

## **Content Acquisition Podcasts**

Content Acquisition Podcasts, or CAPs, are not really podcasts as we typically think of them. Instead, CAPs are short, multimedia vignettes intended to provide instruction to a professional audience. All CAPs use rich images, occasional on-screen text, and clear narration together to deliver a cohesive instructional product. In particular, this instructional delivery option draws a distinction from regular podcasts and other multimedia options via their grounding in Mayer's Cognitive Theory of Multimedia Learning (CTML). The CTML grew out of cognitive load theory, which holds that all learners are subject to limited amounts of cognitive processing capacity at any given time, and once overloaded, new learning is unlikely. Instruction should therefore be carefully designed and delivered to keep the learners' limited cognitive levels from being overwhelmed. Mayer's model also leverages Paivio's concept of humans possessing dual inputs for accessing information (audio and visual) that work together to maximize learning, and Baddeley's construct of working memory. By leveraging these understandings how people learn via a cognitive paradigm, Mayer intends his CTML to be a functional guide for designing high quality instruction using multimedia. This scaffold is quite specific, as Mayer and his colleagues have identified and empirically tested 12 instructional design principles that, when used together, purport to minimize a learner's cognitive load, and maximize learning capability. Please see: Mayer, R. E (2008). *Multimedia Learning* (2<sup>nd</sup> Ed.). Cambridge University Press.

### **Types of CAPs**

#### **CAPs for Teachers (CAP-T)**

There are several types of Content Acquisition Podcasts (CAPs). The original was CAPs for Teachers, or CAP-T. The purpose of CAP-T was to provide teacher candidates or teachers a short burst of information about a topic. We often created CAP-Ts to teach about static topics like characteristics of students with various disabilities (e.g., content that never really changes). These videos only included images, occasional on-screen text, and narration. The following are articles where researchers used CAP-Ts to teach teacher candidates or teachers about content, and compared their performance on various learning measures with peers who learned using another method (e.g., reading, lecture). You can see examples of these videos at [www.SpedIntro.com](http://www.SpedIntro.com).

#### **CAPs for Teachers with Embedded Modeling Videos (CAP-TV)**

Another type of CAP is CAPs for Teachers with Embedded Modeling Videos (CAP-TV). CAP-TVs include a segment that is the same as the original CAP-T in terms of using images, text, and narration to deliver instruction for a topic. But these videos also include a teacher modeling a skill or practice to provide the viewer with an additional scaffold for learning. CAP-TVs provide the ability to use this method to teach about specific evidence-based practices, and show a learner what they should look like. You can see examples of CAP-TVs at [www.SpedIntro.com](http://www.SpedIntro.com). The new video series for the High Leverage Practices in Special Education ([www.highleveragepractices.org](http://www.highleveragepractices.org)) are a form of CAP-TVs.

### **CAPs for Students (CAP-S)**

Kennedy and his colleagues also developed a form of CAPs for students, called CAP-S. These videos also use Mayer's CTML and design principles, but marry them with evidence-based practices for teaching specific vocabulary terms or concepts to students with and without disabilities. Kennedy and his colleagues have conducted research demonstrating that teacher candidates and inservice teachers can learn to create CAP-S, and that action has positive impact on their knowledge and implementation of practice when teaching.

### **CAP Professional Development Process (CAP-PD)**

Using resources from IES, Kennedy and his team developed the CAP Professional Development Process (CAP-PD). The CAP-PD process includes CAP-TVs to boost a teachers' knowledge, help their implementation of evidence-based practices using customizable curriculum materials (in the form of PPT slides), and then data-driven coaching/feedback using a new observation tool called the Classroom Teaching (CT) Scan. For information about the CT Scan, please email Michael Kennedy ([mjk3p@virginia.edu](mailto:mjk3p@virginia.edu)) or go to the Technology Resources link on the TED website.

### **CAP Production Steps**

[http://people.virginia.edu/~mjk3p/docs/CAP\\_Production\\_Steps\\_MK.pdf](http://people.virginia.edu/~mjk3p/docs/CAP_Production_Steps_MK.pdf)