Closing The Gap

Assistive Technology for Children and Adults with Special Needs

Podcasts: What are you missing?

By Paula S.Cochran

Abstract

What do a college disability counselor from Texas, a parent of a child with autism in Colorado, an English teacher in South Africa, linguists from Los Angeles, and a child psychologist from Arizona all have in common? Two things: the Internet, and a desire to help other people by sharing their expertise through podcasting. This article will explain what podcasts are, why professionals in health and education-related fields are a perfect target audience for podcasts, and how to access podcasts of particular interest to professionals in special education and rehabilitation.

What is a "podcast"?

First of all, despite the name, no iPod is required in order to listen to a podcast. Podcasts are like radio, frozen in time on the Internet. They are simply audio files (more about this later). This cost-free source of portable information and entertainment can be

podcasts of interest in this article

include at least one person talking. They range in length from two to three minutes (a hint or word-ofthe-day) to a half hour (in-depth interview or lecture). An important difference between podcasting and radio or television, though, is that the vast majority of podcasts are never "broadcast" anywhere but on the Internet. So, except for podcasts from National Public Radio or television networks, podcasts often have an amateur feel about them. Anyone can make a recording and post it on the Internet as a podcast.

For example, in Colorado, Michael Boll is posting regular podcasts on his Web site at <www. AutismPodcast.org>. Michael is the parent of a child with autism, and his podcast series is a mix of quick hints from and for other parents, interviews with parents and professionals, and information of interest to both. A quick hint this spring (#12, April 15, 2006) came from a parent in Washington and focused on strategies their family uses to making eating in restaurants a successful experience (they go early before the crowd, order "work food" like nacho chips and salsa, Dad sits close, and when possible, they eat outside where it's quieter). A different perspective on autism and eating issues is gained through an interview (reposted April 28, 2006) with speech-language pathologist Nicole Sparapani, a regular guest on the show.

Begun in December, 2005, this podcast series has already amassed many interesting episodes and is a terrific example of parent-professional collaboration and parentto-parent support.

Beth Case, a disability counselor at North Harris College in Houston, began her podcasts about disability issues in September, 2005. Beth also serves as the Outreach Specialist for the Postsecondary Education Consortium Texas State Outreach and Technical Assistance Center (PEC Texas SOTAC). She served as the President of the Association on Higher **Education and Disability (AHEAD** in Texas) in 2005.

Most podcast series have a "promo" or short description that helps potential listeners decide whether to visit the Web site and try a podcast or even subscribe to the series. The promo for Beth's podcast series is as follows:

The Disability411 podcast provides audio workshops, interviews and information on disability-related topics for disability professionals, as well as consumers and their families. Conferences are expensive and reading articles takes time. Keep up to date on best practices, legal developments and news in the disability world by listening whenever and wherever is convenient for you. Visit http:// disability411.jinkle.com> for more information.

The topics covered in Disabil-

enjoyed by anyone with a computer and good Internet access.

Another way of thinking about podcasting is "radio on demand", sort of like TIVO makes TV shows you choose to record available to you when you want them. And just like radio, podcasts can consist of music or speech or a combination of any sounds. The

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ity411 are wide-ranging. A spring episode (Show 19), for example, included information about the new national certification exam for sign language interpreters, accessible Web site design, and a new doctoral

program at Wright State University on Technology-Based Learning With Disability. Some episodes are interviews focused on a single topic (e.g., reading and learning disabilities, Show 20). Beth copiously documents her show, including both a transcript and links to resources for each episode.

How do people listen?

Podcasts are posted in an audio file format called MP3. MP3 is also the format used for most of the music being downloaded from the Internet. Just like there are several ways to view a text file or a picture on the Internet, there are many ways to access and listen to podcast files. Three of the most common methods are described below. The choice depends on the listener's needs and preferences. Any Macintosh or Windows computer less than five years old is likely to already have what is needed to listen to podcasts.

- 1. Method one is for the listener who wants to listen to some or all of the podcast right then, while sitting at the computer. There is usually a "Listen" or "Play" button near the title of the podcast, intended exactly for this purpose. Just click! Be patient, because sometimes it takes a few seconds to load before the podcast starts playing. Also, be sure your speakers are on or you have headphones attached to your computer.
- 2. Method two is for listeners who plan to play the file later. They may listen on their computer, perhaps using Windows Media Player or iTunes or RealPlayer. Or, they could move the file to a portable audio player or pocket PC manually. In either case, there may be a Download button or they can just right-click on the MP3 filename and download and save the file (like a picture) wherever they want on their computer (such as in the My Audio folder.) Once the file is downloaded and saved, it can be played with no Internet connection at all.
- 3. Method three is for listeners who know they want to subscribe to a podcast. The most popular software for this purpose can be downloaded at no cost, such as iTunes and Juice (formerly iPodder). A person usually subscribes by clicking on a "Subscribe" or RSS/XML link on the podcast's Web page. (RSS stands for really simple syndication.) The special software will download the podcast, keep track of where the podcast came from, and will automatically go back to look for new ones at intervals specified by the user. Once the podcasts have been downloaded to your machine, they can be played as above or

Concerns about MP3 players and potential damage to hearing

The issue of iPods and other MP3 players and potential damage to hearing was discussed in the Feb 13, 2006 issue of Advance magazine. They interviewed Brian Fligor, ScD, CCC-A, of Children's Hospital Boston and Harvard Medical School. He had previously studied personal CD players and has recently taken up the issue of iPods and "ear buds" vs. headphones. Ear buds are the small, light weight, in-the-ear device that come as standard equipment with most MP3 players. They present a seven to nine decibel increase in loudness over traditional over-the-ear phones. The tricky part comes with analyzing an individual user's behavior, not the device itself. Fligor is studying both. His preliminary recommendation is that operating an iPod, for example, at 60 percent volume, with ear buds, is okay (not damaging to hearing). The impact of durations of more than an hour, or habitual use of several hours a day, has yet to be studied (Banatoi, 2006).

In March, 2006, the American Speech-Language-Hearing Association (ASHA) released the results of a telephone survey designed to assess the use and impact of portable listening devices on high school students (n=301) and adults (n=1000). They announced that high school students are more likely than adults to report having experienced the following three symptoms of hearing loss:

- 28 percent turn up the volume on their tv or music player (26 percent adults)
- 29 percent say "what or "huh" during normal conversation (21 percent adults)
 - 17 percent have tinnitus or ringing in the ears (12 percent adults)

Not surprisingly, two-fifths of students and adults play the volume loud, with students twice as likely as adults to play music very loud (13 percent to six percent). However, adults are more likely than students to use their MP3 players for longer periods of time; 43 percent of adults use them for one to four hours or longer (nine percent) compared to fewer than one-third of students.

(http://asha.org/about/news/releases/newsurvey.htm, accessed March 19, 2006).

"ASHA advises consumers to lower volume levels, limit listening time, and use earphones that – unlike ear buds which come with products like the iPod – block out unwanted sound that can prompt users to increase volume levels (77 percent of surveyed students, 81 percent of adults have not purchased such earphones, poll results indicate). It also encourages the public to see a certified audiologist if they are experiencing hearing loss symptoms." (<http://asha.org/about/news/releases/release-hearing-loss.htm>, accessed March 19, 2006).

This advice may not take into consideration what iPod users are doing while they listen – and that blocking out environmental noise presents additional saftey hazards in some circumstances. Basically, the jury is still out – we need more research to determine how long and how loud is safe. Congressman Edward Markey of Massachusetts has called for more research and, in conjunction with ASHA's survey announcement, requested that the National Institute of Health address this concern. (http://markey.house.gov/docs/health/Letter%20to%20the%20NIDOCD%20on%20Hearing%20Loss.pdf, accessed March 19, 2006).

included in files to be "synced" with a portable device (MP3 player, handheld PC, etc.).

Note that "subscribing" is free. Subscribing just means that the new content will be delivered automatically. This saves the listener the trouble of going back to each Web site that may have an interesting new podcast available, just to see if it's there yet. It is this technical feature that transforms an audio file into a "podcast." This convenience has fueled the podcasting explosion among all age groups.

Exactly how to subscribe depends on which software is used. The most common element is telling the software the address of the podcast (called the "feed"). This can be done by copying and pasting the URL (URL= Universal Resource Location, in other words, the Web address of the file that contains podcast information) in response to a prompt from the software. An example feed URL is http://cccslp.truman.edu/podcasts/cccslp1.xml, although some feeds end in .rss instead.

What's all the fuss about?

The term "podcast" was coined because of the dominance of the iPod among MP3 players, world-wide. There are estimates that Apple has three quarters of the global portable music player market (BBC news http://news.bbc.co.uk/1/hi/ business/4332680.stm>. Accessed May 25, 2006). No matter whether they are using an iPod or other MP3 player, the audience is definitely listening to more than music. It turns out that young adults, especially, are depending on iPods and similar devices for access to news, sports, information about interests and hobbies, and audio books. According to a study released by the Pew Internet and American Life Project in April, 2005, even then nearly 30 percent of U.S. adults who owned MP3 players, like the iPod, said they had downloaded podcast programs from the Internet. This was a surprising finding, given that podcasting had only emerged the previous year.

Education and rehabilitation professionals as a target audience

What if you could listen to people discussing your favorite hobby or your professional specialty, any time it was convenient for you? Maybe you'd listen while you are commuting, or gardening, or exercising.

Professionals in special education and rehabilitation are a perfect target audience for this new method of information dissemination and consumption. Why? Because we are all too busy. We all want to keep up with the latest in our professional arenas. Many of us work in relative professional isolation (we're the only [name your profession] in the school, hospital, county). Most of us wish we knew a little bit more about [name your topic]. And, maybe most importantly, nearly all of us find people to be really interesting.

There is a human connection made when we listen to each other's voices that isn't quite the same as reading print. For all of these reasons, podcasts have a great deal of potential appeal to educators, PTs, OTs, SLPs, counselors, and anyone else interested in special education or rehabilitation. To help this group of professionals find podcasts of particular interest to them, a list including the categories of specific disorders, disability policy/issues, healthcare topics, and language has been started at http://cccslp.truman.edu.

Persons with special needs as a target audience

For similar reasons, our clients and their families may also find some podcasts of value. There are already podcasts being produced with special populations of learners/ listeners in mind. For example, Arizona child psychologist Samuel Caron offers information and advice in many forms on his Web site: ADHD Information for Children and Parents http://adhd1. net>. Dr. Caron's podcast series, titled "ADHD Podcasts for Children: The Dr. C & Elwood Show," features lively conversations between he and Elwood, his puppet. An amateur ventriloquist, Dr. Caron says that he uses Elwood routinely in his clinical practice with children who have attention deficit disorders. The podcasts are intended for both parents and their children who have ADHD. They introduce and discuss some of the common vocabulary and issues surrounding ADHD, in an entertaining and simple way.

Language and linguistics are currently among the most popular topics in educational podcasting. Linguistics researchers and ESL instructors Lucy Tse and Jeff McQuillan produce an excellent series designed to help people further their skills in learning English as a second language

Where to find listings of podcasts on every subject from babies to wrestling, hand bells to wine

Podcasts, in general, are easy to find. A person who types "podcast index" in the Google search bar will be busy exploring for days. Otherwise, try the following:

Clinical Computing Competency for Speech-Language Pathologists http://cccslp.truman.edu – Listing of podcasts related to special populations, language, disability and healthcare issues. Home of podcasts for SLP's about clinical technologies.

Podcast.net Directory http://weblogs.about.com/od/podcastdirectories - Podcast index; search by category, key words, etc.

National Public Radio Podcast Directory <www.npr.org/rss/podcast/podcast_directory.php> – Podcasts based on NPR radio news, features, series.

Podcasting News **<www.podcastingnews.com/forum/links.php>** – Index of podcasts on all topics with highlights on new podcasts.

iPodder site **<www.ipodder.org>** – History of podcasting and popular index.

About: Podcasts Indexes and Directories http://weblogs.about.com/od/ podcastdirectories> – A podcast meta-site or jumpstation about podcast directories.

http://www.eslpod.com. Each of their "English as a Second Language" podcasts begins with a brief conversation or first person account that emphasizes several vocabulary words or phrases in context. The key concepts are then discussed and repeated with brief explanations. Pronunciation is careful and the rate of speech is somewhat slower than normal conversational rate. Learning guides, including scripts and comprehension questions, are available in conjunction with the podcasts. Although their target audience may be second language learners, their goal to provide "an effective source for learning English" may conceivably apply to a wider audience. For example, once the word gets out, that audience might include people with language-learning disabilities or mild residual effects from TBI (Traumatic Brain Injury).

For more advanced vocabulary, people who enjoy new words or are preparing for college entrance exams should try the "Just Vocabulary" podcasts from South Africa http://www.justvocabulary.libsyn.com. Posted almost daily, each brief podcast presents two new words in an organized way. The words are spelled, defined, and used in several sentences. According to Jan Folmer, the creator and host, a new testing application is being developed so that learners can review and test their own progress with advanced vocabulary acquisition.

Podcasts come in many shapes and sizes

A new podcast series entitled "Using Computers in Speech and Language Therapy" has begun at Truman State University http://cccslp.truman.edu. This series is designed from the start as a professional development experience for listeners. It is based on the ten recommended clinical computing competencies explained and illustrated in detail in the recent book, Clinical Computing Competency for Speech-Language Pathologists (Cochran, 2005; reviewed by Joan Tanenhaus in the April/May 2005 issue of Closing The Gap). The focus of the book and the podcast series is how computers can be used during intervention and assessment activities. It is anticipated that CEU's will eventually be available for clinicians who listen to the podcasts and submit the appropriate paperwork.

As professionals explore a variety of podcasts, they will notice a variety of types, not just topics. There are some that have an obvious educational tone and intent. These are likely to increase beyond the language lessons format of many existing podcasts. For example, already the Journal of Medical Management Practice offers podcast versions of at least some of its articles at SoundPractice.net <www.soundpractice.net/section.cfm?id=25>. Some professors are podcasting their lectures, which may become a helpful alternative to audio recording or assisted notetaking for some students.

Less formal podcasts by private individuals often feel more collaborative and have sharing and exchange of information and opinions as their main goal. Other podcasts seem more like "announcements." Many universities are podcasting their "news of the day," which is a convenience for the general student body and may be an especially useful format for students with limited vision or reading ability. To streamline the production process of this kind of podcast, it's possible to automate Web postings by using text-to-speech technology to create the podcast version. For example, at the site Evidence in Motion http://blog.evidenceinmotion.com, each addition to physical therapist John Childs' blog about evidence-based practice is automatically converted into podcasts through synthesized speech.

So far, the number of blatantly commercial podcasts is limited, but as the audience grows, more will come. Even now, what may appear to be an interesting topic/series may be just the repeated posting of a new product announcement (e.g., a new hearing aid). This is just one reason why professionals should hesitate to recommend a particular podcast or series to a client or family without listening to it first. Remember, it's just as easy to post inappropriate and misinformed advice as it is to post expert recommendations. Most podcasters will include some information about themselves on their site. Clearly, anyone offering professional advice should also be offering verifiable credentials.

Getting started

Don't spend too much time trying to figure out the new terms or software related to podcasting. The bottom line is, you can

learn more when you decide you need to know more. For now, the important thing is to try one! Find a podcast that sounds interesting and has a play or listen button near the title. Just click and see what happens. If you like what you hear, keep listening. If you don't, try another and another until you find something worth your time. If you get really interested, you'll learn what you need to know to become a more regular and efficient podcast consumer. If you decide to start making your own podcasts, there is much advice and free recording/ editing software available on-line (Google: how to podcast). Also, there's a whole shelf of books at your local bookstore. But that's for a different day.

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Resources

iTunes, free download from Apple at <www.apple.com/itunes/download>.

Juice, free cross-platform versions (Windows, Mac, Linux) available at http://juicereceiver.sourceforge.net>.

RealPlayer, free download at <www.real.com>.

Windows Media Player, free download from Microsoft at <www.microsoft.com/windows/windowsmedia/default.mspx>.