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2014

Abstract

Technological Challenges of Faculty at a Historically Black College and University

by

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MEd, American InterContinental University, 2004

BA, University of Arkansas at Little Rock, 2001

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Technology integration (TI) in many classrooms has been hindered because of limited technology usage, which has caused a void between instructors communicating with and educating students. The purpose of this case study was to address the problem of TI in the classroom setting at a small Historically Black College and University (HBCU) in Arkansas by uncovering ways to motivate faculty to use technology in the classroom while identifying barriers to effective TI by faculty. The theoretical framework which guided the study was Rogers's Diffusion of Innovation Theory. Faculty members who are comfortable using more technology in the classroom will better prepare students for the global society, where technology drives many careers. The research question explored faculty members' limited use of technology in the HBCU classroom setting. Eleven participants were selected from faculty in 4 departments on campus. Data were obtained through face-to-face interviews and then transcribed, themed, and coded using Microsoft Excel. Findings indicated that faculty members lacked the technological training needed to increase their support for TI in the classroom setting. Participants used technology only at a lower level as PowerPoint presentations, videos, Comprehensive Academic Management System, and the Internet. As a result of this study, a faculty development workshop was created. This study contributes to positive social change at this HBCU and other institutions of higher education by identifying limitations to using technology, thus enabling researchers to identify the factors that will motivate faculty to use more technology in the classroom.

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Dedication

This doctoral project study is dedicated to God, my Creator; Christ, my Redeemer; and the Holy Spirit, my Comforter. Without God, I can do nothing. I dedicate this project study to the loving memories of my grandparents, John E. and Mary Etta L. Clegg. I also want to dedicate this project to my grandmother, Lottie M. Brentley, and my church families.

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Section 1: The Problem

Introduction

Although some instructors use social networking technology in their personal lives, they do not support technology integration (TI) consistently in the classroom setting. Faculty are the impetus for educational initiatives on college campuses, so as leaders, faculty should be encouraged to use technology to increase communication with students (Smolin & Lawless, 2011). As society in general becomes more technologically perceptive, college students will need to possess technological skills to stay current with advances in such daily activities as banking, shopping, and health care, all of which have advanced from paper to electronic processes. Professionals think and act differently in regard to technology and its use (Ertmer & Ottenbreit-Leftwich, 2010). Many college students continue to experience limited access to technology in the classroom setting. This limited access to technology hinders students in several ways, especially in their job preparation. The use of technology in the classroom is critical to the learning process. For the purposes of this paper, the terms *use of technology*, *technology usage*, and *TI* are used synonymously.

Faculty members also limit their use of technology in the classroom for a variety of reasons, including a lack of technological equipment, not knowing how to integrate technology into the curriculum, and limited financial support (Hsu, 2010). TI in the classroom is paramount for instructors educating technologically literate 21st-century students. Ertmer and Ottenbreit (2010) stated, “It is no longer appropriate to suggest that teachers’ low-level uses of technology are adequate to meet the needs of the 21st-century

learner” (p. 257). Most students use technology (Web 2.0 tools) not only to network with friends, family, and peers but also to connect with other institutions. Because technology has become the new mode of conversation, to provide this new generation of learners with a productive and effective education, educators must learn to use advanced technological strategies as part of their delivery of course content (see Appendix A).

At a small historically Black college and university (HBCU) in Arkansas, TI in the classroom has been hindered because of instructors’ limited use of such technology, which has caused a void in instructors’ efforts to communicate with and educate students. Some factors contributing to faculty not using technological tools in the classroom include a lack of knowledge about technology, the need for training in technology, and the inability to relate technology to course curricula. The digital divide between faculty and students should diminish as faculty integrate technology in the classroom.

Technology at the HBCU

To advance the use of technology by faculty and students at the small HBCU that was the focus of this project, the chief academic officer (CAO) explored the idea of establishing a technology committee, which was formed and organized by the faculty senate. The goal of the technology committee was to keep instructors informed of technological changes, challenges, and advances on campus. The committee also was responsible for assessing new technologies and assisting with the training of faculty. The technology committee elected three officers: chair, cochair, and secretary. The technology committee comprised faculty members from each department, IT staff members, the computer lab coordinator, and the director of user services. After the initial

meeting and election of officers, the chair and cochair of the technology committee met with the CAO, who outlined a direction for the committee.

Following the meeting with the CAO, the technology committee met in February 2011 to discuss general technology concerns expressed across the campus. Some of the faculty members on the committee spoke about their technological challenges and inquired whether other faculty members on campus were experiencing the same issues. The chair of the technology committee worked with the cochair to develop a faculty survey to assess faculty members' knowledge of technology. The survey instrument was presented to the technology committee and administered to faculty.

The survey participants were all faculty members present at the faculty senate meeting. From the responses, the largest number of faculty members expressed an interest in incorporating Internet/Wi-Fi/web-based resources in their classrooms and the least number of faculty members wanted to incorporate music software in their classrooms. The other responses indicated that the most experience was with word processing, with an average total of 18 years of experience; the least experience was with web-based instruction, which totaled an average of 3 years. Based upon these survey results, it became evident that faculty members at the HBCU were experiencing technological challenges and wanted technology to be integrated into their instructional strategies, particularly Internet and web-based instruction.

Currently, many faculty members at the HBCU limit their use of technology to PowerPoint presentations or DVD players on projectors in their classrooms. These tools mean that student engagement in the learning process is limited. Faculty would use new

technologies in the classroom with proper training, which could help to eliminate barriers to TI. Section 1 includes information relevant to the rationale for studying this problem, special terms associated with the problem, significance of the problem, research question, review of the literature, implications, and summary.

Rationale for the Study

Contemporary students were birthed into technology, so it behooves faculty to keep up with them by supporting TI in the classroom setting. TI in education depends on continuous effort that includes identifying the factors and practices that can be applied to encourage faculty to support TI (Kinuthia, 2004).

Instructors are sometimes reluctant to use technology without being trained properly. The lack of technology training for faculty can result in (a) limited TI into subject area methods courses and other university courses, (b) a lack of faculty modeling, (c) an emphasis on teaching about technology rather than teaching with technology, (d) insufficient funding and faculty training opportunities, and (e) a lack of emphasis on technology in students' field experiences (Judge & O'Bannon, 2008). Even in 1999, the USDoE realized the need for more technology in the classroom. Judge and O'Bannon (2008) stated that "the U.S. Department of Education [USDoE] established the *Preparing Tomorrow's Teachers to Use Technology* (PT3) programme to support organizational change in teacher education so that future teachers enter the classrooms prepared to effectively use the computers that await them" (p. 18).

Evidence of the Problem at the Local Level

Historically, Arkansas has endured inequality in the education of minorities in the state. In 1957, a pivotal year in education in Arkansas, Central High School of Little Rock made newspaper headlines nationwide. Nine African American students, under the direction of the local National Association of the Advancement of Colored People (NAACP) President Daisy Bates, desegregated Central High School: The “Little Rock Nine” risked their lives and the lives of their families to be a major part of history (NAACP, 1992).

Duncan, a reporter with a local Little Rock television station in 2010, interviewed Attorney John Walker, who argued that the Arkansas Scholarship lottery discriminates against African American students who could be potential college students. Duncan quoted Walker as saying, “The scholarships soon to be awarded would require an ACT score of at least 19 ... the average ACT score of Black students in Arkansas is only 16” (para. 3). Inequalities exist in the educational processes of African American high school students. The same inequalities are reflected in the graduation rates of students attending an HBCU in Arkansas.

In 2011, the Arkansas Department of Higher Education (ADoHE) reported the graduation rates for 4-year public colleges and 2-year public colleges. One 4-year public college, the University of Arkansas at Pine Bluff, which is an HBCU, reported a graduation rate of 23.9%, a percentage derived from students entering the college in cohort year 2005 (Fall 2004). The highest graduation rate of 56.6% was at the University of Arkansas at Fayetteville, a predominantly European American 4-year public

institution. The other two HBCUs in Arkansas were not represented in the ADoHE report because they are private 4-year institutions.

Technological Disadvantages in Arkansas

Arkansas is lagging in technology and household Internet usage. According to the U.S. Census Bureau, in 2011, the U.S. average for households using the Internet outside of the home was 80.23%, and the U.S. average for Internet usage in the home was 71.06%. Arkansans fell below the U.S. average in both categories. The average for households in Arkansas with Internet usage outside the home was 70.87%, and the average for Internet usage in the home was 58.76% (U.S. Census Bureau, 2011). The lack of Internet usage in or outside of the home has been and continues to be a technological concern in Arkansas.

The institutions of higher education in Arkansas need major improvements. Arkansas ranked 50th of 51 states, including the District of Columbia, because it was found to be graduating less than 20% of its population 25 and older with a bachelor's degree ("Arkansas Panel," 2008). Educational leaders in Arkansas will have to work diligently to recommend ways to increase graduation rates. In 2007, Arkansas spent \$54 million on remediation programs for students ("Arkansas Panel," 2008). The graduation rates in Arkansas colleges are unacceptable, and college administrators, instructors, and academic support units must collaborate to find ways to increase graduation numbers. One such way could be by supporting TI in the classroom setting.

In July 2010, Windstream Corporation, a communications operations company that is housed in 23 states, announced that its permanent headquarters were opening in a

major city in Arkansas. The mayor expressed excitement about the national headquarters residing in the city (as cited in Windstream, 2010). Governor Mike Beebe said, “Technology-based jobs are vital to our future economic success, and this continued and expanded commitment from Windstream bodes well for our state and our people” (as cited in Windstream, 2010, para. 3).

Evidence of the Problem From the Professional Literature

By using technological tools, students might be able to communicate more effectively with their teachers. However, most faculty members do not support TI in the classroom and have not been properly trained in the use of technological tools. Drexler, Baralt, and Dawson (as cited in Birch, 2008) identified the lack of professional development as the primary reason for the lack of TI in the classroom setting.

According to Roach (2000), HBCUs lag behind in technology use. Roach identified the slow adoption of technology by faculty members, fiscal instability, HBCUs’ inadequate operations management departments, and a lack of student exposure to TI as barriers to the effective deployment and use of technology. Many participants in the same report also mentioned the culture of HBCUs as another inhibiting factor. This factor had more influence than poor finances in the HBCU TI lag (Roach, 2000).

Another factor hindering TI at HBCUs is the digital divide, defined as events that cause a gap or inequality in how people access information and communication technologies (ICT; Segev & Ahituv, 2010). Investing in TI is not necessarily the norm at HBCUs. Consequently, for many HBCUs, closing the digital divide is becoming less likely (Stuart, 2010). Stuart (2010) further stated, “Even if capital needs were met, there

is the issue of sustainability” (p. 13). Maintaining IT networks could become a potential situation for HBCUs because of the need for finances to run the department. To close the digital divide for students, teachers must become equipped and ready to lead the movement in TI. Faculty development in TI will need to become a priority on HBCU campuses.

Special Terms

The following terms were used throughout this study:

Faculty development/Professional development: The interchangeable terms refer to programs offered to train teachers in technology usage, peer coaching, assessment strategies, and new teaching techniques (Persellin & Goodrick, 2010).

Historically Black colleges and universities (HBCUs):

The Higher Education Act of 1965 defined an HBCU as any historically Black college or university established prior to 1964 whose mission was, and is, the education of Black Americans and that is accredited by a nationally recognized accrediting agency or association determined by the Secretary of [Education] to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation.

(USDoE, 2011, para. 2).

Motivation: An internal state that starts, leads, and sustains behavior (Lee, McInerney, Liem, & Ortiga, 2010).

Technology integration: The use of technology in the classroom to enhance teaching and learning (Ham, 2010).

Web 2.0: Websites that give access to users, allowing them to exchange personal information and modify content on the site, and which have application software built to benefit users visiting the sites (Shelley & Vermaat, 2010).

Web 2.0 tools: Applications on the Web used for the purpose of user participation, collaboration, and sharing of resources (Doherty, 2010).

Significance of the Study

Historically, HBCUs have been deprived of advances in technological tools and their use. According to Roach (2000), “Jones presented a time line and historical analysis of IT [information technology] development since 1985, showing HBCUs to be unprepared to properly finance IT development since the mid-1990s” (p. 42). Because of the lack of funding for technology, the digital divide increased. To address the digital divide, sessions were developed for individuals to strategize with HBCU leaders to solve the problem (Roach, 2000).

Robert Rucker, Jr., the vice president for planning, budgets and information technology for the United Negro College Fund (UNCF), stated, “Most funding for private HBCUs is for scholarships and direct student support. Bringing communications infrastructures up to speed is a priority at many schools but, by necessity, a low one” (as cited in Stuart, 2010, p. 13). Stuart (2010) argued that it would take \$400 million to upgrade communications, wire campuses, and retrain faculty and staff to update private HBCUs to the same level as other institutions of higher education.

In President Obama’s State of the Union address on January 25, 2011, he explained the importance of technology in the future:

The rules have changed. In a single generation, revolutions in technology have transformed the way we live, work and do business... We'll invest in biomedical research, information technology, and especially clean technology, an investment that will strengthen our security, protect our planet, and create countless new jobs for our people.

Because technology will be a focal point for students as they strive to secure employment in the future, students should be exposed to TI in every class on the college campus.

Snipes, Ellis, and Thomas (2006) found that faculty members did not have access to technology development because of scheduling conflicts with their teaching course loads. Exposing students to technology will be beneficial to their futures and potential professional lives. Many professional careers have technological platforms that require students to be technologically competent. By including more technology in the classroom, faculty not only would engage students in the learning process but also would teach them how to maximize the learning and educational benefits of the technology that they already use for networking and entertainment purposes.

Research Question and Subquestions

Research Question

Most discussion in HBCUs has centered on increasing their enrollment, retention, and graduation rates. The ADoHE reported that college enrollment in the state had dropped (as cited in Blad, 2012). According to the official 2011 enrollment rates reported by Blad (2012), HBCUs in Arkansas had suffered enrollment losses. As an example, one

HBCU campus lost 11.3% of its students. Enrollment rates are a concern for HBCUs, which tend to be tuition driven. Many studies on HBCUs have focused on finding ways to retain students. Scant attention has been paid to TI in HBCUs. The purpose of this study was to identify the factors for limited TI on a particular HBCU campus. The study was guided by one research question: Why is faculty members' usage of technology limited in HBCU classrooms?

Subquestions

1. What are the motivating factors that encourage faculty members to integrate technology in the classroom?
2. What is the relationship between faculty members' personal use of social networking media and TI in the classroom?
3. What are the barriers that prevent participants from integrating technology in their classrooms?
4. How can faculty members maximize the use of technological resources that are currently available?
5. How do faculty members currently use the course management system (CMS) that is readily accessible to them?

These research questions helped to explain why the faculty members who participated in this study limited their technology usage in the classroom setting. To address the questions, I conducted a case study to gain insight into the lack of TI in the classroom (Lodico, Spaulding, & Voegtle, 2010). Gaps in past research included the following: (a) Limited data exist on TI in HBCUs (Stuart, 2010); (b) researchers have

focused on teacher education training to use technology in K-12 classrooms (Hsu, 2010; Y. Liu & Szabo, 2009; Shane & Wojnowski, 2007); and (c) most research has been geared toward student achievement, not faculty performance (Georgina & Hosford, 2008).

Review of the Literature

Introduction

Contemporary learners were born into technology, whereas faculty members lag in their computer knowledge and skills. Lambert and Cuper (2008) stated, “From a young age, today’s children are exposed to computers, the Internet, instant messaging, social networking sites, and cell phones that provide instant communication locally and globally” (p. 265). With technology and education as the focus, I conducted this qualitative study to address issues related to TI in the classroom setting at an HBCU with limited access to learning and teaching technology resources.

As facilitators of learning, faculty members should be equipped to integrate technology into the learning environment. The literature reviewed in this study reflected the topic of TI in higher education. To gain knowledge in TI, instructors must begin the process with faculty development. I used the following Boolean terms to research this topic: *educational technology, writing process and technology, technology, Web 2.0 and higher education, professional development, faculty development, multimedia and learning, technological training, technology integration, adopting new technology, motivation, constructivist learning theory, and communities of practice*. The literature review focused on the following terms: *multimedia and learning, diffusion of innovation*

theory, TI, Web 2.0 tools as an educational technology instrument, motivation, and HBCUs.

Multimedia and Learning

Shelley and Vermaat (2010) defined multimedia as “any application that combines text with graphics, animation, audio, video, and/or virtual reality” (p. 92). In regard to education, multimedia is an asset to learners because they have different learning styles. “As technology continues to advance, integrating multimedia in the classroom is not just for consideration but a must for curriculum developers as they design courses for the 21st century student” (Tucker & Courts, 2010, p. 38).

Krippel, McKee, and Moody (2010) argued that multimedia is grounded in constructivist theory. They posited that although many educators use PowerPoint as a tool for multimedia learning, multimedia also should include interactions with the learners. Johnson and Mayer (2009) asserted that “multimedia material is highly relevant to education in that online lessons and textbooks, particularly in science and mathematics, use words and graphics to present information” (p. 621).

Educators of adult learners, especially learners in higher education, should consider using multimedia in their teaching approaches. Faculty members who use multimedia in the classroom expose students to real-world technological skills (Tucker & Courts, 2010). Facilitators of learning also should consider aligning students’ multiple learning preferences with various forms of multimedia instruction to improve the learning environment (Zaidel & Luo, 2010).

Diffusion of Innovation Theory and the Adoption of New Technology

Rogers's diffusion of innovation theory covers four components relevant to diffusion: innovation, communication channels, time, and social system (as cited in Sahin, 2006). Most studies of TI have focused on the social system (i.e., change agents, opinion leaders, innovativeness level, innovators, early adopters, early majority, late majority, and laggards; Karnowski & White, 2002). Many studies on adopting technology into teaching and learning have focused on Rogers's theory (Al-Senaidi, Lin, & Poirot, 2009; Eneh, 2010; Kinuthia, 2004; Macdonald, 1999).

Faculty members can have a difficult time adopting technology in the classroom. Yu, Brewer, Jannasch-Pennell, and DiGangi (2010) argued that faculty resistance to adopting technology as one of their instructional strategies has been a major concern in higher education. For example, after using Rogers's diffusion of innovation theory, a faculty member could be viewed as a laggard or a person having difficulty adopting technology. Sahin and Thompson (2006) found that laggards do not adopt innovations until other members of the social system have used them successfully. Faculty members who are considered laggards must feel comfortable with others using technology before they are willing to adopt innovations themselves. Rogers's diffusion of innovation theory could be used to label faculty to determine where they fit in regarding the adoption of new technology. In order to support TI in the higher education classroom, faculty members must be willing to adopt new technologies.

Technology Integration

TI is the focus of many colleges and universities. There have been many studies on TI in the classroom (Ham, 2010; S. Liu, 2011; Smolin & Lawless, 2011; Yang & Huang, 2008). Adopting technology on college campuses is not an easy task. Zhou and Xu (2007) found that it is easier for a university to adopt technology when the institution has a technology strategic plan. Eneh (2010) referred to technology adoption as an individual or an organization electing to use technology. Researchers have suggested that teachers' values and beliefs play a role in the adoption of new technology (Chen, 2008; Ertmer, 2005; Isomursu, Ervasti, Kinnula, & Isomursu, 2011).

TI is beneficial to teachers, especially faculty at institutions of higher education. Georgina and Olson (2008) noted that discussions about TI into pedagogy are taking place among instructors from all disciplines in higher education. Teachers should support TI in the classroom because ICT is becoming the new literacy in the 21st century (Levin & Wadmany, 2008).

TI With CMSs and Learning Management Systems

Many colleges and universities are using CMSs to deliver instruction, keep records, and communicate with students. CMSs are software that manage information and data about student enrollment and student performance, and distribute course content via the Internet (Al-Shboul, 2011). Venkatesh et al. (2007) explained how the use of learning management systems (LMSs) can be advantageous to learning. CMSs can have such features as discussion boards, announcement, assignment links, hyperlinks, and so on, to facilitate faculty and students communication outside of the classroom setting

(Unal & Unal, 2011). LMSs are used not only by and for faculty. Black and Blankenship (2010) studied the use of LMSs as a library resource. They reported that 10 of 11 students used the library resource page in the LMS.

Barriers to TI

Yang and Huang (2008) conducted a study in Taiwan, and the 332 English teachers in the sample identified barriers to support for TI. The top three barriers were a lack of preparation time, a lack of instructional design abilities for TI, and a lack of appropriate training. S. Liu (2011) stated that “a lack of knowledge about how to use technology effectively, which influences teacher decisions about whether to use technology, is likely a barrier to technology integration” (p. 1014).

Faculty members’ beliefs about TI also can be indicative of potential barriers to TI in the classroom setting. Palak and Walls (2009) noted that “teachers who effectively integrate technology move toward student-centered instructional practices, and this in turn suggests a shift in teachers’ beliefs as teachers experience new patterns of teaching and learning” (p. 418). Moody (2009), who studied teachers’ perceptions, stated, “The changes that technology integration enables are considered transformational in nature and impact the beliefs, perceptions, and practices of teachers and educational institutions” (p. 1). For TI to be effective, instructors need to believe that TI is beneficial to them as well as their students.

Another barrier to TI in the classroom has been identified by researchers as the limited amount of training that instructors have received in the use of technology (Georgina & Hosford, 2008; Judge & O’Bannon, 2008; Meyer & Xu, 2009). Many

researchers have focused on technology training for instructors for online learning or IT (Deutsch, 2010; Georgina & Olson, 2008; Hsu, 2010; Polly & Hannafin, 2010); this focus has been a barrier to supporting TI in the classroom because online learning is not the same as the integration of technology into a traditional classroom setting. In higher education, professional development should include not only technological training for online learning but also TI into instruction by using laptops or other digital supports (Kay & Lauricella, 2011; Sahin, 2007; Venkatesh et al., 2007). For TI to be effective in the classroom setting, faculty will need instructional as well as technological training.

Web 2.0 Tools

Institutions of higher education are finding more ways to engage students and increase their academic performance. One way is to incorporate Web 2.0 tools into the curricula to turn users from readers to writers and make the web a conversational setting (Magolda & Platt, 2009). Examples of Web 2.0 tools are wikis, blogs, virtual world environments, social networking sites, Google Documents, and digital storytelling. The use of Web 2.0 tools will enhance student achievement in higher education (Collis & Moonen, 2008; Nelson, Christopher, & Mims, 2009; Rethelers, Piorun, & Prince, 2009) by increasing communication between faculty and students (Tifarlioglu, 2011).

Teaching With Web 2.0 Tools

Faculty can use Web 2.0 tools in the classroom to amplify their interactions with students. Students who are already using Web 2.0 tools are doing so mostly for entertainment purposes. According to Zuckerberg (2009), Facebook celebrated having more than 250 million users connected to family and friends. Collis and Moonen (2008),

in reference to students, asserted that “they are members of several [w]eb-based communities of practice, sharing resources and asking one another for help and assistance” (pp. 95-96). It is imperative for faculty in higher education to learn how to use Web 2.0 tools to support teaching and learning because their students use this technology on a daily basis (Ajjan & Hartshorne, 2008). When teachers use Web 2.0 tools more consistently, the classroom will become a learning community (Light, 2011), a transition that will facilitate communication between faculty and students.

Faculty Development With Web 2.0 Tools

Using Web 2.0 tools in the classroom alone will not ensure student participation; teachers also need to commit to learning about the new technology and how to use it. Kibrick, van Es, and Warschauer (2010) suggested that instructors lack experience incorporating technology into their instructional strategies and using digital tools to advance learning. Although faculty might want professional development in different areas of instruction, heavy workloads, physical constraints, and other factors might deter them from seeking face-to-face assistance to enhance the learning environment (Brooks, 2010). In order to instruct faculty members in Web 2.0 tools, professional developers might choose to include constructivist theories in their teaching approaches.

Constructivist Approach to Teaching and Learning With Web 2.0

The constructivist learning theory has been used in previous studies on higher education (Fiume, 2005; Schweitzer & Stephenson, 2008). Constructivism has been described as “a process of constructing meaning; it is how people make sense of their experience” (Merriam, Caffarella, & Baumgartner, 2007, p. 291). Rolloff (2010), who

conducted a study on nursing education, found that the learners made sense of their experiences by constructing knowledge, or engaging in constructivism. Expressing the cumulative nature of learning, constructivists take new information and relate it to existing information in an attempt to retain and use learned knowledge (Knowles, Holston, & Swanson, 2005).

Typically, faculty development focusing on Web 2.0 tools will place instructors in higher education in the role of adult learners seeking knowledge on technology to enhance their teaching as well as student learning. The communities of practice (CoP) theoretical framework will assist faculty development in the use of Web 2.0 tools. The CoP theory is grounded in constructivism and also acts as a social theory (Brooks, 2010; Duguid, 2005). To expand the description, CoP theory is a social learning theory focusing on participating in community life and constructing identity (Guldberg & Mackness, 2009). CoP is a good theory for faculty members learning Web 2.0 tools to support TI because as students, instructors will be able to learn and teach one another (Newswander & Borrego, 2009). In addition, because instructors are learning in the CoP to adopt Web 2.0 into their courses, instructional technologists must consider time management when they develop the CoPs. It takes time to adopt new technologies because technologies must be introduced, taught, and implemented in a way that best suits faculty members (Yu et al., 2010). It is imperative for instructional technologists or faculty professional developers to cultivate a strategic technology plan for TI; the development of CoPs will serve as a good start.

Motivation

Another factor determining support for TI is the motivation of faculty members. Wlodkowski (2008) defined motivation as “the natural human process for directing energy to accomplish a goal” (p. 2). Motivation can be intrinsic or extrinsic. Intrinsic motivation is critical to learning and is the inherent tendency to seek out challenges, explore, and learn for self-enjoyment (Ryan & Deci, 2000; Wlodkowski, 2008). According to Vallerand and Bissonnette (1992), “Extrinsic motivation pertains to a wide variety of behaviors where the goals of action extend beyond those inherent in the activity itself” (p. 600).

In an early study on motivation, Deci (1971) assumed that a person can be intrinsically motivated to perform an activity at a given time. Ultimately, Deci wanted to know the effect of external rewards on motivation. In 1957, Festinger (as cited in Deci, 1971) argued that external rewards should decrease intrinsic motivation. Feelings of competence during an action can enhance intrinsic motivation to complete that action again (Ryan & Deci, 2000; Vallerand & Bissonnette, 1992).

Intrinsic Motivation

Intrinsic motivation refers to engagement in an action simply for the sheer joy of doing it, not because rewards are attached to it (Shin-Yuan, Durcikova, Hui-Min, & Wan-Mei, 2011). Intrinsic motivation can be developed. Ryan and Deci (2000) asserted that choice, autonomy, and opportunities for self-direction enhance intrinsic motivation. In an effort to explain intrinsic motivation, Petroni and Colacino (2008) suggested that “motivating creativity is mainly intrinsic in nature and that it is the manager’s job just to

create the environment through which this creativity can flourish” (p. 22). The manager is only creating the environment for creativity, so it is up to the workers to direct themselves, a process that enhances intrinsic motivation.

Extrinsic Motivation

Extrinsic motivation refers to the outside or external factors that motivate a person to do something. Ryan and Deci (2000) referred to extrinsic motivation as “the performance of an activity in order to attain some separable outcome” (p. 71).

Researchers of studies on intrinsic and extrinsic motivation have cited Ryan and Deci’s explanation of intrinsic and extrinsic motivations (Becker, McElvany, & Kortenbruck, 2010; Demir, 2011; Fagan, Neill, & Wooldridge, 2008; Lei, 2010; Wen-Chung & Chen-Ling, 2010).

Extrinsic motivation is different from intrinsic motivation. Vallerand and Bissonnette (1992) identified four types of extrinsic motivation: external, introjected, identified, and integrated regulation. External regulation refers to doing a task to avoid negative consequences. Introjected regulation refers to internalizing the reasons for actions. Identified regulation happens when the behavior is something that an individual wants to do and is perceived as being chosen. Integrated regulation refers to doing the behavior willingly while determining where the behavior fits into other activities or valued goals.

Intrinsic and Extrinsic Motivation in Education

Intrinsic and extrinsic motivation can occur simultaneously, albeit at different levels of concentration (Wen-Chung & Chen-Ling, 2010). According to researchers,

rewards and benefits can be a negative factor in regard to intrinsic motivation because students can tell when teachers are being rewarded or teaching for pleasure (Demir, 2011; Wen-Chung & Chen-Ling, 2010).

The purpose of a longitudinal study by Becker et al. (2010) on intrinsic and extrinsic motivation in regard to reading was to determine the effects of intrinsic and extrinsic motivation on the amount of reading time for children. Becker et al. found that extrinsic motivation yielded substandard reading skills. The children who were intrinsically motivated devoted more time to reading and understanding text. Becker et al. further commented, “Children who see reading as a desirable activity tend to read more frequently and thus develop better reading skills ... children who read for extrinsic reasons (e.g., parental pressure) have poorer reading skills than do children with lower extrinsic motivation” (p. 781).

In regard to education and motivation, Riaz, Rambli, Salleh, and Mushtaq (2010) conducted a study on the motivation factors in formal and informal learning based upon Moshinske’s learning motivation framework. They identified two types of learners, that is, active and passive, noting that

The active learners require very little extrinsic motivation because they are intrinsically enough motivated to perform learning tasks. While the passive learners are required to be pushed at every stage of learning process, as they seriously lack intrinsic motivation and need more extrinsic motivation. (p. 43)

Knowing whether learners are active or passive is beneficial when planning training and development sessions. With this knowledge, activity leaders can influence

the learners by adjusting the materials accordingly to meet the needs of both types of learners.

Activities that encourage intrinsic and extrinsic motivation for educational purposes can be as simple as tests or quizzes. An in-class quiz, for example, will give students the opportunity to reflect on their skills, and positive scores might compel them to improve. Self-reflection on the quiz could serve as the intrinsic motivator, and the grade on the quiz could serve as the extrinsic motivation.

In an exploratory study of intrinsic and extrinsic motivators and student performance, Mo (2011) commented on “the positive impact of external motivators on intrinsic motivators, proposing that students may gradually develop lifelong routines through external guidance and assistance” (p. 24). Mo also noted that “instructors’ use of mandatory in-class quizzes would motivate the students to spend time on the course material and may consequently kindle student interest in the field” (p. 24). Quizzes give students a sense of ownership of their grades, thus allowing them to become self-motivated to improve academically.

Motivation and Faculty Development

Motivating faculty to learn is different from motivating students to learn. The training, expertise, and professionalism of faculty help to establish the reputation of a college (Wallin, 2003). A variety of external rewards, including pay increases and promotions, can encourage faculty to engage in activities that will increase their knowledge. Klassen, Al-Dhafri, Hannok, and Betts (2011) affirmed that “the FIT-Choice theoretical framework for teacher motivation is based in expectancy –value theory, and

relates teachers' success expectations and task valuations to career choices in education" (p. 580). Teacher motivation is important to advance education reform (Guzel, 2011).

Administrators play a major role in motivating faculty to support professional development activities. Faculty development activities that can increase instructors' knowledge about TI also will enhance student achievement. Wallin (2003) stated, "The role of the administration should be to assist faculty in developing plans and prioritizing their needs" (p. 330). Administrators should provide funding for faculty development, which will help teachers to engage students in the learning process (Klassen et al., 2011; Lei, 2010; Wallin, 2003).

Dedicated educators want students to reach their highest potential. Faculty development must be designed to decrease the barriers to student learning (Burks, Heidenberg, Leoni, & Ratliff, 2009). The desire of teachers to provide their students with an optimal education often is a form of intrinsic motivation. Educators strive to be successful in their classes, which makes faculty development a necessary activity (Burks et al., 2009).

Adults learn differently from children. Adult learners are intrinsically or extrinsically self-directed. In a study of Knowles's model of andragogy, McGrath (2009) suggested that motivation plays an important part in adult learning because if adult learners are not motivated, they will not participate in learning. The same model could be used for faculty members.

Another framework for educating adults in regard to motivation is the motivational framework for culturally responsive teaching by Wlodkowski and Ginsberg.

The framework has four conditions: establishing inclusion, developing attitude, enhancing meaning, and engendering competence (Wlodkowski, 2008). This framework could teach instructors how to prepare for adult learners from different cultures. If teachers are not motivated to learn new instructional strategies, they will not attend faculty development sessions.

Historically Black Colleges and Universities

This portion of the literature review provides insight into HBCUs and the digital divide.

History of HBCUs

HBCUs were established to give African Americans access to higher education and to foster educational opportunities for newly freed slaves (Abelman & Dalessandro, 2009). The first HBCU, the Institute for Chartered Youth, now known as Cheyney University, was founded in 1837 (Williams & Ashley, 2004). Williams and Ashley (2004) stated, “There was a need to create black [*sic*] institutions of higher learning because southern whites [*sic*]—and to a large degree northern whites—did not want Black people in their schools” (p. 3).

Thanks to the efforts of churches and lodges, African American colleges were founded, often by African American men and women who knew that these institutions would play a critical leadership role for African Americans (Bennett, 2007). Church leaders like Bishop Daniel Payne of the African Methodist Episcopal church founded Wilberforce University in Ohio in 1856, the first college owned by African Americans.

This college was the first in the world to be headed by an African American (J. Williams & Ashley, 2004).

Beginning in the 1860s, the U.S. Congress gave land-grant college provisions to educate newly freed African Americans (Abelman & Dalessandro, 2009). Abelman and Dalessandro (2009) found that “nineteen land-grant institutions were organized and were initially non-degree-granting agricultural, mechanical, and industrial schools” (p. 105). These land-grant colleges were established through the Morrill Act of 1862 (Duemer, 2007).

A major change occurred in 1965, according to the White House Initiative on HBCUs:

The Higher Education Act of 1965, as amended, defines an HBCU as: “...any historically black college or university that was established prior to 1964, whose principal mission was, and is, the education of black [*sic*] Americans, and that is accredited by a nationally recognized accrediting agency or association determined by the Secretary [of Education] to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation. (para. 2)

The White House Initiative on HBCUs ensured that students attending these colleges would receive the same education as students attending predominantly European American colleges or universities. From Jimmy Carter to Barak Obama, U.S. presidents have signed executive orders in regard to HBCUs. President Barak Obama signed

Executive Order 13532 on February 26, 2010, to advance equal opportunity in higher education and increase the HBCU graduation rate by 2020 (Obama, 2010).

Current Educational Trends in HBCUs

The majority of African American students attending HBCUs are underprepared to complete college-level work successfully. In fact, Miah and Omar (2011) argued that many students attending HBCUs are first-generation college students coming from low-SES backgrounds that can act as a disadvantage in their academic success. Miah and Omar also contended that the students in their study lacked information, knowledge, and training, all of which contributed to their not using available resources and technology at the Southern University of New Orleans.

Along with underprepared students, many HBCUs are being challenged by financial difficulties, some of which are the consequence of poor budgeting. Many struggling private and public HBCUs do not have funding sources similar to predominately European American schools (Tindall, 2009). HBCUs lag behind predominantly European American institutions in regard to fund-raising efforts and endowments (M. Williams, 2010), so they need help from outside entities such as the National Pre-Alumni Council (NPAC) of the UNCF to solicit donations (Drezner, 2009). In a study on efficiency and endowments at HBCUs, Coupet and Barnum (2010) hypothesized that colleges and universities that have larger endowments thrive and might be deemed more efficient and that with increased levels of endowments, these institutions can improve their human and physical capital.

A final consideration is the low graduation rates of HBCU students.

Administrators of HBCUs need to increase their graduation rates so that they can retain their accreditation status and help to meet President Obama's 2020 goal of leading the world in the number of college graduates (Adams, 2011). It is imperative for HBCU faculty to take a proactive stance in regard to graduating students, especially because most student success depends on faculty performance in the classroom. Increased TI in the classroom could help to raise graduation rates (Anyaso, 2008).

Implications

The findings derived from this research project can be used to better equip faculty to integrate technology in the classroom. Specific workshops for faculty that focus on TI could promote the engagement of 21st-century learners in the learning process. After completing the workshops, instructors might be able to better communicate with students and use the same media that students are currently using for entertainment purposes in different ways for educational purposes. Another outcome could be the development of a strategic TI plan for all of the departments on campus. Finally, a TI handbook explaining to faculty members how to include technology in their lesson planning could be developed.

In an effort to serve the underprepared students enrolled in HBCUs, TI in the classroom will benefit students and faculty. Many of the students whom HBCUs serve come from poorly funded and academically challenged high schools; other HBCU students are "usually first generation college/university students, and do not have the family background for higher education" (Miah & Omar, 2011, p. 57). The focus of many

HBCUs is to graduate employable students, so HBCUs must provide technologically sound curricula for these millennial learners. With low graduation and retention rates at HBCUs, faculty must find different ways to engage all students and their various learning styles in the educational process. HBCUs have to give students a real-world connection, and TI in the classroom is the way to do so.

Summary

Section 1 of this research project focused on TI in the classroom. This project study took a qualitative approach to understand the challenges at one small HBCU in Arkansas regarding support for TI in the classroom. Identifying the TI problem will allow faculty to find ways to learn about technology and how they can use it to enhance students' learning. The discussion in Section 1 also focused on the motivational factors that might encourage faculty to integrate new technology in the classroom setting. Section 1 covered the following topics in the literature review: multimedia and learning, diffusion of innovation theory, TI, Web 2.0 tools as an educational technology instrument, motivation, and HBCUs.

In Section 2 of this research project, I explain the methodology that I used to conduct the study. Topics for Section 2 include the research design, description of the participants, data collection, qualitative results, data analysis, and findings. Section 3 includes a detailed outline of the project study that was developed from the participants' responses. Topics include goals, rationale of the project, review of the literature, project detailed, roles and responsibilities of the participants, project evaluation, and social change. Section 4 includes reflections and conclusions in regard to the project study.

Topics include project strengths, project limitations, recommendations, analysis of the project, self-analysis, overall reflection, implications, applications, and directions for future research.

Section 2: The Methodology

Introduction

In Section 2, I describe the methodology that I used to collect and analyze the data. Qualitative research is led by research questions, whereas quantitative research is guided by hypotheses (Creswell, 2009). One research question guided this qualitative study: Why is faculty members' usage of technology limited in HBCU classrooms? Addressed in Section 2 are the study components of research design, research questions, population and sample, data collection, and data analysis.

Research Design

Because of the small number of faculty at the HBCU under study, the most appropriate methodology for this study was qualitative. An open-ended questionnaire was more practical than a Likert scale, a quantitative measure that is a conclusive measurement, because it was an exploratory measure. I used an open-ended questionnaire to obtain more in-depth explanations from the participants about the phenomenon at the HBCU. Researchers can use the data from an open-ended questionnaire to identify overlapping themes (Creswell, 2008). A qualitative approach was a better choice to explore the limited use of technology in the classroom by faculty at a small HBCU.

The qualitative approach that I chose was case study. Merriam (2009) stated, "A *case study* is an in-depth description and analysis of a bounded system" (p. 40). Because qualitative case studies can be characterized as particularistic, descriptive, or heuristic (Merriam, 2009), particularistic was the best choice for this study. To better understand the theoretical explanation of the particular issues (Hancock & Algozzine, 2006) at the

HBCU, I chose to use instrumental case study. This instrumental case study focused on the topic of TI in the higher education classroom setting. The issue was whether or not faculty members would be willing to support TI in the classroom setting, despite the challenges in their own limited knowledge and/or at the HBCU.

Case study researchers first identify the problems under investigation and then develop rationales for the approaches that they select (Lodico et al., 2006). I chose the case study method to determine what would motivate faculty to use more technology at this particular HBCU. A quantitative approach to this topic would not have been helpful in determining faculty motivation, mainly because there was not a statistical measurement tool to determine motivation for faculty on campus. In addition, quantitative research tends to look for variables, deductive explanations, and statistics (Smeyers, 2008). A mixed methods approach was not appropriate because there were no statistical data to quantify; therefore, qualitative case study was the best approach in researching faculty members' limited use of technology in the classroom. A factor like motivation cannot be assessed quantitatively.

Research Question

Why is faculty members' usage of technology limited in HBCU classrooms?

Subquestions

1. What are the motivating factors that encourage faculty members to integrate technology in the classroom?
2. What is the relationship between faculty members' personal use of social networking media and TI in the classroom?

3. What are the barriers that prevent participants from integrating technology in their classrooms?
4. How can faculty members maximize the use of technological resources that are currently available?
5. How do faculty members currently use the CMS that is readily accessible to them?

I derived the interview questions from the research questions along with the subquestions. I conducted a pilot study to test the interview questions.

Pilot Study

Researchers conduct pilot studies to test their interview questions and other research methods prior to conducting the actual studies (Glesne, 2011). I chose to conduct a pilot study to test the interview questions. I also sent an electronic letter of invitation explaining the purpose of the study to potential participants. I requested volunteers for the pilot study who met the same inclusive criteria as the participants in the larger study. The pilot study participants were four faculty members from the HBCU's Department of General Studies. I also sought one instructor of each of the following four courses: math, science, English, and history. I chose these courses because every student must take them as a requirement to graduate from the college. Faculty members who volunteered for the pilot study had 3 days to indicate whether or not they would participate in the larger study. All notifications and correspondence occurred via personal e-mail addresses to maintain the confidentiality of the volunteer participants. I e-mailed the consent form, interview guide (see Appendix B), and demographic sheet (see

Appendix C) to the pilot participants. Once the pilot participants had the opportunity to e-mail their responses to the interview questions and other appropriate forms, I reviewed their responses.

Pilot Study Results

To self-identify for the study, four instructors from the HBCU's Department of General Studies e-mailed me from their personal e-mail accounts. The pilot study participants did not recommend any changes to the questions on the demographic sheet or the interview guide. I subsequently moved forward with the data collection process in the larger study.

Participants

The *participants*, a term used mostly in qualitative studies (Merriam, 2009), were faculty members at a small HBCU in Arkansas at the time of the study. Because random sampling is a common strategy in quantitative research (Glesne, 2011), I used purposeful sampling to obtain the participants for my study (Lodico et al., 2010).

Sample

Using homogeneous sampling, I conducted individual interviews. Creswell (2008) stated, "In homogeneous sampling, the researcher purposefully samples individuals or sites based on membership in a subgroup that has defining characteristics" (p. 216). Homogenous sampling allowed me to identify the characteristics of individuals on campus who met the criteria to be in the sample.

I e-mailed full-time faculty and adjunct instructors from four disciplines at the HBCU to request their participation in a study focusing on TI in the classroom setting. I

used the campus e-mail system to invite the faculty members to participate in individual face-to-face interviews. I sent the e-mails through the official Walden University e-mail system. I asked the participants to respond to me using their personal e-mail accounts to ensure their privacy and confidentiality. I also gave the potential participants 2 to 3 days to respond to the request. After receiving their responses, I scheduled individual meetings with them in mutually selected locations to further maintain their confidentiality.

Criteria for Selecting Participants

I obtained the final sample of 11 participants from 13 full-time and 11 adjunct instructors from four departments: business, social and behavioral sciences, public administration, and religious studies. I chose these disciplines because they house bachelor's degree programs that will help to direct students into their prospective careers. Particularly, support for TI in these classes would allow faculty members to enhance students' learning. The original goal was to have three faculty representatives from each department.

In the spring of 2012, administrators at the HBCU chose to lay off and rehire faculty at the small HBCU. Because of this restructuring process, some departments lost personnel, leaving only two public administration faculty members, for example, in that department. For this reason, I had only 11 participants instead of the proposed 12.

The participants have worked at the research site since the fall of 2011. Because technology continuously changes on campus, I chose 2011 because the gap in time meant that the instructors have had 2 years to critically reflect on how they might have used technology in their courses or how they are currently using technology in courses. I

further chose this group because new faculty members might not yet have had the opportunity to use the technology that the campus provides in their classrooms. With instructor turnover in many departments across campus, these individuals were representative of past and present TI on campus.

Researcher-Participant Relationship

Glesne (2011) suggested that researchers sometimes study their own institutions or conduct what she termed *backyard* research. For this case study, because I was employed at the research site at the time of the study, I was in an exploratory situation with the participants, which was backyard research. I did not act as the authority on technology usage at the college; instead, I acted as a learner who had discovered a phenomenon on campus, namely, the limited use of technology in the classroom.

Gaining Access to Participants

I applied to the small HBCU's Institutional Research Board (IRB) to conduct research on campus. I locked the approval letter from the small HBCU in a secure location for safekeeping. Upon completion of Walden University's IRB application (IRB approval #02-05-13-0152202), I forwarded the response to the small HBCU's IRB before collecting any data. After obtaining permission from the IRB and the appropriate college officials and participants, I began to collect my data.

Ethical Protection

I asked the interviewees and the pilot study participants to sign respective consent forms. The consent forms assured the participants that no harm would come to them during the study and that they had the option of withdrawing at any time. The

interviewees did not receive any compensation for their participation in this study. I did not use the actual names of any participants in the study. I placed the data obtained from the study in a locked box and will store them for 5 years. I also stored the electronic data on a password-protected personal computer and will keep them for 5 years.

Data Collection

Merriam (2009) suggested that collecting data through interviews in a qualitative case study creates a holistic picture of the experiences and perceptions of the participants. Face-to-face interviews in this case study allowed me to obtain in-depth data indicating how faculty members at an HBCU incorporated technology in their classroom. In the case study research tradition, I used individual interviews to collect the data (Hancock & Algozzine, 2006).

Once I had my sample, I contacted the participants by personal e-mail to schedule the interviews at mutual dates and times. The 11 interviewees were full-time and adjunct instructors from each bachelor's degree program at the HBCU in four departments: business, social and behavioral sciences, public administration, and religious studies. I had scheduled the face-to-face interviews sessions to last 45 minutes each, but the average interview lasted 20 minutes. The interviewing process is important, especially when behavior, feelings, or people's perceptions cannot be observed. It is the best approach when conducting case studies (Merriam, 2009). I e-mailed the interview guide to the selected participants prior to conducting the interviews. The interview process lasted almost 2 weeks.

I created an interview guide for the one-on-one interview session. I also asked the individual interviewees to complete a demographic and professional information sheet adapted from a study by Kinuthia (2004). I adjusted some questions from the demographic and professional information sheet for this study. I was given permission to use the survey and modify it as needed (see Appendix D).

I used interviews to gain information from the participants. I recorded the interview sessions with a digital recording device. Glesne (2011) stated, “Many persons will agree to the use of a tape recorder” (p. 115). The purpose of the digital recorder for individual interviews was to ensure an accurate accounting of what the interviewees stated. I also took notes during all of the interview sessions by using a note-taking application on a third-generation iPad that was password protected.

I stored all additional information, including interview scheduling, transcription notes, and audio recording notes, in a reflective journal that helped me to interpret the data. “Personal reflections about the meaning of the data are included in the research study,” (Creswell, 2008, p. 265). The reflective journal kept me on task and organized throughout the process.

Role of the Researcher

At the time of the study, I was employed at the HBCU and served as the faculty professional development chair, cochair for the faculty senate technology committee, and vice chair of faculty senate. Having a good rapport with faculty as a researcher and coworker allowed me to obtain honest responses during the interview sessions. I also learned from the participants, so I did not act as the authority on the subject of TI. To

avoid bias, I listened carefully to the participants to ensure the accuracy of their responses for the data analysis.

Credibility

To ensure credibility, I used member checking and requested a peer debriefer. I triangulated the data from the pilot interviews, member checking, and the peer debriefer to identify limited technology usage in the classroom setting. The pilot interviewees tested the interview protocol and made no recommendations for revisions.

Member checking is the process of allowing the participants to review what they stated during the interviews (Creswell, 2008). I used member checking to allow the participants to review their transcriptions for accuracy. Viewing the final results allowed the interviewees to check for errors on the researcher's part in either interpreting or transcribing the data obtained from their interviews.

A peer debriefer is "a colleague who examines field notes and meets with the researcher on a regular basis asking questions to help him or her reexamine assumptions" (Lodico et al., 2010, p. 274). The peer debriefer, who had access to personal and privileged information, signed a confidentiality agreement. The peer debriefer reviewed the following documents: project study, interview guides, reflective notes, interview transcripts, data analysis, and the capstone project. Using these measures for credibility, I ensured that I was not purposely seeking discrepant cases to justify the research.

Qualitative Results

As mentioned earlier, I obtained approval from Walden University's IRB as well as the HBCU's IRB to conduct this study. Once I received the e-mail from the HBCU's

IR department representative, I sent an e-mail over the campus e-mail system requesting participation in the study from four departments: social and behavioral sciences, religious studies, public administration, and business. Although I had initially planned to conduct the interviews in the library, because of time constraints and other professional obligations to the college, some participants chose to have their interviews in closed-door offices on campus, and others chose to have them during working lunches off campus.

After signing the consent forms, I asked the 11 participants, five male and six female African American instructors, to complete a demographic and professional information sheet regarding professional rank, employment status at the institution, years of experience teaching, department of academic work, and technology usage. Participants identified their professional rankings as professor ($n = 1$), associate professor ($n = 2$), and instructor ($n = 8$). Nine participants had full-time employment status; two were adjunct. Five of the 11 participants had taught for 0 to 5 years, and six participants had taught for 6 to 10 years. The majority of the participants indicated that they were at a basic level of technology use. The results of the demographic and professional information sheet were processed using an online survey form created in Google Forms.

Data Analysis

Creswell (2009) argued that case studies involve detailed descriptions of the setting or participants. I prepared transcriptions of the responses to the interview questions and used them to begin analyzing the data and identifying emerging themes. I had two to five pages of transcription for each participant. Transcribing the data took approximately three weeks. During the transcription period, I used a labeling system to

ensure the participants' confidentiality. I transcribed the audio files from the 11 interview sessions using my password-secured laptop. I labeled each participant by the first three initials of the department in which he or she worked as well as a numeric identifier (e.g., BUS001). Once I finished the transcriptions, I mailed each participant a two-page executive summary of that participant's particular transcription for review. I allowed 2 to 3 days to hear from the participants to follow up and make any modifications. None of the participants disputed the content of their respective transcriptions.

Using hand analysis, a qualitative data procedure, I color coded and themed the transcribed text. In qualitative research, instead of using terms like *counting*, the qualitative researcher uses *indexing* or *categorizing* when looking for similar themes (Glesne, 2011). I categorized and inputted the data based upon the interview responses into a Microsoft Excel workbook and highlighted them in different colors. Some themes were technology usage, usage of the CMS, social interaction using technology, and technology training and development. The categories assisted in identifying that TI in some HBCU classrooms was limited. Once I had themed, coded, and categorized the data, I explained the findings through narrative writing.

Findings

The participants were open and honest about their experiences integrating technology in the classroom setting at the HBCU. I gave the participants as much time as necessary to answer the interview questions and explain their usage of technology in the classroom.

Research Question

The case study was guided by one overarching research question: Why is faculty members' usage of technology limited in HBCU classrooms? This question was addressed by Question 16 on the interview guide: "Give your thoughts on limited technology. Is technology usage limited in your classroom, on campus, or in your department? Why or why not? Please give a detailed explanation." Most participants indicated that technology on campus has been limited because of resource and funding shortfalls, the lack of Internet connections, no Internet access in the classrooms, and a poor technology infrastructure. BUS001 said, "Technology is definitely limited. There is a need for better Internet connection on campus and in the classroom and I also feel that the students need more exposure to the newest and latest greatest technology."

A large number of participants stated that they perceived technology use as being limited because of insufficient resources and funding challenges. As examples, REL003 stated, "Where funding is being placed where it's being prioritized," and HSH001 said, "My perceived knowledge of the lack of adequate funds in order to bring the college up to the level where technology is available."

CRJ001 felt that few labs and access times for the labs contributed to the technology limitations on campus, noting that "there are a few labs. We probably could use a few more computers to help them; maybe longer hours, so if they work at night or have different things going on at night, they have access to those computers."

REL002 mentioned the limited amounts of technology in the classrooms, noting that "I think it is just the fact that we have such limited amount of technology in the

classrooms . . . we did have a shot at it at one time and the equipment disappeared.” The participants felt that many factors contributed to the limited technology usage in the classroom, on campus, and in their departments.

Subquestion 1

What are the motivating factors that encourage faculty members to integrate technology in the classroom? This subquestion was addressed by Interview Questions 5, 6, 9, 10, 11, 13, and 15.

Question 5 asked, “How important is integrating technology in your classroom”? Most participants simply stated that it was very important, but many other participants answered this question by stating that integrating technology in their classrooms was important, extremely important, and vital to students. The following themes emerged: student learning, student success, and student engagement. Technology in the classroom was vital to student learning. BUS003, a participant from the business department, stated, “It’s actually significant, and it’s vital to the learning process for our students today because they use technology more than they use a traditional style of learning, which is reading, doing homework, or looking up stuff.”

Integrating technology in the classroom also was perceived as being important to student success. REL001 said, “For the classes that I teach, very important because I feel like I am not necessarily teaching a course discipline but just how to function in everyday life.” PAD002 stated, “Use their (students) time wisely because if we’re not engaging them in the classroom they’re not getting anything from your lesson.” According to the

participants, TI was important to student learning, student performance, and student engagement.

Questions 6 asked, “In your opinion, how important is technology training to you in your position”? Two participants indicated that technology training for their position was very important. Themes that emerged from the other participants’ responses were faculty development and faculty performance. REL003 stated, “Very important, very important because for one thing as an instructor, we need to be up on the latest technology.” HSH001 said, “It is important because technology training allows me to be more current in my field.” PAD001 stated, “It [technology training] gives you new strategies to use in the classroom.” Clearly, faculty members felt that technology training would develop their skills as well as enhance their performance.

Question 9 asked, “In your opinion, how important is technology usage in the classroom in regards to student performance”? Participants expressed that technology usage in the classroom in regard to student performance was important. Four themes emerged from this question: student performance, student learning, student engagement and student success. Participants stated that technology usage in the classroom enhanced student performance, student learning, and student engagement.

BUS001 said, “In regards to student performance, I guess I’m gonna [*sic*] say because our students are such millennial learners that it’s very important.” HSH001 stated, “It’s important because of students that are not great readers. They may need more of the visual or interactive devices.” HSH002 said, “For the generation Xs [*sic*] and millennium, I think they would rather have their work and lectures electronically.”

BUS003 stated, “Because we want to keep our students engaged. We don’t want them to get bored. Since they’re already texting and doing Facebook and all this other stuff, why not incorporate that into what we’re teaching to keep them focused.”

Faculty members also stated that integrating technology in their classrooms was important to student success. BUS002 noted, “The more that our students are exposed to technology and the more they understand how to use that they’ll find that it’s easier for them to be successful.”

Question 10 asked, “In your opinion, how important is the usage of technology in teaching 21st-century learners”? For this question, it was clear that the participants felt that the use of technology in teaching 21st-century learners was very important to student success, faculty performance, and student engagement. One participant felt that the usage of technology in teaching 21st-century learners was very important. Many participants indicated that technology usage in teaching 21st-century learners was important to student success.

HSH001 stated, “It is very important because as students prepare for the workplace their ability to be flexible and competitive lies [*sic*] a lot in their ability to be able to manipulate different types of technology devices.” BUS003 suggested that technology use in teaching 21st-century learners was important to faculty performance, noting that “it should be a requirement for instructors to learn the technology so that we have a better delivery of improving what we teach.” PAD002 commented, “But this adult learner, millennial learner what has been tagged, it’s the most important thing for them because it is what they remember it’s how they divide their time.”

Question 11 asked, “How does technology in your classroom enhance your performance as a faculty member”? Ten of the 11 participants stated that it made them proficient instructors by keeping them on the cutting edge, keeping them organized, assisting them with time management, and making them better instructors. REL001 stated, “Make sure that I’m on the cutting edge of technology.” HSH002 replied, “I’m more organized that way . . . I think I can keep up with it more better [*sic*] electronically than if I had hard copies.” BUS003 remarked, “I think it makes me a better instructor by using technology you know because students don’t just want you to lecture.” BUS001 indicated that technology in the classroom enhanced performance as a faculty member because of faculty development by stating, “Well, it encourages me to want to learn more and to increase that professional development.”

Question 13 asked, “If you do not use technology in your classroom, what will encourage you to use technology”? Only two participants answered this question because other faculty members indicated that they already used technology in their classrooms. HSH002 answered, “I think if the administration made it mandatory that we incorporate it into our syllabus I wouldn’t have no [*sic*] choice but to use it consistently.” REL002 stated, “The fact that the student body is using more technology than I have been using.” As noted previously, the two participants stated that they would use more technology if administration made it mandatory and also because their students used technology.

Question 15 asked, “In your opinion, how would incentives encourage you to use more technology in the classroom”? Seven participants indicated that monetary compensation and awards would encourage more usage of technology in the classroom. BUS002 stated, “I think you need to have some awards for those, recognition for those, and ultimately I think it always help to let there be some monetary compensation for something eventually for faculty to help inspire that.” BUS003 informed, “If you have an incentive to utilize technology, faculty would be more encouraged to use it. It’s also kinda [*sic*] expensive because we’re buying our own technology.” PAD001 suggested, “If the school provided a pad for the ones that do not have one to use, we would use it more in the classroom.” REL001 asserted, “It would encourage not only me to use technology, but I think it would encourage every other instructor to use technology.”

PAD002 stated:

You know pay to go get it or even having the access not in lecture type learning, but in hands-on type workshops where we go through a series much like continuing education or something to that nature that when we come out, we can be certified in.

Three participants stated that they did not need any incentives to use technology in the classroom. BUS001 reflected, “Well, I really think because of the area I am in Business Administration I really don’t need an incentive. I really don’t have a choice but to stay current.” HSH001 stated, “I don’t really look at myself as requiring an incentive and I never thought about it that much.” HSH002 commented, “I think if I had a

classroom that would give me the incentive that the technology is there. I don't have a projector. I don't have time to go and ask the technology center.”

CRJ001 suggested that students should have incentives to bring iPads to class:

Well, if you give students something they're always going to want to work a little bit harder. If you say I will give you five bonus points if you bring in your iPad we are going to do research on a certain subject then they will more likely bring their iPads every time you have class.

Given these points, the participants indicated being intrinsically as well as extrinsically motivated to use more technology in their classrooms. Faculty members at the small HBCU were intrinsically motivated to integrate technology in their classrooms because of the factors of increased student learning, student success, student engagement, and student performance. Instructors wanted to perform better in the classroom; thus, faculty development and faculty performance were other motivational factors that encouraged faculty members to learn more about different technologies to apply in their classes. Most participants responded that they could be extrinsically motivated to use more technology by receiving such incentives as monetary compensation or awards to assist in the purchase of technological devices to use in their classrooms. To summarize, faculty members were willing to support TI because they wanted to see students learn, matriculate, and be successful in their classrooms and in their prospective careers.

Subquestion 2

What is the relationship between faculty members' personal use of social networking media and TI in the classroom? Question 1 asked, “How do you use

technology in your social interactions”? The majority of faculty members stated using many popular social networking sites: Facebook, Twitter, Socialcam, LinkedIn, Instagram, Pinterest, and YouTube.

The importance of this question was to determine the relationship between faculty members’ personal use of social networking media and TI in the classroom. Participants who used limited technology in their personal interactions also used technology at a minimum level in their classrooms. Participants who indicated using social networking media in their personal lives also used more technology in their classrooms.

Subquestion 3

What are the barriers that prevent participants from integrating technology in their classrooms? The interview questions that paralleled this subquestion were Questions 12, 14, and 16.

Question 12 asked, “What new technology skills would you like to acquire and how do you propose to get that knowledge”? All 11 participants wanted technology training on multiple devices and applications. Participants made the following suggestions for training topics: making videos/podcasts, developing applications, taking certified training sessions, using socrative (student response app), learning Comprehensive Academic Management System (CAMS) discussion board, learning SPSS, using survey technology, creating Quick Response (QR) codes, setting up projectors, and incorporating iPads and iPhones into education. Clearly, all participants wanted to learn new technological strategies to incorporate in their classrooms.

Question 14 asked, “If you are not currently using technology in your classroom, please identify obstacles that are prohibiting technology usage. Please be as detailed as possible.” Only two participants responded to this question. HSH002 suggested inadequate access to computers and projectors as obstacles. REL002 stated, “Lack of having actually dealt with classroom technology such as projectors and things of that sort.” Nine participants stated that this question did not apply to them because they already were using technology in their classrooms. Overall, the participants considered limited access to technology in the classroom an obstacle to student learning at the HBCU.

Question 16 asked, “Give your thoughts on limited technology. Is technology usage limited in your classroom, on campus, or in your department? Why, or why not? Please give a detailed explanation.” The participants listed insufficient resources and funding; the lack of Internet connections, access, and technology infrastructure; the limited number of computer labs; and the limited amount of technology in the classroom.

Faculty members would use more technology in the classroom if the barriers to TI, namely, a lack of knowledge of different types of technologies, limited resources and funding, the lack of Internet connections on campus and in some classrooms, and the limited number of computer labs, were removed. Once the barriers are removed, faculty members might be able to communicate more effectively with their students, with the potential outcome being enhanced academic performance.

Subquestion 4

How can faculty members maximize the use of technological resources that are currently available? This question was answered through Interview Questions 2, 7, and 8.

Question 2 asked, “In your classroom, how do you incorporate technology in the following: course assignments, lesson planning, lectures or lesson delivery? Give examples of usage.” As noted, faculty members used technology in their classrooms in various ways, including PowerPoint, projector, video, CAMS, and Internet/e-mail.

BUS002 stated, “I’m still doing some quizzes, even though I try to do quizzes [*sic*] online but I still try to do quizzes. Most of my classes our lectures are by PowerPoint. We do PowerPoint presentations with that.” BUS001 stated, “I use a lot of PowerPoint and I also use the institution’s CAMS system.” HSH001 commented, “Lecturer video prerecorded and presentation on LCD projector.” REL001 remarked, “I make sure that I have a current email address with the demographic of students or the type of student we dealing with I have them to email me to ensure that they have my correct email address.”

Question 7 asked, “How did you learn how to incorporate technology in your course assignments, lesson plans, etc”? Six of 11 participants stated that they had learned how to incorporate technology through trial and error. HSH001 revealed, “Self-knowledge just kinda [*sic*] playing with it on my own and then I do have a co-worker, a colleague that is familiar with technology and she helps me out some.” PAD002 stated, “Trial and error mostly. Graduate school prepared me for some but mostly trial and error.” Five of the 11 participants learned technology through faculty development.

BUS003 suggested, “Training on CAMS when we do our faculty development at the beginning of each semester and then training by my chairman.”

In summary, faculty members at the small HBCU learned technology primarily through trial and error or through faculty development offered through the college.

Question 8 stated, “Give an example of a successful lesson you have taught using technology.” Participants stated that they used technology successfully in many ways. Most of the participants used PowerPoint and projectors as visual aids in their lessons.

BUS001 stated:

Well, I guess I can refer back to ... when I used PowerPoint for a lesson for my Intro to Business class to explain a chapter. Students [could] focus more on what I was saying ... instead of looking directly into a textbook.

Other participants used computer lab assignments for real-world experiences.

According to HSH002, “Three years ago, ... I was taking my students to the computer lab ... to search for jobs on the computer. I think that was successful because some students were still doing paper applications and things like that.” Some participants stated that they used technology by having students use the Internet to research assignments relevant to real-world issues.

CRJ001 stated:

I would say probably a classroom assignment where I had the kids do research projects on I say for instance for February we did Black history and I told them that when they got to class if they would answer certain things within a certain span, Googling it, or looking it up on Yahoo they would get extra bonus points.

Some participants used prerecorded videos and movies in conjunction with lecture materials in their classrooms. HSH001 commented, “In one of my classes, specifically the social psychology class, that textbook come with a set of prerecorded videos from the author, and so, I always try to play them at the beginning of classes.” Lastly, REL001 conveyed texting students to poll them, noting that “I ask a question, and I place my phone number on the board, and the first person that sends me a text, they [*sic*] actually get so many points for getting to me first.” The participants who used technology successfully in their classrooms gave students an advantage in the learning process.

Although the participants could have used other devices and technologies to improve interactions with their students in the classroom setting, the faculty members indicated that they were self-taught in the use of technology in their classrooms. The participants used PowerPoint mainly because it is a visually appealing tool. In essence, the faculty members used whatever technological resources were available to them on campus.

Subquestion 5

How do faculty members currently use the CMS that is readily accessible to them? Interview Question 4 asked, “What features do you use in CAMS? How do you use them”? CAMS is the CMS currently being used by faculty and students at the small HBCU. Participants used CAMS in various ways: discussion board for conversation topics with students, course announcements to stay in touch with students, course documents for resources for students, course assignments to give assignments through the student portal, keeping active grade books for students/faculty, attendance to ensure

students were attending courses, and course hyperlinks to offer web-based resources to assist with course materials. Most instructors used CAMS for grading, attendance, and course announcements; however, for higher order usage such as course hyperlinks and discussion forums, the number of participants decreased. Overall, because CAMS served as the CMS and the main communication link among faculty, staff, and students, it was imperative that faculty felt comfortable using the technology that was readily available to them.

Conclusion

This case study project study focused on faculty responses in interview sessions. I coded and analyzed the data from the transcriptions to identify themes. I also used different methods of triangulation: pilot interviews, member checking, and peer debriefing. Upon completion of this project study, I disseminated a hard copy as well as an electronic copy to the HBCU's IR department and the peer debriefer. As mentioned previously, each participant received a two-page executive summary of his or her transcription via personal e-mail. This section focused on the data collection, data analysis, and reporting processes.

Findings indicate that faculty members lacked the technological training needed to support TI in the classroom setting. Participants used technology at a lower level: PowerPoint presentations, videos, CAMS, and the Internet. As a result of these findings, I developed a faculty development workshop for the project study. Upon completion of the TI workshop, the workshop materials will be e-mailed to all faculty through campus e-mail so that they will have access to the training materials.

In the past, faculty have depended on their own knowledge of the subject matter to teach students (Persellin & Goodrick, 2010). I developed this project study to give instructors the opportunity to enhance the learning process in their classrooms. TI will allow faculty to interact with students more effectively and increase student engagement. Institutions of higher education are incorporating mobile devices into their curricula, making it mandatory for students to purchase their own devices (Moran, Hawkes, & Gayar, 2010). The faculty development workshop will give instructors the technological instructional tools necessary to connect more effectively and efficiently with students and other faculty. The workshop will be represented in a PowerPoint presentation, and a link will be included in one of the slides for faculty members to complete the course evaluation, which will be developed in Google Drive survey form. This section highlighted the need for a faculty development workshop at the small HBCU. Section 3 focuses on the project that was developed based upon the findings from the participants' responses.

Section 3: The Project

Introduction

Edel (1998) defined faculty development as learning activities created to permit faculty to engage students through information technology into course activities. At the small HBCU that was the focus of this study, there are not many opportunities for faculty development in TI. At the beginning of the fall and spring semesters, the human resources department offers a faculty retreat, where information about such topics as sexual harassment, employee retaliation, and the budget for the academic school year; a welcome from the president; and deadlines for applying for employee benefits are presented.

At least 2 hours of the training is devoted to the college's CMS, but TI is not included in the retreat. There has been some separate training on technological devices and applications, but it has not been connected to the faculty retreat, which is mandatory for all faculty, staff, and administrators. Because the retreat is mandatory for full-time and adjunct faculty, the meeting could serve as a platform to train faculty on the use of current technologies for the classroom.

Smolin and Lawless (2011) suggested that technology can break down barriers between students and instructors and that technology can facilitate learning in ways that traditional curriculum delivery cannot. This case study focused on the limited use of technology by faculty at a small HBCU. According to the results, faculty wanted to have training on various technological devices and applications so that they could support TI in the classroom setting. Based upon the results, I considered three project genres:

process evaluation, economic evaluation, and professional development evaluation. A description of each type follows.

Project Evaluation

Process evaluation assists in understanding the relationships among interventions or parts of programs (Linnan & Steckler, 2002). At this time, there is no process to support TI or provide faculty development. Because there is no process to evaluate, I could not use the process evaluation genre for this project study.

Economic Evaluation

As found in an obesity study by Picot et al. (2009), economic evaluation refers to the cost effectiveness of a program. At the time of the study, the HBCU did not have either a strategic plan to implement technology or a technology budget available for review to determine cost effectiveness. Because there was no formal plan or budget to review, I did not choose the economic evaluation genre for this project study.

Professional Development Evaluation

The third project genre considered and eventually selected for this study was professional development evaluation. Mouchayleh (2009) stated that because travel costs are rising and educational travel budgets are shrinking, many college officials are providing professional development onsite to lower costs. With an already stressed budget at the HBCU, as indicated by the participants, the college will benefit from providing TI professional development programs on campus.

Professional development evaluation assesses the effectiveness of a professional development program. Shehab, Elnour, Al Sowaidi, and Abdulle (2012) suggested that

future continuing professional development should have a full evaluation of course programs to improve the participants' skills. The participants in my study wanted to have technological training on different technologies and applications to enhance student learning. For this reason, I chose to create a faculty development workshop on TI that will be evaluation based.

Goals

Faculty members at the small HBCU have many demands on their time. Students are not necessarily college prepared, so with the time and effort needed to provide remediation for students, faculty need to be offered training sessions that will not intrude on their already limited time. All 11 participants were interested in learning new technological skills for their classrooms. A faculty development workshop will give them the avenue to receive that knowledge. REL001 stated, "I think sometimes we hinder our students, but that's why we have to be creative and technology not only allows us to be creative but it allows us to be efficient."

The faculty development workshop benefits faculty members in various ways. I have set two goals for the development workshop on TI in the classroom setting: (a) provide faculty members with educational technological alternatives to overcome barriers to TI in their classrooms, and (b) train faculty in ways to use technological skills to engage adult learners in the learning process. The first goal is to provide faculty members with educational technological alternatives to overcome barriers to TI in their classrooms. Some instructors have Internet connections in their classrooms, but others do not. The workshop will assist faculty in identifying assignments that students can work

on in class or at home, regardless of their technological devices. The second goal is to train faculty in ways to use technological skills to engage adult learners in the learning process. Most participants indicated using social networking in their personal lives, but none indicated using social networking as part of the assignments in their courses. The use of social networking will allow faculty members to engage students in the learning process inside and outside of class.

Rationale for Project

This case study focused on the reasons for the limited use of technology in the classroom setting by faculty at a small HBCU in Arkansas. The participants identified the limitations to technology as a lack of funding and resources and a limited technology infrastructure at the HBCU. The purpose of the TI workshop is to provide various techniques that will allow faculty to increase student engagement by integrating technology in the classroom. Based upon the data collected in this qualitative case study, I designed a faculty development technology workshop. As mentioned by HSH001, “Technology training allows me to be more current in my field.”

To enhance instructors’ performance, I developed a workshop on faculty development in technology usage. It is important during the training sessions to offer technology training and for faculty members to learn how to incorporate technology into the classroom setting (Guzman & Nussbaum, 2009). The faculty development TI workshop training focuses on how to use the available technology to increase student engagement in the learning process.

Review of Literature for Project Study

Instructors at the small HBCU who participated in this study recognized the need to integrate technology in their classrooms. One interview question asked, “In your opinion, how important is the usage of technology in teaching 21st-century learners?”

REL003 stated, “So by knowing at a young age about the technology, 21st-century learners need to know ... to be productive pretty much in every aspect in life whatever job you might have [*sic*]. Technology is all over the place.” Technology is ubiquitous, so it is imperative that faculty members and students embrace technology in their classrooms. With technology changing so rapidly, faculty who receive training in the use of technology will be able to stay current on the most recent technological developments. For the most part, information from the review of literature was found using the following Boolean terms: *electronic portfolios*, *social networking and education*, *mobile devices*, and *student response systems*. The same terms were used to guide the literature review.

E-Portfolios

Instructors use portfolios to track students’ academic performance. An e-portfolio, or an electronic portfolio, can be used as an assessment tool that is presented in a multimedia platform (Mok, 2012; Strudler & Wetzel, 2011). Mok (2012) found that one barrier to the proper use of e-portfolios is the technical training of faculty and students. Graduating college students can use e-portfolios as professional networking tools, and instructors can use them as excellent assessment tools.

Paper-based portfolios are not as effective because they need a physical storage area; e-portfolios can be stored electronically. Students also can use video and audio tools to enhance their work. When assigning e-portfolios, instructors should develop assessment rubrics detailing facts about the setup, digital design, and ways in which the information should be presented (Chi-Cheng & Bing-Hong, 2012). Well-planned rubrics will display students' talents, professional growth, and achievements (Awwad, Nofal, & Salti, 2013), and provide faculty with an assessment tool that can measure students' academic growth.

Social Networking and Education

Social networking websites allow members of the online community to share interests, ideas, photos, and videos with other registered users (Shelley & Vermaat, 2010). According to Watson (2012), many schools have banned students from using social networking sites, but social networking sites can be positive in higher education. According to a case study conducted at Bucks New University in the United Kingdom by Knight and Rochon (2012), social networking sites successfully assisted students at that school to transition from secondary school to college by enabling them to build friendships with potential classmates.

Social networking sites engage students in learning so much that even institutions of higher education are incorporating them into learning communities for traditional and distance learning (Ardnt, 2012; Lester & Perini, 2010). One criticism of social networking, however, is hypernetworking, which refers to spending 3 hours or more each

day on social networking sites (Strom & Strom, 2012). Faculty members can control how much time they set for students to complete assignments using social networking sites.

Mobile Devices

Mobile devices used in higher education include personal digital assistants (PDAs), Smartphones, iPads, and iPods, all of which can give students the opportunity to learn asynchronously (Boyinbode, Bagula, & Ngambi, 2011; Fuegen, 2012). Mobile learning refers to the use of mobile devices for education (Yang, 2012). In mobile learning, the pedagogy switches from a teacher-centered approach to one that is based in constructivism and takes a learner-centered approach (Boyinbode et al., 2011). Colleges use mobile devices in many ways, one of which is to communicate with students. Princeton University, for example, developed iPrinceton, a set of applications (apps), for students to access course materials, library resources, and video lectures (Alden, 2013).

Although the usage of mobile devices in higher education classrooms is increasing, mobile learning is more than simply issuing students and instructors with electronic devices (Fuegen, 2012). The negative aspects associated with using mobile devices include having to read text on smaller mobile screens, having limited space for graphical content, and having limitations of a mouse and keyboard usage (Ting, 2012). An implementation plan needs to be in place for successful mobile learning to happen. Usable and accessible devices should be part of the implementation plan to ensure the inclusion of all learners (Suki & Suki, 2011).

Student Response Systems

Student response systems, or clickers, are devices used in education to engage students in the classroom; they often are used to transmit student responses over wireless technology (Gok, 2011). Researchers have found that classroom response systems (CRSs) have increased student performance and student engagement (Bartsch & Murphy, 2011; Bojinova & Oigara, 2011). Muncy and Eastman (2012) conducted a study on CRSs and found that they could promote the active learning of marketing and business students.

Conclusion of Project Review of Literature

Faculty training and development will enhance instructors' performance in the classrooms and engage students in the learning process. Classroom strategies such as e-portfolios, social networking, mobile devices, and student response systems can be the catalyst to promote student performance by engaging them in active learning. The results showed that faculty usage of technology in the classroom setting was limited because of lacks in all of the following areas: Internet connections, access points, technological infrastructure, amount of technology, computer labs, and financial resources. Faculty also indicated being intrinsically motivated to integrate technology in their classrooms because they knew that it could make them more proficient instructors. The project is meant to provide that motivation.

Project Details

Needed Resources and Existing Supports

Faculty members will need the following resources for the project: laptops/mobile devices, access to the Internet, a basic knowledge of computers, a projector, and access to

Microsoft Office Suite or other compatible programs. The laptops or mobile devices must be Internet enabled. Participants must be connected to the Internet before viewing the PowerPoint presentation, which includes embedded video and hyperlinks to websites.

The college will provide the wireless Internet connections and location. The location of the workshop will be the school auditorium, which will provide access to wireless Internet and a projector. College administrative will be instrumental in promoting the faculty development workshop. The IT department of the college will assist the facilitator by providing access points for the workshop and connection to the presentation tools in the auditorium.

Potential Barriers

Potential barriers that could result in a nonproductive workshop include a lack of support from administration, a lack of interest from faculty, and a lack of faculty time to participate in the workshop. Historically, the administration at the small HBCU has made attendance at meetings mandatory in order to obtain full faculty participation. Unfortunately, if administrators do not make this workshop mandatory, instructors might not attend.

Lack of interest in the workshop by faculty could result in limited participation. Like students, instructors attend meetings that are interesting to them. To gain faculty members' attention, the workshop will be innovative and filled with information about new technologies. Lack of time could be another potential barrier to the workshop. College administration should allow time for educational strategies; however, a vast

amount of time is spent discussing policy changes. In order for the workshop to be successful, these barriers will have to be removed.

Implementation and Time Frame

The HBCU developed its Center for E-Teaching and E-Learning in an effort to further support TI in the classroom setting. I had a meeting with the initial team of advisory board members and discussed the development of a workshop on TI. Based upon the results of the research, the participants stated that they would like to learn about new technology and ways to integrate it in their classrooms.

The 3-day TI faculty development workshop will be held in the auditorium, which can hold more than 100 people; thus, all faculty will be encouraged to attend. The workshop will include a 15-minute break during each morning session.

Proposed Implementation

Because of the workload that faculty face during the school year, I am recommending that the faculty development workshop take place during the spring faculty retreat. The faculty retreat usually occurs 1 to 2 weeks prior to the first day of classes. Instructors would gain knowledge about ways to integrate technology in the classroom setting right before they could actually use it in a practical way in their classes. Instructors also will be more effective in the classroom if the technology training is taught and modeled on site (McMillan, 2008). Faculty members will receive the appropriate support to encourage the use of technology in their classrooms.

Roles and Responsibilities of Workshop Participants and Others

The vice president for academic affairs at the HBCU provides dates and academic workshops to the human resources department as it plans the faculty retreat. I will coordinate with both stakeholders to determine the time allowed for the project. The responsibility will lie with the faculty members to attend and participate in the workshop.

As the workshop presenter, I am responsible for developing the workshop materials, providing training on new technological strategies for the classroom, creating the PowerPoint presentations, and following up with faculty who might have questions or concerns about the topics discussed during the workshop. I also will provide a sign-in sheet and workshop evaluation forms. For faculty members who cannot attend the TI workshop, I will make available an online course developed in Blackboard Course Sites. At the conclusion of the workshop or online course, I will give each participant a certificate of completion.

Project Evaluation

When planning to evaluate a program, a researcher has different program evaluation types to choose from, including goal-free evaluation, expertise-oriented evaluation, participatory-oriented evaluation, and objective-based evaluation. I chose objective-based evaluation, a commonly used program evaluation approach that uses transparently written objectives supported by benchmarks to guide the evaluation (Spaulding, 2008). Spaulding (2008) stated, "Either way, quantitative or qualitative data, or both, are collected and findings are compared to the project's objectives" (p. 13). I developed the objectives for the TI workshop based upon the needs expressed by the

participants in my study. The overall goal of the objective-based evaluation is to provide faculty with information on ways to incorporate technology in their courses. Table 1 outlines the project objectives and benchmarks.

Table 1

Project Objectives and Benchmarks

Project objectives	Benchmarks
1. To establish technology training that will motivate faculty members to incorporate technology in their classrooms.	1. To engage at least 20% of full-time instructors and 20% of adjunct instructors in the technology training.
2. To increase the usage of technology in the classroom.	2. Increase technology usage by 25% in the classrooms of instructors.

The TI workshop will include formative and summative evaluations. The participants will receive pretest, workshop, posttest, and follow-up questionnaires 1 to 2 months after the workshop. The pretest will be a technology usage questionnaire. The workshop will include the web-based tools with examples of how they can be incorporated into instructional strategies. The posttest is a questionnaire designed to reflect on how technology tools will be used in individual instructors' courses. The information from the follow-up questionnaire will be used to show how faculty members are using web-based tools and encourage others to use the tools in their classes.

The overarching evaluation goals are to (a) impart knowledge of new technologies to instructors, (b) encourage faculty to engage students with technology in the learning process, and (c) use technology that is readily available to students for educational purposes that can make students more marketable in the workforce. By integrating more technology in their instructional strategies, faculty have the potential to

be more productive and engage more students in the learning process. The TI workshop will be beneficial to faculty, students, and the entire college campus.

Social Change

Local Implications

The faculty development workshop will promote social change by enhancing the performance of faculty members. Instructors have strong content knowledge, but depending on their experiences and expertise with technology, they might find it difficult to combine their content knowledge and technological skills. Razfar (2008) suggested that although there has been a dramatic increase in technology over the years, there has not been a concomitant increase in the number of instructors incorporating technology into their instructional strategies, particularly instructors at institutions with low-SES student populations.

All of the participants in my study wanted to learn new technologies that they could integrate in the classroom setting. By learning new technological skills, they recognized that they could provide students with the latest technology needed for them to be successful not only in college but also in the future workplace. Giving these new technological skills to instructors will help them to improve their levels of instruction. Faculty members seemed to be intrinsically motivated to develop skills to become better instructors. According to CRJ001, "I would like to continue in any type of training . . . any technology or mobilization summits to be able to see how technology is being used so that I can come back and actually use it in the classroom, if funding is available."

Implications Beyond the Scope of the College

The TI workshop will benefit faculty and students at the small HBCU that was the focus of this study. The workshop also will be available to faculty members from different colleges via the Internet in the form of an online TI course. A lack of resources should not deter faculty members from receiving development in TI. As long as faculty can access the Internet, they will be available to take the online course. The faculty development workshop course can be synchronous or asynchronous. I will make myself available to make presentations to colleges or universities that would prefer face-to-face workshops on TI. To further campus academic improvement, I also am willing to provide services in program evaluation to determine whether more technology is needed for instruction at different colleges or universities. Section 4 focuses on reflections and conclusions in regard to the project study.

Section 4: Reflections and Conclusion

Introduction

Section 4 includes my reflections about the process leading to completion of this case study project study. The discussion focuses on strengths, limitations, and recommendations; analysis of the project; self-analysis; overall reflection; implications; applications; and directions for future research.

Project Strengths

The first strength of the project study is the ability to address the technological needs of the faculty members at the HBCU. Many of the faculty participants spoke about the problems supporting TI in their classrooms. Second, the results highlighted the professional development needs of the instructors at the HBCU. The participants indicated wanting to learn about new technologies that they could use in their classes. Finally, the project addressed the changing technology limitations on campus by giving educators different avenues in which technology can be incorporated into their classrooms. The project study incorporated adult learning theories, TI strategies and web-based tools to help faculty members to support TI in the classroom setting. Regardless of the discipline, the web tools used in the project will help faculty members to engage students more readily in the learning process.

Project Limitations

The project had three limitations. The first limitation was that the project focused only on the needs of faculty. Based upon the responses from the faculty members, technology at the HBCU has been limited because of the shortage of resources,

professional development not addressing TI, and the lack of technology infrastructure at the college. The second limitation was that the project included instructors from only four departments: business, social and behavioral sciences, public administration, and religious studies. I would have liked to receive input from the faculty members in the general studies department. I also would have liked to involve more faculty members in the technology discussion. The third limitation was the lack of student involvement in the study.

Recommendations

I recommend that the HBCU administration develop an academic budget and finance committee under the direction of the academic executive board to oversee spending to support educational technology on campus. According to the participants, TI in the classroom setting has been and continues to be limited because of the lack of financial support. In response to the financial limitations, I recommend that HBCU administrators apply for grant money in an effort to ease the pressure on institutional funding for campus technology.

Second, I recommend that data be obtained from the students' perspectives that are based upon their experiences with TI. Future researchers could conduct mixed methods exploratory studies with students, who need to be more involved in discussions about their learning process.

Third, I recommend that the HBCU's Center for E-Teaching and E-Learning focus on providing training sessions to inform faculty members about technology and ways to integrate it in the classroom setting. As stated earlier, faculty members

intrinsically want to be better instructors. With this in mind, training sessions should help faculty to develop their knowledge related to using technology. Faculty members need to know content knowledge and the principles of andragogy, as well as understand how to support TI to enhance their teaching and students' learning.

Analysis of Project

Scholarship

As the idea for the project was developing, I had to determine what would be an adequate research project for my campus. At the heart of my research was TI, which was based upon complaints from faculty about ways to increase technology usage in their classrooms. I became passionate about wanting to provide colleagues with different tools to be successful in their teaching.

I learned how to find peer-reviewed articles and scholarly research in online databases. I learned how to plan, implement, and evaluate a program. I also learned how to conduct interviews. Although this process was challenging, I believe that I have become a better researcher because of my participation in it.

Project Development and Evaluation

The results indicate that the participants had a real need for and wanted professional development in TI. They were very easy to work with, making my job as a researcher that much easier. Using an interview process was the best way to identify the faculty members' needs regarding TI. The responses to the interview questions prompted my search for user-friendly web tools that could assist faculty members in

communicating better with their students. I decided on the objective-based program evaluation because I considered it the best evaluation type for our faculty.

Leadership and Change

While preparing this project study, I became more of a technology leader on campus. Over the years, I have become the “go-to” person for technology on the campus. Learning about TI in the classroom has changed my life tremendously. I have represented the HBCU at faculty development conferences focusing on TI. I have made presentations about ways to integrate technology in the classroom. I am pleased that my colleagues have allowed me to offer them this training on technology use in the classroom setting.

Because the college is at the elementary stage of becoming more data driven, I will contact the HBCU’s IR department about conducting a survey on student interest in learning new technology for education. As a campus leader in TI, I feel that it is important not only to train faculty members on new technologies but also to help students to learn new technologies that they can use to propel their learning. I will coordinate with the HBCU’s Center of E-Teaching and E-Learning and Student Affairs to schedule dates and workshops for students.

As mentioned previously, many of the participants indicated that funding and resource shortfalls have resulted in limited use of technology in the classroom at the HBCU that was the focus of this investigation. As a technology leader on campus, I will assist the Title III director in locating additional funding and resources that will allow the college to update its technological infrastructure and help administration to cope with budget restraints.

Self-Analysis

Scholar

While conducting this study, I learned how to obtain information from the literature and share that information through my scholarly writing. I learned how to review scholarly articles, analyze them, and write in-depth analyses. I can now think critically and engage other scholars in comprehensive and detailed conversations, such as the face-to-face interviews that I led during this study. I also had to learn how to be flexible and manage my time so that I would not get behind in my research. I believe that I became a better researcher in the process of completing this study.

Practitioner

This project study taught me to be a more effective teacher. I now look for more ways to communicate more efficaciously with my students. Since completing this study, I also have incorporated more technology into my classes. I find myself wanting to be on the leading edge of technology use and share my new skills with students and colleagues. I am constantly trying new apps and visiting websites to research and find innovative technology that the faculty and students at the HBCU can use. As a professional educator, it is my job to provide students with a high-quality education and help other faculty members to expand their own learning.

Project Developer

Walden University gave me the tools to be a successful project developer. At first, I did not know what topic I wanted to focus my research efforts on. After attending the residency, I gained a clearer vision of my research topic. Shortly after attending the

residency, I took 8103, a course that basically taught me about program planning. Prior to taking this course, I had no experience planning a program. At the time, I did not understand the importance of taking that course, but I do now. Without that course, I would not have been able to develop the faculty development TI workshop. I am a stronger project developer because of the leadership of the instructors at Walden University.

Overall Reflection

The project study has changed the HBCU. The participants look forward to opportunities to learn more about technology and ways to incorporate it successfully in their classes. The time taken to read the literature, write this study, and plan a program has benefited the college as well as myself. The overall experiences of researching a problem on campus, offering solutions, and trying to be supportive to faculty members have given me more confidence not only as an instructor but also as a technology leader at the HBCU. The most important part of this project study is knowing that I can help other instructors on campus to deliver knowledge to students using technology in the classroom setting.

Implications

This project study has the potential to change the lives of educators not only at the HBCU that was the focus of this study but also at other institutions. With the faculty development workshop also being developed as an online course, instructors will be able to access it through the Internet. I feel that this research is only the beginning of great opportunities for the HBCU where I teach.

Applications

Because faculty members are more interested in learning about and using technology in the classroom setting, I believe that designated campus instructors could offer workshops that would allow faculty members to bring their own devices. They could download and learn different technological tools and ways to implement these tools in their classrooms. For this to occur, faculty members will have to take time out of their schedules to meet. From the responses to the interview questions, I feel that such workshops would be welcome on campus.

Directions for Future Research

It is my hope that more research takes place on the HBCU campus. Future researchers might want to gauge students' use of technology in the classroom. One topic could be students' perspectives on how technology is being integrated in the classroom. Another topic could be the development of a strong technological infrastructure on a limited budget. A researcher might choose to expand this study to other HBCUs or colleges to determine whether they also are experiencing the same or similar technological challenges. Finally, a researcher might want to conduct a study to determine how campus leadership is using technology. Researchers could pursue many other avenues to strengthen TI in the classroom.

Conclusion

This case study was about TI and the challenges that faculty at a small HBCU face to support TI in the classroom setting. Through face-to-face interviews, I gathered information from the participants about the location, how they felt about TI, and what

barriers were keeping them from integrating technology in the classroom setting. Of course, research is meant to offer solutions. One solution to limited technology usage at the HBCU was to offer a faculty development workshop on TI with an objective-based program evaluation. It is not enough to provide educators or students with technological devices; they must be trained to use those devices effectively and properly to communicate with one another in the classroom. By doing so, students will be actively engaged in the learning process and faculty members will know how to use technological tools to keep their students engaged.

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Appendix A: Faculty Development Workshop

Transitioning from Pedagogy to Andragogy: Adult Learning Theories

Day 1

Agenda

- 8:00—8:30 Registration
- 8:30—9:00 Overview of Transitioning from Pedagogy to Andragogy
- 9:00—10:00 PowerPoint Presentation over Adult Learning Theories
- 10:00—10:15 Break
- 10:15—11:15 Discussion on Course Topic 1: Pedagogy vs. Andragogy
- 11:15—12:15 Discussion on Course Topic 2: Adult Learning Theories
- 12:15—1:15 Lunch
- 1:15—2:15 Discussion on Course Topic 3: Teaching the Adult Learner
- 2:15—2:45 Group Activity
- 2:45-3:00 Wrap-up/Final Thoughts/Dismissal

Faculty Development Workshop

Transitioning from Pedagogy to Andragogy: Adult Learning Theories

Day 1

Learning Guide

Dr. Nedra R. Allen, Presenter

Mission Statement

The mission of the faculty development technology workshop is to provide instructors with teaching strategies using the catalyst of technology to enhance faculty performance and increase student engagement.

Purpose of Faculty Development Workshop

The purpose of this adult learning theory workshop is to bring awareness to faculty members of multiple adult learning theories that can be used to support classroom instruction.

Course Objectives

At the conclusion of this course, faculty members will be able to:

1. Understand the difference between pedagogy and andragogy
2. Identify adult learning theories that can be used in their courses
3. Develop a lesson plan using the adult learning theories.

Course Topics

This course will focus on the following:

1. Pedagogy vs. Andragogy
2. Adult Learning Theories
3. Teaching the Adult Learner

Self-Inventory Questionnaire

This questionnaire is designed for you to take a self-assessment of your knowledge of adult learning theories. This is only created to assess where you are in regards to adult learning theories.

Likert Scale

5-Strongly Agree 4-Agree 3-Not Sure 2-Disagree 1-Strongly Disagree

1. I am very familiar with adult learning theories. _____
2. I feel that technology is a waste of time to use adult learning theories in my teaching. _____
3. I know what 'andragogy' means. _____
4. I am an expert when it comes to adult learning theories. _____
5. I plan my lessons activities around adult learning theories. _____

Short Response

1. How do you currently incorporate adult learning theories?

2. What adult learning theories would you like to learn for your classroom?

Course Topic 1: Pedagogy vs. Andragogy

Pedagogy is defined as the art and science of teaching children (Knowles, 1973). Children learn differently than adults. Children are mostly provided with the knowledge teachers want them to have. Primarily, in the classrooms of children P-12 grades, the classroom instruction is both teacher-led and teacher-centered. In classroom instruction that is teacher-led or teacher-centered, often the child learns what the teacher wants him/her to learn.

Depending on the grade level, the assignments for the students are usually reinforced with vast amounts of repetition, recall, and memorization. Children are also taught to work socially in groups which carry over into adulthood; however, social interaction is a large portion of how children learn. Research suggests that teachers assist their students encouraging students to use prior knowledge to learn the task at hand (Vosniadou, 2003).

Andragogy has been defined as the art and science of helping adults learn (Knowles, 1980). Knowles introduced the concept of andragogy from Europe in 1968 (as cited in Merriam et al., 2007). Knowles's theory hinges on the following six assumptions:

1. As a person matures, his or her self-concept moves from that of a dependent personality toward one of a self-directing human being.
2. An adult accumulates a growing reservoir of experience, which is a rich resource for learning.
3. The readiness of an adult to learn is closely related to the developmental tasks of his or her social role.

4. There is a change in time perspective as people mature—from future application of knowledge to immediacy of application. Thus, an adult is more problem centered than subject centered in learning.
5. The most potent motivations are internal rather than external.
6. Adults need to know why they need to learn something (as cited in Merriam et al., 2007, p. 84).

From Knowles assumptions, the adult learner takes control of his/her learning. Other researchers has termed it self-directed learning.

Self-Reflection on Pedagogy vs. Andragogy

1. How could you encourage your students to self-direct his/her learning?

2. How do you identify a student that is internally motivated to learn your subject matter?

Course Topic 2: Adult Learning Theories

This section of the workshop will focus on multiple adult learning theories; it will also focus on learning models that will encourage student engagement. The first model stems from self-directed learning models. Grow's *Staged Self-Directed Learning* (SSDL) assists instructors with identifying what stage his/her student is in regarding self-direction in an effort to move the student from one stage to the next (Merriam et al., 2007). The stages are:

Stage 1: Dependent learner: Learners of low self-direction who need an authority figure (a teacher) to tell them what to do

Stage 2: Interested learner: Learners of moderate self-direction who are motivated and confident but largely ignorant of the subject matter to be learned

Stage 3: Involved learner: Learners of intermediate self-direction who have both the skill and the basic knowledge and view themselves as being both ready and able to explore a specific subject area with a good guide

Stage 4: Self-directed learner: Learners of high self-direction who are both willing and able to plan, execute, and evaluate their own learning with or without the help of an expert (Merriam et al., 2007, p. 117).

Experiential Learning

The experiential learning model was developed by David Kolb. Jarvis (1995) stated that experiential learning, "is actually about learning from primary experience, that is learning through sense experiences" (p. 75). The experiential learning model describes four abilities:

1. An openness and willingness to involve oneself in new experiences (concrete experience);
2. Observational and reflective skills so these new experiences can be viewed from a variety of perspectives (reflective observation);
3. Analytical abilities so integrative ideas and concepts can be created from their observations (abstract conceptualization);
4. Decision-making and problem-solving skills so these new ideas and concepts can be used in actual practice (active experimentation) (Merriam et al., 2007, p. 164).

In order to move from experiential learning theory to practice, instructors have certain responsibilities. Montgomery and Groat (1995) stated that when teaching, instructors must make assignments answer the following questions: “Why are we learning this? What are the key points of this issue? How do I use this knowledge?” (p. 4).

Group Activity

What are the four components of Experiential Learning by David Kolb?

Components	Descriptions (own thoughts)
Concrete experience	
Observation and reflection	
Forming abstract concepts	
Testing in new situations	

What does Experiential Learning imply for teaching and learning? (Dialogue with colleagues to generate ideas.)

Implications for Teaching	Implications for Learning

What have you learned about Experiential Learning? (Self-reflection)

Spirituality and Learning: Let's get spiritual!!!

Yes, there have been studies and empirical data on students learning through spirituality. An example is three components of spirituality identified by Courtenay and Milton: 1) a sense of connectedness, 2) a search for meaning, and 3) an awareness of a transcendent force or energy beyond the self (Merriam et al., 2007). In order to foster spiritual learning, there must be three aspects of a sacred space—dialogue, respect, and accountability (Merriam et al., 2007).

Course Topic 3: Teaching the Adult Learner

This section will focus on teaching the adult learner. It is imperative that in adult education the teacher moves from teaching to facilitating. In Long's book entitled *Teaching for Learning*, he notes 10 principles:

1. Adults are neither superlearners nor idle clock-watchers. Their attitudes and efforts are contingency based. Learning is facilitated in an environment that emphasizes the uniquely personal and subjective nature of learning.
2. Adult instruction is based on the concept of personal worth and dignity of each student.
3. Adults are autonomous beings with goals, desires, and expectations.
4. Adult students are capable of participating on an equal basis in making decisions affecting their own welfare.
5. The self-concept of the adult is progressively toward self-accountability, self-responsibility, and self-direction.
6. The adult's learning is influenced by previous life experience, including such things as memories, life events, and interpersonal relations.
7. The adult's orientation to learning is related to application. Applications, however, takes many forms from cognitive to motor skills, from mental theories to real-life problem solving.
8. Learning should be intrinsically motivated as it finds both its source and reward in its own experience.

9. Resistance to change is a natural human attribute, but so is the will to overcome constraints and seek change.
10. Learning is facilitated in an atmosphere in which people are encouraged to trust themselves, to make mistakes, and to try again (Galbraith, 2004, pp. 9-10).

Although adult learners are internally motivated, they still need external motivation in order to learn. Students respond to positive feedback.

Group Discussion

Instructions: Breaking into groups of five, each group will take two of the ten principles and discuss how they can be applied in the classroom. Take 25 to 30 minutes for discussion.

Final Self-Reflection Questionnaire

Please complete this final self-reflection. The purpose of this questionnaire is to assess how well the objectives were met throughout the course.

Likert Scale

5-Strongly Agree 4-Agree 3-Not Sure 2-Disagree 1-Strongly Disagree

1. I feel that this course and the topics were beneficial to me. _____
2. I feel that the course objectives were met. _____
3. I feel that the learning guide is clearly written and easy to follow. _____
4. I will incorporate the adult learning theories learned from this lesson. _____
5. I am likely to share the information learned with my colleagues. _____
6. I will encourage others to take the workshop or the online course. _____

Short Response

7. How will you use the information learned today?

8. Would you consider using the adult learning theories in your course? How?

9. I liked _____ the least.

10. Please indicate new topics you may be interested in learning.

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Slide 1

**Transitioning from Pedagogy to
Andragogy: Adult Learning Theories**

Dr. Nedra R. Allen, Ed. D.
General Studies Department

Slide 2

Purpose of the Workshop

- Bring awareness to faculty about adult learning theories

Slide 3

Course Objectives

- Understand pedagogy and andragogy
- Identify adult learning theories
- Develop a lesson plan

Slide 4

Course Topics

- Pedagogy vs. Andragogy
- Adult Learning Theories
- Teaching the Adult Learner

Slide 5

Course Topic 1:
PEDAGOGY VS. ANDRAGOGY

Slide 6

Pedagogy

- Defined as the “art and science of teaching children”
- Teacher-Led/Teacher-centered

Slide 7

Why do adult educators teach adult learners as if they are children?

[Adult Learning Concepts](#)

Slide 8

Andragogy

- Defined as “the art and science of helping adults learn”
- Student-centered

Slide 9

Malcolm Knowles

- Coined the term 'andragogy' and based his theory on six assumptions
 - Self-concept/self-directing
 - Experiences
 - Readiness to learn
 - Orientation to learn
 - Internally motivated
 - Need to Know

Slide 10

Adult Learning Video

- [Andragogy](#)

Slide 11

Course Topic 2:

ADULT LEARNING THEORIES

Slide 12

Grow's Staged Self-Directed Learning

- Stage 1: Dependent learner
- Stage 2: Interested learner
- Stage 3: Involved learner
- Stage 4: Self-directed learner

Slide 13

Experiential Learning

- Four different abilities:
 - Concrete experience
 - Reflective observation
 - Abstract conceptualization
 - Active experimentation

Slide 14

Course Topic 3:
TEACHING THE ADULT LEARNER

Slide 15

Teaching for Learning

- Ten Principles for teaching adults:
 - Contingency based
 - Personal worth and dignity
 - Goals, Desires, and Expectations
 - Decision making
 - Self-concept

Slide 16

Cont.

- Experiences
- Orientation to learning
- Intrinsically motivated
- Overcome constraints
- Encouraged to trust

Slide 17

Motivation

- [Video on Motivating the Adult Learner](#)

Slide 18

Closing

- Questions and Answers

Slide 19

References

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- Merriam, S., Caffarella, R., & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide*. San Francisco, CA: Jossey-Bass.
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Slide 20

Thank You!!!

- Thank you for your time and attention. Please feel free to email me with future questions or concerns on the presentation at nedallen24@gmail.com.

Faculty Development Workshop

Writing with Web 2.0 Tools

Day 2

- 8:00—8:30 Gathering/Recap from the other workshop
- 8:30—9:30 PowerPoint Presentation over Writing with Web 2.0 Tools
- 9:30—10:30 Discussion on Course Topic 1: Classroom Blog
- 10:30—10:45 Break
- 10:45—12:00 Discussion on Course Topic 2: Web 2.0 tools for Collaborations
- 12:00—1:00 Lunch
- 1:00—2:00 Discussion on Course Topic 3: Digital Storytelling
- 2:00—3:00 Digital Storytelling Group Activity
- 3:00—3:30 Wrap-up/Final Thoughts/Dismissal

Faculty Development Workshop

Writing with Web 2.0 Tools

Day 2

Learning Guide

Dr. Nedra R. Allen, Presenter

Mission Statement

The mission of the faculty development technology workshop is to provide instructors with teaching strategies using the catalyst of technology to enhance faculty performance and increase student engagement.

Purpose of Faculty Development Workshop

The purpose of this adult learning theory workshop is to bring awareness to faculty members of writing strategies using Web 2.0 tools in the higher education classroom instruction.

Course Objectives

At the conclusion of this course, faculty members will be able to:

1. Understand Web 2.0 tools
2. Demonstrate the utilization of Web 2.0 tools to enhance writing

Course Topics

1. Creating a classroom blog
2. Web 2.0 tools for collaboration
3. Digital storytelling to enhance writing assignments

Self-Inventory Questionnaire

This questionnaire is designed for you to take a self-assessment about your knowledge of web 2.0 tools. This is only created to assess where you are in regard to integrating web 2.0 tools in the classroom.

Likert Scale

5-Strongly Agree 4-Agree 3-Not Sure 2-Disagree 1-Strongly Disagree

6. I feel that I have an understanding about web 2.0 tools. _____
7. I feel that engaging students in learning is not as important as them understanding the content of my course. _____
8. Every opportunity I get I tend to use web 2.0 tools for writing. _____
9. I am currently using web 2.0 tools for writing. _____
10. I am not too familiar with web 2.0 tools. _____

Short Response

How do you currently use web 2.0 tools?

What web 2.0 tools do you employ to attract the minds of the adult learner in the classroom?

Course Topic 1: Classroom Blog

Blog which is an abbreviation of the word ‘web blog’ is a tool that is used either in education or as social media. Generally, in a blog, the author posted a statement or an opinion about a subject and the readers reply to what is written. Blogs are a very useful tool for communication. For today’s workshop the blog site we will explore is Blogger which is the blog site for Google.

Group Activity

Step 1: We will create a blogger account together. If you do not have a Gmail account we will create it first.

Step 2: Think of a topic to post on your blog.

Step 3. Post a comment to someone else’s blog.

Self-Assessment on Blogs

1. How will you incorporate the usage of blogs in your classroom?

2. According to your discipline, what topics do you feel you will add to your blog?

Course Topics 2: Web 2.0 Tools for Collaboration

Web 2.0 tools are a good form of interaction between students and instructors. As the title indicates; the tools are web-based. Students can access the Internet at home or at school, on their phones or any Internet-enabled devices. Instructors can also be accessible as well as long as the student has Internet capabilities. This section will focus on Google Docs as a web tool for collaboration.

Group Activity Google Docs

For this activity, we will break into groups. The goal of this activity is to work on an essay together. We will select a topic together as a group. Once the topic is selected, the group will be given a section of the essay to write: introduction, main points, and conclusion. Each group will be responsible for its references so we can add it to the reference page(s).

Course Topic 3: Digital Storytelling

Digital storytelling can be used as a teaching tool for individual or group projects. Digital storytelling is similar to creating a PowerPoint presentation. Using multimedia, students can tell stories about themselves or course content. Unlike the goals of presentation, the students may or may not have objectives that are being displayed which allow the student to have complete autonomy. It is up to the student to decide the content that will be displayed for the instructor; however, the instructor may want to have a rubric if there are certain artifacts the student needs to include in his/her digital story. The following image displays the purpose of digital storytelling.

Group Activity Digital Storytelling

In this group activity, we will create a digital story based on the following topic: What motivates me to succeed? You may use pictures from the web, photo album on your cells, and music. You can be as creative as you like.

Final Self-Reflection Questionnaire

Please complete this final self-reflection. The purpose of this questionnaire is to assess how well the objectives were met throughout the course.

Likert Scale

5-Strongly Agree 4-Agree 3-Not Sure 2-Disagree 1-Strongly Disagree

1. I feel that this course and the topics were beneficial to me. _____
2. I feel that the course objectives were met. _____
3. I feel that the learning guide is clearly written and easy to follow. _____
4. I will incorporate the web 2.0 tools learned from this lesson. _____
5. I am likely to share the information learned with my colleagues. _____
6. I will encourage others to take the course. _____

Short Response

7. How will you use the information learned today? _____

8. Would you consider using the web 2.0 tools in your course? How?

9. I liked _____ the least.
10. Please indicate new topics you may be interested in learning.

Slide 1

Writing with Web 2.0 Tools

Dr. Nedra Allen, Presenter
Arkansas Baptist College

Today, you are taking a workshop on web 2.0 tools. The goal of this workshop is to provide instructors with tools to engage students in learning the writing process. Although the main focus is writing, these tools can be applied to other disciplines across the curriculum.

Slide 2

Purpose of the Workshop

- Bring awareness to faculty members of writing strategies using Web 2.0 tools

Slide 3

Objectives for Workshop

- At the conclusion of this workshop, faculty members will be able to:
 - Understand Web 2.0 tools
 - Comprehend how to utilize Web 2.0 Tools to enhance the writing process

Slide 4

Course Topics

- Because of time constraints, the web 2.0 tools that are the focus of this workshop is:

- Classroom blog
- Web 2.0 tools for collaborating
- Digital Storytelling

Slide 5

What are Web 2.0 tools?

- Web 2.0 tools are designed to allow interaction between users.
- Examples: blogs, wikis, social networking, media sharing, and others.

Slide 6

Blogs

Slide 7

Classroom Blog

- Blogs are used in higher education in various ways.
 - As an interaction between student and teacher
 - Can be used as a discussion board
 - Will allow students to journalize their thoughts on a particular topic

Slide 8

Using Blogs

- If you have never used a blog before, then Google Blogs is a very good user friendly site.
- To create a blog:
 - Begin with a search engine
 - Type 'Google'
 - Create a Gmail Account (You may use your current email address to open this account.)
 - Click the more button (blog) will be on this list

Slide 9

Using Blogs cont.

- The next slide is a screen print of how to select Google Blog.
- Once you have created a Gmail account then click the more button.
- Then click even more and you will see a Blogger button. Click on it.

Slide 10

Let's Do It!

- Group Activity-Creating a Classroom Blog

Slide 11

Using Blogs cont.

- You will then be prompted to create a blog.
- You may choose to create a profile now or later.
- You may also choose to submit a picture and make your blog as welcoming as possible.

Slide 12

Using Blogs cont.

- Your students will want to upload their pictures on their profiles when they begin blogging. (Remember the students will need to setup Gmail accounts, too.)

Slide 13

Sample Assignment for Blogging

- A sample topic in English Enrichment would be: Is prewriting or brainstorming an important part of the writing process? Why or Why not?

Slide 14

Web 2.0 for Group
Collaborations

Slide 15

Web 2.0 Tools for Collaboration

- Collaboration is very important to students

Slide 16

Google Docs

- To access Google Docs
- You must have a Gmail Account
- From the Google home page
- Click 'more'
- Select Documents

Slide 17

Google Docs, Cont.

- Once you sign in the following screen print is what you will see.

Slide 18

Google Docs, Cont.

- To begin, you must select 'Create New' button
- Choose which type of document you want to begin: document, spreadsheet, presentation, etc.

Slide 19

Google Docs

- Once the students begin to accept your invite, you will see their names appear on the left.

Slide 20

Sample Assignment for Google Docs

- Using Google Docs, an English Composition I instructor could:
- Break a class of twenty students into 5 groups of 4 students.
- Each group could take one portion of a five paragraph essay
- Topic: Why do students drop out of school?
- As a class, brainstorm and write the thesis statement including the main points of the essay
- Group I will collaborate on the Introduction

Slide 21

Sample Assignment, Cont.

- Group II will collaborate on the first main point
- Group III will collaborate on the second main point
- Group IV will collaborate on the third main point
- Group V will collaborate on the conclusion and restating the thesis statement and the main points

Slide 22

Sample Assignment, Cont.

- After all parts of the essay are complete, the instructor could put the completed essay on the projector and show the students their completed work.

Slide 23

Digital Storytelling

Slide 24

Digital Storytelling

- Digital Storytelling can be used either as an individual assignment or collaboration.
- Digital storytelling is using computer-based technology to create a story. Using multimedia a student will tell a story about himself/herself, add graphics, and sound to bring his/her story to life.
- This tool is very helpful for creative writing assignments.

Slide 25

Digital Storytelling, Cont.

- Students may use PowerPoint presentation software since that is more familiar to them.

Slide 26

Digital Storytelling, Cont.

- Although Digital Storytelling focuses on multimedia, students will also have to use the writing process in order to submit an outline about the story he/she is telling.

Slide 27

Sample Assignment for Digital Storytelling

- The English Composition II instructor could assign the following:
- Topic: What motivates me to succeed?

- The student could begin the writing process by brainstorming 'motivation' and 'success'
- Using his/her thoughts begin an outline as to how he/she will tell the story of what motivates him/her personally

Slide 28

Digital Storytelling, Cont.

- The student will then begin telling his/her story by whatever media he/she chooses
- Students can use their own images or photos to tell the story or use Google Images to find pictures
- Once the story is complete the class can view them together

Slide 29

References

- Google website. www.google.com

Slide 30

Thanks...

Thank you for your time and attention. I hope that one or all of these tools will be helpful to you along your journey of educating our leaders for tomorrow. If you have any questions, please feel free to contact me at nedra.allen@arkansasbaptist.edu. Please fill out your survey and leave it on the desk.

Faculty Development Workshop

Teaching and Learning using Technology

Day 3

Agenda

- 8:00—8:30 Overview of Teaching and Learning using Technology Workshop
- 8:30—9:30 PowerPoint Presentation over Technology Integration
- 9:30—9:45 Break
- 9:45—10:00 Reassembly/Break into Groups for Hands-On Session
- 10:00—11:00 Group Collaboration/Lesson Planning
- 11:00—11:45 Group Presentations
- 11:45—12:00 Further Discussion
- 12:00—1:00 Lunch
- 1:00—2:30 Roundtable Discussions on topics covered/lesson plans
- 2:30—3:00 Wrap up/Final Thoughts/Dismissal

Faculty Development Workshop:
Teaching and Learning using Technology

Day 3

Group Collaboration Activities

1. Group one-Pathbrite

This group will develop logins and create an e-portfolio. Also, this group will develop a rubric and artifacts list according to the discipline.

2. Group two-Google hangouts

This group will create a Google Hangout with one another. Make a lesson plan explaining how this product could be used in the class.

3. Group three-Remind101

This group is responsible for creating a Remind101 account and sending text messages to one another as practice. This group will also make a list of how this product can be used in the classroom.

4. Group four-Socrative

This group is responsible for developing a quiz in Socrative. The goal of this group is to practice both as students and faculty members. This group will tell faculty how this tool can be used in classes.

All groups will present after time is called.

Faculty Development Workshop
Teaching and Learning using Technology

Day 3

Learning Guide

Dr. Nedra R. Allen, EdD

Presenter

Mission Statement

The mission of the faculty development technology workshop is to provide instructors with teaching strategies using the catalyst of technology to enhance faculty performance and increase student engagement.

Purpose of Faculty Development Workshop

The purpose of the technology integration training is to give awareness to faculty members of different web-based tools that will support classroom instruction.

Course Objectives

At the conclusion of this course, faculty members will be able to:

1. Develop a learning community where technology is used
2. Gain knowledge about available technology that can be used to engage students inside and outside of the classroom
3. Incorporate more technology in their courses.

Course Topics

This course will focus on the following web-based tools:

1. Pathbrite-E-portfolio application
2. Google+ Hangouts-Social Networking Tool
3. Remind101-Messaging System
4. Socrative-Student Response System.

Self-Inventory Questionnaire

This questionnaire is designed for you to take a self-assessment about technology usage in your courses. This is only created to assess where you are in regard to technology integration.

Likert Scale

5-Strongly Agree 4-Agree 3-Not Sure 2-Disagree 1-Strongly Disagree

11. When it comes to allowing cell phones in my classroom, I tell the student not to bring them. _____
12. I feel that technology is a waste of time in my classroom. _____
13. Every opportunity I get I use technology. _____
14. I am an expert when it comes to technology in the classroom. _____
15. My students are encouraged to bring smartphones and mobile devices to class.

Short Response

How do you currently use technology in your classroom?

What technologies would you like to have in your classroom?

Course Topic 1: E-Portfolios

When it comes to assessing student learning, there are many different techniques; however, e-portfolios are a definite way of assessing students and are project-based strategies. E-portfolios give students an end product that will be used not only for grading purposes but also students can use this e-portfolios so that employees can see how students progressed through college. Awwad et al. (2013) argued that e-portfolios allow students an opportunity for self-reflection and allow students to see their own growth and achievements. Clearly, e-portfolios will be an excellent tool for faculty and students. Both faculty members and students will be able to use e-portfolios for assessments.

Pathbrite is an electronic portfolio that is housed on the web. It is an awesome tool that will allow students to be as creative as they want. The website is free to educators and individuals. Should an institution plan to purchase it for a school, the access for educators is free; however, it is \$10 per student and he/she can pay it individually or it can be invoiced to the school. Pathbrite is free if the student signs up as an individual creating a portfolio.

Recommendation for Usage

I have two recommendations for usage: 1. the student can begin an individual portfolio in Student Success courses or 2. once the student has declared his/her major, he/she can start the portfolio for the introduction course. An example would be in the Introduction to Business course. Faculty member's responsibility is to develop a rubric of artifacts that the student will need to place in the portfolio. Once the student gets to his/her Senior Seminar course, the instructor for the course can review the artifacts as

part of the assessment for the course. Artifacts can include but are not limited to: resumes, biographical information, sample of projects in his/her major, etc. Reflect on the portfolio artifacts as if you were an employer. What would you want to see? Remember, the portfolios will be web-based and the students can give access to anyone. Check e-portfolios for errors as if you were grading a paper. By doing so, the student could possibly be more marketable in the job market.

Self-Reflection on Pathbrite E-portfolio

1. Based on your discipline, what artifacts will you encourage your students to include in their e-portfolios?

2. Would you consider creating an e-portfolio for yourself? Yes or No
3. Would you like to see your campus adopt Pathbrite e-portfolios as an overall assessment tool for students? Yes or No
4. Please give any additional comments on Pathbrite e-portfolios.

Course Topic 2: Social Networking in Education

Social networking is a good way for faculty members and students to stay connected beyond the range of the classroom. Knight and Rochon (2012) used social networking in their study as a support to help new students transition from high school to college. From their findings, students were very engaged in social networking (Knight, & Rochon, 2012). Social networking is a good tool for communication that can be done on any device as long as there is an Internet connection.

Google+ Hangouts is a social networking tool that is designed to bring people together via the Internet. This product is a product that can be used regardless of the mobile device. A hangout can be created by one person or it can be scheduled. It is a free application. It requires users to create a sign in account for Google+. One hangout can connect up to ten people. There is no time limit on the hangout. This product takes chat rooms to another level because you can upload photos during the conversation.

Recommendations for Usage

I recommend the following uses for Google+ Hangouts: 1. Instructors may choose to assign a hangout for group collaborative projects or 2. If an instructor knows that a group of students do not comprehend a topic in the course, he/she may choose to create a scheduled hangout for tutorial purposes. For either suggestion, the instructor can assign a record keeper and notes from the hangout can be graded as an assignment. An example could be for religious studies students to discuss potential sermon topics and scriptures for a project for class. By doing so, immediate feedback from the students and instructors

can guide the student in the right direction for the project saving the student preparation time.

Self-Reflection on Google+ Hangouts

1. How would you incorporate Google+ Hangouts? Think of an assignment.

2. Would you consider Google+ Hangouts as a means of communication for faculty members in your discipline? Yes or No

Please give any additional comments on Google+ Hangouts.

Course Topic 3: Mobile Devices

Technology touches every part of our lives. Children as young as toddlers play with their parents' smartphones. Bearing this in mind, why is technology so limited to college students? Mobile devices are classified as Internet enabled devices, such as smartphones, tablets, laptops, PDAs, MP3 players, or touch iPods. Depending on the mobile device there are certain platforms that are operating systems: Android or IOS. Mobile learning integrates learning using mobile devices and the concept is the technology can be used anytime and at any place (Boyinbode et al., 2011). There are many different applications that support mobile learning and different of ways of using mobile technology. For this topic, I will focus on a student messaging system.

Remind101 is a product that can be used on any mobile smartphone regardless of the operating system platform. The instructor signs up for free with Remind101 either from his/her pc or from his/her smartphone. It is a text messaging system. It allows the instructor to send messages to students without the student having the instructor's telephone number. The instructor will not have the students' telephone numbers either. The instructor will be assigned a 800 number that he/she can post on the board and the students are enrolled when they text the 800 number.

Recommendations for Usage

It is my recommendation that the faculty member use this method to text message students. Since it will be a blast text message, the instructor will save time rather than emailing or texting each individual student. It is good for reminders like. "Do not forget

your homework is due on _____ date or no class Friday.” The possibilities of reminders are endless.

Self-Reflection on Remind101

1. How would you incorporate Remind101? Think of ways to use it in your course.

2. Would you consider using Remind101 as a means of communication with your students? Yes or No

Please give any additional comments on Remind101.

Course Topic 4: Student Response System

For 21st-century learners, it takes more than just a lecture to get their attention. As an instructor, I am sure you have experienced lecturing on a topic to students and then the smartphones come out and you are not sure if they are engaging in the lesson or playing on their phones. In many cases, students playing on the phone is a huge concern; however, if they are using for educational purposes that should be fine. Stav, Neilsen, Hansen-Nygaard, and Thorseth (2010) incorporated technology by using student response systems for iPod touch and iPhone. Student response systems or clickers actually engage students in the learning process.

Socrative is a product that encourages student and instructor communication. The instructor will need to install Socrative on two different devices to see how it works. For example, the instructor will need to download it as a teacher on the laptop and as a student on his/her smartphone. This product can be used with either Android or IOS platforms. Instructors can create short quizzes, lecture questions, etc. and the students can respond in class. You can use this product for formative or summative assessments. You will have immediate feedback from students and know if they comprehend what you are teaching which allows quick modifications. This student response system is a must have if your personal goal is to increase student engagement in your class. After you have finished, you can download a report of your students' progress.

Recommendations for Usage

I recommend that this tool is used while the instructor is lecturing. For this to take place, the instructor will need to prepare his/her lecture questions or quizzes prior to

coming to class. When the students arrive, they can download Socrative to their devices. Then the faculty member and student will be able to communicate. I suggest starting out with questions that are simple to allow you and the students to get acquainted with the software. Then use it and have fun with it. Offer positive feedback to the students.

Self-Reflection on Socrative

1. How would you incorporate Socrative into your course?

2. Would you consider using Socrative as a means of communication with your students during your lecture or course information? Yes or No
3. How much time will you spend preparing your materials for Socrative? (in terms of hours) _____ per week

Please give any additional comments on Socrative.

Conclusion

These are the first topics in technology integration for this workshop. There are many other products and applications that will enhance faculty performance and increase student engage. After all, it should be the goal of every instructor to engage more students into the learning process. Keeping them engaged will increase retention rates and further increase graduation rates. It should be our mission to provide the best education possible so that our students will graduate and reach their potential. Commit today to using more technology in your classrooms as this will allow your students to grow academically.

Course Evaluation

Final Self-Reflection Questionnaire

Please complete this final self-reflection. The purpose of this questionnaire is to assess how the objectives were given.

Likert Scale

5-Strongly Agree 4-Agree 3-Not Sure 2-Disagree 1-Strongly Disagree

1. I feel that this course and the topics were beneficial to me. _____
2. I feel that the course objectives were met. _____
3. I feel that the learning guide is clearly written and easy to follow. _____
4. I will incorporate the tools learned from this lesson. _____
5. I am likely to share the information learned with my colleagues. _____
6. I will encourage others to take the workshop or the online course. _____

Short Response

7. How will you use the information learned today? _____

8. Of all of the web-based tools learned today, I liked _____ the most.
9. I liked _____ the least.
10. Please indicate new topics you may be interested in learning.

Follow-Up

Upon completion of this course, in three months, I will send a follow-up email asking the following questions:

1. How are you using the tools you learned from the technology integration training?

2. Are your students more engaged in the lesson? How so?

3. I was unclear about _____. Please provide me with more information about this topic.

4. Additional future topics.

Thank you very much for your time and attention. I look forward to hearing great things about your experiences with teaching using technology.

References

- Awwad, F., Nofal, M., & Salti, N. (2013). The impact of electronic portfolio on developing reflective thinking and self-directed learning readiness. *Cypriot Journal of Educational Sciences*, 8(1), 78-104.
- Boyinbode, O., Bagula, A., & Ngambi, D. (2011). An opencast mobile learning framework for enhancing learning in higher education. *International Journal of U- & E-Service, Science & Technology*, 4(3), 11-18.
- Knight, J., & Rochon, R. (2012). Starting online: Exploring the use of a social networking site to facilitate transition into higher education. *Electronic Journal of E-Learning*, 10(3), 257-261.
- Stav, J., Nielsen, K., Hansen-Nygaard, G., & Thorseth, T. (2010). Experiences obtained with integration of student response systems for iPod touch and iPhone into e-learning environments. *Electronic Journal of E-Learning*, 8(2), 179-190.

Slide 1

**Teaching and Learning using
Technology**

Nedra R. Allen, Presenter

Slide 2

**Purpose of the Faculty Development
Workshop**

- The purpose of the technology integration training is to give awareness to faculty members of different web-based tools that will support classroom instruction.

Slide 3

Course Objectives

- At the conclusion of this course, faculty members will be able to:
 - Develop a learning community where technology is used
 - Gain knowledge about available technology that can be used to engage students inside and outside of the classroom
 - Incorporate more technology in their courses.

Slide 4

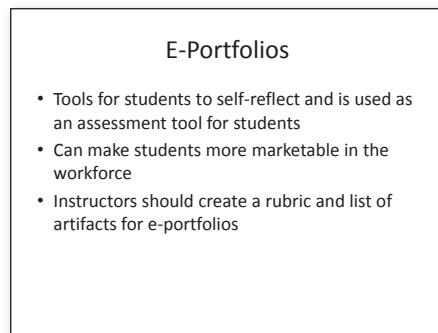
Course Topics

- This course will focus on the following web-based tools:
 - Pathbrite-E-portfolio application
 - Google+ Hangouts-Social Networking Tool
 - Remind101-Messaging System
 - Socrative-Student Response System.

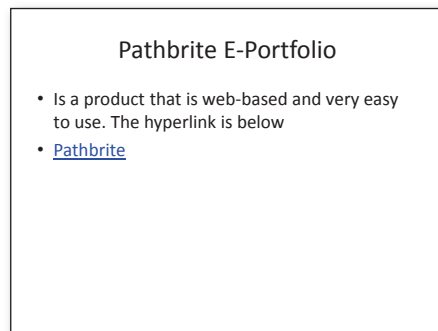
Slide 5



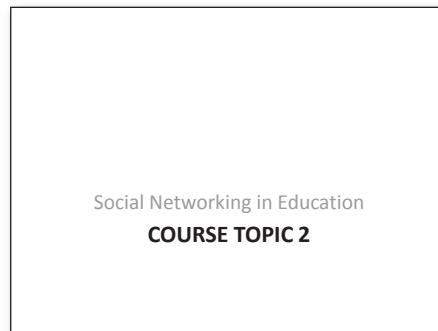
Slide 6



Slide 7



Slide 8



Slide 9

Social Networking

- Good line of communication between educators and students beyond the classroom boundaries
- Great for group collaborations
- Encourages small group learning for tutoring course information

Slide 10

Google+ Hangouts

- Free application on both Android and IOS
- Allows up to ten people per hangout
- No time constraints and photos can be uploaded during video call
- [Google+ Hangouts](#)

Slide 11

Mobile Devices

COURSE TOPIC 3

Slide 12

Why should we use mobile devices in the classroom?

- [Mobile Device Video](#)

Slide 13

Mobile Devices

- Smartphones
- PDA devices
- Tablet PCs: Android or Apple iPads
- Kindles/Nooks

Wi-Fi connections allow these devices to connect to the internet.

Slide 14

Remind101

- Messaging system that allows faculty members and students to communicate
- Send text without the instructor using his/her personal phone number
- [Remind101 Website](#)

Slide 15

Student Response System
COURSE TOPIC 4

Slide 16

Student Response System

- Engage the students in the lecture
- Ask students questions and they can respond immediately
- Educator can modify and adjust quickly upon responses

Slide 17

Socrative Teacher/Student

- Engage students using clickers from their multiple devices (apple/android)
- To test product, you must have two different devices and download the student version and teacher version
- [Socrative](#)

Slide 18

Future Technology Usage

- Technology is here. We must embrace it.
- Video on the future of technology.
- [Advance Future Technology](#)

Slide 19

References

- Google+ Hangouts. n.d. Retrieved August 5, 2013, from http://www.google.com/+learnmore_/hangouts/
- Pathbrite. (2013). Retrieved August 5, 2013, from <http://www.pathbrite.com/for-educators/>
- Remind101. (2013). Retrieved August 5, 2013, from <https://www.remind101.com/>
- Socrative. (2013). Retrieved August 5, 2013, from <https://www.remind101.com/>

Slide 20

References

- Kumar, A. (2011). *Advance Future Technology, Must See*. Retrieved August 5, 2013, from http://www.youtube.com/watch?v=IDF_60ok04
- Vodafone Global Enterprise. (2011). *How mobile technology could shape the consumer goods sector in . . .*. Retrieved August 5, 2013, from <http://www.youtube.com/watch?v=8DXB475spgc>

Appendix B: Interview Guide

Face-to-Face Interview

Project: Technology integration at a historically Black college or university

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

Position of Interviewee:

The purpose of this study is to determine how to integrate more technology into HBCU classrooms. Faculty members serving in various departments on campus will be interviewed. The data collected from the interview will be kept confidential and will be used to identify ways in which to integrate technology in the classroom. The interview should take approximately 30 to 45 minutes. The interview session will be audio taped to assist in the data analysis process.

Questions:

1. How do you use technology in your social interactions?
2. In your classroom, how do you incorporate technology in the following: course assignments, lesson planning, lectures or lesson delivery? (Give examples of usage)

3. In your class, how do you encourage your students to collaborate on course assignments using technology?
4. What features do you use in CAMS? How do you use them?
5. How important is integrating technology in your classroom?
6. In your opinion, how important is technology training to you in your position?
7. How did you learn how to incorporate technology in your course assignments, lesson plans, etc.?
8. Give an example of a successful lesson you have taught using technology.
9. In your opinion, how important is technology usage in the classroom in regard to student performance?
10. In your opinion, how important is the usage of technology in teaching 21st Century learners?
11. How does technology in your classroom enhance your performance as a faculty member?
12. What new technology skills would you like to acquire and how do you propose to get that knowledge?
13. If you do not use technology in your classroom, what will encourage you to use technology?
14. If you are not currently using technology in your classroom, please identify the obstacles that are prohibiting technology usage. Please be as detailed as possible.

15. In your opinion, how would incentives encourage you to use more technology in the classroom?

16. Give your thoughts on limited technology. Is technology usage limited in your classroom, on campus, or in your department? Why or why not? Please give a detailed explanation.

(All interviewees will fill out a demographic and confidentially sheet.)

Appendix C: Demographic and Professional Information

1. Please indicate your age range.

20-25	36-40	51-55	66-70
26-30	41-45	56-60	above 70
31-35	46-50	61-65	

2. Please indicate your gender.

Male Female

3. Please indicate your race.

_____ American Indian or Alaska Native
_____ Asian
_____ Black or African American
_____ Native Hawaiian or Other Pacific Islander
_____ White

4. Choose one

_____ Hispanic or Latino _____ Non-Hispanic or Latino

5. Please indicate your professional rank at this institution.

_____ Professor _____ Associate Professor
_____ Assistant Professor _____ Instructor
_____ Other

6. Please indicate your status at this institution.

_____ Full-Time _____ Part-Time _____ Adjunct

7. How many total years of college teaching experience do you have?

0-5	16-20	31-35
6-10	21-25	35-40
11-15	26-30	above 40

8. Please rank the following activities 1 to 4 according to the amount of time spent on each (1 being the activity you spend most time on and 4 being the activity you spend the least time on).

_____ Teaching _____ Research _____ Service
 _____ Administration

9. Please indicate names of the college and department in which you do most of your academic work.

College (., Business) _____ Department (., Accounting) _____

10. Please indicate the teaching area (discipline) in which you perform most of your instruction (., Taxation, Elementary Education)

11. Do you have a web site of your own? _____ Yes _____ No

12. How would you assess your expertise in using computer-based technologies for instructional purposes?

13. How would you assess your expertise in using Web-based technologies for instructional purposes? _____

14. What suggestions do you have for increasing technology usage in the classroom?

15. Please provide any additional comments you may have.

If you have any questions about this demographic sheet, please feel free to email the researcher from your personal email address (not Small HBCU email address).

Appendix D: Letter of Permission to Use Survey Questions

Dear Nedra

While of my articles did you locate? Not a problem. Please let me know how your study turns out.

Regards,

Wanjira Kinuthia, Ph.D.

MSIT Dept

Georgia State University

P.O. Box 3978

Atlanta, GA 30302-3978

Email: xxx

>>> "Nedra Allen" <xxx> 06/02/11 12:47 PM

Dear Dr. Kinuthia,

My name is Nedra Allen and I am a doctoral student at Walden University.

I am currently in the process of writing my project proposal and during my quest for knowledge about faculty development in technology integration in the classroom. I am writing to ask if I may use your survey questions and modify them if I need to? Thank you very much for your time and consideration in this matter.

Nedra R. Allen, M.Ed.

Doctoral Learner

Computers Instructor

General Studies Department, Small HBCU

Curriculum Vitae

Nedra Allen, MEd

Education

- 2014 Doctor of Education, Walden University, Minneapolis, MN
- 2004 MEd, Instructional Technology, American InterContinental University, Hoffman Estates, IL
- 2001 BA, English, University of Arkansas at Little Rock

Relevant Professional Experience

- 2008-Present General Studies Instructor, Small HBCU, AR
- 2012 Instructional Technology Consultant, Arkansas State University, Jonesboro, AR
- 2004-2006 Teacher, UAMS Head Start, AR

Community Service

- 2007-Present Volunteer, Martin Luther King Head Start
- 2008 Volunteer, Juvenile Diabetes Research Foundation

Publications

I write adult church school lessons and teaching strategies book for the African Methodist Episcopal Church. The lessons are published in Nashville and are distributed nationally and internationally.

Book

Allen, N. (Expected 2014). *From cope to hope: Words of encouragement for single parents*. Grant House.

Presentations (Partial List)

- December 2012 Workshop, Small HBCU, AR Topic: Teaching and Learning using Mobile Devices
- October 2012 Workshop, HBCU Faculty Development Network Conference, Orlando, FL Topic: Innovating Education with Mobilization (iPads/Apps)
Presenter(s): Dr. Robbie Melton, associate vice chancellor for mobilization, Tennessee Board of Regents, and Nedra Allen, Small HBCU (copresenter)
- June 2011 Workshop, Little Rock District Church School Convention Topic: Internet Safety
- April 2011 Workshop, Annual Ministries in Christian Education Training/Planning Meeting, African Methodist Episcopal Church, Nashville, TN Topic: Building the Church School Using New Bricks: Web 2.0 Tools

Professional Development (Partial List)

- March 2013 Difficult Conversations in the Workplace Presenter: Deb Alexander
- February 2013 Designing Instruction to Create Deep and Lasting Learning Among Millennial Students Presenter: Dr. Henry Findlay
- February 2013 Dream Conference: Achieving the Dream

Professional Affiliation

2010 Educational Technology Leadership Club Member, Walden University

Certification

July 2010 NIH Certification