#### ETEC-674, Wk-5, Graham, "Presentations", Focus Questions, & Responses

1)You have been asked to create a podcast. Which of the above tools (or name another) you would use? Briefly explain the procedure you would use to create the podcast.

I would use Audacity to both record the audio for my podcast, as well as to edit it into the final form. It is easy to do both of these tasks. I would also need an external microphone, hooked to my PC computer, upon which the Audacity app would run. I would probably output my audio in MP3 format, which would require the addition of the LAME plug-in to Audacity, which is a separate download, since the open-source, Sound Forge group does not own the rights to the MP3 encoder. Apparently, that plug-in is the proprietary software of another entity. If my podcast were long, I might post it on my Dropbox.com site, and give the link to students through email, or simply post it on my classjump.com, teacher site.

2)You have been asked to help create a presentation that demonstrates how to resize a photograph using Adobe Photoshop. Which of the above tools (or name another) would you use?

Because the demonstration of resizing a photographic image is primarily visual in nature, I would use visual software to accomplish it. My choice would be Tech Smith's SnagIt and Camtasia software bundle. SnagIt can capture screenshots from my PC for later use in my presentation. While Camtasia can record video images of my PC screen, from a variety of sources, and make them editable, along with audio.

## How would you go about creating the presentation?

Camtasia can record live video and audio of my PC screen into a computer file, as I demonstrate using Photoshop, showing each step of the image resizing process, as I talk about it. Then, Camtasia can be used to edit the audio and video, insert text, still images and effects, along with a built-in character generator (CG) for titling and captioning. It can even tilt, pan, and zoom any portion of the pre-recorded video file I would like to present with more attention and focus. And, if that were not all, I could even add circles, arrows, text, and dynamic effects to highlight and clarify any particular portion of my screen-captured video. The entire, edited video can be saved in a project, or simply converted to a number of different delivery formats, for exhibition in a variety of viewing devices, and formats.

#### 3) What are tools like Articulate and Captivate for?

They are generally used in instructional design, to rapidly and easily convert course materials into eLearning environments, like those delivered through LMS systems.

What features do they offer that would be hard to replicate with less expensive tools?

The integration of software simulation, branching, ActionScripts, interaction with variables, development time, and LMS compatibility are some of the features that would be hard to replicate using less expensive tools.

- 4. Create a presentation! Your presentation must include the following:
- 4a) You must create a text transcript. The text transcript is a .doc or .txt file that is just the transcript of the audio presented and/or the text that is visible to the user of the presentation.
- 4b) Your presentation needs to be in a media format (video) other than just text. So while you must create a text file, you must then use that text file to create a more advanced version of the presentation.
- 4c) Your presentation needs to be (choose appropriate standard, based on the type of media) at least 5 slides long if a Slide-Based presentation, 5 minutes if a podcast or video or other type of multimedia format.

You may either upload your presentation to your blog or other site; and, provide a URL in your blog post for the week, or you may provide the presentation to the instructor in another appropriate manner (CD, DVD, etc.). If you provide the presentation in a way that isn't linkable, just explain this under number 4 in your blog post this week.

My presentation is entitled "How to build a Homopolar Motor." It is on my dropbox.com site, available through this link: <a href="https://www.dropbox.com/s/tpvh1mewtakn5rm/ETEC-674%2C%20Winter15%2C%20Wk-5%2C%20Graham%20video%20lesson.mp4?dl=0">https://www.dropbox.com/s/tpvh1mewtakn5rm/ETEC-674%2C%20Winter15%2C%20Wk-5%2C%20Graham%20video%20lesson.mp4?dl=0</a>. It is encoded as an MP4 video, appropriate for streaming, rather than needing to download it completely before viewing.

The transcript of my wording from the video is available at this link: <a href="https://dl.dropboxusercontent.com/u/67881626/674%20Graham%2C%20homopolar%20motor%20building%2C%20video%20transcript.doc">https://dl.dropboxusercontent.com/u/67881626/674%20Graham%2C%20homopolar%20motor%20building%2C%20video%20transcript.doc</a>

My instruction sheet for building the homopolar motor is available at this link: <a href="https://dl.dropboxusercontent.com/u/67881626/674%2C%20Build%20a%20Homopolar%20Motor%2C%20dwg%20%26%20instructions%20%26%20wire%20bending%20TEMPLATE.pdf">https://dl.dropboxusercontent.com/u/67881626/674%2C%20Build%20a%20Homopolar%20Motor%2C%20dwg%20%26%20instructions%20%26%20wire%20bending%20TEMPLATE.pdf</a>

5.Explain your presentation development method, procedures and technology. This is to be posted on your blog.

#### Overview

I decided to make a video that could be actually used later. I have been asked to teach high school students, visiting my college, how to manufacture something simple, within a 30 minute time-frame. This is to be done for Manufacturing Day, October 1, 2015. My video is just a little over 5 minutes, and will be used along with a double-sided, single-page, hand-out of instructions, to guide the visiting high school groups to build a homopolar motor, and make it function, within the 30 minutes available to each successive group of visiting students. There are only three parts to the motor, other than a metal disc that is used as a stand for the motor. The only element that

students will need to custom-build is a rotor coil, which is a pre-cut, and pre-marked, wire with about 12 bends in it. They will do this by following my video, and written, instructions. By following those instructions, the students will combine their custom-built rotor on top of an electric D-Cell (battery part); and a magnetic stack. If assembled according to the directions, and adjusted as I explain, then the rotor wire should easily begin rotating around the D-Cell on its own, continuously, as they observe it. I estimate that, with each student group, the 30 minutes will be consumed by a 5 minute orientation, when the students arrive, followed by my roughly 5 minute video, followed by students actually building their motors in the next 10 minutes. That would leave about 10 minutes for adjusting non-working motors and making them function properly.

## Cover the following:

#### 5a) What did you do to prepare to develop the presentation?

I gathered all of the materials to build the motor, and did a few practice runs, building the motor. I then encoded all of the steps needed into an instruction sheet that I edited several times, into a finished form, with supporting graphics. Then, I gathered together all of the videotaping and audio devices that would augment my PC in building the video, including lights, tripod, wireless microphone system, camera and cables. After that, I recorded many video clips of the introduction and assembly process, from different perspectives, and reviewed them to decide which would be best to use.

#### 5b) Did you create the transcript first? Why or why not?

I created the actual transcript from the words I spoke on the edited video AFTER recording the video. But, I had already written up the instructions for how to build the homopolar motor BEFORE anything else. So, that was my guide while recording. In the past, I have prewritten scripts, and in the heat of the recording moment, ad lib'ed my way through the script, which ended up only capturing the spirit of what I intended to say, rather than a word-for-word performance of the script. Because I do not have a teleprompter, I decided it would be more accurate, and efficient, to transcribe what I said after seeing the edited video.

A transcript of the wording on the video will be available to any student who can benefit from it, in case there are those students who have difficulty hearing the words on the video. They can read the transcript, and follow the instruction sheet, which has visual images to duplicate, along with the words.

## 5c) Explain your development process.

I first had to plan the instruction sheet for students to use to build the motor. I edited that many times, so I could boil it down to just the essentials. Then, I printed it in the same form that the students would later receive. In a way, that was my initial, crude script. As far as the video goes, I know the script for a video should be planned before it is shot. But, I did several practice runs of the video, after editing together the instruction sheet. I knew what I wanted to say, and the timeline for the finished video. Then, I just did something of an ad lib, saying everything that I knew was important when I was on the opening wide-shot of me. Then, putting my camera on a tripod, I took the close-up shots of my actually building the homopolar motor from the same, double-sided instruction sheet that I would give to students in the future. So, using it as my guide, I recorded the visuals of me, doing each step of the construction process, while the camera captured everything I was doing with my hands and materials, both for the wire bending, and for the final assembly of the finished motor. Once it was working, I showed an even closer view of the motor rotor spinning around the D-Cell, to show what success looked like—what the students should accomplish.

Ultimately, I had to edit everything into a finished video, post it to my dropbox site, and bring the link back to this document, so I could share it with others. Then, I had to post this to my blog, as specified, after having completed my responses to all of the focus questions, herein.

# 5d) Explain how you addressed (or would address) ADA considerations in your presentation.

Since this video was a one-way communication tool, I wanted to add many dimensions to the delivery of it, including video and sound, to add media richness, and social presence, so that it did not seem detached and boring to students. For ADA, a transcription of the audio was made so students could have text where they may not have heard everything that was said on the audio track within the video. Additionally, the instruction sheet had graphic images in addition to the text-based instruction sequence needed to manufacture the motor. This added another dimension to the communications array.

When I have time in the future, I would like to also add scrolling text at the bottom of the video that is synchronized with the corresponding video images, to add closed-captioning to the video, to better reach students with hearing challenges. Even though my video is only about 5 minutes long, I imagine it will take half of a day, or more, to accomplish this synchronized, scrolling, closed-captioning, without the aid of specialized, closed-captioning automation applications. I have done this manually before, but it was extremely time consuming, especially the synchronization of the captions with the associated video segments.

5e)What did you learn about creating presentations? If nothing, then you didn't create the right kind of presentation as you should not do something you already have mastered! Challenge yourself!

What I learned about myself was that, without an inordinate amount of time to memorize and rehearse, I cannot precisely follow the words of a script while recording a video. If I concentrate on the words that I should be speaking, then I lose track of the things I should be doing in the

video. Either that, or I must shoot short segments, and then edit them all together, to form a smooth, finished product.

What I learned about ADA compliance in videos is that it takes a huge amount of time to accomplish this, so enough time needs to be allotted to that task. And, time is money. So, anytime a project takes more time, it costs more money, even if done with volunteers, but especially if people are paid for their time involvement. This means that time and money have to be budgeted into any such project, to account for ADA compliance. These costs can be minimized through the investment in automatic transcription software, but someone still needs to check the accuracy of the finished product—never totally trust a computer to do these things for you.