

## **Increasing Relevancy and Learning through Audio-Visual Content Acquisition Podcasts**

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### **Author Biography**

Dr. Katherine (Katy) Green is an associate professor and program coordinator of Special Education at the University of West Georgia. She graduated from Georgia State University with a Ph.D. in the Education of Students with Exceptionalities with a focus on children with disabilities ages birth to five. With degrees in Speech-Language Pathology and Special Education, Katy taught young children with disabilities in public schools for eight years. Katy's passion and expertise include social-emotional, early communication, and academic supports for young children with disabilities and their families.

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### **Goal of Activity**

The goal of Content Acquisition Podcasts (CAPs) is to provide relevant and alternative means of instruction, while using a multi-media platform. CAPs can be used by instructors to deliver instruction (e.g., Kennedy, Kellems, Thomas, & Newton, 2015), but CAPs can also be created by college students to present knowledge acquired (e.g., Green, Stuckey, Towson, Robbins, & Bucholz, 2019; Alves et al., 2018). Student-created CAPs will be the focus of this manuscript, as discussed below.

In my former undergraduate courses, I often had students research a topic and present the topic to the class at the end of the semester. However, I noticed that students did not always attend to each other's presentations. Further, not all students put their best effort into the presentation. Thus, I decided to require students to make a permanent product: a content acquisition podcast (CAP) rather than a live classroom presentation. The CAPs could then be shared with interested individuals outside the classroom, given student permission. The hypothesis was that if students made a permanent product while using current technology, the assignment may be more meaningful and engaging. Additionally, instead of watching live student presentations, CAPs may increase attention and engagement as the CAPs are similar to short videos that students may find of interest on YouTube or other media sites.

### **Description of the Activity**

CAPs are short, audio and visual podcasts that can deliver instruction in any content area. CAPs are typically created using still images with recorded narration (Kennedy, Hart, & Kellems, 2011). Unlike traditional podcasts, which are usually published online as a series and made available for downloading, CAPs are often stand-alone files, created by educators for instructional purposes. CAPs were designed based on Mayer's cognitive theory of multimedia learning (Mayer, 2009) and 12 accompanying evidence-based instructional design principles (Mayer 2008). The literature on CAPs is relatively new and the majority of research is currently conducted in teacher preparation programs. However, CAPs can be used in any discipline.

Before making the CAP, the students should determine one specific topic. Students may choose their topics or the instructor may assign topics. For example, I have used CAPs in an introduction to special education course. The students made a CAP on a self-selected disability category, such as autism. I have also used CAPs in a math methods teacher preparation course, and the students made the CAP on an assigned mathematics instructional strategy. In an English Literature class, students made a CAP on a particular book or author.

CAPs are often made using slide show software, such as Google Slides or PowerPoint. Prior to creating the CAP, students should be introduced to Mayer's cognitive theory of multimedia learning (Mayer, 2009) and the twelve accompanying evidence-based instructional design principles (Mayer 2008). Students start their CAP with an introductory and agenda slide. The CAP should then have a body of text and a conclusion slide. The students use more images than text in creating the slides; students narrate over the slides, so text should be at a minimum. The text and images should be close together on the slide. I required the maximum length of the CAP to be 5-8 minutes long. The specified length requires the student to select only the most important concepts in the CAPs. Finally, students may use a movie software, narration software, or screencast software to finalize the CAP. Students are recommended to practice narrating the CAP several times in order to create the optimal final product. (See Table 1 on how to make a CAP). To ensure accessibility by all students, the CAPs should be narrated properly, as well include an accompanying transcript of the narration.

### Reflection of How the Activity Meets the Author's Goal

I have used CAPs in a variety of undergraduate hybrid and face-to-face classes. When first presented with the activity of student-created CAPs, anecdotal evidence revealed the undergraduate students expressed concern, fear, and intimidation of creating an unfamiliar multimedia product. However, after they created and watched the CAPs, the students reported that they preferred the CAPs over the typical classroom presentation. When requiring teacher candidates to create CAPs on math strategies, the teacher candidates expressed plans to create CAPs for their K-12 students to help them understand how to complete complex math problems.

The author of this article recently completed a study (Green et al., 2019) comparing student-created CAPs to live student presentations. This study investigated student-created CAPs to demonstrate understanding of math strategies for working with children with disabilities in *Math Methods for Teaching Students with Exceptionalities* course. The research question investigated the effects of the CAP condition, compared to the live presentation condition, on student knowledge of math strategies. An experimental group design was used to compare the two conditions. Results from the study indicated that teacher candidates, when given the opportunity to create a CAP, gained a significant greater depth of knowledge than the groups that created live classroom presentations on math strategies. There is a developing body of research to review studies on CAPs (e.g., Alves et al., 2017; Kennedy et al., 2015).

### References

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- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). New York, NY: Cambridge University Press.
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Additional resource on creating CAPs:  
[https://tedcec.org/wpcontent/uploads/2018/09/Content\\_Acquisition\\_Podcasts.pdf](https://tedcec.org/wpcontent/uploads/2018/09/Content_Acquisition_Podcasts.pdf)

Table 1  
*Instructions of how to make a CAP*

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Step One:

- Identify a topic.
- Decide the most important information.
- Your CAP should be clear, concise, and organized.

Step Two:

- Title your presentation with a title that clearly explains what the CAP is about.
- Organize your content and separate out the key points. Use key points as slide headings.
- Use bullet points for the supporting details.
- You will narrate your CAP; eliminate any unnecessary information.
- Add speaker notes to your PowerPoint, and print them for your narration later.

Step Three:

- Replace text heavy slides with pictures that represent the content.
- Make presentations visually appealing to keep the audience engaged.
- Choose a word or short phrase that describes the topic of the slide.
- Use large text and text color that is easily readable over the background you choose.
- Locate your text in the middle of the slide or near a key picture.

Step Four:

- Finalize your presentation, and type a script of what you're going to say.
- Review your PowerPoint; make sure that it is clear and easily understandable.
- Rehearse your presentation until you are comfortable and CONFIDENT!
- Record and publish your CAP.

How to Publish your CAP using a Screencast Program:

- Create a presentation using software, such as PowerPoint or Google Slides.
- Use a screencast program (e.g., Camtasia, Screencast-O-Matic) to narrate your PowerPoint.
- Publish your program. You can upload to a file sharing site such as Vimeo or YouTube.
- Use the videos linked here to help you make a screencast for either your Mac or PC:
- Video Tutorial: How to record a screencast on Windows 10 for free  
<https://www.youtube.com/watch?v=7QQOGLYhRdo>
- Video Tutorial: How to make a screencast on a Mac  
<https://www.youtube.com/watch?v=2qkHq4gDnE4>