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Enter the iPod

Make way! Apple's popular MP3 player is crossing over into the classroom—and education may never be the same.

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**FETC
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IN

POD

WE TRUST



Beloved by students worldwide, the ubiquitous little MP3 player is becoming a presence in the classroom as teachers discover its many educational uses.
by Mikael Blaisdell

A SECOND-GRADER at Willowdale Elementary School in Omaha, NE, is the speaker in a podcast titled *Respect Rocks!*. His segment of Radio WillowWeb is freely available worldwide through Apple's iTunes Music Store (www.apple.com). Respect is one of the SixPillars of Character that the young student and his fellow schoolmates are studying, and they are sharing what they have learned about it. ■ In Orange County, CA, a Latino student sits with his grandparents and asks them for stories of Guatemala, and what it was like for them to emigrate to a very different country. While his relatives shyly decline to be videotaped, they are comfortable talking in the presence of the iPod and its recording accessory. Later, the student will take the audio recording and combine it with a slide show of old family photos to produce a DVD that he'll share with his classmates and his entire family. ■ A teenager in Scotland downloads a French assignment and listens to it on the way home from school. She knows that shortly a text message will appear on her mobile phone that will test her knowledge. Her text reply will be automatically posted to a Web site, where she'll later take an online exam to measure her progress.

First it was an innovation. Then it escalated to a movement. Now the iPod has sprung a genuine reformation, coming to a global or four-walled classroom near you, no matter where in the world you are. From kindergarten to college, in applications of all kinds, what was originally designed as a mere portable music player is on its way to becoming an essential educational tool. *On its way?* Ready or not, it's already here. ►

'The Gold Medal of Stuff'

At heart, the iPod's appeal is about its easily accessible audio and visual content in an attractive and conveniently sized package. Mechanically, the product is mostly a hard disk drive (although some models use only flash memory) with a small display screen. While the display capabilities of the new video iPod don't really compare with the living-room TV set, especially in a time of oversized plasma screens, that TV set can't travel in your pocket wherever you go, carrying all of your music, audio books, and favorite video pieces along with it.

In creating the initial product, Apple was targeting a market for portable music that had existed in one form or another since the invention of the transistor radio in the 1950s. But the success of the iPod is due to more than just its ability to access a wide variety of audio—and now video—content on the go. Its versatility is popular with users as well. The addition of a simple accessory turns the iPod into a recorder, allowing the user to capture audio content that can be quickly uploaded and distributed anywhere in the world via the Internet. And several related software technologies that link with the iPod enable people with little training to do things like organizing, editing, and publishing photos, music, and video that once were the sole province of dedicated hobbyists or professional artists.

Since its October 2001 debut, the iPod has enjoyed enormous popularity, and the reasons for it have not gone unnoticed by educators at all levels.

Brian McElfish is the technology coordinator and a math teacher at **Serrano Intermediate School** in Lake Forest, CA. "Today's kids have not known a world without the conveniences of mobile phones, portable music players, fast Internet connections, etc.," he says. "They have the ability to function as multitaskers. They can listen to their iPod, watch TV, and call a friend at the same time they're doing their homework by pencil



Photo courtesy of Apple Computer

INSPIRED. Today's students can listen, learn, and then detach from their iPods just long enough to craft their own creative reflections.

and paper." But McElfish is concerned that forcing students to use outdated equipment and old technologies risks boredom and lower interest in schoolwork. In fact, "giving them the freedom to use current technology in what for them may be new and creative ways seems to create a sense of buy-in to the material."

Not too far away, Mike Albert is a history teacher at **South Gate Middle School** in South Gate, CA. "For my students, iPods represent the gold medal of 'stuff,'" he says, "and they're within reach for most of them, either realistically or on their wish lists," he says.

Katherine Hallissy Ayala, head of Computer Education at **The Brearley School** in New York City, agrees: "The kids like having a device of their very own; they personalize their iPods in many ways," she says. "They also like the ability to carry around so much of what's important to them—their music."

A Functional Understanding

The debate over iPod's educational usage has grown increasingly lively. The iPod's many capabilities and associated technologies each present distinct learning opportunities, inside and outside the classroom.

Playback. The core of the debate concerns the basic use of the iPod's playback function to present targeted audio or video material outside of class. "If you can get students to listen to something educational for 30 minutes a day on their way to or from school, that's 30 minutes more of their attention you wouldn't have gotten otherwise," says Robert Craven, coordinator of Educational Technology for the Orange County Department of Education (CA).

Such material can range from music to recordings of speeches, to podcasts created by the teacher or downloaded from other sources, to combinations of slide shows and audio/video clips.

USEFUL LINKS

SOURCES OF HELPFUL INFORMATION abound for teachers and administrators thinking of introducing the iPod into their classrooms and schools. A Google (www.google.com) search of "iPod education," for example, returns more than 25 million pages of information. Submitting "podcasting" will turn up another 16 million. A simple browsing of the education page of Apple's Web site (www.apple.com/education/solutions) will deliver a substantial number of good ideas for possible iPod classroom applications, as well as links to those who have gone down that road before. Other reliable links can be found by searching "iPod language education."

Here are two highly recommended search topics and Web sites:

Copyright issues and acceptable use policies. The TEACH Act is the starting point for developing a sensible policy regarding copyrighted works. Do a Google search of "TEACH Act" to find several useful sites that tell you what you can and can't do when using copyrighted works for teaching.

Making the case for an iPod program. The Orange County Department of Education (CA) has a good video podcast, *Technology in Education: iPods*, available at edtech.ocde.us. The site also has a number of other useful articles and how-tos.

The material can be assigned as if it were a book or magazine article given to prepare the students for a classroom discussion. Playback can also be utilized in class, and is especially useful in

the iPod,” Craven says. “Kindergarteners go to the back of the room and read, practicing to see how many words a minute they can get. The teacher doesn’t have to take class time to listen to



“Where the iPod stands out is in its ease of use, and in the seamless integration it offers between audio, video, photos, and text. It’s the Swiss Army knife of electronics.”

—Robert Craven, Orange County Department of Education (CA)

special education settings. For example, in some OCDE schools, the teachers record some of the daily practices that students do in the classroom, and combine the recordings with photos or other images to be displayed on the iPod’s screen.

“Holding the iPod gives the students something tactile in their hands while listening to the audio and looking at the images,” Craven explains. “The combination helps them stay focused and avoid distractions that may be keeping them from really succeeding.”

Audio Content Capturing. A recording accessory allows the iPod to capture audio content that can then be quickly and easily uploaded to a computer for later review, editing, or distribution. “We’ve got students at all levels doing recordings with

each student read for a minute. He can listen to it later, store it, and have a record to show the parents every few weeks. At the other end, you have older students taking the iPods home and recording oral history sessions with their families.”

Related Software Capabilities. Various related and linked software technologies enable students and teachers to work with audio tracks, photos, and video clips in a wide variety of ways to create works that can be played on the iPod. Podcasts are becoming more and more common at all educational levels, both as a way of distributing content to students and as creative assignments themselves. “The draw of listening, speaking, or applying technical skills can make a difference,” says The Brearley School’s Hallissy Ayala.

GETTING FROM HERE TO THERE

Resources for transferring data between home and school.

It’s too big to e-mail, but the assignment’s on the home computer and has to get to school. What’s a student to do in these days of bloated word-processor and even bigger music or graphics files? Burn a CD or DVD? Use a memory stick? Treat an iPod like a portable hard disk?

The answer may vary, depending on what’s available and where you’re going with it. While a CD or DVD is inexpensive, offers good capacity, and is readable on almost all computers, it can only be used once—unless you’ve bought the RW (“rewritable”) kind (nearly double the cost of a CD-R). The common USB “memory stick” is reusable, and the available capacity of such handy devices keeps going up while prices slowly drop. The iPod offers the most capacity of all, but requires a special cable in order to connect to the target computer.

“I teach songwriting courses,” says Paul Eliot, head of the Department of Performing Arts at the Tacoma School of the Arts (WA). “My students record their projects in ‘home studios.’ They bring their final version in for me on either memory sticks or an iPod—usually by iPod. I connect either the USB stick or iPod to my Mac, import the song to iTunes, and play it for the class within 20 seconds.”

Yet another option for some of Paul’s students, though pricey, is a firewire external hard drive. “I just got one that holds 100GB, optimized for music, for \$200,” says Paul. “USB2 is too slow for live audio recording. Firewire is really the way to go for speed, if you can afford it.”

An Apple for the Teacher

So where should a school or district start in building an effective plan for using iPods in their curriculum?

According to veteran iPod integrators like Craven and Hallissy Ayala, commitment, resources, and training are all key elements. “You have to have a firm commitment from a school’s leadership,” Hallissy Ayala insists. Also crucial are a piloting faculty core and an instructional technology staff to support the group through initial training in use and troubleshooting, and in an iterative exploration of content. Additionally, anyone at all involved in program development initiatives inevitably emphasizes the importance of hands-on training.

David Watts, a technology specialist for the Placentia-Yorba Linda Unified School District (CA), says, “Kids are a natural; teachers are not. You’ve got to have plenty of hands-on staff training time.” McElfish agrees: “I wasn’t aware of what iPods were capable of doing until I saw it for myself.”

In Orange County, Craven’s department

offers courses for educators in the use of iPods and related technologies, and will be running a Summer Institute as well.

“They come in, learn the fundamentals of the iPod thoroughly, and do their own podcast right there in the class,” he says. “We now have at least 15 teacher-student groups in the district that I know of regularly podcasting or in the process of beginning, and I’m certain that there are many more than that.”

Craven says that participants often say they came because they want to find a way to give their students something that they can use with their iPods to further the instruction. It’s a realistic approach to student iPod use: They’ve got them, they’re bringing them to class; let’s find a way to use them for class.

A common hindrance, however, is lack of resources. “Have enough iPods for the project,” says Craven. “Too few can really hamper your efforts. Create a pool. Loan them to the teachers so that they have something to work with.” OCDE’s loaner pool of iPods was created to support teachers who want to make a case for asking their school administration for funding. “We loan them an iPod for a couple of weeks,” says Craven, “and tell them: ‘Use it to make a couple of example projects that you can show to your administration, so that they can really see what one of these things can do in an educational setting.’”

Sounds like a plan, but what are the realities when confronted by the almighty dollar? The current list price for a 30GB iPod is \$299; the larger 60GB version runs for \$399. With an educational discount, the price drops to \$269 for the 30-gig unit, with a similar discount for the larger model. Is the expense justifiable? “There are some cheaper digital voice recorders that will play MP3 files,” acknowledges Craven. “Or you could use a cassette tape recorder for field work. But where the iPod stands out is in its ease of use and in the seamless integration it offers between audio, video, photos, and text. It’s the Swiss Army knife of electronics.”

Are the extra capabilities and the convergence of different media types worth paying \$20 to \$50 more for an iPod? Both Craven and his boss—who approved Craven’s request for the budget to purchase OCDE’s loaner pool of 20 iPods—are sure of it. “While it may be a little more than some of the other tools,” Craven says, “it pays off in so many ways because of its versatility.

“Asking for an iPod for your classroom now is like what we went through asking for digital still or video cameras three to five years ago. The iPod is a part of the teaching arsenal that needs to be in every classroom, right along with the computer itself.”

Additionally, establishing and maintaining an acceptable



TUNED IN. Brearley School ninth-graders put iPods to use during a listening exercise in Spanish class.

use policy is another point to consider. “Our faculty acceptable use policy holds the school to the TEACH Act,” Hallissy Ayala says, referring to the Technology, Education and Copyright Harmonization Act of 2002, which drew up the boundaries for governing educators’ use of copyrighted materials for instructional purposes. “We limit file access to appropriate students, and the files are deleted when a unit of study comes to a close.”

An ‘i’ to the Future

The emergence of iPods as an educational device has had an uneven reception. Some districts are only at the talking stage. Others have moved on to implementation and have well-supported programs underway. The same is true of individual schools, and in the classrooms. Many teachers say they buy their own, as do many of their students. Others are more fortunate and have received iPods through their school or district.

Availability of educational content for the iPod, which once had to be created by individual teachers or developed by the district or a particular school group, is now growing exponentially. Apple’s iTunes Music Store offers loads of free content uploaded from schools all over the country that can be used in lessons or as examples to spur creative efforts locally.

Boon, or bane? The debate continues. In some districts, as in Orange County, the iPod is coming to be regarded as a classroom essential. In other schools, it’s considered a distraction, and along with other MP3 players is officially banned from campus. One thing is certain: For the foreseeable future, students will continue to acquire and use iPods. One thing that’s less certain: Will educators choose to swim with the tide, or against it? **THE**

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