

As the e-book market explodes, publishers and educators debate why e-textbooks lag behind and what they should even look like. **By John K. Waters**





CAN TECH TRANSCEND THE TEXTBOOK?

AFTER TRAVELING A LONG, tortuous road, the much-anticipated e-book revolution has finally arrived. Any doubt that the future of the book is digital has been laid to rest. Kindles and iPads sold like hotcakes during the 2010 Christmas shopping season, and Forrester Research expects the recipients of those devices to spend more than \$1 billion on e-books in 2011, and \$3 billion by the middle of the decade.

So where's the revolution in the *e-textbook* market? According to the National Association of College Stores (NACS), digital books currently account for less than 3 percent of textbook sales. NACS expects that percentage to reach 10 to 15 percent by 2012, while researchers at Simba Information predict that e-textbooks will account for more than 11 percent of textbook sales by 2013. But even this relatively swift growth rate represents a trickle compared to the flood of e-book sales on Amazon. ▶

"To state the obvious, academic publishing is slower to change," says Vineet Madan, vice president of strategy and business development in McGraw-Hill's Higher Education group. "But so is the market we serve. There's a lot at stake for students. The money they spend on a textbook is an expense related to an out-

change the digital publishing landscape: the iPad. Before going out on his own, MacInnis worked at Apple for eight years, managing the company's international market development for education. He started Inkling, he says, after years of watching technology's power to change the way people learn go unexploited.

of the professor. Audio, video, animation, assessment banks, and other content can be integrated within a single title, and the text becomes just one type of raw material used to create what MacInnis calls "an interactive digital experience."

"We're not trying to replicate a book experience at all," MacInnis says. "No

"Everything those students have seen up to this point has been junk. Present me with a PDF on a screen and I'll take a book any day." —Matt MacInnis, Inkling

come—a grade, which gets you to a credit, which gets you to a degree, which, hopefully, gets you to the job you're looking for. As long as the online experience doesn't offer significant value over the print experience, I believe the preference in consumption will still be toward print."

That preference has shown up starkly in some recent surveys. Three-quarters of the students queried by both NACS and the Student Public Interest Research Groups said they'd rather use a paper-based textbook than its digital cousin. Eighty percent of the students queried in the fall 2010 College Student Tracking Survey, commissioned by the Nebraska Book Co. and conducted by Crux Research working with Harris Interactive, said they bought new textbooks; 72 percent bought used textbooks; 20 percent were renters; and only 8 percent bought digital textbooks.

Matt MacInnis, co-founder and CEO of e-book publishing startup Inkling (not the same company as Inkling Books), sees these responses as an unsurprising reaction to the current state of e-textbook publishing.

"All it means is that everything those students have seen up to this point has been junk," MacInnis says. "Come on. Present me with a PDF on a screen and I'll take a book any day."

An Interactive Experience

MacInnis, along with partners Robert Cromwell and Josh Forman, started their company in 2009 to take advantage of a then-unreleased device that promised to

"It was frustrating to watch," he says. "No matter how much power there was in the laptop, the teacher would still whip out the textbook, and we were thrown back into the 19th century. I really wanted that to change, and the iPad gave us the opportunity to make that change."

MacInnis agrees wholeheartedly with McGraw-Hill's Madan that an e-textbook *must* provide a "significant value over the print experience" to win the hearts and minds of students.

"It has to be appreciably better than using a book," he says. "A book provides a really good user experience. It doesn't crash. It's predictable. You know exactly what you're going to get. Simply putting a textbook on a Kindle or a Nook is actually a worse experience. You're working entirely within the constraints of the book, but you're taking away the convenience and reliability of the book."

MacInnis talks a lot about "the constraints of the book" and how textbooks of the future must transcend those constraints. For its part, Inkling has done away with the book metaphor entirely: The company refers to its e-textbooks as "titles," and the Inkling platform presents the content of its titles as sets of "cards" that can be shuffled, so to speak, to suit the needs of the student and requirements

hokey page transitions on screen and that sort of thing. We take advantage of the interactive capabilities of the iPad, in part, by doing away with the constraints of the book. It's the only way to take advantage of the opportunities afforded by the iPad."

Inkling is betting big on Apple's category-redefining tablet, but its gamble may not prove too risky. After all, Apple sold close to 15 million iPads between its April 2010 launch and Christmas. In its recent report, *E-Textbooks in Higher Education*, Simba Information cited "the spate of pilot programs" for the iPad in colleges as a key indicator of a bright, digital future for e-textbooks on the popular device. But MacInnis is also hedging his bets. While Inkling is currently iPad-focused, the company is platform-agnostic and will support other tablet devices as they make their way to the market.

Several big-name academic publishers, including Cengage Learning, John Wiley & Sons, Wolters Kluwer, and McGraw-Hill, are placing their own small bets on Inkling's digital publishing platform. MacInnis says McGraw-Hill moved especially quickly to put some of its content on the Inkling platform. A deal with that publisher was actually struck before the iPad was launched on April 3 last year.

"Our notion is that technology has been under-leveraged to develop more compelling and engaging learning experiences," McGraw-Hill's Madan says. "As we look at evolving our



ONLINE EXCLUSIVE:

John K. Waters looks at Google's new cloud-based e-books service.

campustechnology.com/0311_ebooks

NEW E-READERS STICK TO THE SCRIPT—FOR NOW

WHILE E-READERS HAVE CAUGHT FIRE among consumers of novels and nonfiction alike, they have managed to generate only a squib of damp smoke when it comes to textbooks. As *CT* noted in “The Device Versus the Book” (May 2010; campustechnology.com/articles/2010/05/01/the-device-versus-the-book.aspx), students in three e-reader pilot programs last year found the Sony Reader, the Amazon Kindle, and the Barnes & Noble Nook seriously wanting.

It’s a view shared by many faculty, too. “Studying is not the same as reading,” says Shawna Coram, a business professor at **Florida State College at Jacksonville**. “You read a novel and it’s a linear advance, page by page, through the book. But when you’re studying a textbook, you do a lot of flipping back and forth, and that’s not so easy to do with an online book right now. They’re getting better, but they’re not there yet. That’s why I’ve made it an option, but haven’t switched over completely to e-books.”

If educators had hoped to see manufacturers respond to such critiques, the latest crop of e-readers unveiled at the annual Consumer Electronics Show (CES) in January will probably disappoint. Compared with the dozens of e-readers launched last year, only a handful of new entries debuted this year. And while the new e-readers have been nicely augmented with better e-ink, color, and a few annotating and highlighting tools, they still don’t give students the freedom to browse, dog-ear, flip, and scan that a physical book does.

Tablets don’t necessarily offer these ways to interact with text either, but that fact didn’t stop them—and not e-readers—from being the talk of this year’s CES. Indeed, it seemed as if every Joe with a soldering gun and an LCD had an entry. The industry’s rapid response to the iPad—the release of 80 competing tablets in one year is nothing short of astonishing—may be the biggest indicator of where, ultimately, the whole e-textbook argument is headed. While e-readers may flourish in the short term by offering a digital replica of the printed page, the long-term future probably belongs to products that will, in the words of Inkling CEO Matt MacInnis, provide “an interactive digital experience.”

The whole e-reader versus tablet debate may become irrelevant, however, if the books-in-browsers movement catches on. And there are signs it’s happening—at least in the general consumer space—as evidenced by a recent conference cosponsored by the Internet Archive and O’Reilly Media that was entirely devoted to the subject. Simply put, browser-based books give readers the ability to access their e-books across multiple devices, ranging from desktop computers to smartphones—and e-readers.

Some of the industry’s heavyweights are positioning themselves to take advantage of this flexible delivery mechanism. Amazon recently announced that consumers will soon be able to read their Kindle books on a browser, with no download or installation required. Google, too, is offering similar browser access to readers of its e-books. In both cases, users will be able to sync their libraries across their various devices.

So what does this mean for e-textbooks on college campuses? In the short term, browser-based books suffer from the same shortcomings as e-readers. Kindle users will see much the same functionality on the browser-based product as they do on their e-reader, while Google’s browser-based product can’t highlight sections or annotate the text.

The best days of the books-in-browser movement may lie ahead, though. Unlike the books that appear on today’s e-readers, browser-based books have the capability to become far more dynamic thanks to HTML5 and Flash. Indeed, browser-based books may be perfectly positioned to ride the transition from today’s digitized textbook pages to tomorrow’s interactive, dynamic content. Right now, browser-based books display a replica of the print product—because that’s what’s available. As publishers start to produce the educational content of tomorrow, incorporating video, sound, interactive quizzes, and more, the concept of e-textbooks in browsers—whether displayed on an e-reader, a tablet, or some other device—may come into its own.

products, it’s really about how we deliver more engaging experiences that drive better teaching and learning outcomes. We’re all being pushed increasingly into the business of providing outcomes, but we’re still exploring how we can best accomplish that.”

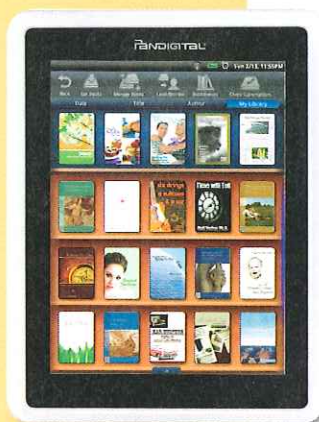
Exploring and Investing

While many publishers are exploring the kind of compelling e-textbook concept espoused by Inkling, they are not ready to bet the farm on it—yet. Indeed, McGraw-Hill is among five major academic publishers—including Pearson, Cengage, Wiley, and Macmillan—that partnered in 2007 to sell e-textbooks that emphasize fidelity to the print textbooks. Essentially, these e-textbooks offer exact digital replicas of their paper counterparts, including page numbers and page layout.

The joint venture, known as CourseSmart, currently offers a catalog of more than 15,000 e-textbooks, including over 90 percent of the core textbooks in use today in North American higher ed—available for an average of 60 percent less than a printed textbook. It also boasts a large selection of “eResources” and digital course materials. And the company partners with other e-book distributors, such as Jones & Bartlett Learning, Elsevier Science, Sage Publications, and Princeton University Press.

“When you look at a CourseSmart book on your iPad, you’re seeing the same thing as a student sitting next to you in class who prefers to use the print book,” explains Sean Devine, CourseSmart’s president and CEO. “The benefit there is that when the faculty member says, ‘Everyone turn to page 343 and look at the graph in the upper right-hand corner,’ all students are literally on the same page.”

The CourseSmart e-textbooks can be accessed through a PC and a web browser, but also downloaded and read on an iPad, iPhone, and iPod Touch. The books support what are fast becoming



standard features of the e-textbook, including keyword search capabilities, highlighting tools, clipping features, note-taking options, and e-mail links. In the next six to 18 months, the company plans to introduce the ability to link to Wikipedia, Google, and other sources on the internet, Devine says.

Despite these enhancements, the CourseSmart e-textbooks still seem worlds apart from the Inkling concept of a product that completely transcends the book. But Devine, who's been working in the electronic book space since the 1990s, believes that too much can be made of this divide. In his view, the e-textbook market is in a transitional period—a period that he doesn't expect to take long.

"We've been talking about electronic

Pearson Learning Solutions. "We have traditionally been a textbook publisher. Now we're an educational content and services provider. Every day we are creating new types of content."

As Kilburn describes it, the Pearson approach blends the kind of content-delivery model offered by Inkling with a focus on learning outcomes.

"We all talk about textbooks, but I'm more interested in what we're doing with the content paradigm," Kilburn says. "One of our biggest initiatives is to think about how we create content. We're creating content that is modular, that revolves around learning objects based on course objectives, that is built in ways that are measurable, and from which we can actually begin to get some outcomes."

While he admits it's a cliché, Kilburn

everyone nods their heads and says, 'Yes, that's the real use of technology, not a flat reading experience online.' But I don't think that's what the market is really looking to technology to do today and in the next five years. I think what consumers are really looking for right now is technology to take the costs of using this content down, and to be able to take full advantage of the malleability of online content to improve it for their own purposes."

Flat World Knowledge's e-textbooks are essentially digital replicas bundled with some useful editing tools, but its publishing and delivery model is bleeding edge. Flat World's offerings are open and customizable e-books published under a Creative Commons open license. Anyone can access the books for free

"What consumers are really looking for right now is technology to take the costs of using this content down."

—Eric Frank, Flat World Knowledge

textbooks for about 15 years as the next big thing," he says. "One thing that's different today is that all the stakeholders—the publishers, the hardware makers, the software producers, the consumers—are getting behind the idea. That's very different from what we saw when the e-books first emerged in the late '90s. And when you have companies like Amazon, Google, and Apple getting into the game, that starts to break down barriers pretty quickly."

It's probably in anticipation of these barriers falling that textbook publishers, including some investors in CourseSmart, are testing partnerships with companies like Inkling. "We're jazzed about the coming digital revolution," says Don Kilburn, president and CEO of

says that he sees the future of the e-textbook as more evolutionary than revolutionary.

"The content hasn't been designed for the medium yet," he explains. "That's where we are right now. The first TV shows were broadcast radio shows; the first iterations of digital content delivery have been static e-books, flat pages. But we're going to see text combined with more robust apps that engage the student and use the medium for both graphic display and interactivity in ways you could never achieve with a static textbook."

A Different Approach

Not everyone believes that the transition will occur so rapidly, though. In the opinion of Eric Frank, co-founder of Flat World Knowledge, there's plenty of demand now for digital textbooks that resemble actual books, and he believes that demand won't dry up any time soon.

"It's fun to talk about all the bells and whistles," says Frank, whose company publishes commercial open source college textbooks. "It's sort of sexy, and

online. Students can also buy paperback versions of the books, PDF downloads, audio and e-reader versions, and study aids. The books are available for the iPad, the Kindle, and other popular e-readers, as well as iPhones, MP3 players, and other media devices.

"What we're trying to bring to the mix is the best of the old world—a publishing sensibility that quality and who the author is matters, that the editorial development work a publisher does actually adds value—combined with an open license that gives our customers the tools to really control the content in a much more profound way than was ever possible before," Frank explains. "I'd argue that professors would generally prefer to add their own two cents and integrate a video they found on the web that they thought was a perfect example of something, rather than to take someone's spinning 3D image and try to teach around it."

Flat World's "malleable content" model was what first drew Miles McCrimmon, a professor of English at

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J. Sargeant Reynolds Community College in Richmond, VA, to the company.

"Our department, like so many others around the country, was interested in weaning itself from the traditional textbook model and the inevitable compromises of the textbook selection process,"

now, I'll be able to click on a number of URLs and, one hopes, find dozens of different versions of my book. And I'll be able to see which chapters were the most useful, and which were not. It's just much more of a dynamic relationship between the author and the end user."

Barkan believes that the high price of paper textbooks will ultimately drive students and teachers to embrace less expensive e-textbooks. But he expects the transition to take a while—as long as a decade—as publishers sort out the best way to deliver academic content. In

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he says. "The minute we agreed on something every three years, we would have to begin this patchwork process to make the text work in our classes. We thought Flat World might offer an alternative."

The company, after talking with McCrimmon and his colleagues, offered him a publishing contract instead. McCrimmon's first textbook, *The Flat World Knowledge Handbook for Writers*, hits the virtual shelves this month.

"It's a book that anyone can use off the shelf, and it's meant to be competitive as a first-year [composition] textbook," he explains. "But I've come to characterize it as more of a beginning than an end. My job was to start the conversation through this baseline text. A year from

A Matter of Money

In all the debate about how today's technology can be used to reinvent the textbook, it's easy to overlook something as straightforward as cost. To Flat World's Frank, it's one of the primary factors driving the e-textbook market today. That's also what matters most to Shawna Coram, a business professor at **Florida State College at Jacksonville**, who is using Flat World's *Organizational Behavior* and *Personal Finance* textbooks primarily as a cost-cutting strategy for her students.

"Our students struggle, as all students do, and if the content is as good—which it is—and I can give them the option to get a free textbook, I feel that it's my obligation to do that," she says.

The same is true of Steve Barkan, a professor and chair of the department of sociology at the **University of Maine**. "A lot of my students are first-generation students, and many work 30 hours a week during the semester just to pay their tuition," notes Barkan, whose book, *Sociology: Understanding and Changing the Social World*, was published by Flat World in September. "Textbooks are expensive: \$100 to \$150 in many cases. When I heard about Flat World's 'freemium' model, I thought, 'What could be better for a student than being able to read a textbook for free online?'"

the meantime, students will be using both digital and paper textbooks.

"A model like Flat World's makes the most sense right now for students, both from a price standpoint and a flexibility standpoint," he says. "Students can get the textbook for free online and read it anywhere in the world. But if they want a print copy, which lots of students still do, they can get a black-and-white version for about a hundred dollars less than equivalent textbooks in my field."

Inkling's MacInnis, on the other hand, feels that students are simply not thrilled by the idea of flat e-textbooks, not matter how customizable or cheap—and the anemic sales record of e-textbooks compared with that of e-books is proof enough. He insists that students and professors will embrace e-textbooks fully only when the publishers let go of the "book" and exploit the technology offered by a new generation of devices and software.

"Once we put something better in front of them that could never have been a book," he says, "when they get used to being able to listen to the opera while watching the Italian and English scroll by, when they get used to being able to quiz themselves on the spot and get real feedback from the device on how they're doing and have it feel like a lot of fun, then they'll wonder how they ever used a book in the first place." **CT**

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Resources

Amazon Kindle: amazon.com

Apple iPad: apple.com/ipad

Barnes & Noble Nook:
barnesandnoble.com/nook

CourseSmart: coursesmart.com

Creative Commons: creativecommons.org

Flat World Knowledge:
flatworldknowledge.com

Inkling: inkling.com

Simba Information: simbainformation.com

Sony Reader: sonystyle.com