Goal of Activity

The goal of Content Acquisition Podcasts (CAP) is to provide relevant and alternative means of instruction, while using a multimedia platform. CAPs can be used by instructor 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 specifi

CAPs are often made using slide show software, such as Google Slides or PowerPoint. Prior to creating the CAP, students should be introduced to MayerÕs 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 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 AuthorÕs 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 indicate 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).

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Additional resource on creating CAPs: https://tedcec.org/wpcontent/uploads/2018/09/Content_Acquisition_Podcasts.pdf