Tablets Take Over

The elimination of the textbook remains the endgame of technology in education. The tablet computer, such as Apple’s iPad, HP’s Slate, and the Dell Streak, is the latest device to provide a new way to access information and push textbooks closer to the brink.

"I know of faculty using tablets in teaching, and the results go back to a computer that is projecting or capturing the image," says Wayne Brent, senior consultant in the University of Arizona’s Office of Instruction and Assessment. "We see them being used in lecturing to annotate graphics and perform problem solving, where instructors bring up a problem and then work through it. Tablets offer the ability to sketch and draw and mark up images, which provides an additional form of expression that you don't have with a regular computer. And, of course, the portability provides that mobility."

But Saltzman points out that finding a means of implementing the technology to benefit the educational process takes considerable thought.

"The challenge is we have to adapt the media to fit the new medium," Saltzman says. "Just because something works well in print doesn't mean it will translate well to an iPad. With this technology, what was a static graph in the book now should be interactive; what were photos now should be videos; and on and on. We know that as tools mature they will be much better. We're not at the point where we can say tablets are ready, but give them a couple of years."

The use of tablets is currently more prevalent in higher ed, says Hap Aziz, director of the School of Technology and Design at Rasmussen College, which has campuses in Illinois, Minnesota, North Dakota, Florida, and Wisconsin. For tablets to make the same impact in K-12, Aziz says that some key issues need to be overcome that are less of a concern in higher education. "If you drop a book, big deal, but if you drop a tablet you get a cracked screen or a broken unit," he says. "At the very least, a tablet for a second-grader should be ruggedized. There are reasons why in lower grades a book is still a good idea."

Still, the multitude of advantages that tablets present to K-12 schools should make it well worth putting up with the occasional butterfingers. And those advantages go far beyond instruction. Lehigh's Bishop says that schools are looking at tablets as a way to reduce the costs of buying new textbooks and limit their physical footprint. Libraries, for one, are looking at using tablets as alternatives to books and making them accessible for checkout by students.

"I've had conversations with the local middle school about using Kindles or iPads to begin reducing library and textbook costs and allowing students to have access to these devices," Bishop says. "It's definitely an idea with possibilities."

Whether tablet devices become the substitute for the textbooks, notebooks, pen, calculator, and everything else that students have crammed into their backpacks for decades remains to be seen. However, educators generally agree that the technology will have a place in the K-12 setting.

"I have confidence there will be a major shift," Marist College's Baron says. "I think the iPad has made some strides in the form factor, but there is a cost factor. But textbooks are also expensive, and I think there will be a tipping point where it becomes more cost-effective to just buy an iPad and have the textbooks preloaded on it." He adds that the catalyst for adopting any of these technologies in the K-12 space will be similar to what drove past changes.

"A lot of it will come from the corporate sector saying it's not getting students with the skills it needs, which will also pressure the government to set mandates on understanding these technologies. Those will be the big drivers of change."