

Issue Brief

Evolving Interactivity in eTextbooks Supports Student Engagement in K-12

Today's eTextbooks enable flexible, personalized and engaging teaching and learning.

Today's eTextbooks: The Challenge and Opportunity

When it comes to textbooks, K-12 districts and their teachers are now addressing two distinct challenges and one notable opportunity. The challenges come from state-level mandates and Common Core State Standards for digital learning, and from tight budgets that are lengthening the cycle for textbook replacement.

The eTextbook opportunity enables a more flexible, individualized and interactive classroom experience, one that engages students and motivates their interest in learning. Taken together, these factors are prompting many K-12 districts to increase their adoption of eTextbooks.

eTextbooks and Tablets: A Match Made for Learning

eTextbooks are available in multiple forms for multiple devices, from a laptop to a tablet to a smartphone, with tablets clearly becoming the device of choice. "Digital textbook and tablet technologies allow in-the-moment learning, where students can explore ideas or answer questions as they come up in classroom discussions," says Theresa Jay, director of technology at Thayer Academy in Massachusetts.¹

By leveraging the capabilities of tablet, video and imagery, as well as interactive technologies, today's eTextbooks go far beyond the simple online text files or PDFs of the past. They are now gateways to a wealth of learning resources such as inline audio and video content, 3-D animations, learning games, assessments and flashcards.

Yet eTextbooks aren't just about in-the-moment learning. They often include tools for online note taking or idea journaling that can be reviewed later or shared student to student for study purposes or student to teacher for reviewing the student's progress and understanding.

Within a lesson, teachers have the flexibility to incorporate a variety of digital content into individual, small group and whole-class learning activities. Teachers can also track student assessment results, progress and usage behavior via data-driven dashboards and other reporting tools from eTextbook publishers.

The student's device isn't a barrier to participation, as eTextbooks typically support access from a range of tablets, laptops, media players and e-readers. Multi-device compatibility is important for schools as they transition from desktop and laptop computers that are used only for selected learning activities to mobile devices that can be used throughout the day. In a 2013 Center for Digital Education (CDE) survey, K-12 educators reported that laptops (at 84 percent) are still the most common device used in their school or district, but tablet adoption (at 66 percent) is coming on strong.²

How eTextbooks Change Teaching and Learning

Bringing eTextbooks and mobile computing devices into the classroom supports new instruction models such as blended learning and flipped classrooms. Blended learning uses a mix of online and in-class learning activities to deliver lessons. In a flipped classroom, students review a recorded lecture or read material in advance, then participate in a topic-related discussion or learning activity during class time.

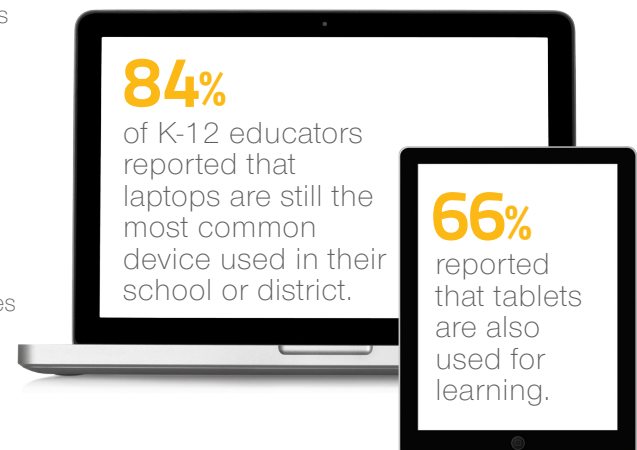
These new instructional models are taking hold in many K-12 districts: A CDE survey in 2012 found that 57 percent of respondents' districts have some number of fully online or blended courses.³

Yet using eTextbooks and tablets doesn't mean teachers need to make dramatic changes in their instruction. These new technologies also support incremental changes that benefit instruction in multiple ways.

Because teachers are no longer limited to just the content of a traditional textbook, they can apply more flexibility and creativity for classroom lesson plans and learning

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activities. Digital content and tablets also give teachers new tools for delivering tailored, self-paced learning to meet the needs of individual students. In the 2013 CDE survey, respondents indicated that personalized learning is the No. 1 goal for their digital content strategies.

At the same time, eTextbooks reduce the burden on teachers to find or create materials as a work-around for outdated print textbooks. CDE found that 43 percent of teachers spend one or more hours each week searching for digital content, building their own digital curriculum and performing related activities.

For the schools, digital content and tablets can help in meeting Common Core State Standards and state-level mandates. "The Common Core Standards will change what and how we teach, especially to meet the different skills and learning levels among students within the same class," says Peggy Villars Abadie, executive director for IT at the Orleans Parish School Board in New Orleans.⁴

How Do Students Respond?

Children and teenagers have seemingly had their hands on some type of computing device since they were very young. They are comfortable with online learning and now expect that more engaging and interactive experience in school.

Their teachers and administrators are getting the message. In the 2013 CDE survey, responding educators ranked the interactivity of eTextbooks and the instant information access they provide as their top features. This ranking reflects the appeal of these features to students.

Moving Forward with Interactive eTextbooks

Three essential activities help promote successful integration of eTextbooks in classroom learning: planning, teacher support and preparation for the future.

Plan for adoption. Coordination among the district curriculum staff, textbook selection committee and teacher representatives is vital to identifying appropriate eTextbooks and a suitable hosting platform. Coordinating eTextbook plans with the district technology plan is important to address issues of device availability and compatibility, network capacity for increased Internet access and media downloads, and integration with other learning applications and systems.

Offer teacher training and support. "Teacher support throughout the school year is key to success of any eLearning program," says Jay. However, a surprising 25 percent of respondents in the 2013 CDE survey indicated their district provided no training on how to use digital content.

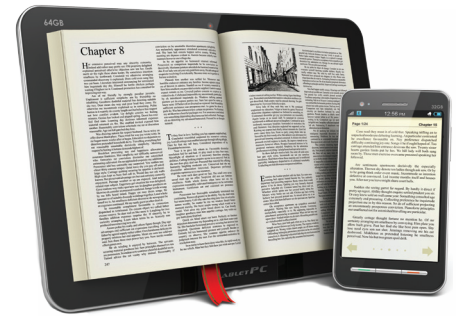
Districts that do offer training use a variety of tools and methods. Professional development workshops give teachers ideas for effective use of eTextbooks and digital technology. Training and assistance can also come from school-based mentors, vendor-provided training, and an online community where teachers can ask questions and find resources for their subject matter and teaching needs.

Prepare for the next wave of eTextbooks. Technology advancements will focus on delivering more flexibility for individual classes and students. Educational content will continue to evolve so that it is more customizable at the "learning object" level. Content interoperability with established learning management systems, student information systems and other platforms will allow better tracking of student progress and quick identification of learning gaps.

But one step is most important of all for any school or district that is beginning eTextbook adoption, says Karen Diggs, director of Technology for Northwest Hendricks School Corporation in Indiana. "Don't just do it. Take the time to formulate a plan and a vision, then make sure that what you're doing will bring that vision to reality."⁵

Endnotes

1. All quotes from Theresa Jay from CDE interview conducted on March 20, 2013.
2. CDE survey conducted April 2013.
3. CDE Digital Content and Curriculum Study, December 2012.
4. All quotes from Peggy Villars Abadie from CDE interview conducted on March 26, 2013.
5. All quotes from Karen Diggs from CDE interview conducted on March 19, 2013.



District Innovators in eTextbook Use

A private school, an urban district and a rural district illustrate the broad potential for adopting eTextbooks.

Thayer Academy Braintree, Massachusetts



Nearly 700 students
in grades 6-12



Independent college-
preparatory school
in suburban Boston

Orleans Parish School Board New Orleans, Louisiana



Mix of district-run and
charter schools,
grades K-12



Urban district

Northwest Hendricks School Corporation Lizton, Indiana



More than 1,800
students in four schools,
grades PreK-12



Rural district in
central Indiana



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