Using RSS Feeds for Distributing Videos

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moodlemoot

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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**

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**

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**

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)**

4. Validate the feed

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

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!!!**

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**

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.**