Apple held an event at the Guggenheim Museum in New York today. The company’s number one initiative: “Reinventing the textbook,” said SVP of Worldwide Marketing, Phil Schiller.

Apple announced iBooks 2, a free app for the iPad and iPhone that will replace the first version, which was announced alongside the original iPad in early 2010. The newest version of iBooks features iPad-specific textbooks from publishers McGraw-Hill and Pearson; titles from Houghton Mifflin Harcourt “are coming soon,” says Apple.

(MORE: Liveblog: Apple’s Education Event)

The textbooks sport interactive features such as diagrams, photos and video clips, along with 3D objects that can be rotated. Apple’s Roger Rosner, VP of Productivity Software showed off a science textbook that contained an introductory video and three-dimensional, animated models of a cell that he could zoom in to for a closer look at the cell’s structure, for instance.

Words in these new textbooks can be highlighted and have their definitions looked up with a quick swipe or tap of a finger, and all of a book’s text is easily searchable: “This is so much better than a paper index could ever hope to be,” said Rosner. Textbooks can feature interactive review questions and turn any notes and highlights you make into digital index cards, too.
Textbooks downloaded from the new iBooks 2 app can be re-downloaded at any time; “You own the book forever,” said Rosner. It’ll be interesting to see how schools that would otherwise purchase books for their students handle that, as they’ll seemingly need to re-purchase copies of books for new students instead of re-using old books. They could always re-use iPads, of course.

Apple also rolled out a Mac application called iBooks Author, which is similar in fit and finish to the company’s line of iWork programs and allows teachers to easily create their own interactive textbooks for use in class. Rosner demonstrated the program, dragging a video file onto a page and pulling in text from a word processing document.

The program features a library of pre-built interactive widgets, and you can drag in your own 3D models, Keynote presentations, pictures and other assorted media, all of which gets automatically formatted before being assembled and transferred to an iPad.

The iBooks Author app is free, and can be downloaded from the Mac App Store. Textbooks are available for $15 or less from the iBookstore; the selection is currently limited to high school textbooks but that’ll expand in the future. As mentioned, McGraw-Hill and Pearson already have titles ready to go, and Houghton Mifflin Harcourt will be available soon – Schiller remarked that these three companies are responsible for 90% of textbooks, so Apple’s already got a sizeable chunk of the market working for it.
Apple’s Eddy Cue, SVP of Internet Software and Services, also unveiled an update to iTunes U, which lets educational institutions put class materials and lectures online. The new updates let teachers post notes to students and hand out assignments, which students can mark as complete when they’re done. It’ll allow for the downloading of videos, audio files and even course-specific apps and serves as a place for students to corral all their class notes as well.

The new iTunes U is available today in 123 countries; the app is free.

More: iBooks Textbooks for iPad [Apple.com]