

Implementing Podcasts and Blogs with ESOL Teacher Candidates' Preparation: Interpretations and Implications

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[Abstract] This in-depth case study of three ESOL (English for Speakers of Other Languages) teacher candidates investigates questions regarding their actions, attitudes, and perceptions toward the instructional uses of podcasts and blogs in a core assignment. This study reveals how they integrate these new instructional technology media while developing a case study for a specific English language learner (ELL) in a real-life classroom context. In this qualitative study, data sources include observations, research field notes, interviews, emails, dialogue, and a pre-term anonymous survey. Valuable results from this study include insight into transformative changes in ESOL teacher candidates' attitudes and perceptions, developing teacher professional identity while practicing innovative instructional technology, professional development, language teaching and instructional technology with digital-age children, and pedagogical reports for ELL classroom application. The educational significance includes, but is not limited to providing research-based podcasting practices for ESOL teacher candidates and ELL learners.

[Keywords] ESOL teacher education; teacher pre-service, podcasting and blogging; ESOL teacher candidates' preparation; ESOL; ELL; technology integration in higher education; core assignments

Introduction

Innovation in educational practice is growing rapidly, as are the numbers of English language learners (ELLs) in the United States (Kim, 2009a; Peregoy & Boyle, 2008). While ELLs are learning a new language, they are also preparing to succeed in the workforce and/or further academic study. The challenge with these goals is that the world in which they will work and study often features vastly different uses of technology than their schools or prior experiences. Initiatives such as The Partnership for 21st Century Skills (2004) and the International Society for Technology in Education (ISTE) have identified technology-related outcomes and standards, which are essential for learner success.

Based on these conditions, a clear opportunity exists to incorporate instructional technology for ELLs. Furthermore, the literature highly recommends incorporating various instructional technologies (podcasts, blogs, wikis, etc.) into the ELL educational context (Grigsby, 2009; Kim, 2009b, 2009c, LaCava, 2002). Our research revealed that many studies examined podcasting learning and integration for higher education (Carvalho, Moura, & Cruz, 2008; Lee & Chan, 2006; McGarr, 2009), K–12 teachers in general education classrooms (Carvalho, Moura, & Cruz, 2008), and pre-service training (Ozkan, & McKenzie, 2008; Pownell, 2006; Tynan & Colbran, 2006). These studies researched podcasting and blogs in teacher education (Brown & Warschauer, 2006; Deng & Yuen, 2009) and for teaching language learners (Soares, 2008). However, few studies have examined ESOL (English for Speakers of Other Languages) teacher candidates' implementation of podcasts and blogs to improve the teaching of ELLs. This specific opportunity for instructional design and teacher support is the focus of this research study and article.

We often call new-generation students *digital natives*; they are “native speakers of digital language of computers, video games, and the Internet” (Prensky, 2001, p.1). One of the significant challenges faculty face is keeping up with these digital natives. It is essential for teacher education to decide how to use technology to advance educational experiences and scaffold learning outcomes.

Prior research elucidates a central, critical issue related to meeting this challenge. Faculty needs to cope with the foundational issue of fear when seeking to adopt new instructional technologies (King, 2002; Warschauer, 2002). Indeed, it is an important and valid challenge to the innovative teacher's professional identity (Lee & Chan, 2006; Lonn & Teasley, 2009; Luehmann & Tinelli, 2008). These trends and research studies lead to a valuable overall and intersecting question: How do we better

understand and facilitate ESOL teacher candidates' learning of new instructional technologies in direct application with ELLs. By examining this question, we can better understand how to close the gap between teacher readiness, preparation, and integration of technology in ELL instruction.

Theoretical Background

The theoretical background for this research study draws from several literatures. As a theoretical framework intended to gain deeper understanding of teaching and the learning styles of ELLs in a social context, a sociocultural constructivist theoretical framework grounds this study (Cole, 1991). Within the sociocultural perspective, knowledge is personally constructed and socially enriched (Windschitl, 2000) by participation in cultural activities. Through this knowledge construction (Kerby, 1991), teacher candidates develop their professional identities (Luehmann & Tinelli, 2008). A brief overview of the literature of professional identity, podcasting and blogs, and podcasting and blogging as innovative teaching tools provides a foundation for this research into ESOL teacher candidates' experiences with podcasting as an ELL learning activity.

Professional Identity

Kerby (1991) refers to *professional identity* as an ongoing process of interpretation and reinterpretation of experiences. Furthermore, Lamote and Engels (2010) summarize the dimension with, "professional orientation and task orientation as indicators for student teachers' personal interpretation of their roles and task, self-efficacy of teachers, and commitment to teaching" (p. 6). Luehmann and Tinelli (2008) discussed how science teachers used technology to support their engagement in reflective reform-based pedagogical strategies, helping them negotiate new cultural and political expectations with students and other stakeholders. Specifically, their study examined the ways blog-based social interaction nurtured the development of professional identities of teachers bringing reform-based practices to their science classrooms. The results demonstrated that blogs support professional learning through social community for the participating student teachers.

The current generation of teacher candidates may be more skillful users of technology and more qualified to teach young learners (Kim, 2009b). Two reasons for this include (1) greater personal use of technology in their daily lives (Prensky, 2001, 2008); (2) many educational contexts include new instructional technology such as podcasting in teaching and learning (e.g., iTunes University; University of South Florida, 2007). Podcasts, which appeared in 2004 (Lafferty & Walch, 2006), are Internet-based audio files, linked in series by an RSS feed, and available for downloading through the Internet. They are much like recorded radio talk shows; however, because they are in digital format and stored on the web, they allow listeners to listen to the program through a computer or MP3 player (iPod or other device).

Podcasting

Podcasts are series of digital audio recordings which are posted on the web and *pushed* (or distributed) with the aid of a Rapid Simple Syndication feed (RSS feed) (Deal, 2007; King & Gura, 2007; Lafferty, & Walch, 2006). It is this RSSfeed, which allows podcatcher programs like iTunes, and Zunecast to obtain the newest episodes of the series immediately upon publication.

Merging these powerful Web 2.0 technologies, podcasts can be part of multimedia blogs, which usually combines text, images, photos, and audio/visual media (podcasts, video, etc.). The content for each episode is posted on a blog (see section below) and often includes a description of the episode, the identity of the hosts, objectives for the episode or links of materials discussed in the recording, contact and copyright information. This entry also includes a direct link to the audio file attached or appended to the posting. (Indeed, another example of podcasts' "roots" in blogs is the fact that *audioblog* was one of the original names of podcast technology as a description of early its format (King & Gura, 2007; Kim, 2009c)). Since 2002 and 2005 respectively, educators developed and expanded the use of blogs and podcasts for both instructional design and instructional activities (Campbell, 2005; King, & Gura, 2007; Richardson, 2006; Troutner, 2007).

As of 2008, podcast technology and portable devices had advanced so that general public and education widely use both audio and video as viable formats for podcast distribution. The format for an audio podcast is MP3 (Moving Picture Experts Group Standard 3), while a video podcast format is MP4 (Moving Picture Experts Group Standard 4). The continued popularity of audio podcasts is due to their convenience for both creator and listener (Lee & Chan, 2006). For listeners, audio podcasts facilitate much greater multitasking (consider the liability of watching a video podcast while driving, versus the efficiency of listening to class related podcasts while commuting to work and school). Moreover, King and Gura (2009) document that podcast producers have to invest five times more the amount of time for video podcast vs. audio podcast creation. For educators already overwhelmed with time demands, this efficiency is a critical and practical consideration.

Blogs

The blog technology is complementary to the podcast. A blog is a specific content management platform, which provides a user-friendly website, usually maintained with frequent entries and may host collaborative discussions easily (Richardson, 2006). Indeed, in recent years, many individuals and organizations began adopting blogging platforms (Word Press, for example) to replace traditional web sites, due to the fact that blogs are much easier for nontechnical users to update with new content. Podcasters do not need to know program coding. Thus, this platform facilitates and hosts user created content achieving the original intent of the web. The pedagogical connections become obvious when one discovers how easily students of all ages can input, post and disseminate content.

In the case of our research project, the blog was the space where the ESOL teacher candidates could easily create a website to post their case study and podcast as an instructional activity and resource. Popular platforms used for teacher education blogs include Blogspot.com, Googlesites.com, and Ning.com (a specialized blog-like platform with additional features). One of the essential features of a blog for k-12 settings is the capability to make any or all postings completely private/password protected and decide whether the blog is globally and publicly viewable, based on requests, requirements and/or consent of administration, students, and parents.

Podcasting and Blogging as Innovative Teaching Tools

Recently, Soares (2008) reported that educators beginning to use podcasts and blogs in various language teaching and learning curricula. She shared the rationale behind using blogs in language classes and recommended it as a good tool for language teaching because of extensive practice with the writing, rewriting and editing process. In addition, Ducate and Lomicka (2005) demonstrated the process of blog readers becoming blog writers.

Podcasting and blogging, as new forms of media literacy (Luehmann & Tinelli, 2008), offer unique opportunities and resources for pre-service teacher education. Since blogging and podcasting technologies are relatively new to teacher education, previous studies specifically targeting ESOL teachers are rare. Recently Kim (2009b, 2009c) shared her positive experience and strategies for implementing podcasts and blogs in her teacher-training program. Kim identified the importance of implementing technologies into teacher education.

More broadly, in teacher education, Deng and Yuen (2009) emphasized the value of blogs in pre-service teacher education. Further, Luehmann (2008) demonstrated how blogs support teacher professional identity and showed the importance of constant practice as well as carefully setting up the goals for their integration. Blogs supported teacher candidates as they developed content analyses and created educational affordance (Lamote & Engels, 2010). A few studies implemented podcasts and blogs into assignments and have demonstrated the need for even greater implementation (Kim, 2009b, 2009c). The increased use of these instructional technology experiences among teacher candidates in the development of their professional identity (Lamote, & Engels, 2010) and in professional development using blogs as a tool (Hou, Chang, & Sung, 2009) reveals the importance and opportunity for integrating podcasting and blogs. In addition, the work of Brown and Warschauer (2006) investigated another aspect of technology in pre-service preparation: the effective integration of technology in the teacher-preparation

curriculum that incorporates credential course work and field placements. This study explored students' attitudes towards integrating technology and the important roles of mentor teachers. Together, these several studies provide an important foundation for further investigation of pre-service teachers' development and attitudes in the integration of technology, and more specifically for ESOL pre-service teachers.

Other researchers continue related inquiry, exploring the use of these tools for language learners (Dippold, 2009; Soares, 2008; Yang, 2011). Several recent studies examine the importance and effectiveness of integrating podcasting and blogs for language learners, emphasizing ESL (English as a second language), EFL (English as a foreign language), and other foreign language learners. These tools assist learners in their target language acquisition—whether English or other languages. They provided various benefits such as sharing space in English blogging, building commonality, and relativity (Yang, 2011), providing instructors' effective evaluation, permitting individualized oral feedback (Hsu, Wang, & Comac, 2008), and providing valuable peer feedback (Dippold, 2009).

Even though there are several studies related to the infusion of podcast and blogs as instructional technology into teacher education, they rarely research either how to integrate these instructional technologies into an assignment or how to integrate these tools in ESOL teacher education. Furthermore, there is need for studies regarding ESOL teacher candidates' professional identity development as they implement these new technologies. Ongoing research in this area is crucial to prepare future educators. As we explored earlier, although there have been studies of integrating podcasting and blogs into teacher education (Brown & Warschauer, 2006; Deng & Yuen, 2009) and using podcasting and blogs to teach speakers of languages other than English (Soares, 2008) or other languages (i.e. German) (Dippold, 2009), there a few studies in ESOL teacher education, particularly in integrating these tools into their assignments. In order to extend this work to ESOL teacher education, we need further study to understand how ESOL teacher candidates create dialogic practice when integrating technology into assignments.

Consequently, this study explored the ESOL teacher candidates' dialogic practice while they implemented podcasting and blogging as a part of completing their ELL case-study project. The goal of the study was to understand their experience of this assignment. They shared their projects with others on the Web as podcasts, interacting with other colleagues in the process. This study may be helpful for other educators who plan to implement new technologies in their classrooms, in particular for ELLs.

Consequently, the purpose of the study is to understand how ESOL teacher candidates produce podcasts and blogs to complete an ELL case-study project and to investigate their attitudes and perceptions toward new instructional technology as well as how they practice experiences of integrating this new instructional technology. The specific research questions are as follows. (1) What are ESOL teacher candidates' attitudes and perceptions of podcasts and blogs, and how do they take on processes geared toward implementing instructional technology? (2) In what ways are ESOL teacher candidates' experiences similar and different while producing podcasts and blogs in compliance with their ELL case-study project?

Research Methods

This study employs a qualitative case study method (Merriam, 1998) to understand how ESOL teacher candidates implemented instructional technology, specifically podcasts and blogs, into a core instructional task. Case studies afford the potential to closely investigate participant experiences with a variety of data being collected (Yin, 2008). This research method is particularly helpful where unique situations may allow better understanding of the results of educational initiatives for others to learn.

This research is an intrinsic case study in the schema of Stake (1995); the researcher has a stake, is involved, in the study. The design incorporates several forms of data collection, thus providing greater validity through triangulation (Stake, 1995; Yin, 2008). Denzin's (1984) model further specifies the methodological triangulation of this study: the researcher gathered data in different ways from the same participants and about the same experience.

Method: A Core Assignment: ELL Case Study

ESOL teacher candidates experience great challenges in supporting ELLs because they hail from various cultural and linguistic backgrounds and socioeconomic conditions. We designed the second-language literacy (SLL) course to provide teacher candidates with a critical understanding of instructional delivery that caters to the linguistic and literacy needs of minority and heritage communities.

One of fundamental rationales for creating this assignment is that it provides more opportunity for ESOL teacher candidates to learn various cases of English language learner. The case-study pedagogy (Erben & Zoran, 2005) engages the ESOL teacher candidates in a dialogue with real-life situations in school settings. Each case study also offers a profile of individual and educational settings, the current situation, and any case-specific issues. The case studies also analyze the instructional situation, providing a professional solution, reflection, and recommendations.

The ELL case-study project includes three main phases. In Phase 1, ESOL teacher candidates conducted ELL case studies individually or in pairs. They found an ELL at school or some other instructional setting, depending on the level of their teaching focus. Once they identified an ELL, they collected data, including observations (an average of 6 hours), interviews with an ELL (twice on average), reading sample (miscue reading sample and think aloud sample), and writing samples. They are encouraged to conduct interviews with school personnel such as the principal and the ESOL teacher. Each ESOL teacher candidate used a case study method and analyzed the data inductively (Lincoln & Guba, 1985) to write the ELL case study.

Phase 2 and Phase 3 focused on implementing podcasting and blogging to complete the core assignment we considered for this study. In Phase 2, the ESOL teacher candidates created podcast audio files, such as an introduction about the project, interview samples with the ELL, and reading samples. In Phase 3, the ESOL teacher candidates blogged the final draft of the ELL case study on a website provided by the instructor. The instructor created the ESOL 2 site using Google Sites. For this study, the activities solely concentrated on Phases 2 and 3, which are steps of integrating these innovative teaching tools into an assignment.

Setting and Research Participants

During Fall 2008, we conducted the qualitative research study in the SLL (Secondary Language Learning) course at a tier-one public research institute located in the southeastern United States. The course required ESOL teacher candidates to complete a core assignment, the ELL case-study portfolio, which requires not only the analysis of case studies to gain experience working with issues common to ELLs, but also the creation of podcasts and blogs as tools for sharing this analysis with colleagues and parents. Through the ELL case-study project, ESOL teacher candidates assess ELLs' L2 language and literacy development in their social worlds.

Because the participants used the blogs as instructional activities and experiences for k-12 students (minors), settings afforded private access only. That is, only users with usernames and passwords for the specific blogs could access them. In addition, because these were underage students, parental and school approvals as well as student consent were all obtained in writing prior to uploading their work. With these controls in place the work of the students were not at risk because the platform was entirely private and confidential for only the teacher and student to view.

Using purposive sampling (Merriam, 1998), three undergraduate ESOL teacher candidates were selected (taking SLL in the Fall of 2008), under the ESOL endorsement program and majoring in Elementary Education from a class of 32 teacher candidates. The sampling was purposive in that it was a stratified sample meant to identify a cross section of ESOL teacher candidates from any given class. We employed four participant-selection criteria (a) Participants completed their case study and all course works in the SLL course; (b) Participants had various levels of prior experiences in using instructional technology tools, including Facebook and other social networking tools; (c) Participants represented both traditional and nontraditional students; and (d) Participants participated in this study voluntarily. The selection of the three participants represented all four of these sectors.

The three undergraduate participants are Rebecca, Vera, and Jennifer (all names are pseudonyms). In her late forties, Rebecca was the oldest student in this class; she focused fully on all class activities and wanted to excel in all her activities inside and outside the classroom requirements. She showed her positive attitude and eagerness for learning, demonstrating her excitement at returning to school. Vera wanted to study with an Arabic student in order to extend her knowledge and experience with students from different cultures. She completed her final internship in kindergarten. She was very sociable, and consistently asked questions related to projects during the semester. Jennifer was a quiet student, but always engaged in the course discussion and activities. She asked questions when necessary and completed her assignments in a timely manner. She was always attentive and showed her enthusiasm to be a fine teacher.

Data Collection and Analysis

Data collection included observations and the researcher's field notes as a practitioner observer, two interviews with each ESOL teacher candidate after completing the semester, ongoing formal and informal discussions, and emails in which they expressed their thoughts and experiences during the Fall of 2008. At the beginning of the semester, a voluntary, anonymous survey contained open-ended questions about each student's past experience.

Description of interview questions. The interview questions asking each candidate's general background and demographic information, perceptions toward podcasting and blogging, experience throughout the project, reflections on his/her future teaching, and reflections on the ELLs' responses.

Data analysis. The multiple data sets and themes emerged inductively during constant-comparison analysis. Analyzing qualitative research (Lincoln & Guba, 1985) allowed us to identify patterns and themes throughout the study. We analyzed data using the *Atlas ti* program (Muhr, & Friese, 2004). The program was useful in managing and analyzing the transcribed data. Once we transcribed the data carefully, we coded emerging patterns (e.g., positive attitudes, negative attitudes), translating from the raw data to meaningful categories (e.g., attitudes); this was our initial coding process (Creswell, 1998).

As we continued the study, we narrowed down from the initial coding to focused coding. Through the focused-coding process, meaningful patterns evolved. Simultaneously, we merged patterns into categories through the constant-comparison method (e.g., candidates' attitudes and candidates' perceptions); and through this method, the main themes evolved (e.g., candidates' attitudes and perceptions). Like most qualitative research, the study may not be generalizable because of the small sample size and findings may be context specific. However, as a thick descriptive study filled with *emic* voices (Lincoln & Guba, 1985), the study is transferable to other settings and subjects.

The researchers used several strategies to address issues of qualitative validity. Since one of researchers was an instructor for the class, she was aware of here dual positionality (Lincoln & Guba, 1985) as an instructor as a researcher while she carried out the study. She increased the trustworthiness of the study by using triangulated data sources, including a *reflexive journal* after each class, interview data, and case studies. Peer debriefing confirmed the coding and the inductive analysis (Patton, 1990). Moreover, participants performed member checking of the data when we returned it to them for review (Merriam, 1998).

Research Results

Analysis of the results provided a valuable window to understand better the ESOL teacher candidates' attitudes, processes, and reflections while podcasting and blogging their ELL case studies. Five themes emerged from this research: (a) teacher candidate's attitudes and perceptions, (b) developing teacher professional identity while practicing innovative instructional technology, (c) professional development, (d) language teaching and instructional technology with digital-age children, and (e) pedagogical reports. This section delineates each theme with representative evidence from the collected data.

ESOL Teacher Candidates' Attitudes and Perceptions

At the beginning of the semester, we conducted a brief survey regarding the ESOL teacher candidates' attitudes, perceptions, and knowledge of and experience with technology. A brief anonymous survey determined that 87% of the participants ($N = 32$) identified themselves as novices. In particular, 95% had never podcasted, and 75% had no experience with blogging. Relatively more students are familiar with blogging than with podcasting. Overall, the students' self-assessments demonstrated that the students are beginners, but a few students have some experience with podcasting or blogging.

The data confirmed that the teacher candidates' attitudes and perceptions varied depending on their previous experiences with other instructional technologies (e.g. PowerPoint). The ESOL teacher candidates' attitudes ranged from fearful or hesitant to rather negative and demonstrated various degrees of anxiety for this project at the beginning of the semester: Jennifer was the sole exception.

Rebecca: I've looked up podcasting as far as getting information for educational purposes or for showing in the classroom. But I would definitely say I'm very limited.

Jennifer: Well, I welcome those things. I don't feel threatened by them. I would like for them to—like the college to have a course. ... So if there's something that I see or like around that I'm interested in, I'll just go and take classes for it.

Rebecca, who did not have previous experience, was rather negative, whereas Jennifer, who has some experience with other instructional technologies, welcomed integrating podcasting and blogging into her work. For her, having prior experience reduced anxiety; nonetheless, both Jennifer and Vera expressed concern about the ever-changing nature of new technologies.

Jennifer: I wouldn't consider myself a novice, because I've really had a lot of experience with it. But like you said, because technology is always advancing, I don't think I'll ever learn it all. So I would say I'm probably in the middle, like I'm not like an expert but I'm not a novice either, I'm kind of in between, because I feel like I still have a lot to learn.

Vera: Because it can constantly be changed by anyone at any point, how true does the information stay? It's almost like another discussion board, but a lot of people take it more as literal, they take it as, oh, if it's here, it's got to be right, and that's not necessarily the case.

Over the course of this project, their attitudes gradually shifted to positive and they developed a willingness to learn and incorporate these digital media assets into their projects. In particular, after completing their ELL case-study project and seeing their projects on the website, the participating pre-service teachers all expressed confidence and enthusiasm.

Jennifer: I think the case studies have helped more, because it's actually—because you're actually using real people and you're using their issues and you're trying to help them and you're doing research. That part has helped me a lot.... I mean, the only way I learned about this was kind of—the technology that I know now was kind of because it was kind of forced on us to learn it, but I ended up enjoying it.

Rebecca: My instructional experience with ESOL 2 I think was a great experience. I think my instructor did a wonderful job as far as exposing technology in the classroom. I know a lot of the students already knew a lot about the technology that she was exposing us to, but there were a lot of us that didn't. So it really, for me, what I took away from it was the experience of doing it.

The ESOL teacher candidates' attitudes shifted from anxiety to confidence in doing these projects, and they enjoyed their experiences. Furthermore, Rebecca said that her fear abated after this project, since she understood the characteristics of instructional technologies: "Honest to goodness, I can tell you that it also helped me not to be as fearful for technology."

The ESOL teacher candidates showed their transformative learning (a radical shift in frame of reference for understanding) (King, 2002) throughout the project. Even though they had many struggles

with both unexpected technical issues and time usage, they were proud of themselves as they shared their ELL case-study projects with their classmates and instructors. Through this experience, they transitioned from the position of novice learners to experts in integrating this form of instructional technology.

Developing Teacher Professional Identity While Implementing Innovative Instructional Technology

Most ESOL teacher candidates have had various teaching experiences: however, they lack experience in implementing instructional technology. For instance, none of the three participants had any experience with podcasting, and only Jennifer had experience with blogging. However, through this teacher education experience, they mastered how to implement podcasting and blogging and reveled in their success, as they became better teachers. Rebecca's case revealed how she developed her teacher professional identity through this experience. Specifically, she believed that this knowledge and experience would help her become a better teacher.

Rebecca: I would say that it helped me to grow, for one thing, because living in the information age, to be able to have that fear, a big part of that fear taken away with the technology experience that to me is just extremely important. So definitely that would be the greatest thing I would say that it has helped me with, and certainly something that's going to make me a better teacher. I'm not afraid to try the new technology. I'm not afraid to—I just think it's incredible. We really learned so much more.

At the beginning, Jennifer stumbled while using these technologies: however, she developed a positive viewpoint, and would later share how her experience transformed her as a teacher. Not only has she gained knowledge, but also she identifies benefits of using these technologies as a professional teacher.

Jennifer: The podcast, it was a little hard, because I had to use like a different browser, because it didn't work with mine. But other than that it was just really easy, it was just type this in, copy, paste, and that was it, so it was really easy....Podcasting I thought was really cool, because for education wise, its mostly free. It's really easy to put your own podcast, so I thought that was really good.

Rebecca: I thought seeing my work up on this room [Web site] was incredible, I thought that was awesome. I would definitely have liked to have been a part of having the time and to have been a part to work together with her [project partner] on that.

In Rebecca's case, her professional identity developed through the course of this experience and she built greater direction and excitement to become a skillful professional teacher. Vera made comments about "going green" through technologies that reduce project printing and are environmentally friendly. It also showed that project experience could provide opportunities for a developing professional identify to interface with institutional goals (Luehmann, 2008), interdisciplinary connections, social issues, and life values.

Professional Development

The ESOL teacher candidates understood that learning how to podcast and blog was beneficial for their future teaching and understand this course as a professional development opportunity. They were also motivated to learn and dialogue their productive learning experience and built their confidence through the projects.

Jennifer: Instructional technology, I see as kind of a method of teaching. Because I see a lot of teachers who don't use it at all and just refuse to. So I think it's just a way to enhance your teaching. That's kind of how I see it.

Vera: I may have all these projects that are due. So again, do I go learn more technology on my own, because I know that it's important, or do I go work on my whatever that I need to do for classes?

Jennifer wanted to integrate this information and these skills into her own teaching for her students. Vera acknowledged that implementing these technologies into a core assignment made her learn these technologies better and more effectively. The ESOL teacher candidates demonstrated their multilevel knowledge and experience with instructional technology, and their responses were mostly positive and constructive. They also addressed the importance of learning new technologies such as podcasts and blogs in teacher education, particularly for learners who are digital natives (Prensky, 2001).

Language Teaching and Instructional Technology with Digital-Age Children

The ESOL teacher candidates also agreed that podcasts and blogs enhanced ELLs' engagement. They acknowledge that they will have a new generation of ELLs (Prensky, 2001). Rebecca and Vera said that the new generation of ELLs may have very high interests in and motivation to use these innovative technologies for their learning. She reasoned that it would be beneficial to use these technologies to draw and sustain their attention.

Rebecca: I mean, kids nowadays, they are very—it's the information age. They know a lot about technology, so I think it's really important for us to advance with it and to strive to understand it better.

Vera: I think one of the benefits was obviously that—by introducing technology you are making some students who may otherwise not be wanting to learn about a certain subject, by just introducing technology and something new, that right there is a way to get their attention, and also gives you again the opportunity to have a lot of comments, and a lot of people involved, and the information can be exchanged among a lot of different people at the same time.

Rebecca confirmed this by adding, "Oh yes, engaging the students, motivating the students, or creating interest." Both Rebecca and Jennifer identified readily opportunities to enhance their students' visualization.

Rebecca: It's incredible, because I think that they [ELLs] are able to see for themselves—they're trying to take in so much information, and no matter what stage they're at, if they can visually see the lesson and see what you're talking about, it's like reality, it's important, it's more meaningful, it connects better for them.

Jennifer: I use them more for the students [ELLs], because some students need more visual stimulation. Some, you can't just read a book and have—they can't always just imagine what you are trying to say, sometimes you need it to be all out there for them to see.

The three ESOL teacher candidates were excited to experience their ELLs' engagement in their podcasts and blogs. Specifically, the teacher candidates saw evidence that the ELL learners who are digital natives (Prensky, 2001) were staying on task, gaining greater meaning and were more motivated. Integrating these tools to teach language learners seemed to provide benefits to learners (Dippold, 2009). These ESOL teacher candidates also created plans for using podcasts and blogs in the ELL classes, which further demonstrated the pedagogical benefits of the technologies.

Pedagogical Reports

The ESOL teacher candidates recommended salient pedagogical directives from their experiences. They proposed ESOL educators integrate podcasts and blogs, as instructional technologies, into (a) the teaching of all subject matter, (b) classroom activities for ELLs, and (c) hands-on modeling. First Jennifer, Rebecca, and Vera said how they could integrate these technologies to enhance their own teaching.

Jennifer: [ELLs] need something that they can connect to.... So maybe if I were to ask where they're from, and what kind of landmarks they have, I can use that picture with my other pictures, and use that kind of technology for them. So they have like, it connects to them in their world.

Rebecca: At the same time, you could use it for their own cultural experiences to bring into the

classroom, which I think is extremely important to have that, so that you have a very warm classroom community. So instructional technology in the classroom is, to me, an incredible tool for making the learner learn.

Vera: I think it depends on what grade I end up, for Earth Day or Cultural Awareness Days, and thinks like that. God, I think it would be great to do things like podcasting, or instead of having a pen pal, having podcasting sessions with their classroom, even in a different state or something like that. So it depends on the resources available too.

Rebecca and Jennifer proposed ideas of using the media in cultural experiences (digital books, Earth Day) using postings, and Vera proposed that she could enhance her teaching to see the world and different cultures at hand. They all shared specific plans to integrate these technologies into their future classrooms, showing their transformative learning (King, 2002) and how they may become cultural workers of change (Freire, 1970).

Second, they wanted to use these technologies to integrate their classroom activities with their future students' lives. For example, they addressed making digital books and other publishing materials. Rebecca and Jennifer wanted to use these tools to make things such as a *digital book*. Rebecca said, "I think that would be really great to use in the classroom for publishing materials, publishing the students' works, and even for the parents." Jennifer addressed the similar ideas to Rebecca's.

Jennifer: For GarageBand, not only did I do the interview for my ESOL student, but I'm also going to be using that same program to record my kindergarten students' reading. Because I'm also going to—I'm doing a *digital book* for them. They drew scenes of the book, the pages of the book, and I'm going to type the wording, and it's going to end up being a listening center.

Third, Rebecca and Vera strongly stated the importance of hands-on modeling to teach these instructional technologies.

Rebecca: I'll make sure I'm listening and watching and then doing it myself, walking through the steps of learning how to do the technology. I mean, I would probably have to listen to the—something and watching somebody walk through it and then me, myself do it, and have that mentor that can help you, that would probably be most effective for me.

Vera: Hands on, and technological. To me it's—so you have to find the balance. Now-a-days you cannot avoid using technology, at least not in this country—. Like I said, I don't know anything about technology, and I am online everyday looking for information....Again, I am a hands-on person, so if I have a opportunity to go in and sit down and learn it by me practicing, I would greatly enjoy it.

Rebecca and Vera's clear emphasis on the importance of hands-on modeling to learn new technologies became directive. One concern Jennifer voiced was that she would need support from the administration. Administrators should understand the need for integrating innovative instructional technologies into the classroom in order to provide any needed resources or support. Vera also acknowledged that she is always engaged in online research as a part of her daily life.

Discussion

In this study, we observed ESOL teacher candidates engage in interpretation, reinterpretation, and self-reflection as they practiced innovative instructional technologies through their core assignment (Kerby, 1991). We learned a great deal about their attitudes and perspectives regarding podcasting and blogging in their teaching contexts. Their reports and interviews clearly revealed that implementing such technologies as podcasting and blogging into the ELL classroom was fun, effective, and beneficial for all of them. In addition, they agreed that the same technologies were beneficial tools for teaching ELLs in the future and for building greater learning opportunities for younger people. Furthermore, the ESOL teacher candidates further developed and advanced their teacher professional identities (Hou, Chang, & Sung, 2009; King,

2002; Lamote & Engels, 2010) while practicing these innovative teaching tools as they interpreted and reinterpreted resources, contexts, and their students. Finally, the results suggest the pedagogical benefits of knowing how to implement ESOL teaching through more motivating media.

There is a close link between these teacher candidates' teacher professional identities (Lamote & Engels, 2010; Trent, 2010) and their professional development. Learning new instructional technologies were critical for them to create and maintain their professional identity. This was partly demonstrated as they acknowledged the next generation of ELLs who are "digital natives" (Prensky, 2001) and their different learning needs and technology readiness. Initial fear and anxiety shifted to excitement and confidence while the ESOL teacher candidates integrated instructional technologies into a core assignment (Kim, 2009b; King, 2002). This result demonstrates that teacher professional identity is dynamic and ever changing (King & Kerekes, 2010) providing a challenge for teacher educators and teachers alike to harness that potential for positive professional development and pedagogical purposes.

The pedagogical reports demonstrate that instructors need to be aware of the differing backgrounds of ESOL teacher candidates in technology when introducing new instructional applications or media. ESOL teacher candidates' ability to use technology and instructional technology varies. In this project, we identified noticeable challenges among the teacher candidates, related to technical support from each institution and the individual ELL's Internet and computer access. The ESOL teacher candidates arrived, each with different levels of knowledge, and needed to find ways to scaffold their instructional technology learning. They all accepted the challenge and were motivated to learn and implement the podcast and blogging technologies in their ELL settings. By accepting this specific challenge, these ESOL teacher candidates demonstrated the pedagogical impact of teacher professional development. Not only did they implement these instructional technologies, but they also contributed to the transformation of their professional practice. The participating ESOL teacher candidates developed new instructional materials, insights regarding ELLs and their learning needs, and growing perceptions of their professional role as innovators and advisors for best practice. In these ways, the teacher candidates advanced substantially in their teacher professional identify and skills development (Luehmann, 2008).

Another outcome of this instructional activity among the ESOL teacher candidates was that by developing their ability to use podcasts and blogs with ELL, they were also building expertise as instructional technology learners and adopters. Using King's *journey of transformation model* (2002), one sees the ESOL teacher candidates have advanced across the four stages of transformative learning development from *fear and hesitation to testing and exploring to affirming and connecting and new perspectives*. In this case, the new perspective is their transition from thinking of themselves as teachers, and no longer solely as students in a graduate class. This model describes teachers' instructional technology learning and the scalability of their learning of one technology to others. Because they have learned podcasting and blogs, they have greater confidence in using more and different technology. Not only did educators advance in their learning of blogs and podcasts, but also of instructional technology application to classrooms and in adopting new technologies. The multi-faceted advances achieved in this realm are significant when one realizes the many skills and attitudes involved in developing effective teachers who continue to learn and use technology in their classes in new ways.

The ESOL teacher candidates also began to envision interdisciplinary connections. As they began to consider and plan more instructional technology activities for their ELLs, their examples branched into other content areas and applications. We have long seen the benefits of interdisciplinary curricula for ELLs (Thorne & Payne, 2005), but creating such custom and specific materials encounters many barriers, not least of which are time, resources and scalability. In this case, the pre-service teachers overcame all those barriers as they quickly created the podcasts and blogs with free resources and stored as on-demand web-based resources. Teachers who create blogs and podcasts find that they develop the benefits of having a quick custom archive of interdisciplinary teaching materials very quickly (King, 2002; Richardson, 2006). These teacher educators are on the road to this discovery.

Finally, the advancement of the reflective practice (Schon, 1987) skills of the participating ESOL teacher candidates is evident in this study. As they advanced in the development and observation of their learning activity, the participants were able to recognize the needs of their ELL learners, as well as how

they responded differently with digital media instructional tools. This study and teacher education model allowed the teacher candidates to practice the model of interpretation, reinterpretation, and self-reflection in context with their ELLs and a new instructional media. By integrating reflective practice into their instructional design experience, they experienced the powerful benefits of situated learning (Argyris, & Schon, 1974). In this case, situated learning enabled the ESOL teacher candidates to build a pattern and practice of instructional inquiry and improvement in situ. By experiencing the benefits of reflective practice, they also appear to develop intrinsic motivation to continue the strategy.

Consider how all of these characteristics are evident in the final action of the ESOL teacher candidates in this case and assignment. The pre-service educators who had been podcast and blogging novices at the beginning now proposed that faculty integrate these instructional technologies into (a) the teaching of all subject matters, (b) classroom activities for ELLs, and (c) hands-on modeling. Their identity shifted from learners in the classroom in the fullest sense to future teachers in their future classrooms. The ESOL teacher candidates may create different resource centers or websites with their own students (Dlott, 2007) to extend their lived experiences from this course to their own world.

Creating easy and simple procedures for educators who want to implement instructional technology to enrich their teaching capacity is crucial (Kim, 2009b). Using such a simple approach with reflective practice and case structure afforded the ability to build strong ownership of learning and created competence and confidence to be teachers. Overall, this study confirms that as a teaching method, the implementation of instructional technologies should be easy, simple, and hands-on. Moreover, these results indicate that the use of instructional technologies in teacher education should include developing clear and specific guidelines for implementation.

Recommendations and Future Research

Although in qualitative research we do not generalize, we can legitimately transfer our findings (Creswell, 1998; Lincoln & Guba, 1985). The implications of this research will likely transfer to other ESOL teacher candidates and ELL learning in several significant ways (Lincoln & Guba). This study also confirms prior studies, which saw podcasting and blogging positively affects general teacher education where they had been incorporated into classroom settings (Ozkan, & McKenzie, 2008; Pownell, 2006).

However, this study recommends that, rather than confining instructional technology activities to teacher candidate programs (and specifically ESOL teacher candidate preparation), faculty needs to integrate podcasts and blogs into the ESOL teaching curriculum. In order to accomplish this goal, faculty and k-12 faculty developers need to be well versed in the specific application of podcasts and blogs to ELL learning as well as how to create supportive, modeling, mentoring environments for the teachers. (King & Gura, 2009; Pownell, 2006)

The transformation of professional identities evidenced in this study among all three participants provides a basis for recommending that ESOL teacher candidates will gain in significant ways from learning podcasting and blogging for their classes. A major need for teacher candidates of all fields (general education, special education, or ESOL) is to cultivate the growth of their professional efficacy and identify. Podcasting and blogging provide this opportunity because they help teacher candidates operationalize their ideas, test their strategies, and improve practice based on the results. This research demonstrates how podcasting and blogging within curriculum classes provides powerful experiences of situated learning for these emergent professionals.

We suggest conducting future research to build upon this work and determine which other classroom activities would benefit from podcast applications, and to what degree they are effective with ELLs. Moreover, further studies may advance our understanding as to the most effective means of preparing ESOL teacher candidates and teachers to use podcasts in their instruction.

This study demonstrates that podcasting and blogging in ESOL teacher education settings are effective, available tools. The results of this study may be transferred to guide effective implementation of podcasts and blogs in other settings (Lincoln & Guba, 1985). This research can also be a model for researching various innovative instructional technologies among ESOL teacher educators using K-12 student work. In the larger context, as innovative instructional technology develops, people expect to be

able to learn and teach *what* they want, *when* they want, and where they want. Preparing our future ESOL teachers to implement these advantages will bring about additional classroom advances for 21st century student learning.

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