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| Technologies for Audio in E-Learning | | | | |
| Name | **Description** | **Appropriate Use** | **How the Integration of Audio with Text Enhances Learning.** | **Effectiveness of Audio in the E-learning Environment.** |
| Audacity | A free program for recording and editing sound. | This program can be used for making ringtones, removing vocals, mixing, creating podcasts and transferring tapes and records to computer. | Allows educators to record a lecture for learners to review on their own to help with retaining new information. | The effectiveness of audio component of narration or music gains learner’s interest, when text alone would be considered boring (Articulate Network.com, 2012). |
| The Levelator | Software that will adjust the speaker’s audio level within a podcast or other audio file. | Software is mainly used for lectures, interviews, speeches, conferences, meetings, radio and TV programs. Its main use is to make audio files clear for projects. | Allows educators to alter the tone of the recording to provide audio that is appropriate for the learning environment. Therefore, reduces extraneous audio. | Combining the components of a compressor, normalizer, and limiter is effective with presentations that have multiple presenters. Students are able to focus on learning course concepts by being able to clearly hear presenters, not having to strain to hear soft-spoken presenters nor cover their ears due to the loudness of another presenter (The Conversations Network, 2012). |
| Aviary Myna | Online audio editor that will remix music or audio clips by adding fade-ins and fade-outs, audio delays, loops, and other effects. | Aviray Myna is used to create and edit multi audio recordings type using Flash. Great source to help a storyboard or presentation to have quality sound. | Provides editing options that can enhance an instructional method and keep leaners engaged within the learning environment. Applies multimedia principles. (Clark & Mayer, 2011) | The effectiveness in e-learning allows learner to follow the transition of a presentation, linking one concept to another concept so the learner gains a full perspective of the material as it relates to the added audio and sound components (Aviary, 2012). |
| Narration/ Voiceover | Brief clear and effective audio used to guide learners through a lesson. | This is used for any type of presentation. It may be spoken by someone who is elsewhere in the production. For example, an instructor teaches a lesson or use step by step instructions with a voiceover following a presentation. | Applies contiguity principle and modality principle within the learning environment which allows the learner to fully comprehend the information simultaneously with audio, visuals, and lectures. (Clark & Mayer, 2011) | Narration and voiceover are effective in aiding students in following learning patterns or tutorials as instructor introduces material in a segmented, pre-training strategy (Lindsey Abbott, 2012). |
| Podcasts | An electronic media file streamed online to a computer or mobile device. | A Podcast can be used by an educator to record lectures or difficult lessons. Podcast can even be used to record class discussions for students who may be attending online. | Provides live or recorded audio that learners can review to gain information for further understanding of course’s content through convenient or mobile devices. | The Podcasts’ effectiveness in e-learning aids auditory learners as well as students who are striving to learn foreign languages (Strategic Technology Solutions, 2012). |
| ProductionSync | Automatic sync technology. Software used for accurate lip synchronization for off-line production. | ProductionSync is used to align and synchronize an animated character’s lip movements, facial expressions, and gestures to its voice track. | Applies contiguity principle where narration is synchronized to the accurate lip movement of the animated pedagogical agent. Therefore, reduces extraneous processing. | Reduces the overloading of essential processing by narrating complex or lengthy material. (Clark and Mayer, 2011) |
| InstantSync | Automatic sync technology. Allows real time lip synchronization. | InstantSync is used to synchronize live animation or communication application. The animated character’s lip movements are automatically synced to its voice track for streaming audio application. | Applies contiguity principle where accurate mouth positioning of the streamed animated character plays at the same time the voice is played. Thus, reduces extraneous processing. | Streamed character agent provides real-time content, and allows for interaction between the agent and learner. |

References:

10 Free Audio Programs to Use for E-Learning. (2011). Retrieved from http://www.articulate.com/rapid-elearning/10-free-audio-programs-to-use-for-e-learning/

Articulate Network.com. (2012). *Should you add background audio to your E-learning courses?* Retrieved from:

http://www.articulate.com/rapid-elearning/should-you-add-background-audio-to-your-e-learning-courses/

Audacity. (2012). Retrieved from http://audacity.sourceforge.net/

Automatic Sync Technologies. (2006). http://www.automaticsync.com/lipsync/

Aviary*.* (2012). Retrieved from http://advanced.aviary.com/tools/audio-editor

Clark, R. C., & Mayer, R. E. (2011). *E-Learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (3rd ed.). San Francisco, CA: John Wiley & Sons Inc.

Lindsay Abbott. (2012). *Audio and the E-learning industry Part I*. Retrieved from:

http://www.lindsayabbottvoiceover.com/2011/02/audio-and-the-e-learning-industry/

Strategic Technology Solution. (2012). *Smart Leaders.* Retrieved from: http://www.suddenlysmart.com/smartleaders.htm

The Conversations Network. (2012). Retrieved from http://www.conversationsnetwork.org/levelator