Constructivist Embedding: The Use of Video Technologies in Online ESOL Methods Courses

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This action research is an initial exploration of the infusion of video technologies in online English to Speakers of Other Languages (ESOL) methods courses. In this ongoing study, students viewed web-based streaming video clips of ESOL teaching strategies and developed their own video clips of ESOL teaching strategies, viewed and commented on their classmates’ in an online discussion forum, and then provided feedback on the experience. Data were collected and results indicate that the students valued the inclusion of video technologies including the production of video clips of their own teaching and giving and receiving feedback on them.

Introduction

Constructivist pedagogy actively involves the student in the creation of his/her learning drawing upon prior knowledge and integrating this with new information and skills to solve real world problems (Lefoe, 1998). Scaffolding provides temporary assistance to learners as they attempt to understand cognitively challenging concepts, and technologies, used effectively, can scaffold the learning of students in P-12 schools. Video technologies are similarly being used to scaffold the learning of pre-service teachers in face-to-face foreign language methods courses (Chuang and Rosenbusch, 2005).

Ferdig (2006) sees value in a social constructivist framework for innovation design involving pedagogy, people and performance. He notes that human interactions with technology are becoming social and natural. As they become more and more ubiquitous, it is important that educators be equipped with the tools to use technology effectively.

Pedagogical technologies can enhance learning. Cognitive gains can occur when learning is scaffolded, a concept which draws upon Vygotsky’s social and linguistic interaction ideas and the work of cognitive stage theorists such as Piaget in which assimilation and accommodation lead to new cognitive insights (Chuang and Rosenbusch, 2005). The role of technologies as aids in scaffolding learning “should focus on how to reach essential educational objectives in higher order skills and on the generation of
collaborative knowledge (Bransford, Brown & Cocking, 1999 in Chuang and Rosenbusch, 2005). Florida’s Educator Accomplished Practices and Preprofessional Competencies (FEAPs) address both of these concepts.

Two of the FEAPs require that pre-service teachers demonstrate

2. Communication - Uses effective communication techniques with students and all other stakeholders., and

4. Critical Thinking - Uses appropriate techniques and strategies which promote and enhance critical, creative, and evaluative thinking capabilities of students.”

Besides these, FEAP 12 focuses on technology and requires that pre-service teachers use it appropriately in teaching and learning processes. (FLDOE website)

Background

Recent research has investigated the use and recognized the value of including various video technologies in foreign language methods courses (Angeli, 2004; Dawson, Pringle, & Adams, 2003; Ferdig, Roehler & Pearson, 2002). Students are able to access actual classroom scenes and explore exemplary practices in an active learning environment…Research offers evidence that pre-service teachers experience a gap between their field experiences in P-12 classrooms and the instructional techniques that they learn about in the methods course from the teacher preparation program (Hughes, Packard & Pearson, 1998).

Class observations and internship experiences can fail to provide pre-service teachers with desirable teaching experiences and opportunities to observe expert pedagogy. Therefore, the need for pre-service teachers to see field-based models of challenging, reform-oriented teaching in action is strongly expressed by some researchers (Dawson & Norris, 2000; Ferdig, Roehler & Pearson, 2002). To bridge the gap between the university classroom and P-12 classrooms, emerging digital technology makes video cases of actual classrooms or video clips of exemplary instruction available to pre-service teachers so that they can access actual classroom scenes and explore exemplary practices in an active learning environment (Ferdig et al, 2004; Krueger, Boboc, Smaldino, Comish & Callahan, 2004). (Chuang and Rosenbusch, 2005).

Hughes noted the advantages of using video resources in teacher preparation programs, namely, that they “provided a context-rich anchor from which students and instructors drew examples and explications, asked more higher level questions, became more flexible in their analysis and application of teaching methods, used (the video clips) as models for teaching, and retained more vivid recollections of video content.” (Hughes et al, 1999 in Ferdig, Roehler & Pearson, 2002). Video clips of real-world instruction have been used successfully with pre-service teachers in programs such as Integrating Technologies into Methods of Education (Krueger et al, 2004) and Reading Classroom Exploration (Ferdig et al, 2004).
Action Research Project

This ongoing action research project involves the use of video technologies in different sections of an online ESOL methods course in a pre-service teacher preparation program. Specifically, it examines the use of freely accessible web-streamed video clips (e.g., Project Connect at the Orange County Department of Education website) and video clips developed by current and former students in the author’s ESOL methods courses in the pre-service teacher education program at Florida Gulf Coast University.

In this regard, two questions of interest are addressed:

1. How can educators of pre-service teachers use video clips in online ESOL methods courses to facilitate learning?
2. How do pre-service teachers assess the use of video clip technologies in their online ESOL methods courses?

Methodology

Pre-service undergraduate education majors in the author’s online sections of Methods, Curriculum and Instructional Effectiveness, a required course in the College of Education at Florida Gulf Coast University, viewed very short (one to three minutes in length) web-based video clips of ESOL teaching strategies (from Project Connect at the Orange County Department of Education website) and commented on them in the weekly module discussion forums in which a high level of engagement and intertextuality was required (Ferdig, Roehler & Pearson, 2002) were required.

As part of an electronic portfolio of required assessments in the course, students then each developed a lesson plan in which an ESOL teaching strategy was included. Each student selected a different strategy from the many described in Peregoy and Boyle’s Reading, Writing and Learning in ESL (2008). To assist the students in the use of the video clip technologies involved in this assignment, the author conducted a two-hour long workshop in the use of the editing software – Windows Movie Maker - and the development of the video clips according to provided guidelines. Students used a standard lesson plan template and were assessed and graded using a video clip assignment rubric.

Inasmuch as the course coincides with the first of two pre-service teaching internships required of all education majors in the university, each student then arranged to have the lesson digitally videotaped while she/he taught it on an internship day. Afterwards, each student developed an edited video clip movie (a maximum of five minutes’ length) using Windows Movie Maker.

Once the assignments were turned in (as CD’s, lesson plans and videotaping permission slips delivered to the author), the video clips were configured for use on the university’s streaming server using Windows Media Encoder and uploaded to the server.

A discussion forum was set up in Angel, the university’s Learning Management System, and links were posted to each of the video clips. Students were required to view
An online Course Assessment Survey was developed to seek student feedback on the use of video clips in the various sections of the online ESOL methods course.

**Results**

Because of the format required, student comments in the Video Clip Discussion Forum were succinct and, due to the response structure required, fairly high on intertextuality (i.e., materials used in the clip, personal experiences, collaborating teachers and their materials, previously-learned concepts, responses to colleagues’ comments). The comments also exhibited varying levels of engagement (i.e., from simply stating what was in the clip with little explanation to examples of analysis, synthesis and other higher-order thinking skills) (Ferdig, Roehler, and Pearson, 2002).

The following are sample comments from the discussion forum.

- **Low Engagement:**
  
  “I love the way in which you had everyone engaged throughout the lesson! And how all of your students participated in telling you their predictions.”

- **High Engagement:**
  
  “I thought that it was cute when you chose a blonde haired girl who looks like Goldilocks to represent her. It allowed the students to see a visual of what Goldilocks looks like. I think I would have addressed why you chose that student to portray Goldilocks. You could have asked the students, “Why might I have chosen this student to be Goldilocks?”

- **Low Intertextuality:**
  
  “I have never seen this done so well before. You seemed to really engage the kids in the lesson and explained each step of the process of imaging in full detail. The students seemed really excited to write about the seeds.”

- **High Intertextuality:**
  
  “When you began to read the text with the students, I noticed that you sat in your chair and read along in your own book. What I like to do is walk around while the students are reading and read along in their book so that I am able to see that they are tracking and also on task.”
Some highlights of student responses to the **Course Assessment Survey** included the following:

- Most students felt that the web-streamed and student-produced video clips were the most meaningful learning experiences in the course.

- All agreed that viewing short video clips by other teachers across the U.S. teaching ESOL strategies was a meaningful learning experience and that viewing short online Windows Movie video clips of their classmates/College of Education colleagues teaching ESOL strategies was a meaningful learning experience.

- They also believed it would be worthwhile for future students in ESOL methods courses to produce short Windows Movie video clips (similar to the ones produced in this course) in which they would teach an ESOL strategy in a real PK-12 class, share it with their Methods course classmates, and receive comments on it from their classmates and course instructor.

- They strongly agreed that producing a Windows Movie ESOL teaching strategy video clip for this course was a meaningful learning experience.

**Conclusions**

The assessment of student learning gained by the use of technologies is difficult to ascertain although it is necessary to ensure that value is added to the investment (i.e., financial, time, personal) associated with the addition of newer technologies to the learning mix (Ferdig, 2006).

Course assessment feedback from these students indicates that they overwhelmingly valued the video clip assignment and the continued use of video clip technologies in online ESOL methods courses. This was particularly the case with student-produced video clips of ESOL teaching strategies.

Student submissions to the Video Clip Discussion Forum in response to video clips produced by their classmates exhibit high levels of engagement and, in many cases, high levels of intertextuality. This was a surprise finding inasmuch as intertextuality was not directly required. It may be the result of learning from the format required in all course discussion forums prior to this.

Viewing and commenting on web-based video clips in discussion forums throughout the semester, and then developing a lesson plan on an ESOL teaching strategy, teaching the lesson, producing a short video clip of the strategy, sharing it with classmates, receiving positive, affirming and constructive comments on it, and providing the same to others may contribute to “the emotional and social responses of students to new educational technologies…an essential component of technology research as affective gains (such as emotional and social growth) often precede and drive cognitive gains.” (Ferdig, 2006)
Discussion

This first action research study in exploring the use of student-produced video clips of teaching in online ESOL methods courses provided answers to the questions posed in the Introduction. These will be validated as the study continues and next investigates the use of remediation strategies in leading to improved student performance in the classroom as evidenced by video clips of students’ teaching.

Student-produced video clips of teaching in online ESOL methods courses and accompanying feedback tools provide a practical, constructivist solution to the questions posed in the Introduction, namely,

*How can educators of pre-service teachers use video clips in online ESOL methods courses to facilitate learning?*

*How do pre-service teachers assess the use of video clip technologies in their online ESOL methods courses?*

Students responded positively to the second question

This action research has barely scratched the surface in investigating the use of student-produced video clips of teaching in an online ESOL methods course. In the next part of this study, online ESOL methods course students will once again produce an initial video clip of an ESOL teaching strategy and then implement changes noted by classmates and the course instructor in a second video clip demonstrating the same strategy with different course content.

A four-part reflective teaching model (Hiebert, Morris, Berk and Jansen, 2007) will be introduced early in the course which will assist teachers with learning from their teaching. Using this model, students will be requested to analyze their own teaching as demonstrated in their video clips. Feedback will also again be provided by colleagues and the instructor using the previous template. One objective is for students to demonstrate ESOL teaching strategy changes based on analytical commentary and reflection. Another is to assess the effectiveness of student-produced video clips in an online methods course in improving student performance.

- A qualitative research model will again be used as it provides a tool which addresses the affective and social needs of students in online ESOL methods courses by establishing a structure for commentary on performance in discussion forums on externally and internally produced video clips. The cognitive gains which result may remain unknown, but as Fredig (2006) notes, meeting the affective and social needs of students are precursors to greater learning.
Resources


Author Note

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Article Citation
