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Video Available at: http://bit.ly/wsusocabstracts

Abstract

Students are required to use academic databases throughout their academic career. This paper will focus on how to create video tutorials, and measure their effectiveness, to supplement in-class database instruction highlighting an example from Wichita State University's sociology librarian. The creation of videos with the QuickTime screencasting tool as well as methods for what to record will be covered. Findings of this study are inconclusive but inform research design for further study. This study represents an institution specific implementation of online video tutorials and the outcomes for instructors and students.

Introduction

Using a database to find information, instead of the ubiquitous Google, can be a hard concept for students to understand. However, librarians can help students by providing access to online help in the form of video tutorials. Often the times that students need the most help is at 2:00 am the day the paper is due, a time when most librarians are sleeping. This paper will describe the steps necessary to identify need and produce quality video tutorials that students can use at their convenience. For this project the sociology librarian contacted an instructor in the Sociology Department at WSU who teaches a class of approximately 250 students every semester. All students in this particular class are given the assignment of finding three peer-reviewed articles about a given sociology topic that is of interest to them and turning in a summary of those articles.

Literature Review

The creation of video tutorials must be carefully implemented. Librarians have an increasingly large number of tools that can be used to aid students in their information seeking behavior (Kammerlocher, Couture, Sparks, Harp, & Allgood, 2011). Linking videos to a specific need, such as how to complete and assignment, is a critical part of creating video tutorials (Lindsey, Cummings, Johnson, & Scales, 2007). Relevant materials must be placed in close proximity to the populations that will use them, such as embedding video tutorials within a course management system or within library guides. Additionally, using input from instructors is crucial when creating products that will be useful to students (Appelt & Pendell, 2010). Despite the number of resources that a library has, it is often only at the direction of an instructor that a student will use, or not use, any specific resource. Therefore video tutorials should focus on areas where need exists.

Creation of a successful video tutorial begins with proper screencasts. It is important to create screencasts in a manner that is conversational and casual (Carr & Ly, 2009). Furthermore, screencasts must be kept to a reasonable time limit if one expects to hold the attention of the viewer (Bowles-Terry, Hensley, & Hincliffe, 2010). A quality screencast is an excellent way to introduce a viewer to a database that they might not be familiar with (Hartnett & Thompson, 2010). Finally, it is extremely important that video tutorials be accessible to all members of a community. Making sure that closed captioning is available ensures that those with hearing disabilities are able to get the content from the video tutorial (Oud, 2011).

Selecting the Database

The first step that librarians need to take when creating a video tutorial is to identify need. Libraries often have hundreds of different databases, some of which are rather esoteric and used sporadically. A librarian that has a good understanding of curriculum offered on campus will likely know which databases warrant a tutorial. Generally one can get a good idea of which databases are high-use simply by paying attention at the reference desk. However, this is not always an indicator of which resources students should be using. The best method for determining which databases make the most logical choice for video tutorials is to talk with instructors and find out what they are telling their students. Additionally, there are assignments that instructors hand out semester after semester; at WSU, the Sociology 111 assignment is a prime example. During a meeting with the Sociology 111 professor, the librarian discussed the possibility of creating a video tutorial to help students complete the assignment. The professor agreed that a video tutorial would be helpful and suggested that the video be embedded in Blackboard. Working with professors gives librarians the opportunity to create video tutorials that will be highly used and serve the needs of students.

In addition to which databases to cover, librarians must also consider the needs of the population. WSU is a commuter university with roughly 92% of its student population living off campus. This implies that a majority of students have to make a special trip to come to class and/or to come to the library for additional help. General use video tutorials will likely benefit students who cannot get to the library easily and will highlight a library's outreach to students. Keep in mind that a video tutorial will never replace the in person learning that librarians can offer to students and should be considered a supplement to instruction and not a replacement (Blake, 2009).

Databases have a lot of advanced features that can be used to a tremendous advantage when searching, but that is not the focus of creating a general use video tutorial, which should enable a student to successfully navigate a database. For the Sociology 111 assignment students are encouraged to use the Sociological Abstracts Database provided by ProQuest. Sociological Abstracts has a lot of features available from the dropdown menus, and while these would likely benefit a more advanced student, they should be avoided in a general use video tutorial. When preparing a script, one needs to be aware that terms like 'Boolean operators' should be avoided. There are moments when teaching Boolean is appropriate, but video tutorials are not that place. Video tutorials need to be clear, concise and to the point.

Creating the Video

Once a topic is identified it is time to move on to the screen capture. Before beginning a screen capture, several technical issues must be addressed. There are dozens of tools that do a wonderful job at screen capture, ranging from free to expensive. Microsoft users can utilize the Camtasia product, which has seamless integration into the Microsoft operating system but is rather expensive. A free option for Microsoft and Apple users is the Screencast-O-Matic software, which does not work as well as some of the professionally designed programs, but creates an acceptable finished product. For Apple users, QuickTime, the built-in software with the OS X operating system has all that one might need to create a quality screen capture. The best advice on using a screen capturing software program is to find one that works and stay with that format. Tutorials created by the WSU Research & Instruction Librarians use the built in tools of Apple computers, which require no additional software and produce a wonderful product. For screen capture the built in QuickTime Player captures the entire screen of the computer which is then exported into iMovie for final editing. This represents one of dozens of different methods that can be used to achieve the same results. Overall length of video tutorials is suggested to be under three minutes (Bowles-Terry et al., 2010). The tutorial for Sociology 111 is just over three minutes in length, but the total amount of video captured was just under two minutes, which will be explained below.

When recording a screen capture for a database tutorial it is best to keep the screen as clutter-free as possible. The Google Chrome browser, used in the Sociological Abstracts tutorial, allows users to hide tool bars and create a clean view of the screen. There are countless ways that different browsers can affect screen casting. For instance, the Firefox browser resized the font in the Sociological Abstracts Database while using an Apple computer, but not when using a Windows computer. The reason for this resizing was not clear and ultimately lead to the use of Google Chrome. Regardless of which database one uses, it is very important to do a test run of how the database reacts to any given Internet browser.

Writing a Script

With the screen capture of your tutorial complete, it is then possible to start the process of writing the script. When writing a script, it is important to avoid complex ideas and or words that can sometimes seamlessly slip into our day-to-day conversations and might be confusing for some students. Writing a script can alert one to possible problem areas where language might be confusing for students. When creating a tutorial script, it is generally easier to first record your screen capture. Starting with the screen capture serves the purpose of fitting your language to what is occurring on screen and not the other way around, which is far more difficult. Additionally, this gives you the opportunity to see how the tutorial 'fits' and the ability to rework things if necessary. When making the tutorial for Sociology 111, it was clear to the librarian that some aspects of using the database were taken for granted (such as logging into the database from off campus which requires authentication) and needed more time in the video. Depending

on the software that you are using it should be possible to 'suspend time' and give yourself more room for adding description when necessary.

 Once you have a script in hand, you now need to record your voice over. Depending on the kind of software you are using this might not be possible. Some software programs force you to read your script and complete screen casting simultaneously; these kinds of software packages can be difficult to use. Before the purchase of any software, it is important to find out if screen casting and audio recording can be done separately or must be completed at the same time in one attempt. The sociology librarian found that it took numerous takes, even with a script, to get the sound right for the tutorial.

A well-recorded audio track is crucial to creating a quality product. The offices at WSU are not sound proof; this created the issue of ambient sound. The sociology librarian discovered that the best time to record an audio track was either early in the morning or later in the evening when fewer people were around.   Additionally, the built in microphone of the computer used was not satisfactory and resulted in a hollow sound. To ensure quality a USB microphone was used to record the audio, resulting in a much higher quality recording.

After completion and editing of the video for Sociology 111, the video was transferred to WSU's Media Resource Center for final upload to the WSU YouTube channel.   For matters of consistency all authorized WSU videos go through the Media Resource Center for upload to the WSU YouTube channel. Additionally, the Media Resource Center added subtitles, a crucial step in the video creation process. Too often libraries will jump into a media project and take for granted that everyone who might use the product has full use of their hearing and visual abilities. Creating accessible database tutorials ensures that the entire student population has access to these aids.   Adding subtitles to a screen cast is key in providing more students the ability to get use out of database tutorials. The Web Content Accessibility Guidelines states in section 1.2.2 that captions should be provided at all times and clearly synchronized with the media (WCAG 2.0, 2008).

Getting Your Work to the Students

The Sociological Abstracts Database tutorial was created one month before the librarian came to the Sociology 111 class to teach database searching skills. After the video was uploaded to YouTube it was embedded in Blackboard, WSU's course management system, for the Sociology 111 class. The video was also embedded in the subject guide for Sociology through the WSU Libraries website, as well as made freely available through the WSU YouTube channel. When the sociology librarian came to class to teach database literacy the Sociological Abstracts Database was the only one used to find articles so that students who opted to use the database tutorial would see a familiar interface. The sociology librarian showed students where the video tutorial was located on the course management system both before and after class. Students were provided with the contact information of the librarian and encouraged to ask questions.

Results

The course management system allowed the librarian to track which students viewed the tutorial in addition to the number of times the video was accessed.   The Institutional Review Board (IRB) at WSU requires that any study using human subjects needs to be reviewed by IRB. The librarian applied for, and was granted, an IRB waiver of informed consent to compare the grades of those students who viewed the video to those that did not. Of the 217 students who completed this class, 82 did not view the video and their average grade on the assignment was 58%. Of the remaining 135 that did view the video, the average grade on the assignment was 94%. On the surface these results would seem to indicate that the video had an impact on student's performance. However, there are multiple factors that might contribute to this disparity.

Two different graduate teaching assistants for the course assigned the grades for the assignment, which could also be causation for the grade differences. There was no way to tell which graduate assistant graded which assignment.   Additionally, the only grades shared with the librarian were those of the

assignment. There might be a link between those who did poorly on the assignment as compared with their attendance in the course, but this is not possible to measure without the records of attendance. This study represents one semester from one class at WSU. Ultimately, this study raises more questions than it answers and acts as a starting point for further study of Sociology 111 classes in Fall 2012 and Spring 2013.

An advantage to the tutorial for Sociological Abstracts is that it not only works for the Sociology 111 class, but also for any student that needs to search the Sociological Abstracts database. As of October 2012 the video has been viewed over 600 times. Creating useful video tutorials is a time intensive endeavor that is worth the effort.   Students have increasingly less time that they can spend at the library or meeting with librarians to get assistance with research. Video tutorials hosted through Internet sites like YouTube allow students (with an Internet connection and working computer) the ability to get an added amount of help in completing their assignments.

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