Improving Student Learning and Retention Using Educational Podcasting

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Questions

• Is podcasting just a fad or does it have educational merit?
• How can I use a podcast in my class?
• Will a student really look at that little screen?
• I guess you need to be a professional video editor and need expensive software to create these podcast things!
• Why do you claim that podcasting can increase retention?
What is a podcast?

• **Podcasts can take two forms; audio only or audio and video.** To utilize the video format you must have a player that can access the video feed.

• **A podcast is a single concept that can be used with a MP3 player** (depending on the model, it may be audio only) and updated automatically using a RSS feed.

• **While most people think of podcasts being used only on an Apple iPod,** this is not the case. If the target is people using a computer, you have additional options.
What is Desktop Video?

• It is a video that has been edited on a computer and can be played back on a computer.
• Is it a podcast? Yes and No
• What format? AVI, WMV, MP4, M4V
• What is a format? How is the information stored.
• What size? Depending on connection speed
• Storage location or what does it take to put it online? Depends on access rights and network.
• What is RSS? Real Simple Syndication
How do I get a Podcast?

• You need to have a program that can receive RSS feeds. iTunes is the most popular, but most Blogs can also accumulate Podcasts. Additionally, MyYahoo or personal Goggle can handle feeds.

• You do not need to have an iPod to listen or view a podcast using iTunes or other audio/video players.

• You can synchronize your MP3 player with your downloaded podcasts.
What is a MP3 player?

• There are many different MP3 players and they were first conceived as a personal music device.

• iPods are specifically designed to work with iTunes and podcasting.

• Microsoft Zune works with the Windows Environment.

• The amount of storage varies with cost. The storage can be either flash memory or hard drive based.
How can I use podcasting?

• Podcasting can be used to review information for students or introduce the concepts of a chapter.

• The discussion of a syllabus would be a useful podcast so students can review your comments near the end of the semester.

• Complete lectures can be posted and sent to students using the RSS feeds. The instructor can choose when the lectures are available for student use.
Should I use video or audio podcasting?

• The simpler format is audio. More students have MP3 players that are audio only at this time.
• Audio podcasts are much easier to create.
• Video podcasts have the ability to convey more information but are limited in resolution.
• Audio podcasts are in general smaller file sizes, can be listened to while doing other tasks, but are much flatter in a delivery format.
What do I need to create an Audio Podcast?

• A microphone of good quality – headset microphones work as a starting point.

• Software to record, edit and save the audio file. Good free software is available.

• A location to save the finished audio file and the associated web page with RSS code. You must place this on a web server.
What do I need to create a Video Podcast?

• A digital video camera.
• A computer with a Firewire connection.
• A headset like mentioned for Audio Podcasting.
• Software to download the video, edit and save the video file in the proper format; good free software is available.
• Storage location is the same as for Audio Podcasting.
What kind of a computer do I need?

- Most computers will be able to create podcasts if they have enough memory and hard drive space (firewire required for video).
- Mac computers have software installed (iLive) on new machines that is designed for podcasting.
- PC computers, at this time, would require using either the free software or purchasing commercial software. Future versions of software may include the needed features that will be part of the traditional computer load.
How do I learn this stuff

• Workshops
  • Hybrid
  • Virtual
  • Live

• Resource:
  http://techcenter.jefferson.kctcs.edu/workshops/podcasting/Pages/default.aspx
How do I get started?

• First we will discuss the creation of audio podcasting.
• Use free software that you can download.
• How to create RSS feeds.
• The second part will be the creation of video podcasts.
Audio Podcasting (assuming a PC)

1. Develop a script of what you want to say. PowerPoint is a good way to organize your thoughts.

2. Acquire a microphone headset, I like USB. Analog headsets cause a computer to potential lag. Connect the Microphone to your computer and make sure your computer recognizes the microphone.

3. Install Audacity and Lame on your computer
   - [http://audacity.sourceforge.net/download/](http://audacity.sourceforge.net/download/)

4. Practice your script, trying to get rid of pauses and getting the pace down.
5. Record your script using Audacity

- Click on the Record Button
- If you make a mistake, pause 5 seconds and rerecord without stopping the software. Make sure you start at the beginning of a sentence, which will make editing easier.
Audio Podcasting (using Audacity 1)

- **Note:** This is a mono file which will be what most microphones create.
You can control the file playback much as a tape player.

Edit your audio file in Audacity.

Highlight the section you wish to remove and click edit and choose the appropriate tool.
Audio Podcasting (using Audacity 3)

- Export your audio file as an MP3. The first time it will ask for the location of Lame.
- Click on the File button and choose Export As MP3.
6. Need to have a server to host the content or have a content storage location.

7. Creating an RSS page - this is an XML page - code is provided for you to modify. Change what is in bold type.
   • You will need to know the size of the file. To determine this, go to the location you saved the file, right click on the file and choose properties. You will see the size of the file.
   • To edit the RSS feed use Notepad or Wordpad not a web editor. Save as a XML file.
   • Create the item part for each podcast; you have only one channel title.
<?xml version="1.0" encoding="iso-8859-1"?>
<rss version="2.0">
  <channel>
    <title>your podcast title goes here</title>
    <description>Write a brief description of the overall theme of your podcast.</description>
    <link>http://www.yourURL.com</link>
    <language>en-us</language>
    <copyright>Copyright 2005</copyright>
    <lastBuildDate>Fri, 28 Oct 2005 21:00:00 -0500</lastBuildDate>
    <pubDate>Fri, 28 Oct 2005 21:00:00 -0500</pubDate>
    <docs>http://blogs.law.harvard.edu/tech/rss</docs>
    <webMaster>yourname@yourURL.com</webMaster>
    <item>
      <title>your episode title goes here</title>
      <link>http://www.yourURL.com/episodename.mp3</link>
      <description>Enter a description for this episode.</description>
      <enclosure url="http://www.yourURL.com/episodename.mp3" length="10469449" type="audio/mpeg"/>
      <category>Podcasts</category>
      <pubDate>Fri, 28 Oct 2005 21:00:00 -0500</pubDate>
    </item>
  </channel>
</rss>
Audio Podcasting (continued)

8. Need to develop a basic web page; code is provided for you to modify; the subscribe icon needs to be linked to the RSS page. Many programs now assist you with this.

- `href="itpc://vince.jcc.kctcs.edu/podcasts/rss.xml"`. Is the required link from the subscription button so that it automatically call up iTunes.
• This location would vary depending on the location you saved the RSS feed. Make sure it states itpc not http.

```html
<html>
<head>
<meta http-equiv="Content-Language" content="en-us">
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<title>This is a test podcast page</title>
</head>

<body>

<p>This is a test podcast page</p>
<p><a href="itpc:/vince.jcc.kctcs.edu/podcasts/rss.xml"> </a></p>
<p><img border="0" src="image.png" width="109" height="36"></p>
<p>&nbsp;</p>

</body>
</html>
```
9. These pages will call iTunes, which must be installed on your computer; it is free and works on a PC.

10. You should see your podcast in the podcast section of iTunes.

Note: A Mac has software to create podcasts as part of iLive.
iTunes

- The files shown without the TV screens are audio only files.
- You must press **Get** to download the file.
Video Podcasting (assuming PC)

1. Develop a script of what you want to create in your video. I like using PowerPoint to develop a logical script.

2. Acquire a digital video camera with a Firewire connection and tripod.

3. Install Microsoft Moviemaker 2 (installed with XP SP2 and Vista) and Videora iPod converter; this second software is required to create H.264 feeds (a standard), which is required for Apple podcasting.
4. Print your PowerPoint Slide large so you can use these as a prompt. Practice your script, try to get rid of pauses and get the pace down; make sure you are focusing on the lens of the camera.
5. Find a location that has a nice clean background and make sure the table in front of you is also clean. In general, trying to film in a class does not work well. Use a tripod.

6. If you make a mistake, pause 5 seconds and re-record without stopping the software.

7. Edit your video file in Moviemaker and save the file.
Filming Suggestions

• Use a tripod if possible
• Film longer than you think you need
• Do not talk while filming so you can hear the sounds around you
• Pan the camera very slowly
• Make sure you have a good battery and extra tapes
Title Slides

• Make title slides, end slides and any information that you want to share in print in PowerPoint and export them as an image, images can be brought into MovieMaker much like video.

• PowerPoint is easy to use and has lots of templates to assist you in the graphic design.
Why Movie Maker II

- Free
- Works like most other programs
- Lots of clips available
Steps to Creating a Video

1. Capture Video and Import Graphics
2. Edit Video
3. Finish Movie
Step 1: Capture

• Need a camera which has Firewire.
• Firewire might require a card to be added to your computer.
• When the camera is connected it should be auto detected by the computer.
Step 1: Capture Video

- Capture directly from the camera

![Windows Movie Maker interface](image)

Collection: Collections
Drag a clip and drop it on the storyboard below.

Movie Tasks

1. Capture Video
   - Capture from video device
   - Import video
   - Import pictures
   - Import audio or music

2. Edit Movie

3. Finish Movie

Movie Making Tips

- How to capture video
- How to edit clips
- How to add titles, effects, transitions
- How to save and share movies
Clip check box

• When you capture, you have a choice of breaking the video into clips. I recommend not breaking the clips automatically.
After capture
All video, audio and pictures must be in the collection.

- They need to be in the location that they will be stored.
- Movie Maker does not save splits and cuts; it only saves the location in the video.
- The original file remains unaltered.

Right click on any image and you can determine the image property.
Step 2: Editing Video Clip

- View
- Split
- Storyboard
Transitions

1. Capture Video
   - Capture from video device
   - Import video
   - Import pictures
   - Import audio or music

2. Edit Movie
   - Show collections
   - View video effects
   - View video transitions
   - Make titles or credits
   - Make an AutoMovie

3. Finish Movie

Movie Making Tips
   - How to capture video
   - How to edit clips

Video Transitions
Drag a video transition and drop it between two video clips on the storyboard below.

- Diagonal, Down Right
- Diamond
- Dissolve
- Eye
Special Effects

• I don’t use them – I have not found a real need for these effects in an educational setting.
Enter Text for Title
Click 'Done' to add the title to the movie.

Created on 3/23/2003

Done, add title to movie

More options:

Change the title animation

Change the text font and color
Audio
Step 3: Exporting

- Appropriate Size of video
- Saving in more than one size
Video Podcasting (continued)

8. Import the file into Videora iPod and convert it to a MP4, H.264 file.
Videora 1

Click on Setup

Looking for videos to watch?

Download, Convert and Copy Video. Automatically.

Videora + Videora Converter

click for more details
Look at the profile must be as shown.

Make sure the saving location is correct.

Click on Profiles.
Make sure this is an H264/320x240/8/10/2007/50/ Vince DiNoto
Click convert

Click start

Locate the video
9. Need to have a server to host the content or have a content storage location, make sure the server can handle the MP4 extension, contact your network manager.

10. Creating an RSS page, this is an XML page, code is provided for you to modify. Change what is in bold type.

- You will need to know the size of the file. To determine this go to the location you saved the file. Right click on the file and choose properties. You will see the size of the file.
- To edit the RSS feed use Notepad not a web editor.
- Create the item part for each podcast, you have only one channel title.
<?xml version="1.0" encoding="iso-8859-1"?>

<rss version="2.0">
  <channel>
    <title>your podcast title goes here</title>
    <description>Write a brief description of the overall theme of your podcast.</description>
    <link>http://www.yourURL.com</link>
    <language>en-us</language>
    <copyright>Copyright 2005</copyright>
    <lastBuildDate>Fri, 28 Oct 2005 21:00:00 -0500</lastBuildDate>
    <pubDate>Fri, 28 Oct 2005 21:00:00 -0500</pubDate>
    <docs>http://blogs.law.harvard.edu/tech/rss</docs>
    <webMaster>yourname@yourURL.com</webMaster>
    <item>
      <title>your episode title goes here</title>
      <link>http://www.yourURL.com/episodename.mp3</link>
      <description>Enter a description for this episode.</description>
      <enclosure url="http://www.yourURL.com/episodename.mp3" length="10469449" type="audio/mpeg"/>
      <category>Podcasts</category>
      <pubDate>Fri, 28 Oct 2005 21:00:00 -0500</pubDate>
    </item>
  </channel>
</rss>
11. Need to develop a basic web page, the subscribe icon needs to be linked to the RSS page with this type of statement: `a href="itpc://vince.jcc.kctcs.edu/podcasts/rss.xml"`. Is the required link from the subscription button so that it automatically call up iTunes?
12. These pages will call iTunes which must be installed on your computer. It is free.

13. You should see your podcast in the podcast section of ITunes.

Note: A Mac has software to create podcasts as part of iLive.
iTunes

- Note for the video podcasts, they show a TV screen.
- You must press Get to download the podcast.
Streaming vs Downloading

• *Downloading is loading the file locally and then playing it.*
• *Streaming is playing the information directly from a server, which may require buffering.*
Links to Podcasts & Blogs

- [http://vince.jcc.kctcs.edu/virtual/](http://vince.jcc.kctcs.edu/virtual/)
- [http://vince.jcc.kctcs.edu/podcast%20workshop/](http://vince.jcc.kctcs.edu/podcast%20workshop/Podcast.htm)
- [http://vince.jcc.kctcs.edu/podcasts/](http://vince.jcc.kctcs.edu/podcasts/)
- [http://vincedinoto.blogspot.com/](http://vincedinoto.blogspot.com/)
Links

- http://www.pixagogo.com/5111825842
- http://audacity.sourceforge.net/download/
Workshops

• KITCenter offers virtual, hybrid and live workshops
• SCATE workshop