitated.

When I read further, I noted that another comment made by this participant referred to the name of the session being evaluated, which indicated that the comments were not made in reference to the session I facilitated. As I continued to read, I began to look for comments that might be related to my session. Because five respondents

mentioned my name or the PowerPoint® session name, I was able to positively identify some of the comments that referred to my session. The comments indicated that the training was well-organized, easy to follow, clear, and concise, that the assignments were easy to follow, and that the checklists were helpful. They stated that the online session had greatly improved their content knowledge and that they would apply newly-learned skills and procedures in the classroom. In regard to communication during the session, respondents indicated that I had provided access to instant messaging and discussion and that the discussion board was especially useful for receiving answers to their questions. In regard to the assistance that I provided, respondents indicated that I was cooperative, flexible, patient, and helpful, and that I was slow in grading. Respondents indicated that they spent from 20 to 30 hours completing the training. When asked whether they would recommend the session to others, respondents responded affirmatively and indicated that learning online saved them gas and time, and allowed them to learn at their own pace. They indicated that the module was time consuming and that more CEU credit should have been given for successful completion.

In planning the session, I had estimated that the training would take 15 hours to complete. Respondents indicated that they spent from 20 to 30 hours completing the session and commented that more CEU credit should have been given for successful completion. Participant responses supported the evaluator's comment that the session included "a lot of work for the amount of credit received."

Summary

After completing the TOP training, I delivered a five-week online session designed to train teachers to use Microsoft® PowerPoint® software to develop instructional materials. Throughout the PowerPoint® training, I followed the TOP model and did not assess participant performance or provide feedback on their progress. Participants did not complete all assigned activities. Late or incomplete assignments were accepted, and participants received credit for completion, regardless of performance quality.

Training content was not adjusted to meet participant learning needs in either the TOP session or the PowerPoint® session. Participants in both sessions were expected to complete all assignments in order, as they were posted on the training sites. In the TOP training, a new module was posted each week regardless of learner progress in the course. The PowerPoint® session was designed and developed prior to the training and was not modified during instruction according to the results of diagnostic or formative assessments.

As an online facilitator, I found that non-verbal cues and direct observation of the use of the PowerPoint® software were limited by the technology being used to deliver the training. I was unable to determine whether participants understood the material, to provide immediate feedback and corrective instruction, or to determine whether enrolled participants were the same people who completed and submitted assignments.

In addition to facilitating the PowerPoint® session, I was expected to provide administrative support for enrolling participants. Prior to the training, I assigned user

names and passwords and enrolling participants in the training site. I felt obligated to provide technical support, because the program made no provision for providing support or training for participants with limited technology skills. In an effort to provide technical support, I provided information so that participants could contact me via email, instant message, or telephone. I also designated a forum on the discussion board so that they could post frequently asked questions.

Participants emailed questions regarding a variety of technology-related issues. I had difficulty helping participants resolve their technology issues because I had no way of viewing their computer screens or systems so that I could troubleshoot technical issues.

Of the 14 participants who initially enrolled in the PowerPoint® training, 4 did not complete it. At the beginning of the training, I felt responsible for establishing communication with participants who had enrolled in the session, but had not started to complete assignments. I emailed and called to encourage them to begin completing assignments. By the end of the training, my attitude toward those not completing the training had changed. I realized that not everyone is a candidate for online learning and was no longer alarmed when participants withdrew from of the training.

I was unaware that my performance as a facilitator for the PowerPoint® training would be evaluated until I received an email from the evaluator three weeks after the session started. I was not provided with performance criteria until after I had finished facilitating the session. Although I received an overall score of 3.8 on a 4.0 scale, I felt that the evaluator comments were vague and subjective. I was disturbed by her comment

that I should consider download time as part of estimated training completion time, because CEU credit was awarded based on the estimated time for completing assignments. In cases where my performance was praised, specific examples of exemplary performance were not cited. Where my performance did not meet the criteria for the highest rating, no suggestions were provided for improvement. The evaluation did not mention my failure to address assessment of participant performance in the training.

CHAPTER V

RESULTS AND DISCUSSION

Introduction

The research question for this study was: How does a first-time facilitator understand the process of delivering professional development in an online environment? From the Standards for Online Professional Development (SREB, n.d.), a protocol was developed that outlined areas to be investigated for the purpose of answering the research question. The areas of investigation included: (a) the use of design and evaluation techniques, (b) the implementation of instructional strategies, and (c) the use of technologies to facilitate online learning. The research protocol was used throughout the investigative process to guide the collection of data. Through the analysis of the data, I came to understand the process of delivering professional development in an online environment. This chapter presents an explanation of how a first-time facilitator understands the process of delivering professional development in an online environment.

First, a model for evaluation of professional development is presented, and standards for online professional development are discussed. Next, a self-assessment of my performance as compared to the evaluation model and standards is presented. Then, themes emerging from the data analysis are presented. These themes are: (a) time, (b)

adherence to standards, and (c) absence of physical presence. Finally, a discussion of the related literature is presented.

Model for Evaluation of Professional Development Training Programs

Throughout my career as an educator, I participated in numerous face-to-face professional development sessions, with no expectation of undergoing an assessment of my performance in these sessions. In my experience, a professional development session was simply a meeting to be endured to earn credit for renewal of my teaching license, with no accountability for learning or implementing the knowledge or skills presented in the training. CEU credit was awarded based on time spent in a session rather than on performance.

When I entered the online forum, however, my expectation was different. All of my prior online learning experience had been in graduate-level courses, and I expected online professional development instruction to be similar to my previous online experience. Throughout the TOP training, I expected to receive grades for completed assignments, along with feedback on my performance. My perception that online professional development training for CEUs for teachers was equivalent to graduate-level work in an online course was further reinforced because the TOP training site listed training objectives, and some of the presentations and activities referred to the importance of assessment in designing instruction.

Because I did not understand the lack of assessment and feedback regarding the quality of my work in the TOP training, I questioned Dr. Patti Abraham, the RCU

director, about how professional development training is evaluated. She directed me to Kirkpatrick's Model of Training Evaluation (1998) (P. S. Abraham, personal communication, August 23, 2005).

According to the American Society for Training and Development (2004, ¶5), "Kirkpatrick's model has been the most widely used evaluation model for over 40 years." There are four levels in Kirkpatrick's Model: Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results. Level 1 of the model, *Reaction*, measures participant opinion of the training, generally through the use of a questionnaire distributed immediately after the training is completed. Level 2, *Learning*, measures participant acquisition of knowledge as a result of the training by using a pre- and post-test or a performance test that requires demonstration of a skill or process. Level 3, *Behavior*, measures transfer of learning to the workplace, by using a pre-test/post-test to measure participant behavior before and after the training or by using questionnaires or interviews to ask training participants, their supervisors, and their subordinates to compare participant behavior before and after the training program. Level 4, *Results*, measures the organization outcomes that occur because of the training program. Kirkpatrick (1998) recommended that measures of training results include the use of a control group, time for results to be achieved, measures before and after the program, and consideration of costs versus benefits. The measures were to include access to organizational data, the identification and control of intervening variables, a comparison between groups or of pre-and post-training results, and a course designed to address clearly stated organizational objectives, with measures of the results identified prior to the evaluation.

After reviewing Kirkpatrick's model, I again consulted Dr. Abraham. In a second, more in-depth interview, she shared an article entitled *Taking a Second Look at Accountability* (Guskey, 2005). She stated that professional development delivered by the RCU is evaluated according to Guskey's recommendations (P. S. Abraham, personal communication, September 2, 2005).

In the article, Guskey (2005) presented an adapted evaluation based on Kirkpatrick's model. Guskey's evaluation model contained five levels. Guskey presented an additional level of evaluation at Level 3, *Organizational Support and Change*. Level 1, *Participants' reaction*, considers participants' reaction to a professional development experience. Level 1 evaluation measures participants' initial satisfaction with an experience and usually includes a survey with questions that focus on whether participants liked the training. The survey typically includes a rating scale and open-ended questions that allow participants to make comments. The collected information is used to improve program design and delivery.

Level 2, *Participants' learning*, measures the knowledge, skills, and attitudes gained by participants in the training. New knowledge and skills of participants are measured using tests, simulations, demonstrations, participants' written and/or oral reflections, and portfolios. The collected information is used to improve program content, format, and organization.

Level 3, *Organizational support and change*, measures whether the local school/district provided resources needed to implement the skills gained through the professional development training. Information is collected by reviewing minutes from

follow-up meetings, questionnaires, interview with participants and school administrators, school records, and participant portfolios. The collected information is used to document and improve organizational support and to inform future change efforts. This is the level added by Guskey.

Level 4, *Participants' use of new knowledge and skills*, measures the extent to which participants are using the knowledge and skills gained from the training. It also measures the degree and quality of implementation. Information is collected through questionnaires, interviews with participants and their supervisors, participants' oral and/or written reflections, participant portfolios, direct observations, and video- or audio-tapes. The collected information is used to document and improve the implementation of the program content.

Level 5, *Student learning outcomes*, measures the impact that the training had on cognitive, affective, and psychomotor student learning outcomes. Information is collected through review of student and school records, questionnaires, interview with students, parents, teachers, and administrators, and participant portfolios. The collected information is used to focus and improve program design, implementation, and follow-up and to demonstrate the impact of the program.

Guskey (2005) believed that for professional development to impact student learning, backward planning should be implemented. The developer must begin with Level 5 and work backward through the levels to plan a professional development program that will result in improved student achievement. First, student learning outcomes must be considered (Level 5). Second, the developer must determine training

content to be implemented to produce those outcomes (Level 4). Next, the organizational support required (Level 3) for those practices and polices to be implemented must be considered. For success, school administrators must actively participate and clearly support improvement efforts. Teachers must be given the necessary time, instructional materials, and technology to implement the knowledge and skills acquired through the professional development experience. Then, the developer must decide what knowledge and skills participants must acquire (Level 2) to implement the instructional practices and policies. Finally, the developer must consider the learning experiences (Level 1) necessary to enable participants to acquire the knowledge and skills.

After studying Kirkpatrick's Model and Guskey's recommendations, I realized that professional development training is evaluated differently from graduate-level course work. In an attempt to expand my understanding of professional development, I investigated its purpose and intent.

According to Guskey (2005), the purpose of professional development is "to make a difference in teaching, to help educators reach high standards, and ultimately to have a positive impact on students" (p. 12). The Professional Development Model published by the Mississippi Department of Education (n.d.) states that the purpose of professional development is to improve student learning by providing opportunities for educators to invest in opportunities to grow individually and collaboratively, enhance job-related skills, acquire new knowledge, and share expertise and insights. After reflecting on the purpose of professional development, I concluded that evaluation of professional development goes beyond the development of teacher knowledge and skills.

The ultimate test of the value of professional development programming is its impact on student learning.

Before I started this research, I believed that online delivery was superior to face-to-face delivery. I assumed that online pedagogy was different from that used in the face-to-face environment. During data analysis, it became apparent to me that the quality of professional development training depends on the quality of instruction, regardless of the mechanism used for delivery. I came to understand that the effectiveness of online professional development training lies not in the use of technology, but in its skillful use to build learning communities and support implementation of newly learned skills. When ongoing, regular follow-up supports integration of new strategies and knowledge through feedback and coaching, learners can effectively use new learning. Such support effects long-term changes in educator practice, which produce student results (NSDC, 2001a).

Review of the Standards for Online Professional Development

In an attempt to further understand the requirements for a high-quality professional development program, I examined two publications that I had reviewed in preparation for this research study. The first was the Southern Regional Education Board (SREB) Standards for Online Professional Development (SREB, n.d.) which were developed from the Standards for Staff Development published by the National Staff Development Council (NSDC, 2001b). The Standards for Online Professional Development included issues and topics unique to online professional development training (SREB, n.d.). The second was a publication entitled *E-Learning for Educators:*

Implementing the Standards for Staff Development (NSDC, 2001a). According to a statement posted on the TOP site, the objectives for the TOP training were aligned with these standards.

The Standards for Staff Development published by the NSDC present factors considered vital to high-quality professional development. The Standards for Online Professional Development (SREB, n.d.) expanded the National Staff Development Standards with additional standards and indicators that address quality professional development training in online environments (see standards in Appendix J). The SREB standards outline three areas of concentration for online professional development programs: (a) e-Learning Context Standards, (b) e-Learning Process Standards, and (c) e-Learning Content Standards.

The Context Standards address the key issues in online programs regarding the importance of building learning communities, involvement of school leaders, and the allocation of resources and support. The Process Standards address the key issues in online programs regarding goals to be accomplished and how they will be achieved. The standards address goal setting, program evaluation, and the use of technology to present materials and design learning to meet participant needs and contribute to the development of learning communities. The Content Standards address key issues of quality and equity of access. This section expands the National Staff Development Council Standards to add the online perspective to illustrate how NSDC standards are to be implemented in an online learning environment (SREB, n.d.)

Self-Assessment of the Training Session I Facilitated

In an effort to increase my understanding of my experiences as an online professional development facilitator, I compared data collected from interviews and the training sites of other facilitators who delivered online professional development training at the same time that I did. I found that we shared several common experiences. None of us used listservers in the training we facilitated, for various reasons. Because I had received no information from the listservers to which I subscribed, my experience with listservers had not been positive. Amanda felt that she did not know enough about listservers and how they worked, so she chose not to use them in her training. Lisa chose not to use listservers in her training because "[The participants] are just trying to get the basics. I remember how much trouble I had. I was like, 'I don't know how to do this.' [For] some of them, it would be too much."

While enrolled as a TOP training participant, Lisa sometimes felt overwhelmed by the TOP training requirements. She stated that she was afraid she would not finish the training because of the volume of work required. She also confessed that she has a tendency to procrastinate; therefore she struggled with completing the assignments on time. Like me, Lisa did not read all of the training material presented because there was "too much to read." She was the last participant to contribute to the Tag...you are it! activity because she had not read all of the information provided and felt that because she had not completed the reading assignments, she could not make a quality contribution to the discussion. She did not want the other participants to think she was "slacking off."

Throughout the training I facilitated, I did not provide feedback to participants on their completed assignments. Participants received a check mark to indicate whether assignments had been completed. Likewise, Lisa gave check marks for completed assignments and made no suggestions for improvement unless participants specifically asked for feedback. Amanda also gave checkmarks for completed activities without making comments on participants' work.

During the TOP training, Lisa organized a binder in which she filed the electronic slide presentations and used a checklist to track completed assignments. Her binder included printed copies of articles with her handwritten notes. She printed the articles because they were difficult to read from the computer screen. Amanda also printed all of the slide presentations and the assignments and organized them in a binder. In this respect, their experiences were consistent with my experience as an online facilitator.

From my experience in face-to-face instruction, I knew that a lecture is a formal presentation in which subject matter is presented orally to a class, while learners take notes. While reviewing related literature in preparation for the study, I noted that Palloff and Pratt (2001) believed that lecture is inappropriate in an online environment. In the online session that I taught, I did not include recorded lectures, because in my mind, lectures should be eliminated in the online environment. Prior to delivering instruction online, I believed that in an online environment, an electronic slide presentation replaced the face-to-face lecture. My analysis of the data led me to question my concept of an online lecture and the application of additional media in the online environment.

During data analysis, I found that Amanda was concerned because in the online environment she was not physically present to demonstrate the use of the Blackboard® system to her students. On a website for Blackboard® users (*Behind the Blackboard*®, 1997-2005), which contains tutorials for the Blackboard® system, she found digital video clips that demonstrated various aspects of the software. She wanted to create similar videos for use in her online course, and she ordered a software package called RoboDemo®, which has since been updated and renamed Macromedia® Captivate®. The Captivate® software allows the user to create electronic training simulations and product demonstrations in Flash® format to be used in online courses. Flash® is a video file format that can be read by a free software package called FlashPlayer®. An instructor may use the Captivate® software to create a video demonstration by recording the keystrokes and mouse clicks required to manipulate the software to be taught. The instructor can also create captions that contain text describing the actions being recorded or record audio narration that describe the actions displayed on the screen. After FlashPlayer® is installed on the learner's computer, when the learner clicks on a link to a digital movie, the computer plays the instructor's pre-recorded demonstration. After Amanda demonstrated the digital recording software for me, I began to consider the value of video demonstrations in the online course.

According to Marsh, McFadden, & Price (1999), lecture is a typical element of an online course and may be delivered by using text, video clips, or compressed video. This concept challenged my belief that electronic slide presentations take the place of lectures in an online course. To further develop my understanding of the use of lecture in an

online course, I accessed several online course websites to determine ways in which course content was communicated by the instructor. In one example, the instructor posted several pages of text to convey information. Another example was an electronic slide presentation which the instructor used to present information about a given topic. Next, I found a course website that presented information through a series of web pages that contained links to information to be accessed and read by learners. Finally, I found web pages that contained links to streaming video- and audio-files containing course content. Through reading and observation, I came to understand that an online lecture is the dissemination of information from the instructor to the learners and can be accomplished in the online environment by using a variety of media.

According to Kozma (1994), most studies of the roles of audio and visual presentation in learning show that the combined use of audio and visual presentations results in more learning recall than visual- and audio-only presentations. Kozma's ideas challenged my belief that video lectures are inappropriate for online instruction.

Prior to conducting this study, I believed that the use of video lectures was an ineffective way to deliver instruction because of my previous experiences with attempting to viewing video files using a dial-up Internet connection. The files were slow to display, and playback was sporadic. The software would play a 30-second segment of the video, pause for about 30 seconds, and then begin to play another 30-second segment. This process would continue through the end of the video. Dial-up Internet service, which allows users to access web services via a telephone line, is often used in homes because

of its relatively low cost. Also, in some areas, a dial-up connection may be the only Internet service available (J. Powell, personal communication, September 20, 2005).

Streaming is the process of playing sound or video files while the file is downloaded to [a] local computer via the Internet. Plug-ins are special software that enable the web browser to decompress and play the video as it is transferred to the computer. Streaming requires a fast Internet connection and powerful computers that are capable of executing the process. The limitations of a learner's Internet connection and hardware may result in an ineffective learning solution. In addition costs, technical issues, and effort increase with audio and video streaming solutions.

Bandwidth refers to the amount of information that can be transmitted over communications lines at one time. The higher the bandwidth, the faster a webpage loads. Bandwidth is similar to a pipe through which Internet content is delivered to the user. Sending video through over the Internet to a learner with a 56K dial-up modem can be the equivalent of trying to suck a grape through a straw, as video files are much larger than text files. There would be too much data to fit through the pipe that connects the computer to the Internet, causing video images to play with such jerky, slow motion that they cannot be viewed (Klaas, 2005).

Special software can be used to significantly reduce the overall size of a file through compression; however, compression results in loss of image quality. Even on a high-speed network, when many users attempt to access the network simultaneously, the amount of available bandwidth is reduced, which may result in loss of playback quality (Klaas, 2005).

Brian Klaas, (2005, The Right Tool for the Job section), a systems designer in the Distance Education Division of Johns Hopkins Bloomberg School of Public Health, stated that streaming video is not appropriate for what he termed "talking heads" lectures. He said that, "while the image of an instructor's head and upper torso can be quite useful in conveying more of a person's personality to online learners, at what point does the 'talking head' stop adding to the learning process and simply continue to suck up valuable bandwidth?" Klaas observed that audio combined with electronic slides is as educationally effective as a video lecture, and provides a superior experience. He stated that using a video as an introduction to a lecture is worthwhile and that a video introduction should be short and to the point. He stressed that before using streaming media, limitations of users' equipment must be considered, to avoid the investment of significant amounts of time in developing content that learners cannot access because of network and connectivity issues.

High-quality video is time-consuming to produce and requires production skills to do it well. Still slides with narration can be just as effective and are much easier to produce, and allow learners to receive instruction both visually and audibly. To keep learners cognitively engaged, an explicit pedagogical strategy and rationale should be employed when audio or video clips are used. Instead of sitting passively, learners should interact with the media and apply information from it to complete a learning activity. The use of streaming media should serve a clear pedagogical purpose and incorporate active learning strategies (*Understanding streaming media*, 2005). Usability studies have shown that people tend not to watch or listen to video clips on the web as they do on television,

therefore instructional clips should be kept to less than ten minutes (L. Howles, personal communication, September 20, 2005).

Haley (2005) noted that software such as Visual Communicator® simplifies the creation of instructional material presented using streaming media. He also noted from his experience using streaming media in an online environment that learners still use dial-up modems, and bandwidth is generally limited. He acknowledged that learners may not watch videos unless required, and he recommended that videos be less than ten minutes in length and that the instructor include an alphanumeric code at the end of each video and require learners to email the code as the subject line of an email to receive credit for watching it. In his study of the use of live video in a synchronous web-based course,

After reviewing the literature and communicating with others concerning the transmission of video over dial-up internet connections, I concluded that several issues must be considered when using video in the online forum. The instructor must consider the capabilities of learner computer systems before making a decision to provide streaming videos. Also, the instructional value of the video must be weighed against the cost and time involved in production. Videos should be kept to less than ten minutes and the learner should apply information learned in the video, instead of watching passively.

As I reflected on my delivery of instruction in the online training session, I began to question the instructional quality of the training I facilitated. In my opinion, I had implemented the techniques presented in TOP. However, the lack of assessment in the TOP training and in the session I facilitated raised doubts concerning the quality of instruction in the program. I also realized that although the primary purpose of

professional development is to improve student achievement, no provision had been made to measure the impact of the training on student learning.

During data analysis, I evaluated the training session that I developed and facilitated to determine whether my session met the Standards for Online Professional Development (SREB, n.d.) and the National Educational Technology Standards for Teachers (ISTE, n.d.), I found that my session did not adhere to standards; I had not applied the standards to the development and delivery of the training.

When I developed and facilitated the online professional development session, I attempted to emulate the training because I believed TOP was an exemplary model for online professional development training. After I studied a publication of the National Staff Development Council entitled *E-Learning for Educators: Implementing the Standards for Staff Development* (NSDC, 2001a) and compared the PowerPoint® training to the Standards for Online Professional Development (SREB, n.d.) and to the National Education Technology Standards (ISTE, n.d.), I realized that I lacked the training and experience to develop and facilitate a training session that would meet the standards endorsed by the leading professional organizations in the field of education.

Adherence to Standards for Online Professional Development

Content quality.

According to the SREB, program goals should be aligned with state and school academic standards as well as student achievement goals (SREB, n.d.). When a program supports content that can be customized, educators can easily align learning with their

personal and professional learning goals and school and district goals (NSDC, 2001a). Professional development teams should determine program priorities based on current adult learning needs and student achievement gaps (SREB, n.d.). A visionary plan for professional development is based on student achievement data, makes provision to accommodate participant learning preferences, and is rigorously evaluated so that adjustments can be made for ongoing improvement. Content flexibility provides learning processes and content tailored to the needs of adult learners to provide just-in-time learning. A fixed learning sequence may indicate that training is poorly designed (NSDC, 2001a).

When I developed the professional development session, I followed the TOP model, which listed training objectives and the standards on which they were based. According to the TOP training site, content was aligned with the National Educational Technology Standards for Teachers (ISTE, n.d.) published by the International Society for Technology in Education. These standards were also relevant to the PowerPoint® training because its goal was to train teachers to use technology in the classroom. During the process of developing the PowerPoint® training, I made a cursory review of the NETS standards that were referenced on the TOP site. In an attempt to model the TOP training, I modified the PowerPoint® session to include an activity in which participants developed a lesson plan and an assessment to be used for teaching PowerPoint® in order to meet the NETS standards.

The PowerPoint® session was developed without a needs assessment or analysis of student achievement data to determine whether educators needed training to use the

software. I chose to develop the professional development session in PowerPoint® because I was experienced in using the software and enjoyed teaching others to use it. I was confident that I could effectively train teachers to develop instructional materials using the software.

Participants were directed to complete all assignments regardless of prior knowledge or skill in various areas of the training, and no provision was made for presenting content related to their needs. The training I developed was based on my preferences as a facilitator, without regard for the need to customize content for participants with various learning needs. In the single instance in which I modified an assignment to allow a participant to produce a product relevant to her work as a school counselor, the assignment was modified only at her request; I had not planned to modify assignments to accommodate participant's work assignments. Alignment of the training with national content standards was an afterthought, and no consideration was given to educator learning needs or the need to improve student achievement.

Design and layout.

The SREB standards state that online course structure and navigation processes should be clear, appropriate to the content, and easy to use (SREB, n.d.). Attractive, subtle graphics may be included for instructional purposes to enhance understanding. Icons, colors, visual images, and page layout may contribute to learning comprehension. Clear, easily understood images and color can be used to emphasize important concept.

Information arranged in consistent, organized ways may help participants feel more comfortable and familiar with content (NSDC, 2001a).

Design elements of the training I developed and facilitated were not selected for instructional purposes. The rubric that had been posted to the TOP site to be used to evaluate the PowerPoint® training site stated that every handout, presentation, and activity in the training should match a common theme. I wanted to achieve the highest rating possible for the design; therefore, I used presentation backgrounds and graphics related to the theme of *power*. I chose the theme because the TOP training had modeled the use of *top* as a theme, and I felt that the word *power* was representative of the PowerPoint® training. I used color in the links to assignments, because I preferred color over black text; the colors were not selected to serve any instructional purpose.

The person who evaluated my performance as a training facilitator noted that she "liked the use of color" that I had used in the assignment links. She also gave me the highest possible score for the section labeled *Learning Environment* and indicated that the site was easy to navigate and appealing to the eye. Her comments made no mention of the standards.

Preparation and support for online learning.

The SREB standards state that participants should be provided with technology training for successful participation in online training, and that participants should adhere to standards for communication and for legal and ethical use of the Internet. Schools and states should provide adequate resources for online training, including time, personnel,

and support systems. Funds should be provided for online training session development and revision, training evaluation, program management, instructors, technical support, and software and hardware upgrades. A technology coach or mentor program should be provided to support participants enrolled in online training. The program should include a technology infrastructure that supports online training. The program should provide means for online participants to resolve technical and implementation issues, including successfully accessing courses and responding to participant questions (SREB, n.d.).

The NSDC (2001a) noted that not all learners will be comfortable and successful in online environments. Online learners must be self-directed, motivated, independent, computer literate, and able to navigate within the electronic environment. Participants with limited or no experience with online learning may need to build confidence in their skills before they are ready to become active online learners and may be reluctant to immediately get involved in the training.

As a training facilitator, I provided technical support for participants via phone, chat, email, and through the online training site. I had difficulty helping participants resolve various technology-related issues. I found it difficult to troubleshoot problems because I was unable to view participant computer screens. Some participants lacked basic computer literacy or navigation skills. For the first half of the training, several participants had difficulty using the Digital Dropbox to submit assignments. Participants sought technical assistance and support from others in their schools, resolved technical issues on their own, or used alternate computers.

Collaboration and development of an online learning community.

According to the SREB standards, participants should have opportunities to collaborate online during and after training sessions. The program should provide participants with opportunities for reflection and follow-up within the design of the program. Training schedules should allow sufficient time for participation collaboration, reflection, and implementation of new teaching strategies (SREB, n.d.).

In an effort to effect long-term changes in educator practice that will produce increased student achievement, support during and following the training should be available to promote educator success in applying knowledge or skills in the classroom or school. When educators receive feedback, coaching, and assistance in applying new strategies or knowledge they may become successful in using new learning effectively. Technology can be used to support educators as they extend their own learning, seek help from others, solve problems associated with implementing newly learned skills and knowledge, and receive feedback and support from experts and colleagues (NSDC, 2001a).

The SREB standards state that online instructors should understand specific challenges and strategies for building an online learning community. High quality training includes the use of interactive communication tools such as discussion boards, chat, email, and virtual classrooms to develop and maintain a collegial online learning community that supports mentoring, collaboration, implementation, and reflection. (SREB, n.d.) A supportive learning community contributes to participant motivation and commitment to learning (NSDC, 2001a).

Although I thought I understood how to use the interactive communication tools in Blackboard® for collaboration among participants, on reflection, I realized that I used the tools only for communication among facilitator and participants. Because I did not fully understand the concept of online learning communities, the interactive communication tools were not used to support mentoring, collaboration, implementation of skills, or reflection on teaching practice. I knew how to use the tools to communicate, but I did not understand how to use them to establish online learning communities by providing opportunities for participants to support and mentor each other in implementing newly learned skills in their classrooms.

Instructional quality.

The SREB standards state that training should use appropriate strategies to address the differences in learners' cognitive and social characteristics, content background, attitudes, motivation, and technical abilities. Training should be compliant with Section 508 of the Rehabilitation Act, and materials should be provided in a format suited for participants with a range of abilities and disabilities.

Instructors should choose activities appropriate to participant needs, and learning experiences should be designed to meet participant needs and learning styles. Content and delivery should engage diverse learners and address learning styles by being flexible and inclusive. Learning should be linked to participants' teaching assignments and curriculum areas, and training should support participant use of research to determine student academic needs and successful learning strategies. A blended, also referred to as

hybrid, training model in which face-to-face and online instruction are combined may be used to accommodate learning styles, and where otherwise appropriate. Facilitators should use teaching strategies, including multimedia technologies and online tools, appropriate to the intended training results. Training should include a variety of learning experiences, including video, audio, simulations, CDs, web resources, and access to experts in subject matter, as appropriate (SREB, n.d.).

The program should include diagnostic, formative, and summative evaluations to ensure that the training meets the needs of adult participants. Formative evaluations should focus on ongoing sharing between participant and instructor, and summative evaluations should summarize participant learning. The program should include online assessments with timely feedback to evaluate participant learning compared to learning goals. Assessment of learning may include documented use of new knowledge and skills through videos or e-journals (SREB, n.d.).

Training should model effective teaching in the online environment by meeting the learning needs of each participant, using collaborative learning strategies, and making timely responses to learners. Training should be delivered by instructors who are highly qualified in their subject area and well-trained in online course design and/or online facilitation. Instructors must demonstrate content knowledge and effective written communication skills, as evidenced in the course syllabus, learning activities, threaded discussions, and e-mail. Instructors should implement online strategies that ensure high-quality, frequent participation and must make a commitment to respond to participants with timely feedback to activities and questions (SREB, n.d.).

Program goals should be aligned with state and local teacher-quality goals to improve participant content knowledge and content-specific pedagogy. The program should develop participants' skills to implement research-based instructional strategies. Program initiatives should be aligned with state and local goals to assist students in meeting rigorous academic standards. Training should prepare participants to develop and implement a variety of classroom assessments (SREB, n.d.).

According to the National Staff Development Council, (2001a), when teachers understand content and can apply the research that supports teaching strategies, the chances that they will make appropriate instructional decisions increase. Teachers with knowledge of content and pedagogy can adjust instruction to assist all students in meeting standards. When professional development programs align closely with the curriculum and with appropriate instructional strategies that are designed to enable students to reach high standards, teaching and learning is likely to improve. Instructional strategies should promote sharing and working together to achieve common goals, and opportunities for collaboration. Collins, Elbaum, Haavind, & Tinker (2000) noted that skilled facilitators summarize information to organize ideas, ask thoughtful questions, and provide feedback designed to provoke deeper reflection and learning.

Because I was a highly-qualified teacher with National Board Certification and over a decade of experience in secondary education, it was assumed that I would implement high-quality instructional practices in the professional development training. However, I did not implement the high-quality instructional practices because my

perception was that professional development instruction was different from instruction in the high school classroom.

Prior to my experience in facilitating the PowerPoint® session, I had never delivered professional development in an online environment. Based on my perception of the requirements of professional development training, I did not implement high-quality instructional or assessment techniques in the session I facilitated, and I did not provide opportunities for participants to receive support in implementing the skills and knowledge gained in the training.

Evaluation and incentives.

The SREB standards state that training results are to be measured in terms of application of learning and increased student achievement. Student grades, test scores, and school-wide indicators such as class enrollment, discipline records, and retention rates may be used to measure training impact. Online professional development programs should provide the same incentives for online and face-to-face participants, including stipends or credits toward recertification (SREB, n.d.).

CEU credits have traditionally been awarded according to the number of hours spent in a session, rather than on demonstrated knowledge and skills or increases in student achievement. Because most online training sessions are designed so that participants complete training at their own rate of learning, time is no longer a suitable factor for determining credit to be earned. Therefore, the NSDC recommends that CEUs

should be awarded according to demonstrations of learning and student achievement, rather than the number of hours invested in training (NSDC, 2001a).

For the TOP training and for the training I facilitated, credit was awarded based on the estimated number of hours required for completion of training activities and assignments. The evaluator for the training I facilitated noted in two places on the evaluation form that the training included "a lot of work for the amount of credit received." She also commented that I needed to "consider download time as part of anticipated time of completion." Participant surveys indicated that the PowerPoint® assignments required more time for completion than I had estimated. Neither demonstration of knowledge and skills nor increased student achievement was considered in the determination of CEU credit awarded to participants in either the TOP or the PowerPoint® sessions.

The SREB standards state that program assessment data should be routinely compared to national research in the following five areas: (a) participant reactions to the training, (b) participant learning, (c) organizational support, (d) participant implementation, and (d) student impact (SREB, n.d.). The areas listed originated from Guskey's adaptation of Kirkpatrick's model (Guskey, 2005).

Using Guskey's adaptation (2005), I determined that the TOP training session appeared to meet the requirements for Levels 1 and 2. A participant survey was used to measure participants' reactions to the training, which met requirements for a Level 1 rating. Participants' learning was measured by a comprehensive final project that included a demonstration of the skills needed to develop an online course, which met

requirements for a Level 2 rating. All teachers who participated in the training were given access to Blackboard® for use in their schools. However, no determination was made whether hardware was available to support the implementation of Blackboard® in participants' schools; therefore requirements for a Level 3 rating were not met. Some of the TOP participants demonstrated their skills and knowledge by facilitating professional development sessions. However, not all of the participants facilitated professional development sessions; therefore the requirements for Level 4 were not met. Student learning outcomes resulting from the training were not evaluated, as required for a level 5 rating.

The PowerPoint® training appeared to meet the requirements for Levels 1 and 2. A survey was used to measure participants' reactions to the training, as required for a Level 1 rating. A final project that included creation of a PowerPoint® presentation was used to measure knowledge and skills gained in the training, as required for a Level 2 rating. Participants completed assignments using PowerPoint® software, which indicated that they had access to the software. However, no determination was made whether the software or adequate hardware resources needed to implement the software were available at the participants' school sites; therefore Level 3 requirements were not met. There was no follow-up to support the implementation of the skills obtained by participants in the PowerPoint® training session, as required for a Level 4 rating. There was no evaluation of student learning outcomes produced by the training, as required for a Level 5 rating.

Further consideration and reflection raised several concerns. Neither the rubric used to evaluate the online training site that I developed nor the evaluation form used to assess the instructional quality of the online session I facilitated appeared to be closely linked to SREB standards. Evaluator comments on my skills as a facilitator appeared to be based on subjective measures of performance. Ratings given on the evaluation were not fully explained. Diagnostic or formative assessments were not used to modify instruction to meet learner needs, and participants received no feedback regarding the quality of their performance in the training. Because program data required for evaluation at Levels 3, 4, and 5 were incomplete, a comparison of local data to national research in all five areas recommended by the SREB could not be made.

Adherence to National Educational Technology Standards for Teachers

The National Educational Technology Standards for Teachers (NETS) (ISTE, n.d.) define fundamental concepts, knowledge, skills, and attitudes needed to apply technology in educational settings. The performance indicators for each standard define learning outcomes to be used to develop assessment instruments. The standards include six areas of teacher proficiency: (a) technology operations and concepts; (b) planning and designing learning environments and experiences; (c) teaching, learning, and the curriculum; (d) assessment and evaluation; (e) productivity and professional practice; and (f) social, ethical, legal, and human issues. The NETS standards indicate that teachers should:

1. demonstrate a sound understanding of technology operations and concepts.

2. plan and design effective learning environments and experiences supported by technology.
3. implement curriculum plans that include methods and strategies for applying technology to maximize learning.
4. apply technology to facilitate a variety of effective assessment and evaluation strategies.
5. use technology to enhance their productivity and professional practice.
6. understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice (ISTE, n.d.).

When I evaluated the PowerPoint® training according to the NETS standards and performance indicators, I found that the training did not provide opportunities designed to prepare teachers to meet the recommended standards.

Training participants were directed to complete a tutorial designed to guide them in learning to use the software. They were also to complete two projects in which they designed instructional materials to be used in their classrooms. In the first project, they were to design and create a presentation to be used for presenting information. In the second, they were to develop a lesson plan and an assessment to be used to teach students how to use PowerPoint®.

Participants who completed the PowerPoint® training were not prepared to meet standards for implementing technology in the classroom. The training did not include an assessment of participant understanding of technology concepts. Project requirements did

not address the application of standards for the design of effective learning environments or the implementation of high-quality, research-based instructional activities and assessments. The training did not provide support for participants to implement skills learned in the training or reflection on professional practice for the improvement of technology integration in the classroom. Participants were not expected to implement knowledge of the social, ethical, and safe use of technology. The training failed to prepare participants to meet the standards for applying technology in educational settings.

When I reviewed the evaluation that was used to assess my performance as a training facilitator, I noted that the evaluator commented that it was "good to have NETS standards for reference." Her comment gave no indication that the training did not meet NETS standards (ISTE, n.d.), although my assessment of the training conducted during data analysis indicated that the session was not aligned with NETS standards.

Several changes could have been made to improve the PowerPoint® training. The training could have been developed to align with content and professional development standards. Activities and assignments could have been selected based on gaps in student achievement and teacher skills. An online learning community could have been developed to support mentoring and self-reflection among participants. Periodic feedback could have been provided to participants, along with opportunities for improvement of submitted activities.

Themes

Three themes emerged from the data. These were: (a) time, (b) adherence to standards, and (c) absence of physical presence. Each theme is discussed below.

Time

Perception that Online Learning is Time-Consuming

As a TOP participant, I perceived that completion of the training was time-consuming. When I fell behind in completing assignments, I attributed my failure to keep up to a lack of time. I also believed that the development of content for the training I would facilitate would be time-consuming due to the necessity of creating electronic documents, posting them to the site, and editing all communications to ensure clarity.

Throughout the TOP training, I kept a journal in which I recorded my thoughts and reactions to various aspects of the training. At the beginning of the training, I noted that my lifestyle included a family in which I was the head of household, a full-time job, and an extensive network of friends. Due to these responsibilities and priorities, I felt that I might not complete the training due to a lack of time to fit the training into my schedule. When a TOP participant posted a comment to the discussion board that she was withdrawing from the training because she did not have time to complete assignments, I readily identified with her perception. The journal entries I made throughout the training revealed my belief that online learning is time consuming.

During data analysis, as I reflected on the time that I spent completing TOP assignments and planning and developing the session I would facilitate, I realized that I

was mistaken in my perception that online learning is time-consuming. In reality, I got behind in the course because I procrastinated due to a lack of motivation. I also allowed other interests to distract me from my goal of completing the training.

Document Preparation and Organization

Throughout the TOP training, I downloaded and printed documents, even though all of the documents used in the training were available in electronic form. During the training, I printed and organized documents in binders. When directed to take electronic notes on reading assignments, I attempted several times to follow the directions. Because the process of electronic note-taking was time-consuming and frustrating, I ignored the instructions and made notes on printed copies instead. I spent time trying to understand activities and learn how to navigate the training site. To complete assignments, I downloaded and printed documents, located information on the Internet, and read and made posts to the discussion board. Documents were submitted through email or the Digital Dropbox.

As a TOP participant, I attempted to resolve technical issues on my own through trial-and-error, or I emailed Peggy for assistance. I did not feel comfortable posting questions to the discussion board, because I was embarrassed for the other participants to know that I did not know how to use all of the features of the Blackboard® system. Sometimes I felt impatient because I had to wait for Peggy's response when I was unable to resolve issues independently. All of these activities required time in addition to the time I spent completing assignments.

When I developed and facilitated the PowerPoint® training, I used printed documents even though electronic documents were available. When I developed the training, I printed all of the electronic slide presentations and handouts and proofread them before posting them on the training site. I organized the printed documents into binders, and folders. When reviewing assignments submitted by participants, I printed them and made notes. To keep track of completed assignments and activities, I printed screenshots of discussion board forums and posts, assignments submitted via the Digital Dropbox, names of participants, links included in each module, and the electronic grade book. I printed emails and composed responses in writing before typing and sending them. I read posts to the discussion board and added comments.

Many factors contributed to the time that I spent online completing tasks unrelated to learning. As a facilitator and as a participant, I found that organizing and printing documents was time-consuming. As a participant, I spent time trying to understand assignments, learning to navigate the training site, and attempting to resolve technical issues. Additionally, time was needed to read instructions, upload assignments, and make posts to the discussion board. As a facilitator, I spent time preparing and uploading training materials, keeping track of assignments completed by participants in the electronic grade book, and composing responses to participant emails and discussion board posts.

Additional Responsibilities of the PowerPoint® Facilitator

In addition to my responsibilities as a training facilitator, I enrolled participants in the training site and provided technical support. During the first two weeks of the training, I also emailed and called participants who were not responding to my attempts to communicate with them. I did not anticipate how much time these additional responsibilities would take outside of facilitating the training and felt overwhelmed because I was not prepared to efficiently use available technology to manage administrative and support tasks.

It was my responsibility to enroll participants in the training site. Prior to the beginning of the session, Peggy posted a list of training participants to the PowerPoint® site. Working from the list, I created usernames and passwords for participants who had never used the Blackboard® system, and I enrolled all of the PowerPoint® participants in the training site. Several participants registered after the participant list was posted. Latecomers emailed enrollment information to Peggy, and she forwarded each email to me. Each time I received an email I accessed the site and enrolled late coming participants individually.

Throughout the first week of training, I continued to enroll latecomers. When new participants enrolled, I emailed them a copy of the email containing training-related information that had been sent to the other participants. This process was frustrating because at the time I enrolled the original participants who had been listed, I was not told that there would be latecomers. In addition, I was not given a date for the end of late registration; therefore I did not know when the late registration process would end. If I

had been given a complete list of late-enrolling participants after final registration, I could have automated the process of enrolling them and providing training information.

As a training facilitator, I provided technical support for participants via phone, chat, email, and through the online training site. I encouraged participants who might have difficulty using the Blackboard® system to seek assistance by calling or emailing me or by posting a question to the discussion board.

During the first week of the training, I felt overwhelmed by the frequent emails and instant messages that I received from participants seeking support for various technical issues. The colleague of one participant requested a change of email for the participant because I was sending emails to an account that he was no longer using. Another reported that he had limited computer access due to a virus that disabled his equipment. I emailed all of the training files to another participant who could not download the files posted on the training site. Two participants had limited typing ability; I recommended the use of a typing tutorial. Several had difficulty using the Digital Dropbox; I emailed them step-by-step instructions.

I also established a discussion forum to address frequently asked questions. I asked participants to use the discussion board to seek help from others and directed those who had completed assignments to check the board daily and offer assistance to those who requested it. I also checked the discussion board so that I could offer assistance as needed.

I had difficulty helping participants resolve various technology-related issues. I found it difficult to troubleshoot problems because I was unable to view participant

computer screens. Some participants lacked basic computer literacy or navigation skills, which caused additional difficulty in identifying the source of the problem without looking at the system. For the first half of the course, several participants had difficulty using the Digital Dropbox to submit assignments. Participants sought technical assistance and support from others in their schools, resolved technical issues on their own, used alternate computers, or withdrew from the training due to unresolved computer issues.

After the PowerPoint® training was over, I realized that I could have added the requested step-by-step instructions and a list of frequently asked questions (FAQs) to a button on the site instead of sending numerous emails to participants and making posts to the discussion board. I also learned from another training facilitator that free web-based resources containing links to user manuals, discussion boards, and tutorials, were available for online technical support.

In addition to my responsibilities as a training facilitator, I completed administrative tasks and provided technical support. I did not anticipate the time needed for these additional responsibilities, and was not prepared to efficiently manage these tasks. These activities were time-consuming because I did not have the information and support needed to complete them efficiently. I was not given sufficient information to efficiently enroll and provide training information to late enrollees. I also did not have specific knowledge of the online help resources available to participants.

Awarding of Credit

As a participant in TOP, I received CEU credit for the training even though I submitted assignments of poor quality, did not submit assignments when they were due, and did not participate in all activities. My performance on submitted activities was not assessed, and the amount of time spent completing activities was undetermined. I received CEU credit for the TOP training based on the estimated time for completion of all assignments and activities.

In the PowerPoint® session, 4 of the 14 participants who initially enrolled in the training did not complete the session. One participant withdrew from the training before completing any assignments. The other three submitted some assignments or participated in some activities within the first three weeks and then stopped. Participants who stopped completing assignments or notified me that they were withdrawing prior to the end of the training did not receive CEU credit.

Participants who remained enrolled for the five week training period received CEU credit. Ten participants remained enrolled for the five-week training period. Nine of them completed all assignments and activities prior to the final due date. One participant completed a few assignments early in the training, and then submitted the rest of them after the due date. Another did not complete any assignments until the second week of the training, and then submitted the rest of them prior to the due date.

Credit for the PowerPoint® training was awarded based on the estimated number of hours needed to complete all assignments and activities. The amount of time

participants spent on training activities was undetermined. The quality of their performance on submitted activities was not evaluated.

Time was an issue in the awarding of training credit. The online environment presents an obstacle in accurately measuring the time spent participating in training activities.

Training Completion Issues

Completion issues in the TOP training.

As a TOP participant, I completed the first three modules within the first three weeks of training. When I received no feedback from the facilitator concerning my performance, I lost motivation to complete written assignments. In the fourth and fifth week of training, I did not complete any of the assigned written activities. However, I was motivated to participate in a discussion activity assigned during the fourth week because reading and replying to the posts made by the facilitator and the other participants provided a way for me to discuss my ideas with others, and I felt less alone online. During the fifth week of training, I participated in a discussion about classroom management in the TOP training. In my comments, I stated my opinion that the facilitator should keep participants involved by encouraging discussion, providing feedback, and reminding them to submit overdue assignments. The assignments that I completed on time involved interaction with others. My desire to share ideas with others prompted interactions with the other participants; knowing that two others were behind in the

course and receiving encouragement from them motivated me to complete unfinished assignments.

Completion issues in the PowerPoint® training.

In an attempt to prepare participants to learn online, I planned orientation activities for the first week of the training. The training orientation included activities that were designed to provide opportunities for practice with the technology, to make introductions, to participants' readiness for online learning, and evaluate the equipment and connection they would use to access the training site. The orientation did not include technology training or instruction in standards for communication or legal and ethical use of the Internet. At the time that I developed the training, I believed these activities were sufficient to prepare participants for online learning.

By the end of the first week, 6 of the 14 participants enrolled in the PowerPoint® training had not submitted any assignments; 2 of these 6 participants eventually received credit for the training. One submitted no assignments the first week and then submitted the rest of the assignments prior to the due date. The other submitted a few assignments early in the training, and then submitted the remainder after the due date.

Four participants did not complete the training session and did not receive CEU credit. Of the four participants who withdrew, one had limited technology skills and had been strongly encouraged by her career-technical director to enroll in the online training. Another one withdrew due to a lack of technology skills and because he had limited access to equipment due to a lack of technical support and the problem that no childcare

available for the times that alternate equipment could be used. Two stated that they were withdrawing from the session due to a lack of time to complete assignments.

At the end of the first week I emailed the 6 participants who had not submitted any assignments. One of them responded with an email message stating that she had decided to withdraw from the training because she did not have time to complete the assignments.

The colleague of another participant notified me that the participant's email address had changed, and he had not received any emails from me. I emailed the messages I had previously sent to the original address. The colleague provided assistance to the participant by emailing some assignments for him; the colleague explained that she was assisting him because he was having problems with his account. All of the participant's assignments were submitted prior to the due date.

Another participant withdrew from the training due to a lack skill in using technology. After I sent the email, she contacted me by phone because she had questions about the requirements for the training. In the conversation, she stated that her career-technical director had pressured her to enroll in the online training. In the second week of training, I emailed to encourage her to complete the training and to provide ordering information for a typing tutorial because she had mentioned on the discussion board that she lacked typing skills. In the third week of training, I emailed to ask for an update of her progress and received no response.

Another participant withdrew due to a lack of technology skills and a lack of access to equipment caused by limited technical support. He notified me that he had no

computer access after a virus corrupted his classroom server and his laptop; he stated that he could use the school computers only after school, and he could not stay late due to a lack of childcare. With the proper technical support, the virus-related issues might have been resolved.

I believe that his lack of skill in using technology also contributed to his decision to withdraw from the training. All but one of his emails contained only one or two lines each, and all of his emails and comments on the discussion board contained typographical errors that revealed his lack of typing ability. In the training evaluation he completed at the end of the first week, he noted that he could not find the forum on the discussion board where he was supposed to discuss his ability to be a successful online learner. This issue indicated that he also lacked navigation skills.

Because I did not receive emails or phone calls from the others, I called each of them. I left a voice mail message for one participant who did not return my call, but did submit a few of the Module 1 assignments. On the last day of the training, she contacted me to ask if I would allow her to complete the session so she could earn the CEUs she needed for licensure renewal. I agreed to allow a three-day extension beyond the final due date, and she submitted all of the assignments within the extended time frame. I believe that her lack of participation throughout the training was related to the fact that she was enrolled in four sessions at once, which limited the time available to complete all of the sessions. After I called the other participant with whom I had had no contact, she submitted assignments for the first two modules and then stopped participating in the training. When I called her at the end of the third week for a progress update, she

informed me that she was withdrawing from the session because she did not have time to complete the assignments.

Many factors contributed to the completion issues faced by participants in the PowerPoint® training. Their reasons for falling behind or failing to complete the training indicated that there was a lack of understanding of the time necessary for online learning. Additionally, participants experienced communication difficulties, a lack of immediate technical support, issues in using the technology, and limited access to equipment. All of these issues resulted in additional time needed to complete the training.

Adherence to Standards

Because I believed TOP was an exemplary model for online professional development training, I imitated the TOP training in the development and facilitation of the PowerPoint® training. During the process of developing the PowerPoint® session, I made a cursory review of the National Educational Technology Standards for Teachers (NETS) (2005) that were referenced on the TOP site. According to a statement posted on the site, the TOP training objectives were based on these standards.

Although the implementation of standards in the development of training had not been addressed in TOP, I realized that the NETS for Teachers (ISTE, 2000-2005) were relevant to the PowerPoint® training. I attempted to meet the standards by modifying the PowerPoint® session to include an activity in which participants developed a lesson plan and an assessment to be used for teaching PowerPoint®. When I evaluated the

PowerPoint® training for compliance with NETS, I realized that the training did not meet the requirements outlined in the standards.

The Standards for Online Professional Development (SREB, n.d.), which were extended from the Staff Development Standards (NSDC, 2001b), were also referenced on the TOP site, with a statement that objectives had been developed to meet the standards. When I compared the PowerPoint® session to the SREB standards, I found that the training I facilitated did not meet the standards. I realized that I lacked the training and experience to develop and facilitate a training session that would meet the standards endorsed by the leading professional organizations in the field of education.

At the time that I developed the session that I facilitated, I did not consider the relationship between the training activities and the SREB standards (n.d.). I did consider the importance of developing training to meet national standards. Even though I reviewed the standards prior to developing the PowerPoint® training, I did not understand how to apply standards to the development of online professional development training. Only after reviewing the SREB standards and NSDC implementation guide during data analysis, did I begin to understand how to apply standards to the development and delivery of professional development programs.

When I developed and facilitated the PowerPoint® training session, I did not fully understand the intent and purpose of professional development. My understanding of professional development was based upon my experiences as a high school teacher, my review of the literature, and what I learned in casual conversations with colleagues who were trained to develop and facilitate professional development. I modeled the session

after the TOP training, relied on the instructional strategies I had used as a high school teacher, and included activities based on personal preferences instead of accepted standards for professional development.

I approached the training development and delivery from the perspective of an educator who had had been accustomed to participating in professional development activities with no expectation of assessment. As a facilitator, I did not understand the importance of using performance assessments in the training and providing feedback to participants, because the activities that I completed as a training participant were not assessed, and I received no feedback regarding my performance.

The assignments that I completed in TOP were based on my previous teaching experiences in the face-to-face classroom. Since my teaching experience had been with high school students, the activities that I developed were suitable for learners in grades 9-12. I gave no consideration to the needs of adult learners.

I used collaborative activities that provided for participant interaction, but I did not understand how to support the development of an online learning community among participants. The session did not provide opportunities for mentoring, implementation of skills, or participant reflection and improvement of performance. I lacked the training and experience to develop and facilitate a training session that would meet the standards recommended by leading organizations in the field of education.

A reflection on the evaluation of my performance in TOP and as a facilitator raised several concerns. Neither the rubric used to evaluate the online training site that I developed nor the evaluation form used to assess the instructional quality of the online

session I facilitated seemed to be closely aligned with the SREB standards for online professional development training. Evaluator comments on my performance as a facilitator appeared to be based on subjective measures of performance. In addition, although the evaluator noted that the NETS standards were included for reference on the training site, she did not comment on the fact that the training did not meet the standards.

Many factors pointed to the need for adherence to standards throughout the online training I developed and facilitated. When I designed and facilitated the PowerPoint® training, I did not use content or professional development standards as a guide. The training did not meet accepted standards in several respects. Activities and assignments were selected according to personal preference rather than student achievement or teacher knowledge and skills. No provision was made to support the development of an online learning community among participants. Assignments were based on previous teaching experience with students in grades 9-12; the needs of adult learners were not considered. The evaluation instruments used for the training did not appear to be clearly aligned with standards for online professional development training, and comments made by an external evaluator seemed to be based on subjective measures of performance.

Absence of Physical Presence

When I facilitated the PowerPoint® training session, I encountered several limitations of the online learning environment related to the absence of physical presence. The term *absence of physical presence* refers to the physical separation of the facilitator

and participants in an online environment. The facilitator and participants are not present in a shared physical space as they would be in a face-to-face classroom.

When I attempted to contact participants and received no response, I was unsure whether they had received my emails or were able to access the training site. I found that it was difficult to gauge participant understanding or provide immediate corrective instruction. I could not observe participants' use of the software to assess their skills in order to correct misunderstandings. Troubleshooting technical issues was difficult because I was unable to view participant computer systems. In addition, it was impossible to determine whether the enrolled participant was the person who completed the assignments that were submitted. When participants stopped sending assignments or responding to my attempts to communicate, I was unsure whether they planned to withdraw from the training or had just fallen behind.

When I attempted to troubleshoot technical problems, I was unable to view participant computer screens. Some participants lacked basic computer literacy or navigation skills, which caused additional difficulty in identifying the source of problems without viewing the participants' computer systems. I was unable to view their actions on the screen, and I found it difficult to determine whether the problem was related to a lack of participant technology skills or whether the problem resulted from an issue with the computer system.

Several participants had difficulty using the Digital Dropbox within Blackboard®; I provided step-by-step instructions for using the Digital Dropbox. After I

gave instructions, documents began to appear in the Digital Dropbox, leading me to believe that all participants had mastered this technology.

Near the end of the first week of the training I facilitated, the colleague of one participant emailed an explanation that the participant had changed his email address and had not received any emails from me. I responded by re-sending the emails to the account specified by the colleague. Throughout the rest of the training, the majority of the participants' assignments were submitted to the Digital Dropbox or from the email account sent by the colleague. Once or twice, assignments were sent from the colleague's email account with an explanation that the participant had asked her to email these for him because he was having problems with his email account. Because all of the assignments had been submitted, the participant received credit for the training. My concern was with completed assignments, not with who was completing them.

One participant made me aware of her limited technology skills and told me that she had enrolled in the training at the insistence of her career-technical director. In a telephone conversation, I answered her questions and encouraged her to get started completing the assignments. Later, I was excited to discover that after our conversation, she had introduced herself on the discussion board and uploaded her picture. She was one of the few participants who included a picture with their introductions. I found this remarkable because she had described herself as having limited technology skills, yet she had successfully transferred a picture from a digital camera to a computer and then uploaded it to the training site, a task that some of the more skilled participants had not

completed. On reflection, I realized that I had no way to determine whether she was the person who had completed and submitted the assignments.

One participant was enrolled in four online sessions simultaneously because she needed CEUs to renew her teaching license. She submitted some of the assignments from the first module, and then I did not hear from her again until the last day of class. At this point, she contacted me to ask if I would allow her to complete the session so that she could earn the credits she needed for licensure renewal. I agreed to allow a three-day extension beyond the final due date. For the next three days, I watched in amazement as assignments were rapidly submitted and comments were posted to the discussion boards. My perception was that she worked diligently until she had completed every assigned activity.

In each of these instances, I assumed that participants had successfully mastered the technology and completed assignments. On reflection, I realized that there were several limitations of the technology used for instructional delivery. When participants were unresponsive to my attempts to communicate, I could not determine whether they received the emails or had successfully accessed the training site. Due to the lack of nonverbal communication and direct observation, it was difficult to assess participant skills or provide immediate feedback. It was impossible to determine whether the enrolled participant was the person who completed the submitted assignments. Providing technical support was difficult because I was unable to view participant computer systems so that issues could be properly assessed.

As a facilitator, I encountered several limitations of the online environment related to the absence of physical presence. When participants did not respond to my attempts to communication, I was unable to determine whether they had received my communication. I found it difficult to gauge participant understanding or provide immediate corrective instruction. It was also impossible to determine whether the enrolled participant was the person who completed the submitted assignments. Troubleshooting technical issues was also difficult because I was unable to view participant computer systems.

Discussion of Related Literature

The research question investigated in this study was: How does a first-time facilitator understand the process of delivering professional development in an online environment? Three themes emerged from the data, including: (a) time, (b) adherence to standards, and (c) absence of physical presence. All of the themes could be found in the literature.

As a facilitator, when I developed content for the PowerPoint® training, I perceived that the task of designing a training session was time-consuming. Numerous studies have been conducted that reveal facilitator perceptions that online learning results in increased workload and time involvement (Betts, 1998; Ensminger & Surry, 2002; Lazarus, 2003; Passmore, 2000; Schifter, 2002). However, very few studies have attempted to gauge the actual time involved in online instructional delivery (Lazurus, 2003). My findings that facilitator perception that tasks associated with delivering online

instruction are time-consuming are consistent with the findings of the literature. More research is needed to determine whether online instruction is more time-consuming than instruction in a face-to-face environment.

As a training facilitator, I did not anticipate how much time would be required to meet additional responsibilities associated with non-instructional tasks. These additional responsibilities included providing orientation and technical support for participants. During the training, I felt overwhelmed by numerous requests from participants seeking support for technical issues. My experience was consistent with Lynch's (2001) finding that online facilitators spend excessive time troubleshooting student problems with technology.

As a participant and facilitator in an online learning environment, I spent time preparing and organizing paper documents. Sellen and Harper (2002) found that even in the most high-tech work environments, paper-based reading and writing accounted for 85% of workers' document-related activity. Even though I am an experienced user of technology, I printed and organized documents for learning and for record-keeping tasks a majority of the time that I spent in the online learning environment.

As a participant, when I attempted to use word processing software to create notes from assigned readings, I found that the task was challenging and time-consuming. I preferred to print, read, and highlight key points from the readings and make hand-written notes in the margins, and I used this method throughout the training. My experience was consistent with Sellen and Harper's (2002) findings that paper supports reading when there is a need to cross-reference multiple documents at a time, because

documents can be easily annotated, and the use of paper allows the reader to read and write in tandem.

Credit for the TOP and PowerPoint® training sessions was awarded based on the estimated number of hours needed to complete training assignments. Training participants completed training assignments at their own rate; gauging the time spent in the training was difficult. Recommendations made by the NSDC (2001a) supported the need for awarding of credit according to demonstrations of learning and student achievement, rather than the number of hours invested in training.

As a training participant, I experienced a lack of motivation to complete written assignments on time due to a need for deadlines for submission of assignments, performance assessment, and feedback. A comment that I posted to the discussion board indicated my feelings of being isolated and alone in the online environment because submitted assignments were unacknowledged. Swan et al. (2000) found that contact with course instructors significantly influenced success in the online environment. Additionally, Hootstein (2002, Providing informative feedback section, ¶ 2) noted that "feedback is even more critical in e-learning than in traditional classrooms because learners may feel isolated and detached due to lack of environmental and nonverbal signals." Vonderwell (2003) also noted the need for prompt feedback to counteract the effects of isolation on online learners. Bradshaw, Powell, and Terrell (2002) noted that without the structure of deadlines, learners may fail to participate in activities. Recommendations made by the SREB (n.d.) support the need for professional

development training to include online assessments with timely feedback to evaluate participant learning compared to learning goals (SREB, n.d.).

As a participant, I was motivated to participate in activities that involved interaction with other participants by a desire to share ideas with them. Encouragement from other participants and knowledge that they were also behind in the course also contributed to my motivation to complete unfinished assignments. Interactions with these participants influenced my decision to continue with the training. Morris (2005) found significant differences in online participation between participants who withdrew and those who completed. Kearsley (1998, Making the Most of Online Learning/Teaching section, ¶ 1) suggested "that the single most important element of e-learning is interactivity among participants." Rovai (2002) stated that interaction among learners is an essential element in developing a sense of community. The NSDC (2001s) noted that a supportive learning community contributes to participant motivation and commitment to learning. My experience was consistent with the literature concerning the importance of learning communities for engaging and motivating participants; interactions with other participants contributed to my engagement and motivation in the online training.

As a participant I experienced issues concerning timely completion of assignments. Work and family obligations, as well as social activities were given priority over completion of the training. I found it difficult to prioritize my responsibilities so that training assignments were completed on time. Bozarth et al. (2004) suggested that online learners need to develop time management skills. Schrum and Hong (2002)

recommended that online learners evaluate their personal and work-related responsibilities before beginning an online course.

Additionally, participants in the training I facilitated experienced issues in using the technology, which included a lack of keyboarding skills, a lack of immediate technical support, and limited access to equipment. Online participants need to understand the time commitment necessary for online learning and develop time management skills as recommended by Bozarth et al. (2004). Auyeung (2004) recommended that facilitators clearly convey objectives and related activities so that participants may estimate the effort required for completion of online training.

Schrum and Hong (2002) recommended that students have access to the appropriate tools as well as technology experiences prior to enrollment in online training. Additionally, Martyn (2003) noted that in a study of 8 blended training sessions with a combined total of 107 participants, only 1 participant withdrew. She attributed the near 100% completion rate to a sense of community established in an initial face-to-face session and to ongoing technical support. Borthwick, Cassity, and Zilla (2002) believed that participants who are relatively slow at keyboarding might be accommodated with a blended approach to instruction. Such an approach to the training might have benefited the PowerPoint® participants who needed to develop keyboarding skills.

As a facilitator, I did not fully understand the concept of online learning communities. As a result, the interactive communication tools available in Blackboard® were not used to support mentoring, collaboration, or reflection on teaching practice. The SREB standards state that online instructors should understand specific challenges and

strategies for building an online learning community. High quality training includes the use of interactive communication tools such as discussion boards, chat, email, and virtual classrooms to develop and maintain a collegial online learning community that supports mentoring, collaboration, implementation, and reflection (SREB, n.d.). Corcoran (1995) noted that to improve practice, teachers must be intellectually engaged and collaborate with others in their field so that they may develop new approaches to working with students. As a facilitator, I used the interactive communication tools in Blackboard® only for communication among participants. According to the SREB, participants should have opportunities to collaborate online during and after training sessions. Additionally, opportunities for reflection and follow-up should be included within the design of the program (SREB, n.d.).

Salpeter (2003) noted that collaboration among colleagues through readings, activities, and facilitated discussions aids in the development of strong learning communities. Professional development programs impact practice only when they provide for follow-up and continuity as participants integrate new strategies into their practice (Corcoran, 1995). Ongoing professional development opportunities allow participants to develop lessons, put them into practice, and then reflect on the results within a learning community of colleagues (Treacy et al., 2002). Such reflection provides an opportunity for participants to share and experience best practices, so that they may improve their practice, as recommended by Hogarth et al. (2004). An evaluation of my skills as a facilitator was conducted only after the PowerPoint® training was completed.

The literature supported self-reflection and evaluation of the implementation of skills within a learning community of colleagues as a means for the improvement of practice.

As a facilitator, additional training could have prepared me to understand the specific challenges and strategies for building an online learning community as recommended in the literature. The National Staff Development Council (2001a) noted that to effect long-term changes in educator practice that will produce increased student achievement, support during and following the training should be available to promote educator success in applying knowledge or skills in the classroom or school. When educators receive feedback, coaching, and assistance in applying new strategies or knowledge they may become successful in using new learning effectively. Technology can be used to support educators as they extend their own learning, seek help from others, solve problems associated with implementing newly learned skills and knowledge, and receive feedback and support from experts and colleagues. The SREB (n.d.) recommended that training schedules allow sufficient time for participant collaboration, reflection, and implementation of new teaching strategies. With additional time in the PowerPoint® training, opportunities could have been provided for participant collaboration, support, and feedback as new skills were implemented.

The training that I developed and facilitated did not adhere to standards for online professional development. To impact student achievement, professional development training must be developed and evaluated in accordance with research-based standards. Research has shown that improving teacher knowledge and teaching skills is essential to improving student achievement. Because students spend a large portion of their time in a

learning environment interacting with teachers, what teachers know and can do directly impacts student learning. In response to the need for accountability measures, the National Staff Development Council developed research-based standards for high-quality professional development (Sparks & Hirsch, 2005). The literature supported adherence to research-based standards for the improvement of the teacher knowledge and skills that are essential to student achievement.

When I facilitated the PowerPoint® training, I experienced issues related to the absence of physical presence in the online learning environment. My experience as a facilitator of the limitations of an online environment due to the absence of physical presence was found in the review of the literature. The SREB noted that blended training in which face-to-face and online instruction are combined may be used where appropriate (SREB, n.d.). Borthwick et al. (2002) noted that a blended course that combines online and face-to-face instruction provides opportunities for facilitators and participants to overcome some of the issues related to a totally online environment, while taking advantage of the benefits of online learning. Lant (2002) also found that physical presence was important for learning. She recommended that a blended learning environment be implemented to maximize the benefits of both face-to-face and online learning environments. Ho (2005) concluded that a face-to-face session was needed before and after online activities, so that questions and concerns that arose from online assignments could be addressed.

Summary of Related Literature

As a facilitator, I perceived that the task of designing a training session was time-consuming. Numerous studies have been conducted that reveal facilitator perceptions that online learning results in increased workload and time involvement (Betts, 1998; Ensminger & Surry, 2002; Lazarus, 2003; Passmore, 2000; Schifter, 2002). However, very few studies have attempted to gauge the actual time involved in online instructional delivery (Lazurus, 2003).

During the training, I felt overwhelmed by numerous requests from participants seeking support for technical issues. My experience was consistent with Lynch's (2001) finding that online facilitators spend excessive time troubleshooting student problems with technology.

As a participant and facilitator, I printed and organized documents for learning and for record-keeping tasks a majority of the time that I spent in the online learning environment. My experience was consistent with the findings of Sellen and Harper (2002) who noted that paper-based reading and writing accounted for 85% of workers' document-related activity.

As a participant, I found the task of using word processing software to create notes from assigned readings to be challenging and time-consuming. My experience was consistent with Sellen and Harper's (2002) findings that paper supports reading when there is a need to cross-reference multiple documents at a time, because documents can be easily annotated, and the use of paper allows the reader to read and write in tandem.

Credit for the TOP and PowerPoint® training sessions was awarded based on the estimated number of hours needed to complete training assignments. Recommendations made by the NSDC (2001a) supported the need for awarding of credit according to demonstrations of learning and student achievement, rather than the number of hours invested in training.

As a training participant, I experienced a lack of motivation to complete written assignments on time due to a need for deadlines for submission of assignments, performance assessment, and feedback. Swan et al. (2000) found that contact with course instructors significantly influenced success in the online environment. Additionally, Hootstein (2002) found that feedback may reduce the isolation and detachment online learners may feel (Providing informative feedback section, ¶ 2). Bradshaw, Powell, and Terrell (2002) noted that without the structure of deadlines, learners may fail to participate in activities. Recommendations made by the SREB (n.d.) also support the need for the inclusion of online assessments with timely feedback.

As a participant, interactions with other participants contributed to my engagement and motivation in the online training, as noted by the National Staff Development Council (2001a). Morris (2005) found significant differences in online participation between participants who withdrew and those who completed, and Kearsley (1998) and Rovai (2002) noted the importance of interaction in the online environment.

As a participant, I found it difficult to prioritize my responsibilities so that training assignments were completed on time. Bozarth et al. (2004) suggested that online learners need to develop time management skills. Schrum and Hong (2002)

recommended that online learners evaluate their personal and work-related responsibilities before beginning an online course.

Additionally, participants in the training I facilitated experienced issues in using the technology, which included a lack of keyboarding skills, a lack of immediate technical support, and limited access to equipment. Online participants need to understand the time commitment necessary for online learning and develop time management skills as recommended by Bozarth et al. (2004). Auyeung (2004) recommended that facilitators clearly convey objectives and related activities so that participants may estimate the effort required for completion of online training. Schrum and Hong (2002) recommended that students have access to the appropriate tools as well as technology experiences prior to enrollment in online training. Additionally, the literature supported a blended training approach to address issues such as those faced by participants in the PowerPoint® training (Martyn, 2003; Borthwick et al., 2002).

As a facilitator, I did not fully understand the concept of online learning communities. The SREB standards (n.d.) state that online instructors should understand specific challenges and strategies for building an online learning community. Corcoran (1995) noted that practice may be improved when teachers are intellectually engaged and collaborate with others in their field to develop new approaches to working with students. Salpeter (2003) noted that collaboration among colleagues through readings, activities, and facilitated discussions aids in the development of strong learning communities. Ongoing professional development opportunities allow participants to develop lessons, put them into practice, and then reflect on the results within a learning community of

colleagues (Treacy et al., 2002). Such reflection provides an opportunity for participants to share and experience best practices, so that they may improve their practice, as recommended by Hogarth et al. (2004). An evaluation of my skills as a facilitator was conducted only after the PowerPoint® training was completed. The literature supported self-reflection and evaluation of the implementation of skills within a learning community of colleagues as a means for the improvement of practice.

As a facilitator, additional training could have prepared me to understand the specific challenges and strategies for building an online learning community as recommended in the literature. The NSCD (2001a) recommended that support during and following the training be available to promote educator success in applying knowledge or skills in the classroom or school. The SREB (n.d.) recommended that training schedules allow sufficient time for participant collaboration, reflection, and implementation of new teaching strategies. With additional time in the PowerPoint® training, opportunities could have been provided for participant collaboration, support, and feedback as new skills were implemented.

The training that I developed and facilitated did not adhere to standards for online professional development. To impact student achievement, professional development training must be developed and evaluated in accordance with research-based standards. Sparks and Hirsch (2005) noted that research has shown that improving teacher knowledge and teaching skills is essential to improving student achievement. In response to the need for accountability measures, the National Staff Development Council developed research-based standards for high-quality professional development. The

literature supported adherence to research-based standards for the improvement of the teacher knowledge and skills that are essential to student achievement.

When I facilitated the PowerPoint® training, I experienced issues related to the absence of physical presence in the online learning environment. My experience as a facilitator of the limitations of an online environment due to the absence of physical presence was found in the review of the literature. The SREB (n.d.) noted that blended training in which face-to-face and online instruction are combined may be used where appropriate. The need for blended training was supported by Borthwick et al. (2002), Lant (2002), and Ho (2005).

Summary

During data analysis, I conducted a self-assessment of the training session I facilitated. I evaluated the training to determine whether content met the Standards for Online Professional Development (SREB, n.d.) and the National Educational Technology Standards (NETS) for Teachers. I found that my session did not adhere to standards and that I lacked the training and experience to both develop and facilitate training that would meet the standards endorsed by the leading professional organizations in the field of education.

The Standards for Online Professional Development (SREB, n.d.) were published by the Southern Regional Education Board. The standards extended the Standards for Staff Development published by the National Staff Development Council (NSDC, 2001b) to include elements that are characteristic of online learning (SREB, n.d.).

The SREB standards outline three areas of concentration for quality online professional development courses and programs: (a) e-Learning Context Standards, (b) e-Learning Process Standards, and (c) e-Learning Content Standards. The e-Learning Context Standards address the importance of building learning communities, school leader involvement, and the provision of resources and support for the online professional development program. The e-Learning Process Standards address data-driven, research-based goal setting, program evaluation, and the use of technology to present materials and design learning that meets participant needs and contributes to the development of learning communities. The e-Learning Content Standards address the quality and equity of access, including the consideration of learner differences and effective implementation of online pedagogy (SREB, n.d.).

My assessment indicated that the training did not adhere to recommended standards related to content quality. Participants were directed to complete all assignments regardless of prior knowledge or skill in various areas of the training, and no provision was made for presenting content related to their needs. The PowerPoint® training was developed without a needs assessment or analysis of student achievement data to determine whether educators needed training to use the software.

The assessment also indicated that the training was not aligned with standards for design and layout. Design elements of the training I developed and facilitated were not selected for instructional purposes. The rubric that had been posted to the TOP site to be used to evaluate the PowerPoint® training site stated that every handout, presentation, and activity in the training should match a common theme. I wanted to achieve the

highest rating possible for the design; therefore, I used presentation backgrounds and graphics related to the theme of *power*. I chose the theme because the TOP training had modeled the use of *top* as a theme, and I felt that the word *power* was representative of the PowerPoint® training. I used color in the links to assignments, because I preferred color over black text; the colors were not selected to serve any instructional purpose.

The training was not aligned with standards related to participant preparation and support for online learning. As a training facilitator, I provided technical support for participants via phone, chat, email, and through the online training site. I had difficulty helping participants resolve various technology-related issues. I found it difficult to troubleshoot problems because I was unable to view participant computer screens. Some participants lacked basic computer literacy or navigation skills. For the first half of the course, several participants had difficulty using the Digital Dropbox to submit assignments. Participants sought technical assistance and support from others in their schools, resolved technical issues on their own, or used alternate computers.

The training did not adhere to standards related to collaboration and development of an online learning community. Although I thought I understood how to use the interactive communication tools in Blackboard® for collaboration among participants, on reflection, I realized that I used the tools only for communication among facilitator and participants. Because I did not fully understand the concept of online learning communities, the interactive communication tools were not used to support mentoring, collaboration, implementation of skills, or reflection on teaching practice. I knew how to use the tools to communicate, but I did not understand how to use them to establish

online learning communities by providing opportunities for participants to support and mentor each other in implementing newly learned skills in their classrooms.

The training was not aligned with standards related to instructional quality. Because I was a highly-qualified teacher with National Board Certification and over a decade of experience in secondary education, it was assumed that I was highly-qualified to facilitate professional development. However, the training that I facilitated lacked the elements of a high-quality instructional environment because my perception was that professional development instruction was different from instruction in the high school classroom. Prior to my experience in facilitating the PowerPoint® session, I had never delivered professional development in an online environment. Based on my perception of the requirements of professional development training, I did not implement high-quality instructional or assessment techniques in the session I facilitated, and I did not provide opportunities for participants to receive support in implementing the skills and knowledge gained in the training.

The training was not aligned to standards related to evaluation and incentives. For the TOP training and for the training I facilitated, credit was awarded based on the estimated number of hours required for completion of training activities and assignments. The evaluator for the training I facilitated noted in two places on the evaluation form that the training included a "lot of work for the amount of credit received." She also commented that I "need[ed] to consider download time as part of anticipated time of completion." A survey of training participants indicated that the PowerPoint® assignments required more time for completion than I had estimated. Neither

demonstration of knowledge and skills nor increased student achievement was considered in the determination of CEU credit awarded to participants in either the TOP or the PowerPoint® sessions.

The National Educational Technology Standards for Teachers (NETS) were published by the International Society for Technology Education. The standards define fundamental concepts, knowledge, skills, and attitudes needed to apply technology in educational settings. These standards were relevant to the PowerPoint® training because its goal was to train teachers to use technology in the classroom. The performance indicators for each standard define learning outcomes to be used to develop assessment instruments. The standards include six areas of teacher proficiency: (a) technology operations and concepts; (b) planning and designing learning environments and experiences; (c) teaching, learning, and the curriculum; (d) assessment and evaluation; (e) productivity and professional practice; and (f) social, ethical, legal, and human issues.

When I evaluated the PowerPoint® training according to the NETS standards and performance indicators, I found that the training did not provide opportunities designed to prepare teachers to meet the recommended standards. Training participants were directed to complete a tutorial designed to guide them in learning to use the software. They were also to complete two projects in which they designed instructional materials to be used in their classrooms. In the first project, they were to design and create a presentation to be used for presenting information. In the second, they were to develop a lesson plan and an assessment to be used to teach students how to use PowerPoint®.

Participants who completed the PowerPoint® training were not prepared to meet standards for implementing technology in the classroom. The training did not include an assessment of participant understanding of technology concepts. Project requirements did not address the application of standards for the design of effective learning environments or the implementation of high-quality, research-based instructional activities and assessments. The training did not provide support for participants to implement skills learned in the training or reflection on professional practice for the improvement of technology integration in the classroom. Participants were not expected to implement knowledge of the social, ethical, and safe use of technology. The training failed to prepare participants to meet the standards for applying technology in educational settings.

After the training, I received a copy of an assessment of my performance as a training facilitator. When I reviewed the evaluation, I noted that the evaluator comments gave no indication that the training did not meet NETS standards (ISTE, n.d.), although my assessment of the training conducted during data analysis indicated that the session was not aligned with NETS standards.

Three themes emerged from the data, including: (a) time, (b) adherence to standards, and (c) absence of physical presence. All of the themes could be found in the literature.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

A review of the literature related to professional development and the online delivery of professional development was conducted. The review presented national standards for the development and implementation of professional development programs and discussed the elements of a high-quality online learning environment, including design and evaluation, strategies for learning and instruction, and the technology used for learning. Online instruction based on sound pedagogical principles is as effective as instruction delivered in the face-to-face environment. The Southern Regional Education Board (SREB) has developed standards for online design and evaluation and for the use of instructional strategies and technologies for online learning. Instruction must be based on learner characteristics and desired learning outcomes. Strategies must be implemented in ways that engage and motivate learners. Online instructors who are trained online experience learning from the perspective of their students, thus improving their practice. Successful online students are motivated, independent learners. They have the skills required for navigating the online learning environment and communicating electronically. Learner-centered approaches that provide for collaboration and promote

interaction and the building of strong learning communities are an essential element to learning in an online environment.

Numerous studies have been conducted that reveal facilitator perceptions that online learning results in increased workload and time involvement. However, very few studies have attempted to gauge the actual time involved in online instructional delivery.

Sellen and Harper (2002) noted that paper-based reading and writing accounted for 85% of workers' document-related activity. They also found that paper supports reading when there is a need to cross-reference multiple documents at a time, because documents can be easily annotated, and the use of paper allows the reader to read and write in tandem.

Recommendations made by the NSDC (2001a) supported the awarding of credit for training according to demonstrations of learning and student achievement, rather than the number of hours invested in training. The literature also supported the need for assessments with timely feedback, and the use of deadlines to encourage training participation.

The literature supported the need for interaction in the online environment. Interactions among participants may contribute to engagement and motivation in the online training.

Online participants need to understand the time commitment necessary for online learning, develop time management skills, and evaluate personal and work-related responsibilities prior to beginning an online course. When facilitators clearly convey

objectives and related activities, participants may make a more accurate estimation of the effort required for completion of online training.

The literature supported self-reflection and evaluation of the implementation of skills within a learning community of colleagues as a means for the improvement of practice. Online instructors need to understand specific challenges and strategies for building an online learning community. Practice may be improved when teachers are intellectually engaged and collaborate with others in their field to develop new approaches to working with students. Collaboration among colleagues through readings, activities, and facilitated discussions aids in the development of strong learning communities. Ongoing professional development opportunities allow participants to develop lessons, put them into practice, and then reflect on the results within a learning community of colleagues, in order to improve practice.

Support during and following the training is needed to promote educator success in applying knowledge or skills in the classroom or school. Additionally, training schedules are to allow sufficient time for participant collaboration, reflection, and implementation of new teaching strategies.

In response to the need for accountability measures, the National Staff Development Council developed research-based standards for high-quality professional development. The literature supported adherence to research-based standards for the improvement of the teacher knowledge and skills that are essential to student achievement. To impact student achievement, professional development training must be developed and evaluated in accordance with research-based standards. Research has

shown that improving teacher knowledge and teaching skills is essential to improving student achievement.

The absence of physical presence in the online environment was found in the review of the literature. The literature supported the use of blended training in which face-to-face and online instruction are combined as appropriate.

The purpose of the study was to provide insight into the experiences of a first-time facilitator of online professional development. Several areas of online instruction were investigated, including: (a) design and evaluation techniques, (b) instructional strategies, and (c) technologies used to facilitate online learning. The research question was: How does a first-time facilitator understand the process of delivering professional development in an online environment?

A case study design was applied to the research. The researcher/participant was the case under study in the context of the delivery of online instruction. According to Yin (2003), the use of a single case study design is valid when the case being studied is representative of a typical case. As the researcher/participant, I was the instrument of data collection for the study and provided a first-hand perspective of my experiences. Data for the study was collected from multiple sources to provide for triangulation of data and thus improve the study's validity and reliability, as recommended by Merriam (1998). The study was conducted in two phases. During Phase I, I participated in TOP training designed to prepare facilitators to deliver online professional development. During Phase II, I delivered an online professional course using the Blackboard® learning management

system. Data analysis was conducted throughout the collection of data, as recommended by Miles and Huberman (1994).

While working at the RCU as a curriculum specialist, I participated in an online train-the-trainer program called Training of Online Professionals (TOP) to learn how to implement teaching pedagogy in an online environment. The TOP training, which was designed to train educators to facilitate online professional development, was delivered online over a 10-week period. The training was required as a qualification for facilitators who wished to deliver professional development online to Mississippi's career-technical educators.

As an online learner, I perceived that completion of online activities was time-consuming. When I started TOP, I felt that I might not complete the training because I believed that online learning required significant amounts of time. Comments made in assignments and journal entries revealed my perception that online learning is time-consuming for learners and facilitators.

At the time I developed the PowerPoint® training session, I had never facilitated online training, and I assumed that the methods and materials used in the TOP training were sufficient to effectively deliver training. For this reason, I used the TOP training site and activities as a model when I developed materials and content for the PowerPoint® training. Selection of instructional materials was not addressed in TOP, and I chose activities and assignments for the PowerPoint® training based on my personal preferences.

I became very frustrated as I made several attempts to compile electronic notes from assigned readings as directed in some of the TOP assignments. After trying different approaches, I decided to ignore the directions. Instead of taking notes electronically, I printed hard copies of assigned readings, highlighted key points, and made handwritten notations on the printed documents.

TOP participants were not trained to implement assessment techniques in the sessions they developed and facilitated. Throughout the TOP training, there was a lack of feedback concerning my progress in the course and the quality of the assignments I submitted. Because I received no feedback concerning my performance, I lost motivation to complete assignments. I did not complete all of the assigned readings and did not put much thought into my contributions to discussions or the assignments I completed. I was frequently late in submitting assignments, and some assignments were incomplete. I did not participate in an online conference that was part of the training. I received credit for the training despite what I consider the poor quality of my completed assignments and my lack of participation.

After completing the TOP training, I delivered a five-week online session designed to train teachers to use Microsoft® PowerPoint® software to develop instructional materials. Throughout the PowerPoint® training, I followed the TOP model and did not assess participant performance or provide feedback on their progress. Participants did not complete all assigned activities. Late or incomplete assignments were accepted, and participants received credit for completion, regardless of performance quality.

Training content was not adjusted to meet participant learning needs in the TOP or PowerPoint® sessions. Participants in both sessions were expected to complete all assignments in the order presented. In the TOP training, a new module was posted each week regardless of learner progress in the course. The PowerPoint® session was designed and developed prior to the training and was not modified during instruction according to the results of diagnostic or formative assessments.

Throughout the PowerPoint® training I facilitated, participants did not complete every assignment, nor did they participate in every activity. Late or incomplete assignments were accepted, and participants were given credit for completion, regardless of performance quality. I did not provide feedback regarding participant performance or progress in the training.

As an online facilitator, I found that non-verbal cues and direct observation of the use of the PowerPoint® software were limited by the technology being used to deliver the training. I was unable to determine whether participants understood the material, to provide immediate feedback and corrective instruction, or to determine whether enrolled participants were the same people who completed and submitted assignments.

In addition to facilitating the PowerPoint® session, I was expected to provide administrative support for enrolling participants. Prior to the training, I assigned user names and passwords and enrolling participants in the training site. I felt obligated to provide technical support, because the program made no provision for providing support or training for participants with limited technology skills. In an effort to provide technical support, I provided information so that participants could contact me via email, instant

message, or telephone. I also designated a forum on the discussion board so that they could post frequently asked questions. Participants presented questions regarding a variety of technology-related issues. I had difficulty helping participants resolve their technology issues because I had no way of viewing their computer screens or systems so that I could troubleshoot technical issues. I felt overwhelmed by the volume of requests for assistance.

Four of the 14 participants who initially enrolled in the PowerPoint® training did not complete it. At the beginning of the training, I felt responsible for establishing communication with participants who had enrolled in the session but had not started to complete assignments. I emailed and called to encourage them to begin completing assignments. By the end of the course, my attitude toward those not completing the training had changed. I realized that not everyone is a candidate for online learning and was no longer alarmed when participants withdrew from the training.

I was unaware that my performance as a facilitator for the PowerPoint® training would be evaluated until I received an email from the evaluator three weeks after the session started. I was not provided with performance criteria until after I had finished facilitating the session. Although I received an overall score of 3.8 on a 4.0 scale, I felt that the evaluator comments were vague and subjective. I was disturbed by her comment that I should consider download time as part of estimated training completion time, because CEU credit was awarded based on the estimated time for completing assignments. In cases where my performance was praised, specific examples of exemplary performance were not cited. Where my performance did not meet the criteria

for the highest rating, no suggestions were provided for improvement. The evaluation did not mention my failure to address assessment of participant performance in the training.

The research question for the study was: How does a first-time facilitator understand the process of delivering professional development in an online environment? Three themes emerged from the data, including: (a) time, (b) adherence to standards, and (c) absence of physical presence. A discussion of themes that developed from the study was related to the literature. All of the themes could be found in the literature.

Conclusions

When I developed content for the PowerPoint®, I perceived that the task of designing a training session was time-consuming. Because no time record was kept during the process, no measure is available with which to gauge the accuracy of my perception. As a facilitator, when I developed content for the PowerPoint® training, I perceived that the task of designing a training session was time-consuming. Numerous studies have been conducted that reveal facilitator perceptions that online learning results in increased workload and time involvement (Betts, 1998; Ensminger & Surry, 2002; Lazarus, 2003; Passmore, 2000; Schifter, 2002). However, very few studies have attempted to quantify the time involved in online instructional delivery (Lazurus, 2003). Further research is needed to determine whether online instruction is more time-consuming than instruction in a face-to-face environment.

As a training facilitator, I did not anticipate how much time would be required to meet the responsibilities associated with non-instructional tasks. At the time that I agreed

to facilitate the training, I was not aware of the additional responsibilities that would be required of me. I was not adequately prepared to efficiently use available technology to manage administrative and support tasks. I needed to be prepared for the additional responsibilities. There was a need for additional technical support for participants beyond that which I provided. Additionally, some participants needed to develop skill in using the technology required for learning online, and they needed to be prepared to learn online through an orientation to online learning. They also needed to be made aware of the time needed to complete the training.

As a participant and facilitator in an online learning environment, I spent time preparing and organizing printed documents. Even though I am an experienced user of technology, I printed and organized documents for learning and for record-keeping tasks a majority of the time that I spent in the online learning environment. Prior to the training, I was unaware of the time needed for learning and record-keeping tasks. This finding supports the conclusion that there is a need for participants and facilitators in the TOP program to be made aware of the time needed to complete these tasks.

As a participant, I found the task of using word processing software to create notes from assigned readings to be challenging and time-consuming. I preferred to print, read, and highlight key points from the readings. My experience was consistent with Sellen and Harper's (2002) findings that the use of paper supports activities that require reading.

Participants in TOP and in PowerPoint® were awarded continuing education units (CEUs) based on the estimated completion time for the training. Assignments were not

assessed to determine the quality of learner performance. The National Staff Development Council (NSDC, 2001a) recommended the awarding of CEU credit based on performance.

The training that I developed and facilitated did not adhere to content standards or standards for online professional development. Improving teacher knowledge and teaching skills is essential to improving student achievement. Because students spend a large portion of their time in a learning environment interacting with teachers, what teachers know and can do directly impacts student learning (Sparks & Hirsch, 2005). The development of training based on standards supports the improvement of teacher knowledge and skills, thus providing opportunities for the improvement of student achievement, which is the primary purpose of professional development.

When I facilitated the PowerPoint® training, I encountered several issues related to the absence of physical presence in the online learning environment. When I contacted participants via email or telephone and received no response, I was unable to determine the cause. I found it difficult to gauge participant understanding or provide immediate corrective instruction. I was unable to view participant computer screens when I tried to troubleshoot technical issues. In addition, it was impossible to determine whether the enrolled participant was the person completing and submitting assignments. A blended approach to instruction may be used to address issues related to the absence of physical presence.

As a TOP training participant, I experienced a lack of motivation to complete written assignments due to the lack of feedback from the facilitator, and I was motivated

to participate in activities that involved interaction with other participants by a desire to share ideas with them. From this finding, the conclusion can be made that the training could be improved by providing feedback from the facilitator and by including additional activities that support the development of online learning communities that provide for interaction.

As a training participant, I logged in to the training site regularly and posted comments to the discussion board, even though I did not complete the written assignments on time. My contributions to the discussions gave the appearance that I was an active participant in the training, although in fact, I was not completing any of the assigned activities that were to be completed independently, including the reading assignments. From this finding, the conclusion may be drawn that a limitation of the online environment is that it is possible for a participant to give the appearance of being an active participant without completing activities that are designed to be completed independently.

As a participant, my work and family obligations and social activities interfered with completion of the training. I had difficulty prioritizing so that training assignments were completed on time. I needed to evaluate personal and work-related responsibilities prior to the training, and develop time management skills. From this finding, the conclusion can be made that participants need to be made aware of the requirements for the training so that priorities can be set.

As a facilitator, I observed that participants also experienced issues concerning timely completion of the PowerPoint® training. Many factors contributed to the

completion issues participants faced in the PowerPoint® training. Their reasons for not completing the training indicated that there was a lack of understanding of the time necessary for online learning. Additionally, participants experienced communication difficulties, a lack of immediate technical support, issues in using the technology, and limited access to equipment. This finding implies the need for an understanding of the time involved in online learning, and the need for structures to be put in place to address issues of technical support, technology proficiency, and equipment access.

As a facilitator, I did not understand the concept of learning communities. The interactive tools in Blackboard® were not used to support implementation of participant skills through mentoring, collaboration, reflection. Additionally, the length of the PowerPoint® session did not allow time for participants to collaborate, reflect, and implement knowledge and skills.

Recommendations

Based on the findings of this study, the following recommendations are offered for the Training of Online Professionals (TOP) professional development sessions and for others who are interested in providing training or professional development using an online learning management system.

It is recommended that facilitators be trained to develop online professional development training aligned with professional development and content standards. It is also recommended that training be evaluated in accordance with professional development and content standards. After completing the TOP training, I did not

understand how to align the training I developed and facilitated with standards. Additionally, the ratings given and comments made by an external evaluator gave no indication that the training did not adhere to standards. I received a 3.8 rating on a 4.0 scale on the evaluation of the session conducted by an external evaluator, although after a self-assessment of the training, I concluded that the session did not meet the Standards for Online Professional Development (SREB, n.d.). The evaluator also noted that it was "good to have NETS standards for reference." Her comment gave no indication that the training did not meet NETS standards (ISTE, n.d.), although my assessment of the training conducted during data analysis indicated that the session did not adhere to these standards.

It is recommended that participants be awarded credit based on demonstrations of learning and student achievement, in accordance with Standards for Online Professional Development (SREB, n.d.). Training participants completed the training at their own rate; no measure was made of the time spent completing activities. Credit was awarded based on the estimated time needed for training completion.

It is recommended that training facilitators be made aware of non-instructional responsibilities and receive training and support for the efficient use of technology to manage administrative and support tasks. As a facilitator, I did not anticipate the time required to meet non-instructional responsibilities. Additionally, I was not aware of web-based resources that were available for online technical support.

It is recommended that measures be taken to support participants in completing training activities by implementing firm deadlines, providing feedback on submitted

assignments, and implementing additional opportunities for participant collaboration. Without enforcement of completion deadlines or feedback on submitted assignments, I lost motivation to complete written assignments and failed to complete them on time. However, I completed activities that involved interactions with other participants because I enjoyed sharing ideas with them. My interactions with other participants influenced my decision to continue with the training. My experience was consistent with findings from the literature, which indicated that success in the online environment was significantly influenced by contact with course instructors (Swan et al., 2000), that feedback is critical for online learners who may feel isolated and detached from others (Hootstein, 2002), and that without deadlines, learners may fail to participate in activities (Bradshaw, Powell, and Terrell, 2002).

It is recommended that facilitators and participants be made aware of the time needed for completing learning and record-keeping tasks and of the need for the use of paper when cross-referencing and annotating documents. As a participant and a facilitator in an online learning environment, I spent time preparing and organizing printed documents. As a participant, I was challenged by the task of using word processing software to take notes from assigned readings.

As a facilitator, I observed that participants experienced issues related to the completion of the training. It is recommended that participants be made aware of the time needed for the online training. It is also recommended that participants without demonstrated proficiency in using the technologies required for online training receive

training prior to enrollment in online sessions. Additionally, it is recommended that structures be implemented to address issues of technical support and equipment access.

It is recommended that a blended approach be implemented in professional development training to address issues associated with the absence of physical presence in the online environment. As a facilitator, I experienced issues related to the absence of physical presence in the online learning environment. Lant (2002) found that physical presence was important for learning, and the SREB (n.d.) noted that blended training in which face-to-face and online instruction are combined may be used where appropriate.

Further research is recommended to investigate the use of web-based publications in the delivery of online professional development. Examples of these publications might include web logs and WebQuests.

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APPENDIX A

CURRICULUM VITAE

Renée Gammill
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Mississippi State, MS 39762
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EDUCATIONAL BACKGROUND

Mississippi State University.
Currently enrolled in Doctor of Philosophy program.
Major: Instructional Technology. Minor: Educational Leadership.
Anticipated date of graduation: December 2005.

Mississippi State University, 2001.
Educational Specialist in Educational Leadership.
Received training in technology, school management and supervision, public relations, and community involvement.

Mississippi State University, 1993.
Master of Education in Technology.
Studied computer lab management, concepts of computer-assisted instruction, curriculum design, and theories for teaching business education subjects at the post-secondary level.

Mississippi State University, 1992.
Bachelor of Science in Technology Teacher Education.
Completed teacher education program with emphasis in career-technical education.

PROFESSIONAL EXPERIENCE

November 2002 to present.
Senior Research Associate/Curriculum and Assessment Specialist
Research and Curriculum Unit for Workforce Development
Mississippi State University; Starkville, Mississippi

Responsible for the development of the state curriculum frameworks and Career Planning and Assessment System (CPAS) test documents for secondary and postsecondary career-technical business, marketing, and information technology programs.

January 2002 to November 2002.
Principal
Oktibbeha County School District; Starkville, Mississippi
Facilitated the consolidation of two high schools in the district.

July 1995 to January 2002.
Business and Computer Technology Teacher
Millsaps Career and Technology Center
Starkville School District; Starkville, Mississippi

- Classroom Responsibilities: Instructed career-technical business students, using classroom computer network. Supervised student teachers and practicum students. Chartered the school's first FBLA chapter.

- Community Partnerships: Conducted computer training for Adult Education classes and software training for a local business. Administered employment tests for the school district and for area businesses. Maintained an active craft committee and frequently visited industry to gather information for instructional improvement. Participated in teacher internship program at National Bank of Commerce.

- Additional Responsibilities: Developed and participated in Tech Prep activities with academic teachers each semester. Served as student advisor and class sponsor. Planned, developed, and coordinated staff development activities for career-technical faculty. Taught staff development computer training sessions for the district. Served as secretary of the building Safety Committee.

- Service Activities: Served on MCTC Faculty Advisory Board. Participated in Starkville School District Teacher Leadership Activities. Member of SACS Review Committee.

August 1993 to July 1995.
Business and Computer Technology Teacher
Lowndes County Vocational Complex
Lowndes County Schools; Columbus, Mississippi

PROFESSIONAL CERTIFICATIONS

July 2004. IC^3 Certification: Internet and Computing Core

November 2001. National Board for Professional Teaching Standards Certification in Career and Technical Education

PUBLICATIONS

May 2005. Mississippi Curriculum Framework for Postsecondary Business and Office Technology

May 2005. Mississippi Curriculum Framework for Postsecondary Banking and Finance Technology

November 2004. CPAS Test Document for Postsecondary Computer Programming Technology

November 2004. CPAS Test Document for Postsecondary Local Area Network Technology

November 2004. CPAS Test Document for Postsecondary Office Systems Technology

November 2004. CPAS Test Document for Postsecondary Paralegal Technology

November 2004. CPAS Test Document for Secondary Business and Computer Technology

November 2004. CPAS Test Document for Secondary Cooperative Education

November 2004. CPAS Test Document for Secondary Marketing Management Technology

May 2004. Mississippi Curriculum Framework for Postsecondary Automotive Vehicles and Accessories Marketing.

May 2004. Mississippi Curriculum Framework for Secondary Business and Computer Technology.

May 2004. Mississippi Curriculum Framework for Secondary Marketing Management Technology.

PRESENTATIONS

May 2004. Mississippi State University, Starkville, Mississippi
Organizing the Internet: Using WebQuests to Guide Student Learning.

March 2004. BlackBoard® Users Conference, Phoenix, Arizona
Cross the B.R.I.D.G.E. to a Standards-Based Curriculum With Blackboard®.
Co-presenter: Dr. Stephanie King.

January 2004. Mississippi Educational Computing Association (MECA), Jackson, MS
Cross the B.R.I.D.G.E. to a Standards-Based Curriculum
Co-presenter: Dr. Marilyn Bowen

June 2003. Mississippi State University, Starkville, Mississippi
Creating Assessments Using WebCT.

PROFESSIONAL AWARDS, HONORS, AND MEMBERSHIPS

Academic Prestige Award, Cohort 3, Department of Educational Leadership, Mississippi State University, 1999-2001
Alpha Theta Chi, Collegiate Honor Society, Mississippi State University, 2001
Nominated for 1997-98 Teacher of the Year, Millsaps Career and Technology Center
Mississippi Association for Career and Technical Education
National Business Education Association
International Society for Technology in Education
Association for Supervision and Curriculum Development
Mississippi Educational Computing Association

PROFESSIONAL LEARNING

Adobe Photoshop
ITS, Mississippi State University, October 2004

Interactive Media
Mississippi State University, Spring 2004
- Created instructional materials using Windows® Moviemaker®, Macromedia® Flash®, Adobe® Photoshop®, CamStudio®, and PowerPoint®.

Business Writing Basics for Professionals
Mississippi State University, May 2004

Telecommunications: Applications in Scholarship
Mississippi State University, Summer 2003
- Researched and presented information related to communication technologies.

Integrating Curricula Within and Across Disciplines: Concept-Based Unit Design.
Association of Supervision and Curriculum Development
Indianapolis, IN May 2003

Technology for School Leaders
Mississippi State University, Summer 1999
- Researched and analyzed administrative technology applications.
- Developed a sample technology plan for a career and technical center.

Novell Client 4.11
IKON Office Solutions, Summer 1997
- Studied the maintenance and administration of classroom computer networks.

Microsoft Office Suite
Owens Business Machines, Summer 1996
- Completed training in the use of the Microsoft® Office® Software Suite, including Word, Access®, Excel®, and PowerPoint®.

Desktop Publishing Principles and Applications
Mississippi State University, Spring 1994
- Applied principles of desktop publishing design to educational applications.

AREAS OF MISSISSIPPI EDUCATOR LICENSURE

AAA 486 Administrator
AA 105 Business Education
AA 111 Computer Applications
AA 310 Business and Computer Technology
AA 317 Cooperative Education

APPENDIX B

INTERVIEW PROTOCOL

Interview Protocol

Participants will be interviewed to obtain information related to the following topics:

Teaching experiences/educational background

Experiences as a participant in the professional development facilitator training program
- Use of Blackboard® learning management system
- Time constraints
- Communication with instructor and with other participants

Experiences in developing online professional development courses
- Adaptation of activities to be used online as opposed to face-to-face

Experiences in the delivery of online instruction
- Online instructional delivery methods used
- Learner engagement
- Instructional aids

Research areas to be addressed in the study:

Design and Evaluation

- How well the TOP training prepared you to design an online course
- Activities, techniques, or materials that worked well in the online environment
- Barriers or problems you encountered in designing the course
- How you promoted learner interactions
- How you evaluated learners

Instructional Strategies

- The instructional methods you experienced in the TOP training. How you applied these in the delivery of the professional development course that you facilitated
- Barriers or problems you encountered in delivering instruction online
- How your experience as an online instructor compared to your experience as a face-to-face instructor

- How the TOP training compared to your experiences in face-to-face professional development environments
- How well the TOP training prepared you to deliver online instruction
- How the TOP training might be improved to better prepare facilitators for online instruction

Technologies Used for Facilitating Online Learning

- Your experiences as a professional development trainer using an online course delivery system
- Issues encountered in using the learning management software
- Issues encountered in the delivery of online instruction

Additional topics may be discussed as they arise in the interviews.

Participants may be given transcripts of interviews in which they participated or field notes or document analyses relating directly to their portion of the study. They will be asked to review the researcher's findings for accuracy and plausibility and provide comments at the next scheduled interview.

APPENDIX C

JOURNAL FORMAT

Journal Format

Please keep a journal that documents your experiences in delivering professional development online. Include information related to how you planned and designed the course, the instructional materials you used, the instructional strategies that you implemented, your techniques for facilitating learning and promoting participant interaction, and how you evaluated participant learning.

Please address the following areas in each entry.

1. Progress made in the course since your last journal entry. (Describe the current unit or module. What unit or module are learners working on? What instructional activities have you implemented? Are you ahead of schedule, behind, or right on target?)
2. Barriers or problems encountered in delivering instruction online
3. Plans for addressing barriers or problems
4. Activities, techniques, or materials that worked well in the online environment
5. General reflections: Any additional comments/observations you wish to make regarding your experiences teaching online

APPENDIX D

OBSERVATION PROCEDURES

Observation Procedures

The Blackboard® learning management system will be used to deliver online professional development instruction via the Internet. I, Renée Gammill, the primary researcher, will be enrolled as an observer in the online courses conducted by participants. I will observe their online teaching behaviors, which may include the posting of teaching materials, the use of online chat discussions, or posts in online discussion forums within the Blackboard® learning management system. Observations will focus on (a) design and evaluation techniques, (b) implementation of instructional strategies, and (c) use of technologies to facilitate online learning.

Participants will be informed that their online professional development course will be used for data collection and that Renée Gammill, the researcher, will be enrolled as a participant in all online training sessions. The *Statement of Informed Consent* clearly states that I will be enrolled in the sessions for research purposes. In Blackboard®, the names of all course participants, including mine, will be listed on the site, beneath the course name. This further ensures that participants will be aware of my presence in the online sessions.

Blackboard® includes a discussion board as well as chat capability. Data may be collected from the discussion board or chat room, and quotes from these forums may be used. Within the Blackboard® system, each participant will be assigned a login-name/pseudonym. Published data will not be identified or associated with participants' names, login-names, or assigned pseudonyms.

No covert research or observations will be conducted in the online forums within Blackboard®. Participants will be aware of my online presence and my purpose for being enrolled in the online course. My name will be listed on the course site as an enrollee, and participants will be informed that I am enrolled for research purposes.

All three participants will be teachers who have been trained to deliver online professional development. Course sites are password protected and require participants to login in order to access the site. Participants must be enrolled in the course site by an employee of the Research and Curriculum Unit for Workforce Development at Mississippi State University. This mechanism will ensure that only adults are included as participants in the study.

APPENDIX E

CASE STUDY OF PEGGY DAWSON

Peggy Dawson

Peggy's first introduction to the use of educational technology was in an elementary school in a position in which she was responsible for supervising students in a computer lab. The principal hired her because Peggy was confident that she could learn the technology, although she had no previous experience. She supervised students as they used computer software programs designed to improve their academic skills. Peggy observed that the students who exhibited behavior problems in their classrooms did not exhibit these problems in the computer lab. Peggy attributed their improved behavior to the use of technology in the lab, and this piqued her interest in educational technology applications.

Peggy's principal actively promoted the implementation of technology in the school. He wrote grants for technology implementation and formed a technology committee designed to provide support for the use of technology. Peggy volunteered to serve on the technology committee and attended the annual conference of the Mississippi Educational Computing Association. Peggy participated in several technology training sessions that were provided as part of the school's professional development program. Because she enjoyed the training, she realized that she wanted to teach others to integrate technology in the classroom. She knew, however, that she would need to develop the necessary technology skills.

During the time that Peggy participated in the training activities, she observed that her son's English teacher used classroom technology through innovative assignments designed to motivate her son to get involved in the class, even though he hated English.

She used the Internet to make the subject more interesting for him. In a casual conversation with Peggy, the teacher related that she was working on a doctorate in Instructional Technology. Because Peggy wanted to learn how to integrate technology in the classroom, the teacher referred her to an advisor at a local university, who assisted Peggy with the enrollment process.

Because Peggy was late in registering for her first semester at the university, many of the classes were filled to capacity, which meant that the selection of courses was limited. As a result, Peggy enrolled in an online course that had recently been developed, and became one of the first online students at the university.

Peggy completed course activities in an online environment using the WebCT® learning management system. As an online student, Peggy did not have Internet access at home. She completed assignments using equipment available at the university. Her first online test was to be taken during a designated time period set by the instructor. The time designated for the test did not occur during the hours that university equipment was available to Peggy. To access the test, she used a neighbor's computer and dialup Internet connection. She experienced difficulty with the connection, and as a result, was late starting the test. As a result, she was unable to complete the test within the designated time frame. At the time this situation occurred, the university offices were closed for the day, therefore, she left a message on the instructor's office answering machine to explain why she had not finished the test. At school the next day, she made arrangements with the instructor to finish the test.

Peggy struggled with the limited communication in the course. Email was used for communication, and limited provision was made for collaboration among students in the virtual classroom or discussion board available within WebCT®. When Peggy attempted to initiate a discussion with others enrolled in the course, she received few responses. In addition, the instructor was slow to respond to emails.

As part of a graduate assistantship in the department in which she was enrolled, Peggy taught a face-to-face introductory course for pre-service teachers designed to introduce basic computer concepts. After one year as a graduate assistant, she was hired by the department as an instructor and remained in that position for two additional years.

In addition to the face-to-face introductory computer course, she taught the same content in an online introductory computer course using WebCT®. At that time, Peggy found that there was little research related to the delivery of online instruction. In the online course, she used methods that were modeled in the courses in which she was enrolled and the activities that she used in the face-to-face version of the course. For extra credit, a student in the face-to-face course typed class notes and helped Peggy create a list of the activities and assignments that had been completed. Peggy posted the notes and the list to WebCT® for use by the online students. When she taught the online course, she remembered her experiences as an online student and vowed to respond quickly to student emails and to provide opportunities for students to become involved in discussions. She believed that being an online student helped her to become a better online facilitator.

Over time, Peggy taught additional online courses at the university, including a telecommunications course, and a course designed to prepare students to integrate documents created among various types of application software. Peggy believed that her instructional skills in the face-to-face classroom were improved by teaching online. When asking questions as face-to-face instructor, she noticed her tendency to answer her own questions. The lag time in asynchronous online communication forced her to wait for student responses before replying. As a result of this experience, she learned to increase the time allowed for student responses in the face-to-face environment

While Peggy was a student at the university, she entered a full-time position as a professional development specialist at the Research and Curriculum Unit for Workforce Development (RCU) at Mississippi State University. In her first attempt at delivering online professional development, Peggy facilitated an online professional development training session in Microsoft® Word®. Another specialist facilitated a session in Microsoft® PowerPoint® at the same time. These sessions were the precursors to the TOP training program.

Peggy developed the TOP training from the *Standards for Online Professional Development* (SREB, n.d.) and from articles that were related to the standards. From the standards and the articles, she developed 10 topics that she believed to be most important for the training of online facilitators. Training objectives were developed from the *National Educational Technology Standards for Teachers* (ISTE, n.d.).

Peggy facilitated the TOP training which was delivered online through the Blackboard® learning management system. In TOP, Peggy demonstrated strategies for

online instruction and classroom management and presented techniques for instructional design and evaluation. Each participant in the program was to develop an online professional development training session. Participants who completed the TOP training were given the option to facilitate the professional development sessions created during the training.

Peggy designed the TOP training to help participants understand that delivering online content is different from teaching in a face-to-face environment. She wanted participants to understand how to engage passive learners in online training by providing opportunities for interaction.

Throughout the TOP training she structured activities and assignments so that they would acquire information from sources other than the online lectures and assigned readings. Her goal in the training was to provide opportunities for participants to take an active role in the learning process. She wanted participants to "own what they were learning," and to be able to implement the techniques modeled in the training.

APPENDIX F

CASE STUDY OF LISA WHEELER

Lisa Wheeler

Lisa was a third-year secondary cooperative education teacher, who had received a 3-year special vocational teaching license. At the time she entered the teaching profession, she held a Bachelor of Science degree from Oklahoma State University in Animal Science and Ag-Communications. To receive a Mississippi 5-year standard vocational teaching license, she completed the Vocational Instructor Preparation (VIP) Program sponsored by the Mississippi Department of Education, delivered through the Research and Curriculum Unit for Workforce Development.

In the course of becoming licensed to teach through the VIP program, in addition to a week-long face-to-face training session, Lisa was required to complete three online training sessions. She decided to participate in the TOP training program because she wanted to earn extra money by delivering online professional development sessions, and to increase her knowledge of online instructional delivery so that she could eventually work from home.

At the time we met, she was enrolled in a Master of Science program in Agricultural Education. She had completed her coursework and was writing a thesis in order to complete the degree requirements.

Lisa facilitated a course entitled Basic Blackboard®. The course was designed for 15 hours of instruction delivered over a five-week period. Throughout the training, participants developed course sites in Blackboard® to be used in their face-to-face courses with secondary students. Each week, Lisa provided questions that guided participants to develop various elements of the course site. The questions were designed

to guide participants in determining the purpose of various components of the Blackboard® learning management system, comparing the components, and then explaining how they would teach participants to use each of them.

For the first three modules of the course, participants used an online help manual available at http://behind.blackboard.com as a resource for finding answers to the guiding questions. For the remaining two modules, they were given a step-by-step tutorial that guided them through the steps required to build a course site.

Some participants also used Internet search engines to locate information that would help them answer the questions. A search engine is a website that allows a user to search the Internet for information by using keywords related to a given topic. The user accesses the search engine by typing its web address, types a keyword, and then presses the enter key on the keyboard. The computer then displays a list of links to websites that contain information related to the topic.

Lisa learned to use the Blackboard® system by participating in two face-to-face professional development training sessions delivered by Amanda Jones, who was also a participant in the TOP program and in the research study. Although she had used the Blackboard® software in her cooperative education classes, the Basic Blackboard® professional development training was her first attempt at delivering instruction online.

APPENDIX G

CASE STUDY OF AMANDA JONES

Amanda Jones

At the time we met, Amanda had been employed as a secondary teacher for seven years, teaching telecommunications, multimedia and cooperative education. She held Bachelor and Master of Science degrees in Instructional technology from Mississippi State University. She had had extensive experience as an online student; almost all of the courses in her graduate program had been delivered online.

As a face-to-face classroom teacher, she had developed a web page for use in her classes. In an Internet-based search for software that could be used in this process, she found a website for the Blackboard® learning management system. At that time, Blackboard® was being offered free of charge, and Amanda started using it in her classroom.

She had delivered professional development training in face-to-face sessions in her local school district and through the Research and Curriculum Unit for Workforce Development (RCU), which contracts with the Mississippi Department of Education to develop and deliver professional development training for the state's career-technical teachers. During the summer prior to the TOP training, she had traveled the state delivering face-to-face professional development sessions for the RCU. When the TOP training was offered, she elected to participate because she wanted to teach online and had enjoyed taking online classes. She felt that delivering professional development training online would be more convenient than the extensive traveling that had taken her away from her family the previous summer.

Amanda facilitated a course entitled Advanced Blackboard®. The course was designed for 20 hours of instruction, delivered over a five-week period. Throughout the training, participants developed a course site to be used in their classrooms, using advanced techniques. Amanda posted a step-by-step tutorial, and participants worked through the tutorial to learn how to enroll users, to create discussion board forums and online tests, and to use the electronic grade book.

At the time she delivered the online professional development training, she was concurrently teaching an online course in business communications at a local community college. In addition to the TOP training, she received face-to-face training in online course development through the college. The community college training provided additional opportunities for her to develop online training materials to be implemented in the Blackboard® environment.

APPENDIX H

RUBRIC USED FOR EVALUATION OF POWERPOINT® TRAINING SITE

Final Project

Each of you has chosen a module to create as your final project. The module will be "graded" on following topics.

	Excellent	Great	Good	Oops!
Content	Three or more resources	Two Resources	One Resource	Wrong Content
Pedagogy	Instruction is varied and participant centered	Instruction is participant centered	Instruction flows, but is instructor centered	Instruction is Stiff
Interaction Plans	Three or more Activities	Two activities	One activity	No Interaction Plans
Learning Activities	Three or more Activities	Two activities	One activity	No leaning activities
Group Activities	Three or more Activities	Two activities	One activity	No group activity
Virtual Office Hours Posted	Added a picture	All information	Just email address	No
Assessment Plans	Used various forms of assessment (more than 4)	Has three assessments	Has two assessments	Has one Assessment
Overall Appearance	Every handout, PP, activity matches with a theme	A theme runs through it	OK	Not appealing to the eye

External Evaluator Comments: (for RCU use only)

APPENDIX I

EVALUATION USED TO ASSESS PERFORMANCE

OF POWERPOINT® TRAINING FACILITATOR

Connect 2004

Research and Curriculum Unit
Office of Vocational and Technical Education

Professional Development Activity External Evaluation Form

Title of Activity: PowerPoint **Overall Rating:** 3.8

Presenter: Renee Gammill

Date (s): Spring 05 PD **City:** Online

Location/Bldg. _____ **Room #** _____

Appraisal Scale: 1- Not Acceptable **2-**Marginal **3-**Quality **4-** High-Quality **N-**Not Applicable

I. Learning Environment

Blackboard® Site **Rating**4

4 Site was easy to move around in

4 Site was appealing to the eye

4 Site content was appropriate

Comments about the Learning Environment:

Liked the quotes, liked use of color in links, had mixed feelings about estimated time of completion for assignments, too much personal info, place personal info in one place.

II. Instructional Materials/Resources

PRINT/ELECTRONIC/WEB-BASED MATERIALS **Rating**3.8__

4 Instructional materials include staff information

4 Instructional materials include relevant, obtainable objectives

4 Instructional materials are research- and standards-based

4 Instructional materials include a complete bibliography

4 Instructional materials include Action Items for participants

4 Instructional materials include relevant graphics/photos

2 Instructional materials are relevant to this specific training session

4 Instructional materials include a current agenda

4 Instructional materials are well-organized, attractive, and easy to read

4 Instructional materials are error free

Comments about the Instructional Materials/Resources:

Need to use deadline dates, good Discussion Board participation, liked printable check sheet, liked grouping, good to have NETS standards for reference, a lot of work for amount of credit received, long download times (most people probably are working on dial-up connection, did not like topics on DB such as rubrics, learning styles because I was taking as a subject related class, liked tag, chat

III. Participants

Rating3.33_____

3 Participants feel comfortable and are interacting with the presenter

4 Participants are stimulated and engaged in the process

N Participants are willing to establish a learning community beyond the training session—B.R.I.D.G.E., email, chat rooms, other

N Participants use time wisely

N Participants display positive attitudes

3 Participants show evidence of understanding and enlightenment

IV. Facilitator

PERSONAL CHARACTERISTICS **Rating**4____

4___Presenter is flexible

4___Presenter is poised and confident

4___Presenter is available to participants through email, chat room, discussion board

4___Presenter is enthusiastic about the training

PRESENTATION SKILLS **Rating**3.88___

4___Presenter is adequately prepared to conduct training and displays sufficient knowledge of the content

4___Presenter has practiced with the use of any equipment or technology

4___Presenter establishes an active learning environment that includes ample practice

N___Presenter models effective teaching, including time on task

4___Presenter states the objectives

4___Presenter implements learning activities in a logical sequence

N___Presenter is articulate and projects voice and is clear and easy to understand

3___Presenter maintains a relevant pace and variance of activities

N___Presenter offers assistance and praises participants

4___Presenter uses familiar terms and provides numerous examples

N___Presenter uses effective questioning to check for understanding and incorporates Participant's feedback into the presentation

N___Presenter attempts to involve/engage all participants equitably

N___Presenter is patient, positive, and motivating

4___Presenter uses a variety of teaching delivery methods

N___Presenter employs an appropriate use of humor

Please place an "X" next to the teaching delivery methods used by this presenter.

X___Lecture	X___Large Group Discussion
X___Demonstration	X___Small Group Discussion
___Role Play	X___Games/Simulations
___Case Study	

Comments about the Presenter:

Did a great job however I thought it was a lot of work for amount of credit received. Need to consider the download time as part of anticipated time of completion.

[redacted]
Signature of External Evaluator

May 20, 2005
Date

APPENDIX J

STANDARDS FOR ONLINE PROFESSIONAL DEVELOPMENT

Standards for Online Professional Development

Guidelines for Planning and Evaluating Online Professional Development Courses and Programs

Teachers need high-quality professional development to help their students meet states' new academic standards and to meet the goal of having a high-quality teacher in every classroom. Online instruction provides teachers with quality professional development through "anytime, anywhere" access to courses and workshops.

While there is a wealth of information in the literature about what is required to provide quality professional development, the use of new technologies to provide teachers with access to quality online professional development is new. Building on the research regarding traditional, face-to-face professional development, online professional development affords teachers, schools and states opportunities never before available. These *Standards for Online Professional Development* have been developed to help schools and states as they begin to use the Internet to provide teachers with much-needed professional development.

The *Standards for Staff Development* document by the National Staff Development Council (NSDC) provides widely accepted and highly regarded standards for professional development. While these standards were developed with face-to-face professional development in mind, they also reflect important aspects of quality professional development, regardless of how it is provided. This document expands NSDC standards to include important issues and topics unique to online learning.

*The SREB Multi-State Online Professional Development (MOPD) initiative wishes to acknowledge and thank the National Staff Development Council for its support and assistance in the development of these standards. The standards were developed with the assistance of the SREB states' departments of education, Educational Development Center Inc., National Staff Development Council and SouthEast Initiatives Regional Technology in Education Consortium (SEIR*TEC).*

e-Learning Context Standards

The Context Standards address key issues regarding who is to participate and what leadership, support and resources are necessary to provide quality professional development. This section adds the online perspective, expanding the National Staff Development Council Standards to include additional context standards and indicators illustrating how these standards are implemented.

Online Professional Development Program Standards	Online Professional Development Program Indicators
Learning Communities – The program provides opportunities for educators to build online learning communities and to work together in pairs or teams, with access to follow-up discussions to share information.	Opportunities for participants to collaborate online during and following courses and workshops are provided. Online professional development goals are aligned with the states' and schools' academic standards, as well as goals for student academic achievement. Acceptable participation requires adherence to communication standards, and legal and ethical use of the Internet.
Leadership – School and state leaders view online professional development as an integral part of the organization's overall professional development plan.	School and state leaders advocate online professional development for teachers, administrators, school boards and community leaders. Online delivery is integrated into the organization's comprehensive professional development plan. Organizational leaders actively participate with staff in online professional development activities.
Resources – Schools and states provide adequate *and ongoing funding for* the online program as part of the overall professional development plan. Schools and states provide adequate resources of time, personnel and support systems for online professional development.	Budgets for professional development include funds for online course development and revision, course evaluation, program management, instructors, technical *support, and software and hardware upgrades.* A technology coach or mentor program is provided to support successful participants' use of online professional development. The online professional development program provides the same incentives for the online participants as for participants of other professional development opportunities who receive incentives, such as stipends or credits toward recertification. The essential technology infrastructure is in place to support online professional development programs. Participants should be provided with any needed technology training to enable their successful participation. Schedules allow sufficient time for participants to collaborate, reflect online and implement new teaching strategies in the classroom. Partnerships with colleges and universities, businesses and other organizations are used to meet participants' professional development needs.

e-Learning Process Standards

The Process Standards address key issues regarding what goals are to be achieved and how they will be accomplished. This section adds the online perspective, expanding the National Staff Development Council Standards to include additional process standards and indicators illustrating how these standards are implemented.

Online Professional Development Program Standards	Online Professional Development Program Indicators
Data-Driven – Program priorities include participant online learning goals that are based on a careful analysis of disaggregated student data.	School professional development teams determine online program priorities based on current adult learning needs and gaps in student achievement.
Evaluation – Evaluations include diagnostic, formative (ongoing sharing between participant and instructor) and summative (to summarize participant learning), and online access is used to ensure that adult participant needs are met.	Program is designed to include online assessments with timely feedback to evaluate participant learning measured against program goals. Student grades, test scores and other schoolwide indicators — such as enrollment in classes, discipline reports and retention rates — may be used to measure the impact of online professional development programs.
Research-Based – Program supports online participant use of research to determine academic needs of students and successful learning strategies.	Program assessment data are routinely compared to national research in these five areas: Participant reactions to online professional development. (Was it time well spent? Was it meaningful to the participants?) Participant learning. (Did the online participants acquire the intended knowledge, skills and attitudes?) Organizational support. (Does the organization recognize and value the use of new skills gained in the online professional development?) Participant implementation. (Do the online participants actually implement skills and strategies in their classroom?) Student impact. (How is student achievement affected by the skills and strategies acquired in the online professional development program by participants?)

e-Learning Process Standards (continued)

Online Professional Development Program Standards	Online Professional Development Program Indicators
Design – Program uses appropriate technologies to present materials in a variety of ways, addressing a range of learning styles. Program integrates face-to-face professional development with online professional development where appropriate.	Instructors select and use teaching strategies — including multimedia technologies and online tools — appropriate to the intended results of the program. Instructors choose face-to-face activities and online activities appropriate to participant needs. Instructors utilize online tools, such as discussion boards, e-mail and virtual classrooms to support mentoring, collaboration, implementation and reflection. Programs support learner schedules by providing "just in time" online professional development. Online course structure and navigation processes are clear, appropriate to the content and easy to use.
Learning – Program incorporates a variety of online learning experiences to meet the learning needs of participants.	Online learning experiences are designed to meet participant needs and learning styles. Online learning experiences are linked to participants' teaching assignments and curriculum areas. Assessment of participant online learning may include documented use of new knowledge and skills through videos or e-journals. To meet the learning needs of participants, online professional development programs should include a variety of learning experiences — such as video, audio, simulations, CDs, Web resources and access to experts in subject matter — as appropriate. Program provides means for online participants to solve technical and implementation issues, including successfully accessing courses and responding to participant questions. Combining online and face-to-face instruction (blended instruction) may be used to accommodate varied learning styles. Participants have opportunities for reflection and follow-up within the design of the program. Program includes a continuum of online courses to accommodate the varied readiness levels of participants.
Collaboration – Interactive communication tools — such as forums, chats and discussion boards — are used to develop and maintain a collegial online learning community.	Strategies are used that promote sharing and working together to achieve common goals. Course design provides opportunities for collaboration. Online instructors have specific understanding of the challenges and strategies for building an online learning community.

e-Learning Content Standards

The Content Standards address key issues regarding quality and equity of access. This section adds the online perspective, expanding the National Staff Development Council Standards to include additional content standards and indicators illustrating how these standards are implemented.

Online Professional Development Program Standards	Online Professional Development Program Indicators
Equity – Differences in learners' cognitive and social characteristics, content background, attitudes and motivation, and technical abilities are addressed using appropriate online strategies. Issues of equity in access to technology, infrastructure and course participation are addressed at the program and course level.	Online content and delivery are flexible and inclusive, to engage diverse learners and learning styles. Programs are compliant with Section 508 of the Rehabilitation Act. All online course materials are provided in a format that can be used by participants with a range of abilities and disabilities.
Quality Teaching – Program improves participant content knowledge and content-specific pedagogy. Program instructors are highly qualified in their subject area and well trained in online course design and/or online facilitation. Program prepares participants to use a variety of classroom assessments.	Program goals are aligned with state and local teacher-quality goals to improve participant content knowledge and content-specific pedagogy. Online program develops participants' skills to implement research-based instructional strategies. Program initiatives are aligned with state and local goals to assist students in meeting rigorous academic standards. Program models effective teaching in the online environment by meeting the learning needs of each participant, using collaborative learning activities and timely responsiveness to learners. Program provides participants opportunities to develop and implement a variety of classroom assessments. Program is delivered by an online instructor with content knowledge and the ability to communicate effectively in writing, as evidenced in the course syllabus, learning activities, instructions, threaded discussions and e-mail. Program is provided by an online instructor with knowledge of online learning strategies. Using these strategies ensures quality and frequency of participation. Program is delivered by an online instructor with a commitment to respond to participants with timely feedback to online activities and answers to questions.

National Staff Development Council's *Standards for Staff Development* is available at http://www.nsdc.org/standards/index.cfm

Standards for Online Professional Development is available at www.sreb.org/programs/EdTech/toolkit/Standards

APPENDIX K

APPROVAL OF THE RESEARCH BY THE MISSISSIPPI STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH

Mississippi State University

February 22, 2005

Renee Gammill
RCU
Mailstop 9636

Re: IRB Docket #05-038: Facilitating Online Professional Development

Dear Ms. Gammill:

The above referenced project was reviewed and approved via expedited review for a period of February 22, 2005 through February 15, 2006 in accordance with 45 CFR 46.110 #7. Please note the expiration date for approval of this project is February 15, 2006. If additional time is needed to complete the project, you will need to submit a Continuing Review Request form 30 days prior to the date of expiration. Any modifications made to this project must be submitted for approval prior to implementation. Forms for both Continuing Review and Modifications are located on our website at http://www.msstate.edu/dept/compliance.

Any failure to adhere to the approved protocol could result in suspension or termination of your project. Please note that the IRB reserves the right, at anytime, to observe you and any associated researchers as they conduct the project and audit research records associated with this project.

Please refer to your docket number (#05-038) when contacting our office regarding this project.

We wish you the very best of luck in your research and look forward to working with you again. If you have questions or concerns, please contact me at 325-3294 or at tarwood@research.msstate.edu.

Sincerely,

Tracy S. Arwood

Tracy S. Arwood
Director

cc: Dwight Hare

Office for Regulatory Compliance
P.O. Box 6223 • 88 Morgan Street • Mailstop 9563 • Mississippi State, MS 39762 • (662) 325-3294 • FAX (662) 325-8776

APPENDIX L

PERMISSION TO CONDUCT STUDY AT THE RESEARCH AND CURRICULUM UNIT FOR WORKFORCE DEVELOPMENT

Mississippi State University
Research & Curriculum Unit
for Workforce Development
Vocational and Technical Education

P.O. Drawer DX • Mississippi State, MS 39762-5671
Phone (662) 325-2510 • FAX (662) 325-3296

January 4, 2005

To Whom It May Concern:

Renée Gammill has my permission to use the data that she collects as she studies the Certification for Online Learning (COOL) program taught through the Research and Curriculum Unit for her dissertation. With education budgets decreasing educators are looking for ways to learn new skills without traveling and incurring expenses. Schools and administrators are also eager to find professional development opportunities that provide needed skills but do not cost and do not require the teachers to be away from school. This is the reason why the Mississippi Department of Education wanted to try this pilot program.

As professional educators it is important to us that online offerings maintain the same quality or better than the face to face training that we provide. We want all instructors of online courses to go through this training and become certified. Our program was developed from materials used at Walden University which is known for its expertise in online education. The program is 10 weeks long and has been very time consuming and in depth. We have had some participants withdraw because of the time commitment but this is to be expected. The research says that a completion rate of 50 percent is normal (Florida Virtual High School). People eagerly sign up for online training assuming it will be easier but soon realize high quality online training is in many cases much harder and more labor intensive. If the participants are unable to commit 10 weeks for the certification, they would probably not be able to teach online for that amount of time.

This is our first attempt at preparing trainers for online professional development, and we are interested in the research Renée is going to conduct. We want to use online education only if it proves to be successful. If I can provide other information, please let me know.

Sincerely,

Patti Abraham

Patti Abraham
Director