Using the iPad to Connect

Parents, Therapists Use Apple Tablet to Communicate With Special Needs Kids

By JENNIFER VALENTINO-DEVRIES

The rise of mainstream tablet computers is proving to have unforeseen benefits for children with speech and communication problems—and such use has the potential to disrupt a business where specialized devices can cost thousands of dollars.

Before she got an iPad at age two, Caleigh Gray couldn't respond to yes-or-no questions. Now Caleigh, who has been diagnosed with cerebral palsy, uses a $190 software application that speaks the words associated with pictures she touches on Apple Inc.'s device.

"We're not having to fight to prove to people that she is a smart little girl anymore, because it's there once they see her using the iPad," said Caleigh's mother, Holly Gray, who said her daughter can use the tablet to identify colors or ask to go outside.

The software, called Proloquo2Go by a company called AssistiveWare BV, is one of a growing number of apps aimed at people with speech difficulties developed for Apple's gadgets. Some of the apps offer images that users can press to make the sound of a word; others lead students through stories to teach them basic speech patterns.

Companies are also planning such apps for upcoming tablets that run Google Inc.'s Android software.

Apple Chief Executive Steve Jobs said in an interview that he hopes the easy-to-use design of the iPad has helped children with special needs take to the device more quickly, but that its use in therapy wasn't something Apple engineers could have foreseen.

"We take no credit for this, and that's not our intention," Mr. Jobs said, adding that the emails he gets from parents resonate with him. "Our intention is to say something is going on here," and researchers should "take a look at this."

Specialized speech devices from companies like DynaVox Inc. and Prentke Romich Co. range from about $2,500 on the low end to $15,000 for a device that uses the eye movements of people who are paralyzed to allow them to select words on a screen. Most are about $7,000, near the amount that Medicare covers for such hardware.
The price of the devices covers the materials required to make them durable; extensive service that is often needed for disabled patients; as well as complicated software, said Ed Donnelly, the chief executive of DynaVox.

He said the iPad might be an alternative for a "very small segment" of people who buy his firm's devices, but noted DynaVox this month released a new touch-screen product, called the Maestro, that resembles consumer tablets. That device costs $7,820.

"Like any specialist device our problem is we just can't get economies of scale. We maybe sell thousands a year," said Russell Cross, the director of clinical applications for Prentke Romich. He said his company's business hasn't suffered as a result of mainstream devices.

"It's not like people have suddenly stopped buying [these] products," he said. "We've always been very aware that the need for [speech] devices is far greater than actual supply."

The dedicated devices are covered by most government and private insurers, but the iPad—which costs between $499 and $829—and other computers generally aren't.

Medicare doesn't cover mainstream tablets, even though they might cost less than dedicated devices, said Andrea Abramovich, a speech pathologist and instructor at the State University of New York at New Paltz.

"There's a hotbed of problems it would open up" because tablets could be used for nonmedical purposes, she said.

Many of the speech apps have been available on traditional computers and smaller touch-screen devices, but parents and therapists said tablets offer more options for children.

"It's portable and something he can carry, and yet it's large enough to be accessible," said Shannon Rosa, an advocate and writer whose nine-year-old son, Leo, has autism and uses an iPad. "There's no cursor analogy he has to work through; it's a direct connection."
The iPad also helps remove some of the social stigma. Devices that are made specifically to help people speak tend to be "bulky," said Bill Thompson, a school psychologist in California with the Orange County Department of Education, who has made several apps to help children with speech problems.

"But now you might have a kid who struggles with bridging the social gap have kids come up and want to see what they're doing. It really has a 'norming' quality," Mr. Thompson said of the iPad.

Speech therapists said there are a few changes they'd like to see to the iPad to make it more friendly for children with disabilities, including the ability to have parents lock the apps so that children can't delete them, or adjustments to make it less likely that people with motor problems would open apps accidentally.

Researchers at the Massachusetts Institute of Technology are planning to study what else could be done to make such tablets better for people who have either autism or speech difficulties.

The devices, for example, could use location data to deliver options for speaking that depend on a particular place—say, a restaurant or a church. Or they could take advantage of technology that can simulate speech based on just a few syllables of a person's voice, said Matthew Goodwin, the director of clinical research at the MIT Media Lab.

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