Using RSS Feeds for Distributing Videos

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Videos in Education

- **Video is the most powerful educational media**
- **Learn to do, or fix things using videos on YouTube and other places on the Internet**
- **Many ways to distribute videos**

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Presentation Goals

- **Discuss a different way of distributing a group of videos using RSS feeds**
- **Advantages/disadvantages of this method**
- **How to create and edit RSS feeds**
- **How to incorporate RSS video feeds into Moodle**

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Challenges with Videos

- **Getting videos to work!**
- **Deciding upon format, size, and quality**
- **Different computers (PC/Mac)**
- **Different browsers**
- **Different video players**
- **Mobile (tablets and smartphones)**

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My Method: Use a RSS Feed

- **Historically – moving lecture videos to iPods**
- **Apple's "podcast" method using one XML (RSS feed) to define a group of audio or video files into "episodes"**
- **iPod reads the RSS feed and automatically updates and displays episodes on the iPod**

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RSS feed can be used by other software and devices!

- **By a browser (Firefox)**
- **By Moodle (RSS feed block)**
- **By the iTunes store**
- **On my iPhone**
- **On my iPod nano**
- **On AppleTV**
- **On my Samsung Tab2**

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1. Create your Media in Proper Format

- **Video format**
  - **H.264 mp4 format**
  - **Bandwidth considerations: <2Mbps**
- **Audio format**
  - **mp3**

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2. Put Videos on a Web Server

- **Key: must have a URL for each video**

- **Website**
- **Video server (when video demand is higher)**
- **Other services, such as Kaltura, as long as each video has its own URL**

- **Test by putting the video URL into your browser and see if it plays**

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What is a RSS Feed File?

- **What does a feed look like?**
  - **An XML data file**
- **Apple's podcast specifications**
  - **https://www.apple.com/itunes/podcasts/specs.html**

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3. Create and Edit a RSS feed?

- **Start with a simple one (from someone else)**
- **RSS feed files are ASCII text files**
- **Edit with a text editor**
  - **I use Dreamweaver**
- **Edit with a "feed editor" program**
  - **FeedForAll (Mac)**
  - **Feed Editor (PC)**

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4. Validate the feed

- **Feed editor programs often can also validate the feed**
- **iTunes**
- **Browser**

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5. Publish Your Feed

- **Put the RSS feed file on a website**
- **Let users, publishing companies (such as Apple's iTunes store) and other applications know its location (URL)**

- **iTunes software (PC, Mac, iDevices)**
  - **File|Subscribe to Podcast**
- **"Podcast Republic" (Android)**
  - **Copy/Paste into Subscripts**

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Using this Feed in Moodle

- Add a **Remote RSS Feeds** block
- Edit the feed information

- CRON will re-reads the RSS feed information from the web server

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Note: Browser Support for RSS Feeds

- Firefox 39.0 (Mac) – shows content
- Internet Explorer 11 – shows content
- Safari 5.1.7 – shows content
- Safari 8 (Mac) – wants to interpret XML code
- Chrome 43 (PC) – shows XML code
- Others (???)

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Moodle's RSS Feed Block Advantage

- Moodle reads the RSS Feed file from the web server
- Displays them **correctly** (in human readable form) as hyperlinks

- Depending upon **browser** and Internet **speed**, users can click on these links to **download**, or to **stream**
  (for whatever reason, most mobile devices will stream these videos)

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Rick's Method of Adding a Video Episode

- (Demonstration)
- Simply edit just one file, I am done.
  - iTunes store updates itself
  - Moodle updates itself
  - Feed readers, like iTunes and Podcast Republic update themselves
  - Browser links update themselves

  - This is great!!!

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Captioning

- The RSS Feed does not include captions
- Captioning often depends upon player
- I prefer **open-captions** in a **second** RSS feed
- I use a shell-script on my server to manage and update the second feed file

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Flash and RSS Feeds

- My own designed "Flash player"
- Flash can read RSS XML file
- Flash in a programming environment – can do anything you want.

- Student clicks link in Moodle
- Link sends **"query code"** to my Flash player
- My Flash player interprets the URL and query code, picks the correct RSS Feed file, and displays the appropriate videos for streaming

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Conclusions
Advantages/Disadvantages

- RSS feed files provide a method of bundling videos
- RSS feed files can simplify the management and distribution of videos
- One RSS feed file can be used in multiple environments

- Moodle provides an easy way to use RSS feeds
  - Moodle does, other LMSs do not

- Disadvantages
  - Probably not the best way to distribute single videos
  - Does not work well with YouTube

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End slide

- Additional support for this presentation can be found at:
- http://www.rjerz.com/personal/work/Presentations/MoodleMoot2015/Using_RSS_Feeds_Distributing_Videos.html
- Email: rick@rjerz.com

- For Pecha Kucha presentations, questions will be asked collectively at the end of the session.

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