

Chapter 5

Audio for Multi-Media Presentations in E-Learning

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ABSTRACT

Although many advances have changed the way we are able record, distribute, and consume audio enhanced or audio based learning materials, audio can still be either a critical driver or an impeding detriment to learner comprehension and retention. Consequently, this chapter reviews the instructional design implications of audio prior to exploring the impacts advances in audio technology, software, and equipment have on the creation of audio enhanced or audio based multimedia presentations for learning, training, or education.

AUDIO FOR MULTI-MEDIA PRESENTATIONS IN E-LEARNING

As popular as video is, audio will always remain a powerful medium for learning products if only because learners are often not in a position to actually watch content, but may be still be able to listen to it. Think of the daily commute as just one key example—this is prime time for learning that audio can serve well. (Cobb, 2013)

Now it is time to consider the audio aspect of multimedia presentations (particularly for e-learning). Like all things technical, the way we create audio enhanced media has come a long ways over the years. For example, audio enhanced learning has migrated from classroom lecture halls, to records, to books on tape, to CDs, and now to downloadable files sometimes referred to as downloads or podcasts (Handley & Chapman, 2011).

From my own childhood, I recall read along records which quickly became tapes and even stuffed animals. Today, children can press buttons embedded in books, globes, electronic readers, and other objects to learn their early words. Last but not least, of course, mobile devices and computers offer even more ways to access the sounds we all crave.

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These sounds, from the serene crashing of ocean waves to the obnoxious blaring of emergency alarms, move us. They change us physiologically, psychologically, cognitively and behaviorally (Treasure, 2011) and they can help or hinder our ability to learn (Clark & Mayer, 2011). It is up to us as designers to find the best ways to leverage this *sonic* force in a manner most conducive to our various causes. This chapter examines advances in both theory and technology that allows us to make better use of sound and audio in elearning.

From Theory to Practice (About the Author)

This chapter is written from and for the instructional designer's perspective (although the concepts can be generalized to any multimedia presentation). Instructional design is the art and science of applying a systematic process or work flow to the creation of instructional materials. Instructional design is a field that draws from multiple branches of academic studies including (but not limited to) education, psychology, and writing. Consequently, instructional designers hail from all walks of life.

My career in instructional design actually began with the completion of an MS in Instructional Design and Technology from Emporia State University in 2001, which I have found is somewhat unusual. Oftentimes, pursuit of this type of degree occurs *after* one finds him or herself in the field of training and development. This order of progress, does however, afford me some insight and advantages over many of my colleagues. For one, I find myself naturally considering analysis and theory, *before* course contents, a strategy that can ultimately be a tremendous time, resource, and money saver.

Figure 1. An old gramophone, photo taken by Tania Matvienko courtesy of freeimages.com



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