

Using Video as a Teaching Strategy

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Abstract: The popularity of YouTube has been growing over the past decade. Educators and students in the 21st century have recognized YouTube as a resource for information gathering and dissemination. Due to the rigorous nature of the culinary curriculum at University of Hawai'i Maui College, it is difficult for students to retain the large volume of knowledge presented. Therefore, the purpose of this Instructional Design project was to develop and evaluate a web-based training module to assist the UHMC culinary faculty on the use of Flip Video cameras to create videos of culinary demonstrations. These videos will then be shared with students via YouTube. The culinary demonstrations can then be loaded into Lulima, our course management system. Using Lulima will provide students easy access to the videos. The ability for students to watch and rewatch culinary demonstrations provides, in essence, an 'Instructor on Demand'. After viewing the instructional design module, the survey results indicated positive attitudes by culinary instructors towards the use of video as a teaching strategy. Enthusiastic responses on using the Flip Video camera to record classroom demonstrations were recorded after instructors completed the module.

Introduction

Students enrolled at Maui Culinary Academy experience an intense two-year program that challenges them in all areas of cooking and baking. The volume of knowledge learned in each course module is rigorous. For example, in the skill building module students are expected to learn the five mother sauces and the minor sauces that can be created from the mothers. The instructors provide demonstrations and the students then practice the skills. However, by the end of the module, students are frequently overwhelmed and have repeatedly struggled to remember the volume of information demonstrated and practiced during the course of the semester. Videos from classroom demonstrations may help reinforce the material. The purpose of this Instructional Design project was to develop and evaluate a web-based training module that instructs culinary faculty on how to use video as an effective teaching strategy at the University of Hawai'i Maui College.

Students at the University of Hawai'i Maui College are digital natives, who are constantly checking FaceBook, MySpace, and email accounts. Students are not just sitting and waiting to be spoon fed information by their professors in a lecture. They learn in a variety of ways. By observing, by watching and by learning, students continue to evolve (Young, 2008). The process of using videos posted to sites such as YouTube to provide instruction is not new. As the Internet changes from a dissemination tool to one that promotes social networking, it is important to think about how tools like YouTube can be used to create a learning community (Skiba, 2007).

Integrating YouTube into classroom instruction has shown to be successful. "YouTube has become part of the tapestry of our student population. We can stick our heads in the sand and ignore YouTube, or we can use it to motivate students" (Adam & Mowers, 2007, p. 22). Stith (2000) goes on to say, "The use of video and animation both in lecture and on the Web is one of the major advantages of computers in teaching" (p. 20). Quick vignettes using a web2.0 format, such as YouTube videos, not only help students learn, but help students retain the information that they have watched (Skiba, 2007). The ability to introduce new concepts using a technology-based format and to reinforce concepts already covered in the classroom at the same time make the use of web-based videos an exciting option for the classroom instructor.

Because of the need to stay current with the digital trend of learning, Flip Video cameras were purchased for our culinary faculty via a Carl Perkins Grant. One of the Perkins grant expected outcomes is to create video libraries to support independent learning opportunities for students in need of review. The culinary faculty has been hesitant to use these cameras, as there is a lack of knowledge on how to use the camera as well as how to post video demonstrations to the Internet for students to view. Thus, the purpose of this study was to develop a web-based training module to instruct faculty on the use of the camera and the steps on how to post materials to the Internet via a YouTube link. A best practice video example was modeled for faculty viewing the training module.

Methods

The University of Hawai'i system has recently adopted Lulima as its online course management system. Instructors have been asked to migrate their classes to Lulima to present course related materials to their students. The majority of culinary faculty at University of Hawai'i Maui College have embraced Lulima to some degree and have become somewhat familiar with this course management system. Therefore, Lulima seemed an appropriate medium to provide the online instructional module.

Three training modules were developed for this project. The first module focused on "Using Video as a Teaching Strategy." This opening instructional module included a video welcome and then focused on the tools needed. The video welcome was produced using the Flip Video camera and was then uploaded to YouTube and embedded into the Lulima training module. This provided a best practice example of how video can be used to improve teaching. A manuscript of the welcome video was provided for those who were hearing impaired.

The second training module focused on “The Features of the Flip Video Camera.” Screen shots were used to explain the different features and components of the camera. Features showcased in this module were how to charge the camera, how to turn the camera on and off, how to zoom, and how to delete a video.

The final training module prepared for this project was “Sharing your Video.” This module included a best practices example of our pastry instructor providing a demonstration on pulling sugar. This example video was posted to YouTube and embedded in Laulima to showcase the potential of using video as a teaching strategy. Training module three also included instructions on downloading a video from the Flip Video camera to your computer, creating a YouTube account, and publishing a video on YouTube.

Each of the three training modules included a short “for your understanding” quiz embedded into the Laulima site to assess the skills attained by each learner. These mini-quizzes provided immediate feedback to the learner on the correct response so that the learner could go back and review materials in the module to validate mastery of the information.

Embedded in the Laulima site was a Pre Survey and a Post Survey that each learner was asked to complete. Our culinary department is small with only 10 faculty members. There was an 80% completion rate, with 8 out of the 10 faculty choosing to participate and complete the survey. The survey measured the engagement, interaction, and most importantly, the learning of each participant in the study.

Results

Quantitative and qualitative surveys and interviews provided data regarding attitudes toward the modules. For example, Likert Scale questions were embedded into the surveys to evaluate the faculty’s attitude towards creating and posting the instructional videos. Data were collected from both the pre and post surveys to measure faculty satisfaction with the module. Actual use of the Flip Video camera in the classroom was also measured.

Engagement

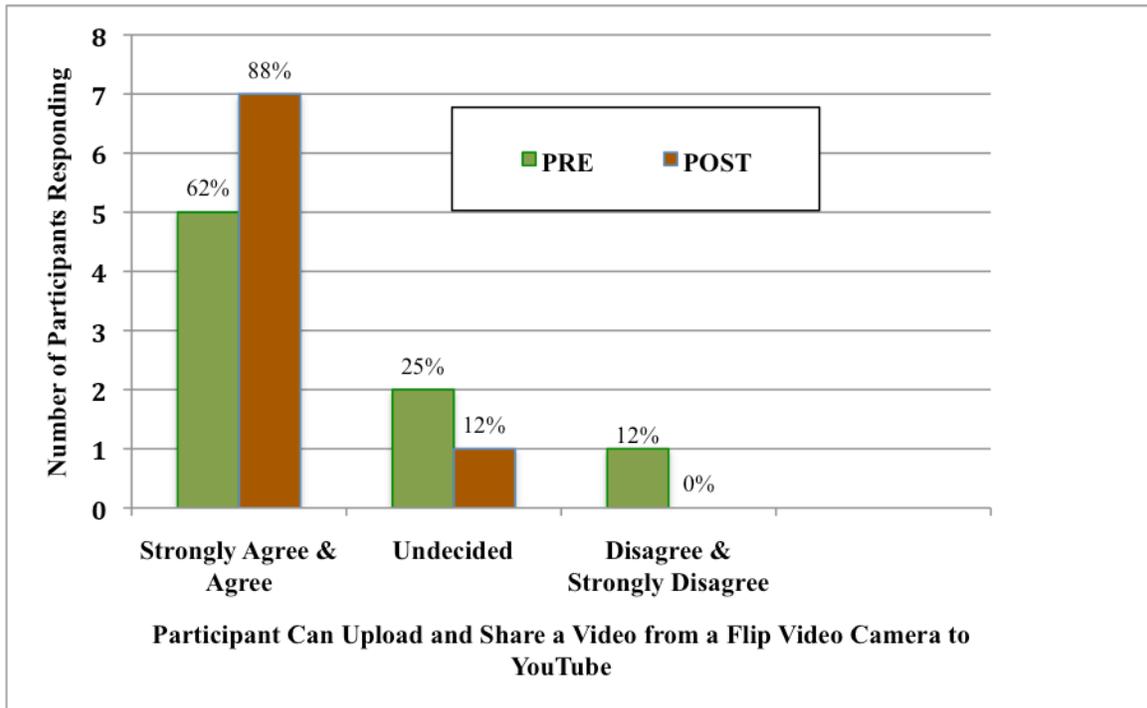
Based upon the results of the pre and post surveys, culinary faculty at the University of Hawai‘i Maui College reported that they felt that the instructional design modules assisted them to learn the skills necessary to upload a video to YouTube. In addition, 88% of the respondents rated the attractiveness, navigation and overall ease of use of the online training module as strongly agree or agree. In informal interviews with culinary faculty, the result of the modules was positive with remarks like “Thank you for taking the fear-factor out of uploading a culinary video to YouTube.”

Interaction

Open-ended questions were included in the post survey to collect data on ways that the instructor would use a Flip video camera for school related activities. Many faculty members listed specific ways that they might use the Flip Video cameras. The responses included (a) making videos of demonstrations that require several distinct sections, (b) cooking demonstrations, and (c) building a series of video vignettes for the Food Safety and Physical Safety course that are site specific to Maui Culinary Academy. This last idea of providing customized site-specific training on our campus is an example of an innovative way of providing education that cannot be duplicated in a textbook or other generic training material.

Learning

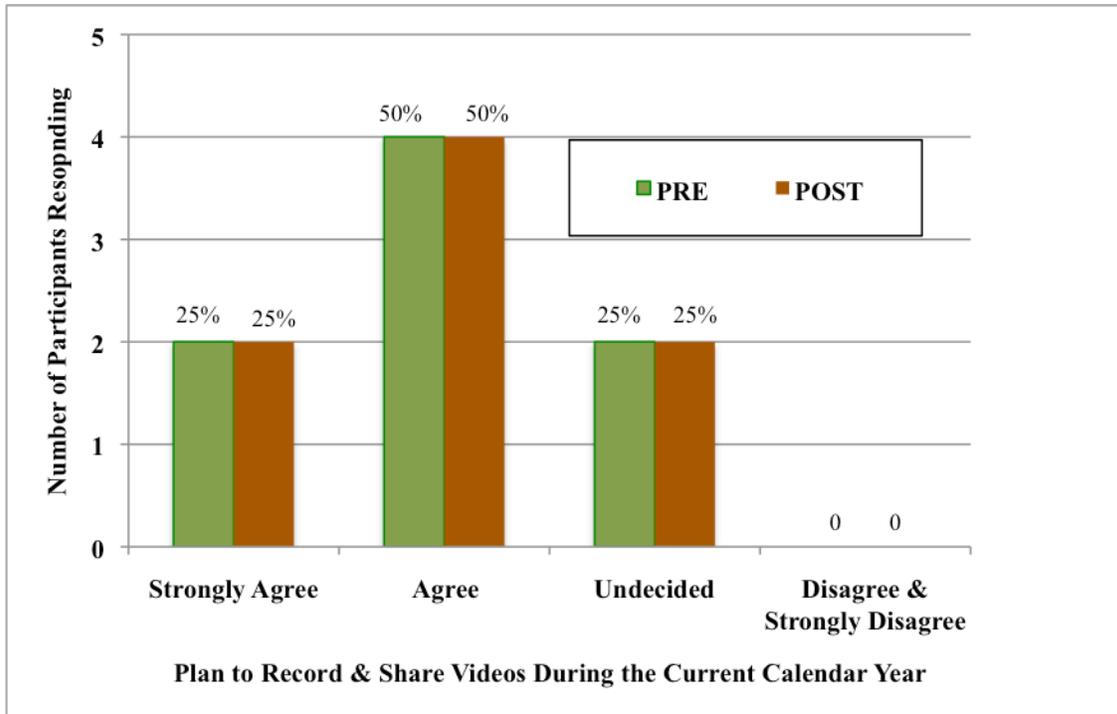
Faculty who went through the training module showed improvement in their perceived ability to upload and share a video from a Flip Video camera to YouTube.



The pretest score showed only 12% strongly agreeing with this statement and 50% agreeing for a combined total of 62%. However, after viewing the module, 50% strongly agreed with this statement with an additional 38% agreeing with this statement for a combined total of 88%. The faculty’s perceived ability to upload and share a video to YouTube increased substantially after viewing the module.

Planned Implementation

After completing the training module, our culinary faculty members were asked if they planned to record demonstrations and share them in the current calendar year. Results indicated that after completing the training module there was no change in the plans of the faculty members to record demonstrations and share them with students in the current calendar year. A full 25% were still undecided on their commitment to implement videos shared on Laulima via YouTube during the current calendar year.



Implications or Discussion

Use of instructor-created videos in the classroom provides a new opportunity for our 21st century students to learn. Young (2008) found that students tended to gravitate towards short videos, watching them at night when teachers were not available. In the current study, short, web-based, instructor-created videos would be available to enhance learning of various cooking and baking techniques. These videos would then allow the students at UHMC to have a ‘Professor on Demand’ as an additional resource and study tool, thereby potentially improving proficiency with culinary and baking skills.

Administrators at the University of Hawai‘i Maui College are aware of this project. The implication of this study indicated that there could be many instructional uses campus-wide for Flip Video cameras. Using video for assessment in auto body or art, demonstrations in nursing, and recording music performances in Hawaiian studies or music classes are just a few of the ideas that were generated. The instructional design team at the University of Hawai‘i Maui College has asked me to augment the training

module by adding additional sections on “How to Edit a YouTube Video” and “How to Embed your Video into Laulima.” The design team is working to purchase additional Flip Video cameras for general campus use that can be borrowed from their office. Having access to the Flip Video Training Site on Laulima should assist in overall training for faculty on campus.

In addition, the training module has a blog feature where users can collaborate on specific ideas on how they are using the Flip Video cameras in their classroom. Sharing grass roots ideas between faculty members could generate innovative practices campus-wide.

Conclusion

This study suggested that using video could engage culinary faculty in a new way of providing instruction for their students. Culinary faculty at the University of Hawai‘i Maui Campus provided positive feedback in both their attitudinal Likert surveys and their informal interviews. Results clearly demonstrated the effectiveness of the training with faculty feedback increasing from 62% pre-module to 88% post module when asked about their perceived ability to upload and share a video from a Flip Video camera to YouTube.

However, the stagnation of results on the instructor’s plans to incorporate the use of video during the current calendar year was surprising and perplexing. The results might indicate that there was an intimidation factor in actually committing to using the new technology. Another possibility could simply be that we were in the midst of the semester with plans already in place. Change in instructional techniques may likely take more time to implement.

In addition, change of mindset takes time. Perhaps if faculty members were provided individual hands-on training on the use of Flip Video cameras in their classroom there would be an increased likelihood of them actually implementing the approach. The wording for the question regarding the instructors plans to record and share videos during the current calendar year may have been too restrictive. Had I removed the timing criteria of ‘during the current calendar year’ I may have seen significantly different results.

Future use of video on campus for instructional purposes may now be more likely as a result of the training module. The results of the study indicated an interest for campus-wide training if additional resources were secured to purchase Flip Video cameras.

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