



Digital Textbooks and Digital Resources in North Carolina's Schools

Joint Legislative Oversight Education Committee
October 4, 2011

Why digital?

- We have entered the *digital information age*; digital books, newspapers, magazines, music and videos are distributed via the Internet for consumption on digital devices.
- In the Speak Up: 2009 survey, US students identified lack of digital content as a key factor keeping them from excelling.



Why digital?

- As our assessments shift from traditional to online, interactive formats, so should our instruction.
- For many of our learners, technology and digital resources and communication is a way of life everywhere but school.

What is a Digital Textbook?

- A digital textbook is an instructional or educational book in digital form.
- Static v. Dynamic content
- Many digital textbooks incorporate multimedia and simulations.



What are Digital Resources?

- Digital resources are instructional materials, generally accessible via the internet. Some examples include:
 - Media and Multimedia
 - Research materials
 - Educator tools
 - Learner tools

What are the Benefits of Digital Textbooks & Digital Resources for NC's Students and Teachers?

- The benefits for the NC K12 educational system can be categorized into three groups:
 - Quality
 - Access
 - Value

Benefits: Quality

- Multimedia and interactivity
- Up-to-date information
- Student annotations

Benefits: Access

- Customization
- Localization
- Adaptability for Special Needs
- Availability

Benefits: Value

- Potential Cost Savings
- Open Education Resources
- Increasing Competition
- Student Health Issues



How are the schools in NC using digital resources and digital textbooks?

- Many NC districts are using digital resources and digital textbooks.
- The majority of those using digital textbooks are using static resources provided by traditional textbook vendors.

How are the schools in NC using digital resources and digital textbooks?

- Statewide, Microsoft IT Academy
- NCVPS utilizes MANY online tools and digital resources
- IMPACT Model School
- Mooresville Graded School District Digital Reform
- Granville County Schools digital math materials
- CMS Digital Science Curriculum



How are the schools in NC using digital resources and digital textbooks?

- Apple iPads and Amazon Kindles (or other eBook readers) for eBooks as supplemental texts.
- The LEARN NC 8th Grade NC History eTextbook pilot, 2009-2010.

LEARN NC Digital Textbook

- In 2009-10, LEARN NC launched a pilot for its 8th Grade NC History digital textbook.
 - Twelve schools participated.
 - [The digital textbook](#) is a collection of primary sources, readings, and multimedia.



LEARN NC Digital Textbook

- Benefits of The LEARN NC model
 - High-quality, online, interactive, media-rich
 - Content is aligned to NC state standards
 - Modular content, easily reused in multiple textbooks
 - Expertise and experiences unique to NC
 - Open and free to NC schools



Digital Reform

- Favoring digitally-based instructional practices
- Pockets of excellence and good examples in NC's schools making the transition
- Race to the Top will help bring infrastructure needed to move forward with digital reform.
 - \$34.5M in NC Education Cloud infrastructure for LEA use
 - \$75M+ of RttT funds in LEA/charter Scopes of Work to increase wireless capacity and add additional teaching and learning devices
 - Additional \$20M+ from other fund sources



Why aren't ALL NC schools using digital textbooks and digital resources?

- An informal survey of LEA Technology Directors indicates some primary reasons:
 - Lack of sufficient student hardware
 - Lack of sufficient infrastructure
 - Administrators and Teachers have not changed from the traditional instructional model.



What are regional trends?

- Virginia's *Beyond Textbooks* initiative, 2010-2011
 - Includes iPads with online resources and digital textbooks in four high schools.
 - Content partners provided digital content at no cost to VDOE and participating school districts.

What are regional trends?

- Georgia is piloting a digital textbook initiative:
 - Goal = cost-effective and self-funded
 - Provide PD for teachers for improvement of instruction
 - Increase student technology literacy
 - Increase parent engagement at home



What are regional trends?

- South Carolina is moving to an eLearning model:
 - Access to relevant content anytime and anywhere.
 - The opportunity and skills to participate in a national and global community.
 - Partnership with SC Public TV and Discovery Education to provide economy-of-scale pricing



What are regional trends?

- New legislation in Florida (State Bill 2120) requires that by 2015-2016 all adopted K-12 educational resources be available in digital form and that LEAs use at least 50% of their state allocated instructional materials funding for digital resources.



How can North Carolina Move Forward with Digital Reform?

- Much can be done to spur digital innovation in our state's schools, both in the short term and long term.



How can North Carolina Move Forward with Digital Reform?

- Short Term Recommendations
 - Clarify textbook adoption statutes to increase LEA flexibility and remove audit exceptions by state auditors.
 - Modify School Improvement Plan statutes to provide increased flexibility and drive innovative practices
 - Provide sustained funding for statewide digital resources; economy of scale decreases costs



How can North Carolina Move Forward with Digital Reform?

- Long Term Recommendations
 - Commission a task force to study the current Textbook Commission statutes to determine effectiveness and whether there is ongoing need.
 - Commission a task force to study the feasibility of, and methods for, providing a digital learning device for all K12 learners and educators.

