Audio Recording for the Educator

Introduction:

In order to take full advantage of computer based learning and multimedia education tools, it is essential to understand the components. Text is the basis for most communications, especially for distance learning. However, text is not limited to the printed word. Text as audio is a critical component to effective multimedia learning objects. The important word here is effective. Greater complexity of media does not ensure more learning (Clark & Mayer, 2008) Harnessing the power of the computer in the classroom and online means applying the Principles of Multimedia Education to the instruction we create. There are eight recognized rules, or principles of multimedia education.

- The Multimedia Principle
- The Contiguity Principle
- The Modality Principle
- The Redundancy Principle
- The Coherence Principle
- The Personalization Principle
- The Segmentation Principle
- The Pre-Training Principle

These rules, or guidelines, create a framework for creating successful, well structured computer based learning objects that can and will enhance your teaching and improve student outcomes.

The first of these principles is the Multimedia Principle. The Multimedia Principle states: Using words and graphics together as opposed to words alone improves learning especially in students with less experience in the lesson content. In the K-12 context, where most of what is taught to students, the ‘new to the content’ label applies to almost everything being taught. This makes well designed multimedia content particularly useful to the K-12 educator.

Audio, that is, text as sound, is the first component of multimedia education that is a marked difference from teaching and learning as usual in the classroom and online. Text is traditionally presented in the form of the printed word, either on paper or on screen. It is not, however, enough to simply record text and play it to improve student outcomes. Audio has to be well made in order to be effective, and well made audio recording is easier discussed than created.

How then, do we, as educators, create audio that will improve our teaching and our student’s learning. By following a few guidelines, this can be accomplished by almost anyone willing to spend a couple of hours learning and practicing a few simple, straightforward techniques.

Creating audio recordings for education is a process, and like any process, there is a progression; a series of steps, that make the process easier to perform and replicate. The first step in creating audio is creating a script. Too often, multimedia lessons suffer form poor audio, and the inherent lack of quality begins before the record button was ever pressed. We’ve all heard the lessons, with plenty of ‘ums’ and awkward pauses. Of the presenter stopping, and saying something like; “Oh, yeah, don’t forget to do this....” Such off topic content is just clutter, getting in the ay of comprehension. It increases the student’s cognitive load, and makes it more difficult to focus on the lesson itself. Research has indicated that the voice of the presenter is far more important than the
appearance of him or her in creating learning with far transfer (Clark & Mayer, 2008).

Enter the script. It’s not sexy, or particularly ‘fun’ to think about, but a script helps eliminate off topic content, and it reduces the time spent editing later, making it far more efficient and less time consuming to create audio and multimedia lessons, making it more likely you will do so. A script, unlike a treatise or research paper, is designed to be presented orally, not read. It should be short, to the point, and less formal than a written paper on the same topic. The one of voice should be conversational, friendly, and upbeat. The presenter should sound welcoming and approachable.

A script should begin with an introduction of the presenter, and the subject matter.

Break the script into small, short paragraphs, no longer than one or two sentences each, to make it easier to read fluidly. This has the added benefit of “chunking” the content for the learner, creating smaller more easily recalled lessons.

Practice before you record. Read through the script, and eliminate or re-write words or phrases that are difficult to read or understand.

Record in a quiet environment. If possible, use a microphone that is designed for audio recording. The equipment, however, is less important than the atmosphere. Extraneous background noise is something we, as listeners, screen out automatically in any environment; but the microphone is not so discriminating. The microphones hear all, and records it. Too much background noise, like the neighbor’s weed whacker, or traffic, or lawn-mower, can make editing the recording next to impossible. Try to avoid having that kind of sound on your lesson sound track.

Use a sound editing program, like Audacity or Soundbooth to record the audio if you are doing the recording directly onto your computer. Applications like Powerpoint and Keynote allow you to record, but editing sound in those programs is agonizing. As you'll see in the next lesson, editing is a really important aspect of creating good multimedia learning objects. Good recordings make the editing task much easier and less time consuming. Audacity, the program we’ll be using for this course, is free, cross platform compatible, and very powerful. It has nearly all the same features as many for pay applications.

If you are going to record to a device, use a Digital Audio Recorder. Avoid tape at all possible. Low end tape recording devices create hiss, and that hiss can be difficult to remove in the editing process. Especially for inexperienced sound editors. (Like us)

Speak slowly and clearly when you record. Remember, this is being heard by someone who can’t see you. Who can’t read the visual cues of body language to get a more nuanced picture of your intentions. If they don’t hear it, your audience won’t learn it.

Finally, if you make a mistake, don’t stop. Pause, collect youself, and keep going. There is no need to go back to the beginning of the script and start over. We’ll get rid of any goofs and bloopers later. That’s what editing is all about. What is important is getting a clean, crisp, well read, technically sound recording into the software, that will allow us to edit it into a concise, coherent sound track for our multimedia lesson.