



In Extended University's Burns Technology Center, our educational technology specialists receive many questions about podcasting, streaming video and other Web multimedia applications. We find that most MSU educators and outreach professionals are interested in using these new tools to share a presentation, lecture or conference with a wider audience. This sheet describes ways to **capture and deliver content**; a future sheet will cover motion graphics applications like Flash, which can enhance educational content through animation, pop-up maps and graphs, interactive quizzes, and games.

Methods of capturing and delivering digital content

	What is it?	Pros	Cons
Audio capture (often called Podcasting, also known as coursecasting)	Audio from a speaker or event is recorded, reformatted and posted to a Web site. A user can listen to the file online or download it to a computer or portable .mp3 player like an iPod. Originally, the word "podcast" referred to content delivered via an automatically downloaded subscription; now the word is used in a more generic sense.	Fairly easy to capture, post to the Web and download. Doesn't require as much bandwidth as video (for the host or the user); generally more portable than video—can be transferred to iPods or similar devices. User can listen to it in the background; doesn't have to be as engaged as watching a video.	Does not provide the rich content that a video or other multimedia file offers; not appropriate for all content, such as if the presenter uses lots of visual aids.
Video capture (sometimes called Vidcasting, Vodcasting, Web video, streaming video, coursecasting)	A video file captured, reformatted and delivered via the Internet. This can be "streaming," meaning continuously delivered to the user from the host (much the way a TV program "streams" into your home) or non-streaming, meaning the user can download the file and can access it at will, even while off-line.	More similar (than audio only) to actually attending an event—you can see and hear the speaker and his/her visual aids. If the content is appropriate, an audio-only file can also be made from the captured video content.	Requires more time and equipment than capturing audio; requires more bandwidth from the host and for the end user. Viewer must be actively engaged in watching. Does not allow for real-time interaction with presenter.
Video production	A video production (as opposed to video <i>capture</i>) is like a professional film with multiple camera angles, on-location shooting, complex editing and transitions, music, actors, etc.	Very rich presentation that is appealing to viewers. Think about the documentary films you see on The Discovery Channel.	Can be expensive and time-consuming. Requires professional actors, director, producer, etc.



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Multimedia presentation	This type of presentation might look like a Powerpoint file delivered via the Web along with accompanying audio, video or other interactivity.	Allows presenter to incorporate more visual aids. User may have flexibility to skip around in the presentation.	More complicated to produce than just an audio or video file capture. Presenter/educator must have good visual aids.
Videoconference	Allows people in two or more locations to interact in real time. Often takes place in a specialized videoconference site with a technology facilitator. Live videoconference be recorded to post on the Web or save to DVD.	A good alternative to costly travel. Allows for live interaction with presenter. Because attendees gather in a specific site to participate, there is group synergy among those gathered.	Participants must gather in a specific site; about 50 videoconference sites are in Montana. Teaching effectively via videoconference is a learned skill.
Webconference / Webcast (audiocast)	Similar to videoconference (above) but the presentation is transmitted to a personal computer rather than a videoconferencing site. Often includes audio and a visual aid like PowerPoint rather than video. "Conference" generally takes place in real time while a "cast" is a file saved for access at anytime. Audioconferences or audiocasts are conducted over a telephone line.	User can participate via his/her personal computer (or phone, in the case of an audiocast). Conference format allows for interaction with presenter. A live conference presentation can also be captured for later delivery.	End users are not in the presence of others, so the opportunity for group dynamics is lost. End users may not have enough bandwidth to participate. Host must have special software; sometimes users must call in via a phone line (in addition to viewing on the Web). May require a facilitator.

Digital video and audio files can be delivered on **DVDs and CDs** to people who may not have a Web connection. These disks can also contain PDFs, Word documents, etc. along with multimedia files. CDs with audio files are the most portable. On the down side, not all disks are compatible with all players or computers. Also, consider whether the disks have to be mailed; postage can be costly. Unlike a Web-based tool, it is hard to track whether the disk has been viewed. Organizing files on the disk can be tricky, particularly for a DVD.

How to get started:

These multimedia tools are useful for delivering content to a broader audience, but they can also be time-consuming and expensive to create. It's best to have a good vision of what you want to accomplish, particularly what is best for your end users. One of the first considerations is whether you need the delivery to be in real-time, so participants and presenters can have live interaction, or whether it's more important that the content is accessible after the actual event has taken place. Also think also about your content: is video required so that it can be understood? Would audio-only suffice? Or are you conveying complex information that might require a package of visual aids, simulations or other instructional tools?

If you would like to talk about your project or view some examples of various multimedia files, contact Suzi Taylor in Extended University's Burns Technology Center. (406) 994-7957 / taylor@montana.edu