Abstract

Learn how to vodcast ‘barefoot’ — recording face-to-face lectures, workshops, and presentations without IS/IT support.

Using simple tools and techniques, classes can be recorded and then broadcast from any location in the world.

The equipment is low-cost and easily carried in a laptop bag.

Vodcasting can transform the effectiveness of blended classes and enhance the learning experience.

Plan

Barefoot Vodcasting
Icebreaker

Problem

Want to faithfully capture classroom experience and make available to students

Why?

?
Classroom Capture

Podcast Producer 2
www.apple.com/server/macosx/

Sonic Foundry Mediasite
www.sonicfoundry.com

Tegrity Campus
www.tegrity.com

Panopto Socrates CourseCast
www.panopto.com

My Constraints

• Non-networked
• Portable
• Self-supporting
• Efficient
• Flexible

Barefoot
Podcast

Audio / Video file + RSS = Podcast

Regular Subscription

Subscription

Week 1
Week 2
Week 3
Week 4
Week 5
Week 6

Podcasts
3 Types

<table>
<thead>
<tr>
<th>Podcast</th>
<th>Audio</th>
<th>Plays on any MP3 player (and iTunes/QuickTime)</th>
<th>.mp3</th>
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<tr>
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</table>
My Solutions

Basic Podcasting  Vodcasting  Pencasting

Plan

1. Explanation
2. Demonstration
3. Recap

Basic Podcasting
Prices vs Storage

- 1GB: $30-35 approx. 5-6 hours
- 2GB: $35-45 approx. 10-12 hours
- 4GB: $45-65 approx. 20-24 hours
- 8GB: $60-80 approx. 40-48 hours

www.sandisk.com
Fixed Microphone Problem

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...

Recording Process
Editing: Audacity

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

Audacity

Mac OS X - Microsoft Windows - Linux

http://audacity.sourceforge.net

Naming Conventions

- jmoore-mkt-595-week1-part1.mp3
- jmoore-mkt-595-week1-part1-2009.mp3
- jmoore-mkt-595-301-week1-part1-2009.mp3
Metadata

- **Title:** MKT 595 Week 1 Part 1
- **Artist:** James Moore
- **Album:** MKT 595 Week 1
- **Track Number:** 1
- **Genre:** Education
- **Comments:** Class Recording (for more information visit http://www.depaul.edu/~jmoore/)

File Sizes (1 Hour)

<table>
<thead>
<tr>
<th>Format</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAV</td>
<td>175MB</td>
</tr>
<tr>
<td>MP3</td>
<td>50MB</td>
</tr>
</tbody>
</table>

Upload to iTunes U

iTunes U is not the only option, but it is free and easy to use.
Alternative Distribution

LMS | Personal Website
---|---
Cost | Free
Trust

Backup Method

If all else fails I have an audio recording

Demonstration & Recap

Basic Podcasting

**Vodcasting** and **Pencasting** still to come...
Vodcasting

Reminder: Vodcasting

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<tr>
<td></td>
<td></td>
<td></td>
<td>.mp4</td>
</tr>
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Considerations

Teaching style dictates what and how you will record
And here it gets more complicated...

What I Want To Record

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Less Important</th>
</tr>
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<tbody>
<tr>
<td>Content (non-ambiguous)</td>
<td>Context (non-verbal / nuance)</td>
</tr>
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Software

<table>
<thead>
<tr>
<th>Linux</th>
<th>Mac OS X</th>
<th>Windows</th>
</tr>
</thead>
<tbody>
<tr>
<td>recordMyDesktop (free)</td>
<td>ScreenFlow ($90)</td>
<td>Camtasia ($179)</td>
</tr>
</tbody>
</table>
Basic Equipment

+ + =

[Image of Basic Equipment components]

Software

Zoom H2

www.samsontech.com
Approx: $150

Shielded USB Cable
Approx: $5 - $10

Preparation

Week 1
Part 1
Part 2
Part 3

Midterm

Week 10

Final

11 Weeks
= 9 Albums
(3 parts)
Images
Course Artwork

Presentation Titles
Weeks 1 - 4
Weeks 6 - 10

Metadata Template

Naming Convention: jmoore-mkt-595-week-1-part-1-2008.m4v
Album: MKT 595: Internet Marketing Week 1
Artist: James Moore
Author: James Moore
Copyright: 2009
Description: MKT 595 class recording from 25th May, 2009.
Director: James Moore
Full Name: MKT 595 Week 1 Part 1
Genre: Education
Information: For more information visit: http://www.depaul.edu/~jmoore/mkt595/
Producer: DePaul University
Track: MKT 595 Week 1 Part 1
URL Link: http://www.depaul.edu/~jmoore/mkt595/

Automator

Recording Process

Audio / Video Recording

Start Lecture End

Audio Recording

Part 1 Break Part 2 Break Part 3

Part 1 Break Part 2

ScreenFlow

1. Open ScreenFlow file
2. Trim recording
3. Add credits (images at start/end)
4. Export as .M4V file (or .MOV)
5. Add metadata (from template)

Upload to iTunes U

iTunes U is not the only option, but it is free and easy to use.
Notes

- Redundancy
- Two recordings (audio and video)
- Can import audio recording into Screenflow
- ScreenFlow encodes immediately
- ScreenFlow offers powerful editing functions

Alternative Distribution

- LMS
- Personal Website
- Free

EduTube

- Up to 200MB
- Privacy through Groups

http://edutube.org
TeacherTube

- No limit on filesize
- Allows embedding

www.teachertube.com

YouTube EDU

- No length restrictions
- Up to 1GB
- “Qualifying 2- and 4-year degree granting public and private colleges and universities”

www.youtube.com/edu

blip.tv

- Free & Paid ($8 per month)
- Up to 1GB
- Hidden videos (Pro)

http://blip.tv
podOmatic

- Free & Paid ($9.99 or $14.95 per month)
- 15 / 100 / 200 GB bandwidth

www.podomatic.com

Others....

- Ooyala
  www.ooyala.com
- Veoh
  www.veoh.com
- Vimeo
  www.vimeo.com

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<td>50MB</td>
</tr>
<tr>
<td>ScreenFlow</td>
<td>850MB to 1.5GB</td>
</tr>
<tr>
<td>MOV</td>
<td>250 to 350MB</td>
</tr>
<tr>
<td>M4V</td>
<td>180 to 280MB</td>
</tr>
</tbody>
</table>
Improvements...

Content (non-ambiguous)
Context (non-verbal / nuance)

Eyesight Camera

Huckleberry ($28.95)
www.ecamm.com/mac/huckleberry/

Firewire Camera

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>iSight</td>
<td></td>
</tr>
<tr>
<td>Unibrain Fire-i</td>
<td>$100</td>
</tr>
<tr>
<td>Cables to Go - IEEE 1394 Extender (16ft)</td>
<td>$25</td>
</tr>
</tbody>
</table>
USB Camera

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logitech Qc 3000 for Business</td>
<td>$28</td>
</tr>
<tr>
<td>Tripp Lite Active Extension Cable (16 ft)</td>
<td>$25</td>
</tr>
</tbody>
</table>

Mini Camcorders

<table>
<thead>
<tr>
<th>Model</th>
<th>Vado HD</th>
<th>Flip Mino</th>
<th>Flip UltraHD</th>
<th>Kodak Zi6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$220</td>
<td>$160</td>
<td>$200</td>
<td>$150</td>
</tr>
<tr>
<td>Removable Battery</td>
<td>Yes (Li-Ion)</td>
<td>No</td>
<td>Yes (2 AA)</td>
<td>Yes (2 AA)</td>
</tr>
<tr>
<td>Recording Time</td>
<td>2 Hours</td>
<td>1 Hour+</td>
<td>2 Hours</td>
<td>2.5 Hours</td>
</tr>
<tr>
<td>Capacity</td>
<td>8GB</td>
<td>2GB</td>
<td>8GB</td>
<td>30MB + SD</td>
</tr>
</tbody>
</table>
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

---

Vado Total Cost

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vado HD</td>
<td>$220</td>
</tr>
<tr>
<td>Battery Charger</td>
<td>$30</td>
</tr>
<tr>
<td>Battery (2 spare)</td>
<td>$30 ($15 each)</td>
</tr>
</tbody>
</table>

**Total Cost**: $280

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Desktop / Mobile

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible MiniTripod</td>
<td>$5-15</td>
</tr>
<tr>
<td>Manfrotto Modopocket</td>
<td>$30</td>
</tr>
<tr>
<td>Gorillapod</td>
<td>$20</td>
</tr>
<tr>
<td>UltraPod II</td>
<td>$15</td>
</tr>
</tbody>
</table>
Medium

Manfrotto 785 Modo Maxi Photo Video Grip Head Tripod ($60)

Two Cameras, One Tripod

6 Inch Twin Bar ($90)
www.berezin.com

Interviews
### Large

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manfrotto 055XPROB Pro Trip</td>
<td>$85</td>
</tr>
<tr>
<td>Manfrotto 322RC2 Ball Head</td>
<td>$110</td>
</tr>
<tr>
<td>Manfrotto 31DDB Tripod Accessory Arm</td>
<td>$125</td>
</tr>
</tbody>
</table>

### Filming

Filming Wirelessly

- BT-1 Bluetooth Webcam
- 15 fps
- 3 to 10 meters (can be extended)
- $150

www.bt-1.com
Wireless Audio

- Sennheiser MKE2 Gold Series Omni-Directional Lavalier Condenser Microphone
- SK100G2B - Body-Pack Transmitter for Sennheiser EW100 Series Wireless systems
- SKP500G2C Wireless Plug-In Transmitter (Evolution 500 Series)

Demonstration & Recap

Pencasting
Livescribe Pulse

- $150: 1Gig / $200: 2 Gig
- Sold at Target and Amazon
- www.livescribe.com
- Smartpen
- Founded by Jim Marggraff (ex-LeapFrog)

Package

- Pen
- Headset / Microphone
- Docking station
- Journal

Basic Parts
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

System Requirements

- PC or Mac

Competition

Iogear Mobile Digital Scribe
www.iogear.com/product/GPEN200N/

Dane-Elec ZPen
www.danedigital.com
What Does It Do?

- Digitizes what you write/draw
- Records audio
- Translates text
- Calculator
- Plays music
- Plays movies

Provides a platform for other software

Pencast: Paper Replay

Demonstration & Recap
Q & A

(Thank you!)

James Moore
Director of Online Learning - College of Commerce

• Telephone: +1 (312) 362-5870
• e-mail: jmoore@depaul.edu
• www.depaul.edu/~jmoore/

www.depaul.edu/~jmoore/barefoot

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Blog: PDFs, videos, examples