Developing Online Lectures as a Supplement to Classroom Instruction

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Length and Segment Strategies

*Consider the following*
- Begin with an outline of your 50 minute lecture and identify clear divides between concepts.
- Consider each concept a segment, which could stand alone as a subtopic within your lecture collection.
- Try to keep each lecture segment around 6 minutes (varying ranges of 8 to 12 minutes are often provided as a maximum length per video in current literature).

*Why?*
- If a student needs to review an individual concept at a later date, they will have to guess at what point in the 50 minute lecture that concept was covered.
- Providing an entire 50 minute video segment often requires a student to watch the entire lecture in one setting. Even streaming media can make it difficult to find your place again.
- Dividing the lecture into shorter, condensed segments provides pause for students to refocus their attention. Use this opportunity for students to reflect on learning.

Guided Note Taking (Low-Technology Solution)

*Consider the following*
- Develop a document for your students in the spirit of a worksheet or study guide to fill in as they watch the lecture collection.
- Organize your document to correspond with your lecture collection, with reflective prompts listed by segment, to guide students as they take notes and reflect.
- Add an area to prompt students for their questions, so these are written down while still fresh in the student’s mind. Allow some time at the beginning of class to address questions.

*Why?*
- The idea of watching recorded lectures outside of class may initially confuse, frustrate, or even anger students. Providing an accompanying activity with clear direction, reflective opportunities, and objectives will demonstrate value to your students.
- Your students may not watch the lectures if these are the only activities assigned. Recorded content may not feel like homework to them, so include some type of activity.
- Students may “check out” while passively watching the lectures in the comfort of their own home. Keeping students actively engaged with prompts for reflection and checking their understanding will alert them when/if they need to watch a portion of the recording again.
Delivery Methods

Consider the following

- Take some time to watch lectures from others colleagues, then weigh the pros and cons of each delivery method based on the materials they presented as well as the materials and subject matter you plan to present. With a wide variety of available technologies, delivery options include: Voice only; Video only; Voice over a document or slide deck; Video next to a document or slide deck; Whiteboard pen annotating with voice or video.

- Reflect on what you do in the classroom – How often do you use a white board? How often do you use your hands or body to demonstrate or gesture when you lecture? Does this enhance your lecture or is it distracting? Do you have physical models and objects in the room with you while you lecture? Are you mostly talking or are you also demonstrating and interacting with other objects?

Why?

- Truth be told, there is no single delivery method that will meet every instructional need. What you’re demonstrating, your personal teaching style, and the subject matter you’re lecturing on should guide your decision making with regard to a delivery method rather than one technology product over another. Consider your needs with regard to a Delivery Method now, before exploring technologies.

Selecting Appropriate Technologies

Consider the following

- Go into this project with the expectation that you will revise approximately 1/3 of the lecture segments in your course’s collection within the first year of teaching with them. This could be anything from fixing a typo to recording an entire segment again. Keep your source files (PowerPoint, PDF, raw video or audio) well organized and in a safe place.

- Select a technology and delivery method, then stick with it. Students will encounter fewer technical headaches if you have no more than two types in your course (Example: Some weeks a streaming video and other weeks VoiceThread). Nothing is more frustrating for students than to resolve one technical issue only to encounter another product the following week.

- Ask for help! Early in your project begin networking with colleagues, an instructional technologist, instructional designer, the Teaching and Learning Center, ZSR Library, and the Service Desk. Determine who your resources are, how they can help, and who else they might introduce you to.

Why?

- These technology preparation tips are from years of experience providing design services and professional development to faculty, as well as end-user support to students using their materials in fully online and blended/hybrid courses. Take your students’ support needs into consideration when selecting your technology and keep it simple. Ask colleagues for assistance in reviewing your materials on multiple devices and systems.

- Don’t go into this alone. Learn early on who is here to help you and what services and training opportunities are available to you. Faculty will often make far more work for themselves than necessary and some abandon their projects early on.
This sheet provides technology ideas, and how to locate assistance on campus, for online lecture delivery. There are multiple products on the market, including some which are free to use, similar to those listed here. You are strongly encouraged to network with colleagues as you explore available technology options.

**Audio Podcast**

*Audacity* is a free, open source audio editing program that allows you to edit, delete, and combine tracks. *Audacity* is installed on WFU issued laptops. If you need assistance, consult an instructional technologist.

**Video Lecture**

A recorded video lecture, which you plan to use over several semesters, is best accomplished with good lighting, a quality camera, and an appropriate backdrop. *Corel Video Editor* is installed on WFU issued laptops. *Google Drive* has unlimited storage for WFU accounts and automatically converts your file into a video player in a format similar to youtube.com. *WebEx*, used for live video, can be prerecorded and stores on the WebEx server. Sign up for a training session on *Corel Video Editor* or *WebEx* through the PDC website. Consider *Wrought Iron Productions* for producing a more professional quality video for a fee.

**FIZZ Model for Quick Video**

The *FIZZ Model* is simply recording short, concise, one-take videos which can be uploaded to *Google Drive*. These videos should not exceed 6-8 minutes and should include a whiteboard directly behind the person presenting for purposes of demonstrating and working through problems. The video quality on newer mobile phones should be sufficient for this type of video, however, small video cameras are on loan from *The Bridge*. If you need assistance, contact an instructional technologist. Also do a search on YouTube for “Lodge McCammon FIZZ Model”.

**Classroom Capture**

You may have noticed many universities are providing videos of lectures as part of an open courseware initiative (MIT, UC Berkley, etc). These videos were often created as an afterthought to serve as student review and were later repurposed for public access. Recording your lecture in this fashion is not preferred and we would like to refer you instead to *Media Site Live*, a set of hardware often used to capture an event or special lecture. Depending on your needs, a *SMART Board* might help you achieve this as well. Or the use of multiple camera angles and video editing services by *Wrought Iron Productions* may suffice for a fee. If you would like to inquire about *Media Site Live* consult with Online Education staff. *SMART* training opportunities are available on through the PDC website.

**Greenscreen**

Also referred to as “weatherman lecturing” *Greenscreen* technology allows the instructor to be overlaid on any type of background, including their own slideshow. The ZSR Library has a greenscreen room with pull-down screens that can accommodate this type of recording in room 260 of *The Bridge* suite and is managed by Barry Davis.
Slides and Video
Options for split screen slides and video abound and this crosses over into Screencasting and even VoiceThread (see below). Adding a small video in the corner next to a set of slides can be done more simply by using a website like Movenote, which runs in your browser and stores your presentation on their website. Articulate Presenter and Adobe Captivate are software programs which also allow you to narrate your lectures or add a video. However, if you are looking for more than simply a “talking head” video in the corner, options include a hardware package known as Media Site Live. This is often used to capture an event or special lecture. If you are interested in learning more about Media Site Live consult with Online Education staff. Wrought Iron Productions is capable of producing a similar video for a fee.

Quizzing within Lecture
Pausing students mid-lecture and requiring them to answer a self-assessment question before proceeding is becoming a more popular option. EdPuzzle is an easy to use beginner’s website that allows you to overlay a quiz question on a video. Articulate is a software product that allows you to add some quiz functionality to a presentation and was designed for the novice computer user. Adobe Captive is a more advanced software program which provides more in-depth options within a presentation. Camtasia, typically used for Screencasting (see below) also provides a quizzing feature. If you would like to inquire about quizzing within a lecture, consult an instructional technologist.

Screencasting
Screencasting means to record the activity occurring on your computer’s screen and adding your voice or video. Screencasting is a better option when switching between multiple windows, for example viewing some PowerPoint slides and then showing students a website in another window. For the beginner, Screencast-o-matic is a website that allows you to record this type of activity. For novice users, Jing is a free software program that is also user friendly. Camtasia, by the same company, is a paid software program with a lot more features. If you need a place to store your video, upload it to Google Drive. If you need assistance, consult an instructional technologist. (VoiceThread also includes whiteboard functionality.)

Whiteboard Pen & Audio
There are many options on the market for recording your pen annotations. Explain Everything is an inexpensive iPad app which will export a video file that can be placed on Google Drive. Camtasia is a software program which allows you to save a video as well and is good for the novice computer user. Adobe Captive is a more advanced software program which exports in HTML5 or Flash format. If you need assistance, consult an instructional technologist. (VoiceThread also includes whiteboard functionality.)

VoiceThread
VoiceThread is a unique website that allows a conversation to develop around a presentation or document. Popular in K-12 because it is so easy to use, VoiceThread is easy enough for a beginner but has enough features to keep the more advanced user satisfied. Video and Audio capture features are available for both instructors and students on the same presentation, as well as pen annotation features. WFU has a paid subscription to VoiceThread (available at VoiceThread.WFU.edu). Consider signing up for a VoiceThread workshop through the PDC website.

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