## Podcasting and the Long

he emerging stream of technologies that can connect classrooms continues to evolve. Podcasting is one of the most recent and most innovative. A recent Pew Foundation survey (http://www.pewinternet. org/pdfs/PIP\_Data\_Techterm\_aware.pdf) found that the average Internet user is not sure what podcasting is.

Only about 10% of users responding to the survey indicated that they had a good understanding of this technology. That is about to change. In fact, the percentage of  $L \not \sim L$  readers who are familiar with podcasting is probably already much higher than 10%. (Editor's note: To ensure you are firmly in the know, read "Podcasting in the Classroom" on p. 20.) The technology coordinators in our local schools report that podcasting is the technology about which teachers are asking most often.

Podcasting, as you may already know, allows distribution of audio files through an RSS feed. This permits users to subscribe to a series of podcasts that are automatically sent to their computer or MP3 player. The capability to receive podcasts is built into freely distributed software such as iPodder as well as the most recent version of iTunes (also a free download).

Mainstream radio is embracing this technology. National Public Radio (NPR) stations, for example, are making a variety of programs available as podcasts. It is certainly more convenient to listen to a program at a time the listener chooses. However, the revolutionary aspect of podcasting, and the dimension that perhaps has the greatest implications for education, involves

the ease with which podcasts can be created and distributed by individual users.

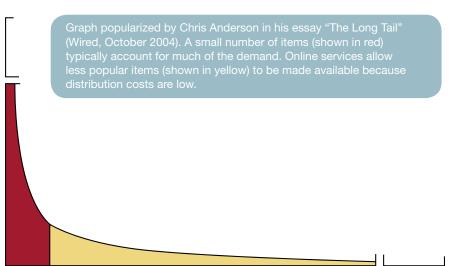
Anyone who has published Web pages can use the same Web server to distribute their podcasts. MP3 audio files are placed on the server in the same way that a text file or image is transferred to the site. RSS stands for Real Simple Syndication. RSS tags resemble HTML tags and specify the characteristics of the podcast (i.e., details such as Title, Description, and URL). RSS tags are simple enough for most people to enter by hand, but most producers use a podcast creation program. These programs automate the process of producing RSS tags for podcasts, just as programs such as FrontPage and Dreamweaver automate production of HTML tags for Web pages. Sites such as Indie Podder (http://www.ipodder. com) provide links to podcast production tutorials and software.

Because podcasts are easy to produce, thousands are appearing even in the early phases of this emergent technology. The ease of distribution means that every podcast can find its audience even if it is only a few individuals.

The mass media produces content aimed at the lowest common denominator. With a limited number of radio and television channels, profits are maximized when each show is designed to attract the largest possible audience. Similarly, limited shelf space in the retail industry is the equivalent of a restricted number of channels. Consequently, physical retail stores only carry a fraction of the books or music CDs available. A longstanding rule of thumb has been that 20% or fewer of the items generate 80% or more of

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the demand. Only the most popular television shows, books, or music CDs were available to the public in the past.

Wired magazine's editor-in-chief Chris Anderson was the first to observe that easy Web site software and RSS feeds can transform this equation. In effect, an unlimited number of channels are now available.

Anderson observed that with an unlimited number of channels available, items that are in low demand (depicted in yellow in the graph) can collectively constitute a market that exceeds the popular items (shown in red) that previously generated the majority of sales.

The potential uses are limited only by our imagination. For example, one couple records a 20-minute conversation describing their week while they make supper each Friday evening, and posts it as a podcast for their parents that weekend. This conversation isn't likely to be of interest to very many people, but to its intended audience of the immediate family, it may be extremely interesting.

How accessible are podcasts? Students in second grade at Willowdale Elementary School are producing podcasts for Radio WillowWeb ("Radio for Kids, by Kids"). Search on "WillowWeb" in the iPodder or iTunes search directory to subscribe, or visit

the site directly (http://www.mpsomaha.org/willow/radio/).

Janet Swenson, past president of the National Council of Teachers of English Conference on English Education, recently joined her colleagues at a retreat to consider the future of English education in light of technological advances. She observes that use of the term writing to encompass multimodal compositions such as digital storytelling and podcasting is now "essentially uncontested" within her discipline.

Enhanced verbal skills in one medium potentially transfer to other media. Podcasts take advantage of a popular cultural phenomenon. MP3 players such as the Apple iPod have become the mechanism for distribution of music for today's youth just as the CD and vinyl records filled this role for previous generations.

Educational uses of podcasting build on the foundation of this cultural phenomenon. It is likely that the capability to work in an auditory medium will have any number of useful benefits in adult life, both socially and in the workplace. Exploring this medium also will allow us to identify ways to complement traditional media such as printed textbooks, providing alternate pathways to understanding.