

## ILLINOIS DESIRE2LEARN REGIONAL USER FORUM

### Classroom Lecture Capture on the Cheap

Elgin Community College

Friday, October 19, 10:25 - 11:25 am



James Moore  
[condor.depaul.edu/jmoore/d2l-rug-2012/](http://condor.depaul.edu/jmoore/d2l-rug-2012/)

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## Overview

Using affordable software and hardware, traditional classroom lectures and presentations can be quickly recorded and made available to students through D2L. The recording captures both video of the classroom and projector. D2L is used to automate the process, and enhance the course experience.

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In case you were wondering...



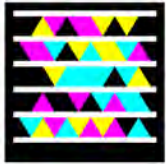
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But I live in Chicago



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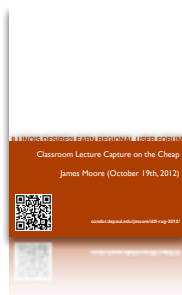
## Contact Information



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- URL: [condor.depaul.edu/jmoore/](http://condor.depaul.edu/jmoore/)

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# Problem

Want to faithfully capture classroom  
experience and make available to students

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## Why?

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**Teach Better** (*hopefully*)

**Lower Cognitive Overload** (*for students*)

**Course Review**

**Cover Student Absence**

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# My Constraints

- Non-networked
- Portable
- Self-supporting
- Efficient
- Flexible
- Works with D2L

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# My Solutions



Basic Podcasting



Vodcasting



Pencasting

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# Portable & Cheap



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## Basic Podcasting

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### Sansa Clip



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## Prices vs Storage

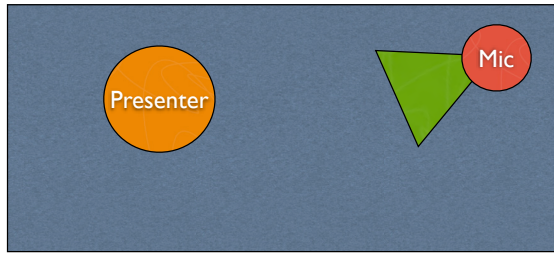
- 2GB: \$30 approx. 10-12 hours
- 4GB: \$35 approx. 20-24 hours
- 8GB: \$55 approx. 40-48 hours



[www.sandisk.com](http://www.sandisk.com)

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## Fixed Microphone Problem



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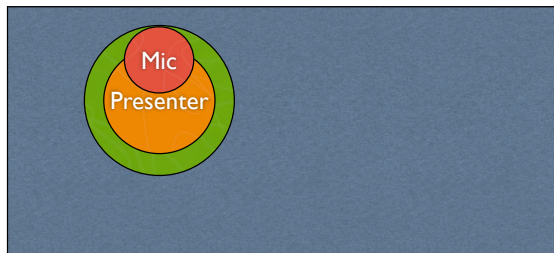
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## Fixed Microphone Problem



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## Change Behaviour

- Decide what you will record
- Repeat/rephrase question
  - “Let me repeat that - your observation/question was...”
- Tell students (in the syllabus) that you record classes
- And that technology can always fail...

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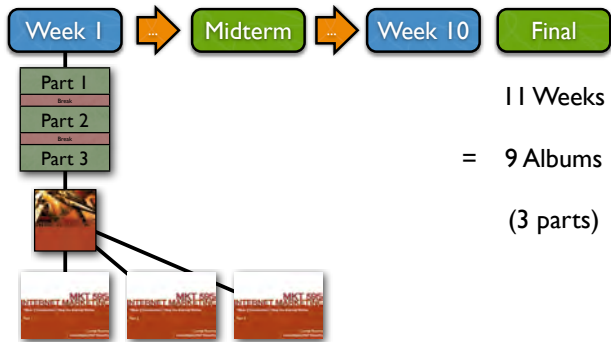
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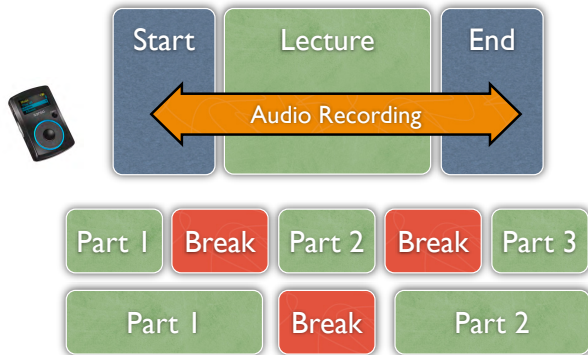
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## Preparation



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## Recording Process



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## Editing: Audacity




- 1.Import .WAV file
- 2.Trim recording
- 3.Export as .MP3 file
- 4.Add metadata (from template)

jmoore-mkt-595-week1-part1.mp3

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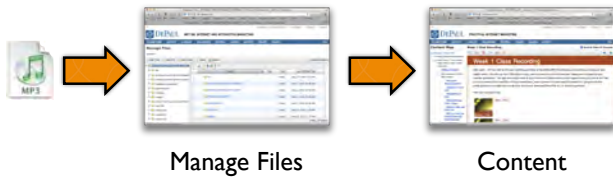
## File Sizes (1 Hour)



WAV	175MB
MP3	50MB

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## Upload to Placeholder



jmoore-mkt-595-week1-part1.mp3

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## Backup Method



If all else fails I have an audio recording

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# Vodcasting

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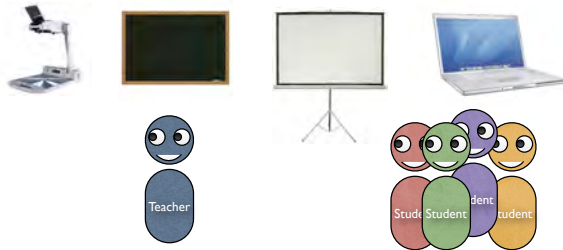
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## Considerations

Teaching style dictates what and how you will record



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## What I Want To Record

Most Important

Less Important



Content  
(non-ambiguous)

Context  
(non-verbal / nuance)

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## Example Vodcast



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## Software

Linux	Mac OS X	Windows
recordMyDesktop (free)	ScreenFlow (\$90) Camtasia (\$105)	Camtasia (\$179)



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## Filming Wirelessly

- BT-I Bluetooth Webcam
- 15 fps
- 3 to 10 meters (can be extended)
- \$150



[www.bt-i.com](http://www.bt-i.com)

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## Basic Equipment



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## Zoom H2 (orH2n)



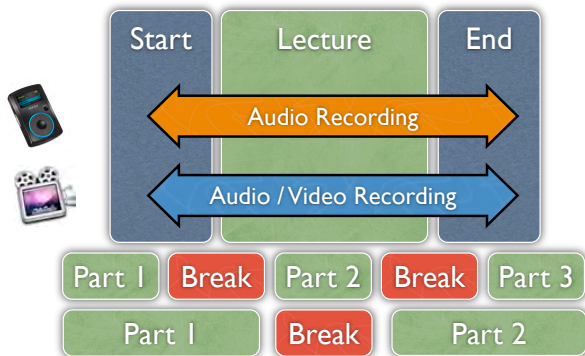
[www.samsontech.com](http://www.samsontech.com)  
Approx: \$150



Shielded USB Cable  
Approx: \$5 - \$10

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## Recording Process



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## ScreenFlow



1. Open ScreenFlow file
2. Offset BT-I Camera by 0.5 seconds
3. Trim recording
4. Add credits (images at start/end)
5. Export as .M4V file (or .MOV)
6. Add metadata (from template)

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## File Sizes (1 Hour)



WAV	175MB
MP3	50MB

ScreenFlow	850MB to 1.5GB
MOV	250 to 350MB
M4V	180 to 280MB

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## Desktop Tripod



Item	Cost
Flexible MiniTripod	\$5-15
Manfrotto Modopocket	\$30
Gorillapod	\$20
UltraPod II	\$15

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## Tripod



Item	Cost
Manfrotto 785 Modo Maxi Photo Video Grip Head Tripod	\$60
Tamrac TR406 ZipShot Compact Ultra-Light Instant Tripod	\$50

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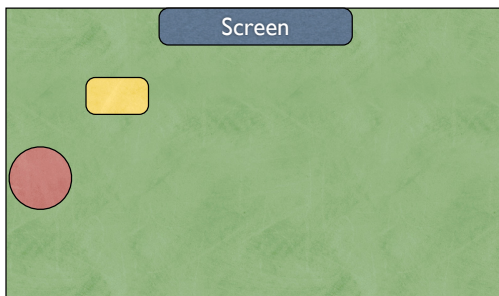
## Two Cameras, One Tripod



6 Inch Twin Bar (\$90)  
[www.berezin.com](http://www.berezin.com)

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## Filming



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# Pencasting

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## Livescribe Echo

- \$100: 4Gig / \$150: 8 Gig
- Sold at Target and Amazon
- [www.livescribe.com](http://www.livescribe.com)
- Smartpen
- Founded by Jim Marggraff (ex-LeapFrog)



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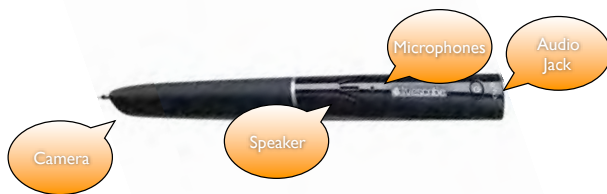
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## Basic Parts



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## Dot Paper

- Works like GPS
- Users will be able to print their own paper
- Pen uses ink that does not register with the infra-red camera

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## Pencast: Paper Replay



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## Papershow



Starter Kit: Approximately \$100

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## Papershow Example

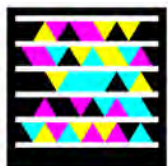
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## Q & A

(Thank you!)

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condor.depaul.edu/jmoore/d2l-rug-2012/



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Appendix

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## Vado or Flip



### Flip

Best video quality

Winner in terms of design and ease of use

Only worth considering if filming 1 hour or less



### Vado HD

Best overall

Can be used (with breaks) to film a 3-hour class

Recommend you purchase spare batteries

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## Vado Total Cost



Item	Cost
Vado HD	\$220
Battery Charger	\$30
Battery (2 spare)	\$30 (\$15 each)
	\$280

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