FISHING FOR LEARNING WITH A PODCAST NET

By

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ABSTRACT

Communicating through the internet has quickly evolved from email, listservs, discussion boards, instant messaging, blogging and now to podcasting. Many of these communication tools have been exploited by the educational community and the latter appears to be no exception. This paper will share background on blogs and podcasts as well as real-world samples, academic examples and a plan to use podcasts as a teaching and learning tool.

Keywords: Podcast, Listserv, Blog, Weblog, Instructional Technology, Podcasting in Education.

INTRODUCTION

Using technology in a relevant, useful way has been feasible only for some people, at particular times and in certain situations. Others have found technology to be somewhat less useful, cumbersome and a nuisance. The search for the elusive Utopian myth of technology for everyone, at any time, has been recognized by many. However, the search for additional tools that cater to the uniqueness of various teaching and learning styles remains active. The web logging or blog phenomenon was welcomed by many technophiles as well as those in academia, producing various academic blogs. A new web-based communication-oriented venue of using technology for learning is following in the blog track. The concept of producing a longitudinal on-going rhetoric of audio, in a logging style, or simply writing thoughts in a chronological fashion is called podcasting. Podcasting is a way of broadcasting an information via the internet in a manner analogous to an audio blog, which is a web log read aloud.

Blog Background

A blog is a Web page made up of brief, frequently updated entries that are arranged chronologically like a journal. The purposes of blogs vary greatly from links and commentary about other sites, to news, diaries, photos, poetry, mini-essays, even fiction. Blog posts are similar to instant messages on the Web. Many blogs are personal, "what's on my mind" type musings. Others are collaborative efforts based on a specific topic or area of mutual interest. Some blogs are for recreation. Some are

for work. Some are for both. Blogs are also excellent team/department/company/family communication tools. They help small groups to communicate in a way that is simpler and easier to follow than emails or discussion forums. A blog can help to keep everyone in the loop, promote cohesiveness and create a community culture. Although blogs are relatively new, a significant amount of literature has already been gathered.

Blood (2000) summarises web Blogs as, A History and Perspective at http://www.rebeccablood.net/essays/weblog_history.html. Basically, web blogs have been in use since 1998 and have grown exponentially as one would expect, since there are no fixed rules or criteria followed and several servers have been provided for free blog services. Garrett (2000) provided a list of current blogs at http://www.jjg.net/portal/tpoowl.html. Since then, he has discontinued that list and now maintains the site as a historical snapshot in time. The site does refer the browser to a more extensive site called The Weblog Madness List of List at http://www.larkfarm.com/wlm/lists.htm. However, even this site has been overwhelmed and abandoned as of July 2002 and yet again redirects those in search of the holy grail of blog list to Eatonweb (20032008) portal located at http://www.portal.eatonweb.com/wlm/. This site is organized by 17 different categories ranging from Books to Roll Your Own. Each category contains many weblogs, which in total equals 555 distinctly different weblogs. However, upon casual browsing, it seems apparent that this number is most likely an order of magnitude short. In addition, specific type or

genres of blogs have developed. When used in an educational arena, the blog becomes an educational Web log or an Ed Blog.

What is a Podcast?

An audio blog or podcast combines the power of a blog – its raw, informal, engaging side with the trend of listening to music and voice over an MP3 player; the most popular of which has been Apples iPOD, which incredibly stores 60-gigabits of files or 15,000 songs. The files can be photographs, music, etc. and with an adapter it can be transferred from a memory card to a computer or even directly to a camera. With another adapter, the user can digitally record their voice, and broadcast (or podcast) this across the web for listeners to hear either synchronously, or can download for later listening through demand control.

Podcasting is a child of blogging, but blogs are not podcasting's only parent. This is evident from Figure 1, which depicts the heredity of podcasting. That is to say that while podcasts and blogs share many features, and for most parts one can think of a podcast as an audio blog; podcasts have qualities, adopted from other technologies, that separate them from blogs including broadcasting, SMTP, USENET, streaming media, and personal media players.

It is difficult to define podcasting as a technology or phenomenon. Though the idea of podcasting was conceived much before 2000, people still have doubts about its usage. The most important feature of a podcast, RSS, or Really Simple Syndication, was adopted from the blog community. RSS allows a content provider to create

Figure 1. Heredity of Podcasting

a 'feed' to inform a listener, using a program called an aggregator, when they have released new content. An aggregator reads several RSS feeds to check if there is new content provided, if so, it is collected for later use. This allows a listener to quit focusing on gathering the content they want. They simply subscribe to the content, and the aggregator presents it ready for consumption.

The use of Podcast can be described simple; One can think of a podcast as a digital magazine subscription. As a magazine, podcast is also delivered to the subscribers, but instead of getting a magazine in the mail, the subscriber will get a digital file that can be downloaded direct to the user's computer or personal media player.

There were several people who were involved in the birth of podcasting, but Adam Curry had the two ideas that made the largest impact on the shape of contemporary podcasting. The first idea is that digital audio and video should be distributed like email, not broadcasted, that people should not have to wait to download a 'live' feed. He realized that even with high-speed internet connections and streaming technology the quality and downloading time of 'live' media is poor. The strength of broadband is not its speed, but its persistence, it's always on so, that one can set his/her computer to download the content (in the background at full quality) before he/she can view it. The second idea is to download the content to a personal media device, so it would be available for the users anywhere and at anytime.

The nomenclature "podcasting" is therefore appropriate because the signal is broadcasted to a personal media device, the initial device which was an iPod. Adam Curry created the first aggregator application for the iPod using AppleScript, the original podcasts had to be consumed using an iPod. Today, several sophisticated aggregation applications allow greater flexibility to the poscaster and listener.

Indicators for podcasts have been informally observed as a cultural phenomenon. Some similar cultural icons that might be similar are Volkswagons, with their built in flower vase; Buffet's parrotheads; Che attire; and Macintosh computers, targeted towards the creative person, in which the iPod formed a natural offshoot for creative

people, who wish to listen to music frequently, with the larger storage and portability.

Real Life Examples of POD Casts

MTV's VJ Adam Curry's (http://www.curry.com/ or http://live. Curry.com/), VJ fame seems to have taken the podcasting world by storm. Adam created another site called ipodder (http://www.ipodder.org) in which he updated a podcast directory and podcast software (http://www.ipodder.org/directory/4/ipodderSoftware). As of April 13, 2005 there were 4949 podcasts actively tracked in the directory. A sampling of the entries include:

Xenex is an experiment in Web Darwinism - http://www.xenex.org/

Burning incense to mask reality's stench since 1986 - http://www.rueskitchen.com/index.php/weblog2/

Download the latest PodGuides -http://www.Pod guides. net/

Audio documentations of the life of a Malaysian-born Chinese who lives in the U.S. - http://ongline.libsyn. com

Welcome to the High Definition Television podcast. We hope you will tune in each Friday and participate - http://homepage. mac.com/arad/iblog/

A podcast for adult learners of Spanish. Reviews and commentaries on available resources, including CDs, tapes, books, Internet radio, immersion language schools, and more -http://ttls podcast.blogspot.com/

Inspirational Quotes - Motivational Quotes - Funny Quotes - Famous Quotes-http://abundance secrets.com/ inspirationalquotes/Music from Asia - http://dragonradio.hk/

'Eclectic' would be the word that quickly comes to mind, both in content, approach and in outlook. These sites seem to represent practically everything that is occurring worldwide, in a raw, uncensored format, ready for consumption.

Review of few popular podcasts and websites as well as a brief summary and critique, are listed below to help the readers to gain a sense of the range of offerings as well as the content and diversity.

1. Podcastalley (http://www.podcastalley.com/) http://www.podcastalley.com/index.php) is a community based website whose purpose is to catalog and rate podcasts. Podcast listeners can look up a podcast and read what other listener reviews, or write their own.

2. Daily Source Code (http://live.curry.com) one is of the top rated podcasts. Produced by Adam Curry vast of its part are biography and commentary. It feels very much like an Audio blog. Mr. Curry talks about his interests and projects.

3. Whole Wheat Radio (http://www. wholewheatradio.org/) is an interesting combination of internet technology. The main focus of Whole Wheat Radio is an interactive internet radio station. The podcast is created from the radio station content.

4. "In Our Time" (http://www.bbc.co.uk/radio4/history/ nourtime/inourtime.shtml)is a radio program produced by the BBC. The BBC is currently making the show available as a podcast available for 7 days after the show airs. The "In Our Time" website describes the show as "Melvyn Bragg (the host) and three guests explore the history of ideas."

Academic Examples

Currently, there are only a few specific examples of academic podcasts available. A quick Google search revealed five million hits when the term podcast was entered. When "academic podcast" was used, only one was displayed, which was Podcast Research (http://podcast.isthereason.com/?p=17). The goal of this site is to attempt to provide a "reasonable picture of the podcast landscape" (Pod Research n.d.). The authors of this site have selected ten podcast sites listed below, and performed a content analysis. Hence the academic aspect of this site is research and not the arena of education. The ten sites included are:

• Dawn and Drew Show - http://www.dawnanddrew. com/dnds.php

• Engadget - http://www.engadget.com/

• The Educational Podcast Network - http://www.epn

web.org/

- Education Podcasts with John Merrow - http://john merrow.blogspot.com/

- Daily Source Code - http://live.curry.com/

- Goin Deep with the Paralyzer and Mr. Clean - http://www.wifflehouse.com/radio/podcast/goindeep/blog/

- Geek News Central-http://www.geeknews central.com/

- Insomnia Radio-http://hardcoreinsomniaradio.blogspot.com/

- The Rock and Roll Geek Show - http://www.american heartbreak.com/movabletype/

- WebTalk Radio Show - http://www.webtalkradio.com/

- BlogosphereRadio - http://www.blogosphere radio.com/

- The Delta Park Project http://www.deltapark project.com/

There are a few sites that try to educate people on podcasts, such as Teach42 (http://www.teach42.com/edupodcasters/),http://www.teach42.com/category/podcasting/teach42-podcasts/) that guide to education related podcast, although it is thinly populated and highly technical. Ipodder.org contains categories and one category is higher education.

Table 1 represents sites that contain higher education podcasts, along with frequency of publication and last show date, as well as with an additional comment if they are still active as of April 2005.March 2008. First of all, it is evident that there are not an abundance of these sites and secondarily, their posting data is less than desirable for someone who is searching for continuity in their listening experience. Since several of the podcasts cannot be found, their status is included to reinforce the point of including this table to demonstrate the random and lack of dependability of academic podcasts currently available on Internet. As use of the technology continues to grow, the reliability of these podcasts continues to improve, and frequency of creation is increased.

Podcast	Frequency	Last Show Date	Comment
D'Arcy Norman dot Net – University of Calgary	Unable to find Podcast		
Drexel CoAS Talks – MP3 Podcasts , Drexel University	Sporadic	February 2008	Live Podcast
Edupodder Podcast – Steven Sloan, San Jose State University	Sporadic	March 2008	Live Podcast
Elearning Queen, Susan Smith Nash	Weekly	March 2008	Live Podcast
Flosse-Posse, Open Source in Education	Monthly	March 2008	Live Podcast
Georgetown University Forum	Weekly	March 2008	Live Podcast
History According to Bob, Podcasting Stories of History	Several per Week	March 2008	Archived
Matt Pasiewicz, Educause Connect	Weekly	February 2008	Live Podcast
OLDaily Audio, Steven Downes, National Research Council	Was Daily	February 2008	Live Podcast
Stand Up 8, Dale Pike, UNC, Charlotte, North Carolina	Unable to find this podcast		Live Podcast
Stigmergic Web – Rob Wall, North Battleford, Saskatchewan	Unable to find this podcast		Live Podcast
Technology & Learning, James Basore	Was infrequent	May 2006	Live Podcast
Today's Podcast, Scott Brenner	Sporadic	April 2005	Live Podcast

Table 1. List of sites which contain higher education podcast

What Podcasting Promises Educators

Podcasting can promise a unique approach to improving foundational pedagogical approaches to information processing and conceptual learning. Conceptual learning is contextual, relevant, holistic and at times requires intentional gaps. A major strategy for transferring information from short term to long term memory includes a conceptual learning phase, commonly called "chunking." Humans classify and gather several ideas or concepts together, make sense of them and then, search for connections to fully construct ideas and impressions. Conceptual learning requires multiple inputs, time between inputs, guidance, reflection, facilitation and subsequent quality control of ideas. Most importantly, for learning of substance and enduring to occur, humans require intermittent periods of time in which a 'game plan' mixed with positive facilitation and/or resources so that the necessary connections can be made. The point at

which connections are made is where genuine learning – sustentative, long-term learning takes place.

Ibrahim (2001) has found that greater conceptual learning is fostered when teachers use interactivity-based teaching strategies to train students to link everyday experience in the real physical world to formal school concepts. Muller (1998) indicated that students identified three factors that led to their conceptual learning: (a) they were able to actively explore and thus construct their own understanding; (b) the social interaction in small groups; and (c) authentic learning task provided a meaningful way of learning.

A podcast allows learners to either listen to others or share their ideas with spontaneity, which captures their attention and can sustain this attention sufficiently to enable transferance these concepts into their long term memory. Secondarily, learners can create their own audio podcast, which enables them to reflect on their own learning verbally. This process reinforces and at times, can facilitate self-correcting of ideas when learners hear themselves stating ideas incorrectly. Therefore, the connection between podcast and conceptual learning is multifaceted, in that it allows the learner to encapsulate ideas into packets of concepts. These concepts can be connected to one another from one podcast to another, either from the same person's cast or another person's podcast on a similar topic. Even the concept of a podcast seems difficult to understand at first, especially in the absence of participating in one. However, once someone listens to a podcast, the power of this environment as a learning tool becomes apparent for many. Hence, the metaphor for using podcast is inherent in the concept of podcasting itself.

Currently, podcasting is still in its infancy, especially in the academic environment. Many in the industry still believe that podcasting is still not ready to go mainstream, mostly due to the multiple technical steps and equipment required to broadcast. One of the major purposes of this manuscript is to provide a background of podcasts for those who adopt academics early to consider a use for podcasting in their teaching and learning. For those pioneers, as usual, one can most likely encounter the

'bleeding edge' since there is currently no examples which clearly indicate proven foundational pedagogical uses and outcomes for podcasts. We would like to suggest several scenarios where podcasting makes good, pedagogical sense for educators. These scenarios might include contextual "in-situ" examples such as broadcasting from a manufacturing site for an industrial engineering course; recording audio while installing a groundwater monitoring well and subsequent purging, collection of water quality data and ultimately sampling the water for shipment to an analytical laboratory; interviewing school age children while then participate in a field trip to the local natural history museum for pre-service teachers; tracing the path of various explorers as one travels through the U.S. on Amtrak passenger trains for a history course; and describing the use and applications of a new tablet PC.

Each of these scenarios create a longitudinal context for the listener to follow, connect and revisit. Although visual learners may struggle initially, if the podcast is done well, with authentic background sounds, and colorful narratives, most listeners will be able to create their own vision.

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