Exploring iPhone, iPod & iPad

By Julie Holmquist

The debut of the iPod touch and iPhone in 2007 and the iPad in 2010 has created new opportunities for children with disabilities.

With their touch-screen technology, mainstream look, built-in accessibility features and thousands of web apps (applications) that are inexpensive and readily available, these technologies offer a wealth of new educational tools worth exploring, says Bridget Gilormini, director of PACER's Simon Technology Center (STC).

"Part of their appeal is that these devices don't say, 'I'm an assistive technology device,'" Gilormini says. "A lot of students don't want to be different than others, and by using an iPod or an iPad, they're not."

The devices can also open new worlds for children with disabilities, a fact highlighted in a 2010 New York Times article about 7-year-old Owen Cain.

Owen is medically fragile and has lost nearly all of his muscle movement, but the iPad's sensitive touch screen allows him to turn the pages of an e-book by himself.

Apple includes assistive technology (AT) in its products as standard features at no additional cost. For example, the iPhone, iPad, iPod and Mac OS X include screen magnification and VoiceOver, a screen-access technology for people who are blind and have visual impairments. Apple provides many other accessibility features for vision, hearing or cognitive impairments.

In addition to the many built-in accessibility features provided by Apple, a variety of hardware and software products are sold separately that adapt the iPhone, iPad and iPod touch for special needs.

Apps 101
Before deciding if one of these devices would be helpful, families should ask the following questions:

- What is the purpose of the device?
- How will the user access the device?
- How long will the battery last compared to other AT devices?

When considering a device, parents and educators are usually concerned with durability, sound and any barriers to its use, says Jonathan Campbell, assistive technology specialist with the STC.

"The iPad is not as fragile as a traditional laptop," he says. The glass is reinforced "gorilla glass," the aluminum back is sturdy, and it has no sharp edges. "It's a pretty tough piece of machinery, and it's scratch resistant," Campbell says, noting that it can be damaged by water, however. Purchasing a rubber case for the iPad will make it even more durable.

Adding inexpensive speakers gives the iPad good sound capabilities, and other add-ons allow users to use a switch.
with the device. "But families should realize that not every app will be compatible with all accessibility features and hardware add-ons," Gilormini says.

**App resources**
Once a family has an iPhone, iPod or iPad to use, the Simon Technology Center can help parents find appropriate apps for their child. Here are several resources to consider.

- App resources are continually updated on a STC electronic document called "iPod/iPad for Education: App 101." This 17-page document is listed on PACER’S web-site at PACER.org/publications/stc.asp under Presentation Handouts. It provides links to many in-depth app sites that are regularly updated, including app recommendations for students with autism, apps for special education and TOP 40 free iPhone apps. It also provides video examples of how apps are being used and links to companies creating accessories for the iPod and iPad.

- A regular feature called "App Corner" includes updated information on various apps. Find it in the STC Tech Notes monthly e-newsletter at PACER.org/stc/news.asp.

- More updated information is posted to the STC blog at simontechnologycenter.blogspot.com.

**App trials**
Because most apps are inexpensive, app developers generally do not provide trials for consumers. However, parents have several ways to view an app before deciding if it is appropriate to write its use into an Individualized Education Plan. Families can borrow iPods and apps from the STC Lending Library, and a quick search on YouTube also usually turns up demonstrations of many apps, Campbell says.

For more information on web apps, the STC Lending Library or assistive technology, call the Simon Technology Center at 952-838-9000 or visit PACER.org/stc.