

Replacing Textbooks with Tablet PCs

Problem: Mississippi K-12 students often have textbooks that average xx years old. Combined with the fact that most textbooks average 3 years out of date upon publishing, our students can only hope to learn facts and theories that are older than $xx+3$. This excludes such significant events as the mapping of the human genome, advances in biotechnology and medicine, military conflicts such as Operation Liberty Shield, and other advances in technology.

Environment: The State of Mississippi spends \$18 million annually to supplement local school districts' purchase of textbooks.

Local school districts spend approximately $\$xx$ million annually on textbooks for a total of $\$xx+18$ million.

Mississippi's K-12 population is approximately 500,000 students.

Solution: Replace paper textbooks with electronic tablet personal computers for every K-12 student in Mississippi.

From our partnership with America Online and the successful implementation of the Computers in the Classroom initiative, we are seeing a number of publishers move to providing e-textbooks.



The replacing of textbooks with Tablet PCs would first be done on a pilot basis and fully implemented in 3 years.

Vision: Students would be able to carry 1 tablet PC (approximately 4 lbs) versus 5-7 books for all their classes. Teachers can download homework and exams via a wired synchronization process or a wireless network. Teacher would be able to automatically grade and correct homework and exams by automating the exams and homework. Paperwork and coping expenses would be reduced as tests and homework became electronic. Students would be able to take the Tablet PCs home for educational work and to access the Internet, provided they dial-up access to an Internet Service Provider.

Bottom Line: Full Implementation = 500,000 students x \$2,000/tablet + \$2 million for training + \$5 million for infrastructure upgrades and software development + \$3 million for contingency (replacements) = \$20 million.

Continuing annual costs = \$1 million for training + \$5 million for infrastructure and contingencies = \$6 million. Upon completion of full implementation, the State of Mississippi would save \$12 million annually on textbooks (\$18M annual appropriation - \$6M technology continuation costs – \$5 million electronic rights and permissions for e-textbooks = 7 million); thereby, recovering the cost of implementation with 3-4 years.

***These are rough estimates only.

Tablet PC Resources:

Microsoft

<http://www.microsoft.com/windowsxp/tabletpc/default.asp>

<http://www.microsoft.com/windowsxp/tabletpc/evaluation/default.asp>

<http://www.microsoft.com/windowsxp/tabletpc/evaluation/toptenbenefits.asp>

Vendors

http://www.gateway.com/work/prod/sb_tabletpcb_ProdDetail.shtml

<http://www.electrovaya.com/>

Other Sites of Interest

<http://www.tabletpctalk.com/>

http://school.aol.com/site_info/educator_approved.adp

Action Plan:

- Obtain a Tablet PC for demonstration with sample textbooks loaded.
- Approach from the public-private partnership perspective and building on the “Computers in the Classroom” initiative
 - Including AOL, Barksdale, Pittman, Maddox, Public Education Forum
 - Howard, Gateway, other manufactures
 - Textbook Publishers
- Providing technology for children and parents
- Plan announce at the Superintendents’ or the Education Technology Conventions this summer with pilot projects in an elementary, middle, and high school for Fall of 2004.