

Engineering Paradise

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If only we could make all our video work like this – would it attract students?

Using Video for Transformed Classes

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Informal Video

- Many different forms
 - PowerPoint with Voice
 - Screen capture using a tool like Jing while writing on a document
 - iPad App (Android does not have good support for this)
- Usually un-edited
- Limited ADA compliance if any
- Off the cuff to answer student questions

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Created with Doceri



Quick iPad video

Used to address student questions over homework. This is much easier than trying to type out an example and the concepts behind it! This one was created with Doceri

Conversion of fibroblasts by MyoD

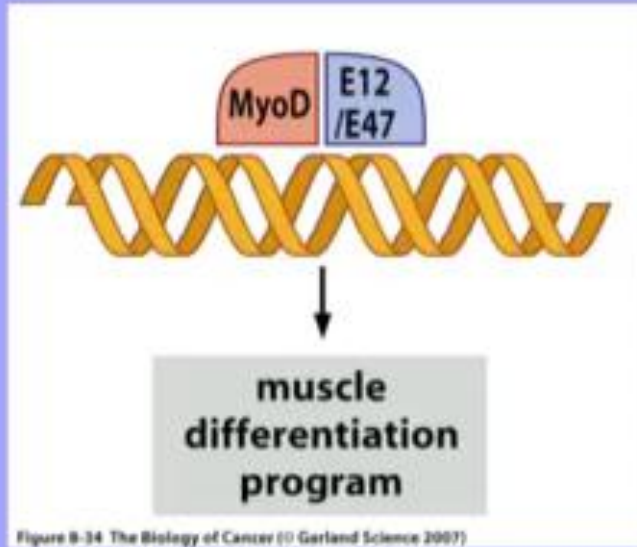
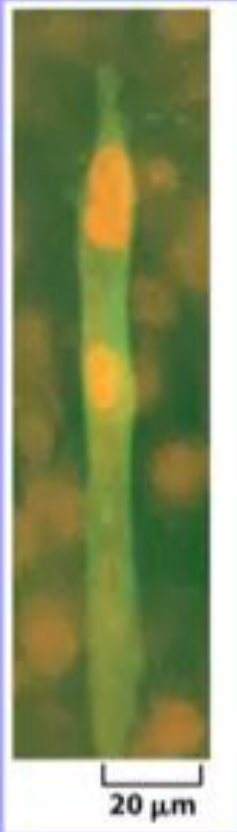


Figure 9-34 The Biology of Cancer (© Garland Science 2007)

Figure 8-18 Essential Cell Biology (© Garland Science 2010)

Another version of an iPad created video

This video was created using the Explain Everything app. It is a great way to finish out a topic when you realize you spent more time in class on some than you expected, or had to be gone at the last minute.

Tools for informal video

- iPad
 - Doceri
 - Explain Everything
 - Educreations (hosted)
- Screen recording
 - Jing
 - <http://www.screencast-o-matic.com/>
 - Lecture Capture Utility such as Tegrity

Formal Video

- Planned
 - Edited and polished
 - Closed-Captioned
 - Multiple formats
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- May take the place of a lecture
 - Targeted supplemental
 - Review concepts

Architecture, Technology, and Society; 1750 to the present

Crystal Palace and
Train Stations



Protein Folding

Cell Bio Lecture, created as part of a flipped class experiment. Created by annotating PowerPoints, while using Camtasia to screen record, along with a SmartPodium to annotate



Osmosis Demo

Formal Video to demo Hypertonic, Isotonic, and Hypotonic solutions for General Biology

Filmed in real time, edited to take only about 5-6 minutes instead of 2 hours

Note the call outs at 3:10

Tools for formal video

- Camtasia Studio
- Adobe Captivate
- Lecture Capture (Tegrity) when downloaded and edited

Best Practices

- Decide on a recording standard
- Practice, Practice, Practice
- Be Patient
- Clean-up your screen
- Turn off things that might Pop-Up
- Make Multiple Short Clips
- Watch the mouse
- Use a dedicated microphone (USB?)
- Record in a quiet location
- Use a script
- Project and enunciate
- Monitor the audio level
- Use the Audio Enhancements option

Other Helpful Apps

- CamScanner – make a PDF from a photo taken with your device
- Slide Shark

Credits

- Engineering Paradise - <http://youtu.be/Y0DxmthvkKU>
- iPad Doceri app: Calculus – Kimberly Kinder, Assistant Teaching Professor, Missouri S&T, Mathematics
- iPad Explain Everything app: Biology – Dr. Katie Shannon, Associate Teaching Professor, Missouri S&T, Biological Sciences
- Crystal Palace and Train Stations – Dr. Jeff Schramm, Associate Professor, Missouri S&T, History
- Protein Folding – Dr. Katie Shannon
- Osmosis – Adam Martin, Biological Sciences
- Techsmith: www.techsmith.com/tutorial-camtasia-recording-tips-prior.html