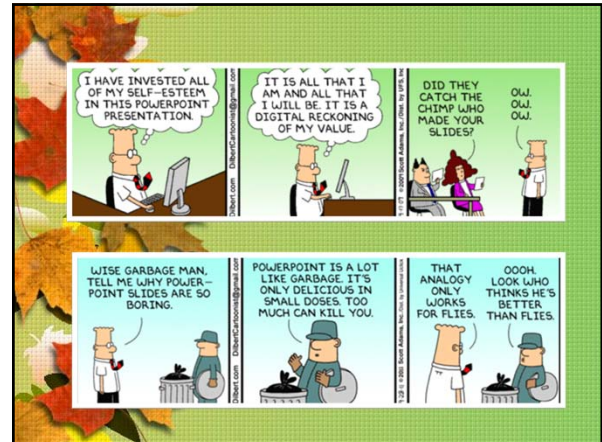


Teaching Upside Down with Video and Clickers

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<http://tinyurl.com/cvj8cvu>



Upside-Down Classes

What is an upside-down class?

A class where a majority of the lecturing is done outside of the classroom; i.e. on line.

Why bother?

This frees you up to try different things in the classroom like active learning, discussions, etc.

What do you need to teach an upside down class?

You need 3 main things 1) A student response system, 2) lectures on-line, and 3) some learning activities you have been wanting to try.

From the Chronicle of Higher Education

"'Teach Naked' Effort Strips Computers From Classrooms"

by Jeffrey Young

"When Computers Leave Classrooms, So Does Boredom"



<http://chronicle.com/article/Teach-Naked-Effort-Strips/47398/>

Structure of an Upside-Down Classes

- Before class, students are expected to go on line and view lectures.
- At the start of class, the students have a quiz on the important topics using clickers.
- Based on quiz results, there is some lecture on what topics students did poorly on.
- Then some active learning activities are used.
- Sometimes the activities are used during the lecture portion.




On line Lectures

- Lectures were recorded when the class was taught in previous semesters.
- Use Camtasia Studio.




Tools for Capturing Content

The most used tool for capturing content for posting on-line or in a podcast is **Camtasia studio**. Available for Mac or PC.

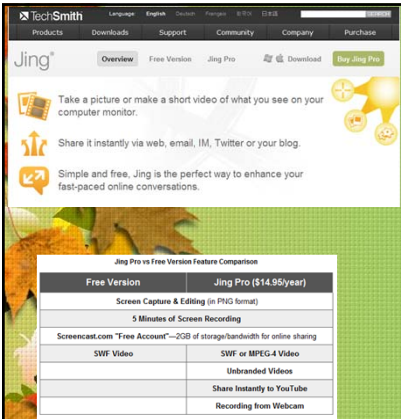


A free tool is **CamStudio**. It does not have as many features and is PC only.



Jing

Jing is a free capture program that will allow you to record your desktop with audio. But you can only record 5 minutes of content.



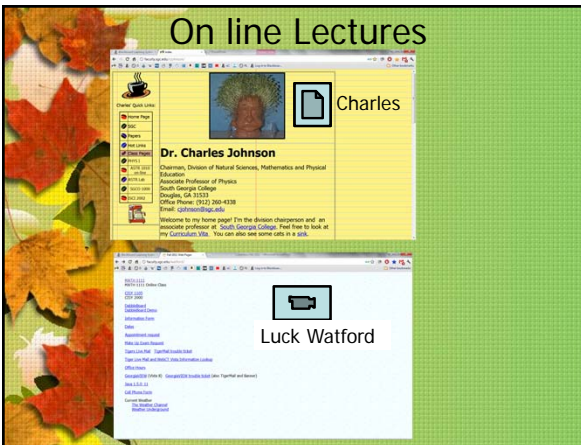
Free Version	Jing Pro (\$14.95/year)
Screen Capture & Editing (in PNG format)	Screen Capture & Editing (in PNG format)
5 Minutes of Screen Recording	5 Minutes of Screen Recording
Screencast.com "Free Account"—2GB of storage/bandwidth for online sharing	Screencast.com "Free Account"—2GB of storage/bandwidth for online sharing
SWF Video	SWF or MPEG-4 Video
	Unbranded Videos
	Share Instantly to YouTube
	Recording from Webcam

Tools of the Trade



- Wireless Mic
- Tripod and Video Camera
- Digital Voice Recorder
- Web Cam
- Tablet Computer

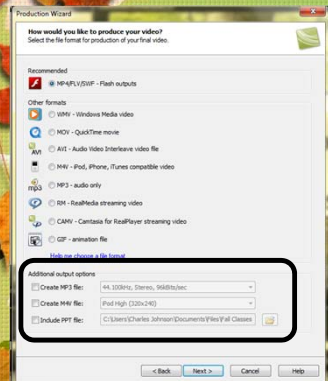
On line Lectures



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Luck Watford

Camtasia Creates Files for Podcasts



Once the podcast file is created, you need a place to store it and enough bandwidth to allow students to download it.

University System of Georgia Podcasting Service

The University System of Georgia (USG) podcast server provides centralized podcast hosting services for USG institutions and regional organizations or units. As a part of the Pod website, the server is available to USG faculty and staff for the distribution of audio and video content for a variety of educational and information purposes.


Please select a university from the list.

- Abraham Baldwin Agricultural College
- Alabama State University
- ACT Test Institution
- Alaska Metropolitan College
- Arizona State University
- Baylor College
- Clarion State University
- Columbus State University
- Dakota State University
- Kennesaw State
- Florida State University
- Georgia College
- Georgia College & State University
- Georgia Digital Innovation Group
- Georgia Southern College
- Georgia Highlands College
- Georgia Institute of Technology
- Georgia Perimeter College
- Georgia Southern University
- Georgia Southwestern State University
- Georgia State University
- Governor's Technical Institute
- Marshall College of Georgia
- North Georgia College & State University
- Polk State University
- Savannah State University
- South Georgia College

Free storage and bandwidth from USG.

<http://podcasting.gcsu.edu/>


PRS or Clickers





Personal Response Systems (PRS) use remotes to allow students to anonymously log answers to questions into a classroom computer.

Why use PRS?

- Allows you to quickly quiz the class.
- Saves time grading.
- Students get instant feedback.
- Allows you to see what topics to spend more time on.
- Can use it as a jumping-off point for mini lectures.

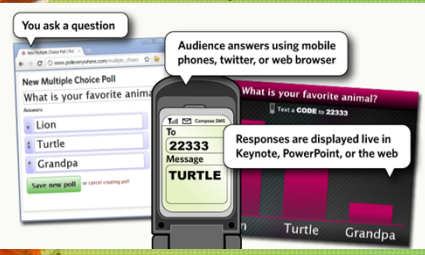


Types of PRS

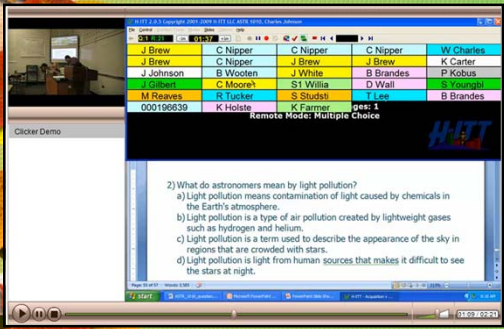
RF (Radio Frequencies)	IR (Infrared)
Pros: <ul style="list-style-type: none"> • Can do more than multiple choice questions. • The systems can process over 500 responses per second. • No limit to the number of remotes that can be used. • 2.4Ghz band 	Pros: <ul style="list-style-type: none"> • The IR system provides superior security • Line-of-sight • The IR system is expandable; Base units can be "daisy chained" together

Poll Everywhere



As a poll is displayed to an audience, they submit responses by visiting a specific web site, by sending text messages, or using Twitter and indicating the option they wish to select.

Clickers in Use



2) What do astronomers mean by light pollution?
 a) Light pollution means contamination of light caused by chemicals in the Earth's atmosphere.
 b) Light pollution is a type of air pollution created by lightweight gases such as hydrogen and helium.
 c) Light pollution is a term used to describe the appearance of the sky in regions that are crowded with stars.
 d) Light pollution is light from human sources that makes it difficult to see the stars at night.

Active Learning

Examples of "active learning" activities include:

- A **class discussion**—held in person or in an online environment.
- A **think-pair-share** activity—when learners take a minute to ponder the previous lesson, later to discuss it with one or more of their peers, finally to share it with the class as part of a formal discussion.
- A **short written exercise**—the "one minute paper." This is a good way to review materials.

