Using Online Technology to Enhance Student Presentation Skills

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Introduction

Today, businesses expect employees to have strong communication and presentation competencies in order to be effective in their jobs. Producing employable graduates has become an important criterion in higher education (Raybould & Sheedy, 2005). Although students in traditional face-to-face programmes have opportunities to practice presentation skills, the growth of online curricula creates issues with providing students the opportunities to develop oral skills. Online presentation tools exist, but mastering the technology may be difficult and requires careful planning, design and implementation to be effective (Hutchinson, 2007).

This case study describes how an academic unit at St. Petersburg College (SPC) in St. Petersburg Florida, USA, used video presentation technology in their online teaching environment to improve students' presentation skills. Results showed students improved these skills, and thus, the project was deemed a successful. However, institutions should realise there are challenges and limitations, both from a technological viewpoint as well as human-computing issues.

In evaluating the senior-level Capstone (dissertation) module, the lecturers found some deficiencies in student presentation abilities, especially for those students who participated in online-only modules, as they may not have had opportunities to practice public speaking in online courses. Thus, a project team was created to address this issue.

Project Objectives

The team members determined the overall objectives of this project were:

- determine the level of student presentation deficiencies;
- implement a video presentation option into a module as a test;
- review changes in student presentation skill levels and determine if the project was a success.

Presentation Skills Assessment

In 2006, the lecturers developed assessment criteria to assess ten student proficiencies in their Senior Capstone (dissertation) module. For 2006 and spring 2007, lecturers graded each student on a scale of 1-5 (poor to excellent) for each of the ten criteria. Table 1 illustrates that the evaluation scores for each category, and shows that one category – 'presentation skills' was weak compared to the others.

At the end of each course, students complete a student survey of instruction (SSI) indicating their ratings of the course and instruction. Student commented that many felt unprepared for the dissertation presentation, especially those attending the online-only modules, which did not use presentation assessment. The team members realised there was a serious problem and decided to implement a solution utilising video presentation technology.

Table 1: Capstone Evaluation Results

Category	Rating Criteria	Average Score, Fall 2006	Average Score, Spring 2007	Average Score, Fall 2007	Average Score, Spring 2008
1	Entrepreneurial and Innovative Skills	4.3	3.6	4.1	3.8
2	Oral and Written Communication Skills	3.7	3.4	3.8	3.7
3	Business Acumen and Organisational Skills	3.7	3.5	4.0	3.9
4	Creative Problem Solving Skills	3.8	3.5	4.0	3.8
5	Informed Judgment and Analytical Skills	3.7	3.5	4.0	3.9
6	Project Management Skills	3.6	3.7	4.0	3.8
7	Presentation Skills	3.5	3.3	3.7	3.7
8	Problem Well Defined and Reasonable Solution	3.8	3.4	3.9	3.8
9	Handling Questions Skills	3.8	3.8	4.1	4.2
10	Overall Quality of Work	3.7	3.6	4.0	3.8

SPOC Overview

The St. Petersburg Online Communicator (SPOC) comprised a suite of tools designed for synchronous and asynchronous communication in online modules, although only the Student video feedback dropbox tool will be reviewed in this paper. Users simply need a high-speed internet connection, a Web camera, and a Flash enabled Web browser to use the system (Raze & Rabelo, 2007). This tool integrates into SPC's online learning management system, ANGEL (similar to Blackboard). The tool allows students to record a video presentation and submit this recording as an 'assignment' directly to the ANGEL dropbox for grading and feedback. The lecturer then plays back the student's recording for grading. Lecturer's can also insert text feedback for the student, and issue a grade. The student can play back the recording and view the grading comments and feedback within a window with a date-time stamp for each of the comments.

Figure 1 shows a screen shot of the SPOC video recorder (Shapiro, et al., 2007). The top right section shows a preview of the video presentation when a student reviews the work before submission. After the video is submitted to the grading dropbox, the lecturer reviews the students video (shown on the bottom left of Figure 1), and types in comments and feedback for the students benefit.

After analyzing the results of the Capstone feedback surveys and determining the level of deficiencies with student presentation skills, the team decided to begin a small pilot with two modules for the spring 2007, ISM3324 (Applications Security) and ISM4480 (Electronic Commerce). The lead tutor for both courses modified the modules to include a video presentation option for four of the assignments.

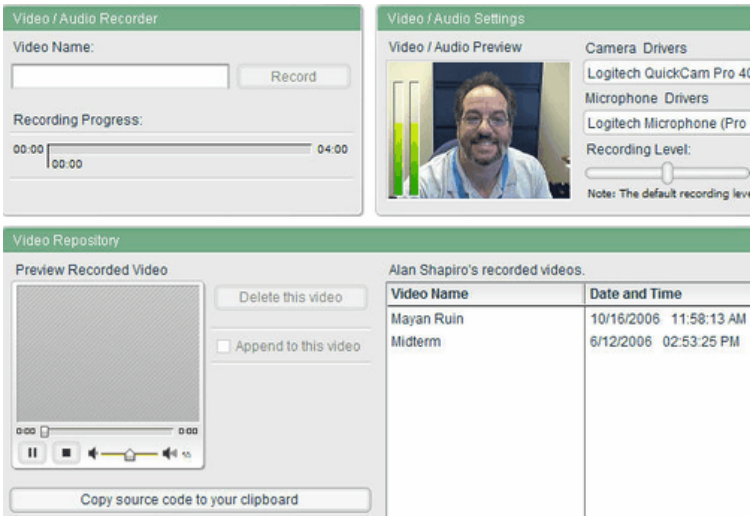

Figure 1: SPOC Video Recorder Screen

Overcoming Technology and Human Factor Issues

The team experienced several technical and human face issues. First, students were reluctant to use the SPOC recorder and to try new technology. To alleviate concerns, systematic tutorials were created for the students and lecturers on how to use the system. Second, 'test' assignments were created where students could submit 'test' videos to the dropbox to ensure the video was working and the lecturer could access their assignment.

Third, since most online students had little experience with presentations in the programme, they were worried about grading policies for presentation assignments. Standard rubric matrices existed for written assignments, but detailed rubrics had to be developed for presentation-type assignments. To encourage students to try the technology, they were given the option of either submitting a normal 1000-word written assessment, or a 2-minute video presentation for the first semester SPOC was implemented. This first semester of the project, lecturers tended to be more lenient with grading presentations compared to written assignments. Once several students tried this method and found it was not as difficult as originally anticipated, the information quickly spread among the students that this option was actually 'easier' than writing a research paper. The number of students then trying this method did increase as time went on.

Another issue with the project was how the lecturers were going to be trained on the technology. The Web and Instructional Services (WITS) group created a series of tutorials for lecturers demonstrating how to use the system, including how to install the recorder into their ANGEL module, how to use it, and how to provide feedback and grading. A series of hands-on workshops were held for the team members in the CTM to familiarise them with SPOC and to gain practical experience.

There was a known technical problem with some versions of Internet Explorer not working properly with the SPOC video dropbox. After several students encountered this issue, the Student Technical Support Desk developed a quick procedure for students to work around the problem. Since the fall of 2007, most of the issues students reported to the lecturers were user mistakes and quickly resolved.

Implementation and Feedback

In spring 2007, two modules were modified to include optional SPOC video assignments: ISM3234 (Applications Security) and ISM4480 (Electronic Commerce). Therefore, the first

graduating group of Capstone students to benefit from this implementation was fall 2007. Table 1 does show that the presentation skill results for the fall 2007 module (3.7) and spring 2008 group (3.7) did have improvement compared to the fall 2006 (3.5) and spring 2007 modules (3.3). Although there was a slight improvement during this time, the table does indicate presentation skills were still lower than written skills. However, the team theorised part of the reason was that not all students had the chance to take part in using video presentations.

The team surveyed both students from the courses with the video assignments as well as capstone sections where students had prior experience with SPOC. Although the college-wide SSI survey did not contain a specific question about SPOC, the team especially reviewed student comments about the use of SPOC technology. In addition, informal feedback was solicited from students at the end of his or her Capstone presentation. A sample of some specific student comments on the SSI is included below:

'Using SPOC was a nice change from writing research papers.'
'I ran into a hassle with setting this up, but it worked ok after that.'
'It was less threatening to record a presentation in front of a camera than give it in a class.'
'Once I tried the video format, it was easy. Why can't the rest of my classes offer this option?'
'Using SPOC was good to increase some speech skills, but it was different when we actually had to present in front of a real audience in capstone, but it was better than nothing.'
'It first did not work with my browser, but tech support helped fix it.'

Implications

The use of technology to augment speech and presentation instruction in an online environment can be successful if managed properly. Practitioners should realise there are a variety of technical issues to overcome. Because of the increase in online learning, learning technologists in schools should be insisting that new technology functionality should be incorporated into products such as ANGEL, Blackboard and Moodle, instead of schools having to try to develop and integrate video technologies. Fully integrated tools would allow easier and more cost effective implementation for the IT team, students and lecturers. Schools would not be forced to have software development staff create these tools, and instead could concentrate on their core competencies.

Institutions must also realise that technology is only one component of changing to online teaching, managing human factors is a prime concern. The school may have to set up training or tutorials for staff and students in order to ensure they are comfortable using the technology. Specific help desk procedures may also need to be implemented as well. Although this paper presents a case study at a U.S. institution, many of the issues could be applied to U.K.-based schools. At the University of Worcester, greater emphasis is being placed on online submission of assignments, and more tutors are implementing this option for written assignments. Technically, the technology does exist for online submission of video presentations, and should be considered for the future.

Conclusions

This paper presented a case study, which reviewed the implementation of a presentation curriculum for online students. To ensure students could use the technology effectively, a series of tutorials and grading rubrics were developed. At the end of this experience, students expressed positive feedback from giving online presentations. The results of grades also showed a slight improvement in skills. The project team felt that with a larger number of students performing online presentations over their academic career, presentation skills will improve significantly, and the team planned to implement the technology in more modules. Although online video presentations may not be as an effective method compared to face-to-

face presentations in front of a live audience, they can provide a positive learning experience for students who may not be able to attend traditional module sessions.

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