

ORANGE COUNTY
BOARD OF EDUCATION

AGENDA ITEM ABSTRACT

Meeting Date: January 3, 2012

AGENDA ITEM No. 12-01-10

ACTION: (Y/N) N

SUBJECT: Technology Plan Update

INFO. CONTACT: Dr. Denise Morton/ Angie Veitch PHONE: (919) 245-4100

ATTACHMENTS: 1. 2011-2013 Technology Plan

PURPOSE: To provide the Board of Education information on the possible technology options to be included in the 2011-2013 two year technology plan. The Board will be asked to discuss and provide direction concerning instructional technology in Orange County Schools.

BACKGROUND: This technology report provides an overview of the strategic priorities that need to be addressed in a two-year technology plan that is due to the Department of Public Instruction in April. Items to be considered for inclusion in the plan are:

- Blended learning
- E-textbooks for instructional delivery of the Common Core and Essential Standards
- Online resources
- Student one-to-one laptop initiative
- State Accountability on-line testing
- Parent Assistant Module (a component of NCWISE)

The presentation will also include information related to a recent visit to a school district that is using "one to one" computers with students grades 4-12. A video of a one-to-one computer initiative that is currently in place in an Orange High School English class will also be shown.

A district technology committee will meet from January through March to craft the final plan to be submitted to the Board of Education in late March for their review and approval.

FINANCIAL IMPACT: To be determined

RECOMMENDATION: The Superintendent recommends that the Board of Education receive and discuss information concerning the new instructional technology plan and give direction to staff for future planning.

DRAFT WORKING DOCUMENT
2011-2013 ORANGE COUNTY SCHOOLS TECHNOLOGY PLAN

STATE TECHNOLOGY PLAN

The NC State Board of Education adopted a two-year technology plan in November that consisted of five main strategic priorities:

1. A Statewide Shared Services Model
2. Universal Access to Personal Teaching and Learning Devices
3. Statewide Access to Digital Teaching and Learning Resources, Including Digital Textbooks
4. A Statewide Model of Technology-Enabled Professional Development
5. 21st Century Leadership for All Schools and Districts

In April 2012, Orange County Schools (OCS) will submit a local two year Technology Plan to the North Carolina Department of Public Instruction that addresses how the district will address the 5 strategic priorities listed above.

LOCAL TECHNOLOGY PLAN

In preparing the OCS technology plan, decisions will need to be made to provide direction on future technology initiatives for students and staff. Listed below are some options that should be considered.

1. Current Initiatives

OCS would continue some of the successful elements which are part of the current technology plan. The main components are:

- Updating infrastructure and network software
- Refreshing teacher computers
- Refreshing student computers—laptops and desktops
- Purchasing new and refreshing older digital devices used for instruction (ipods, document cameras, gps devices, etc.)
- Providing professional development opportunities for all staff

2. Future Initiatives

- **Blended learning**
In this teaching environment, teachers develop online course content but deliver it in and out of the classroom.
- **E-textbooks for instructional delivery of the Common Core and Essential Standards**
An electronic book (variously, e-book, ebook, digital book) is a book-length publication in digital form, consisting of text, images, or both, and produced on, published through, and readable on computers or other electronic devices. Sometimes the equivalent of a conventional printed book, e-books can also be born digital. The *Oxford Dictionary of English* defines the e-book as “an electronic version of a printed book,” but e-books can and

do exist without any printed equivalent. E-books are usually read on dedicated e-book readers; personal computers and mobile phones can also be used to read e-books.

- **Access to Online resources**
Educational applications, sites and software that can be used to increase student achievement.
- **State Accountability on-line testing**
NCDPI has communicated to school districts that in 2013-2014, all state assessments will be administered online. The district needs to be prepared with appropriate bandwidth and hardware capabilities to administer all assessments online.
- **Parent Assistant Module**
The Parent Assistant module in NCWISE is designed for parents/guardians or students to access student information via the Internet from any location. This module is currently being used in a number of North Carolina school districts.

Beginning 2012, Orange County Schools will launch the Parent Assistant Module for parents/students at Orange High School as a pilot site for the district.

Each parent or guardian will be provided with a username and password and will have access to student records 24 hours a day.

Later in the year, all other Orange County Schools will be enabled for limited Parent Access that will allow them access to student demographics, emergency contacts, attendance information and schedules (middle and high school only). The grade book part of the module will not be enabled at that time. Full implementation for the remaining schools will be fall 2012.

- **Student one-to-one laptop initiative**

OCS would provide all teachers and students in grades 4-12 with a laptop to establish a one-to-one learning environment.

The components of a successful 1:1 learning initiative are: (excerpt from "The Friday Institute for Educational Innovation")

- A well-articulated vision and a strategic plan for implementing the approach;
- Engagement and support from all constituents of the school community, local government, the business community, and parents;
- Collaborative school and district leadership teams comprised of instructional, curriculum, technology, and administrative leaders who are committed to the approach;
- Professional development and ongoing support for teachers as they reshape and update teaching practices to take full advantage of the available technology, as well as

for administrators as they update school management practices and support the teachers;

- School-based staff, such as instructional technology facilitators and media specialists, who provide instructional support for the use of technology to enhance learning;
- A portable, wireless computer device for each student, teacher, and administrator;
- Additional technology to support teaching and learning in each classroom, such as a scanner, projector, digital white board, document camera, and digital camera;
- High bandwidth connectivity to the school and sufficient wireless connectivity throughout the school;
- Digital education resources for teachers and students, including tools and resources that support productivity (e.g., word processing), web 2.0-based activities (e.g., blogs and wikis), e-learning (e.g., learning management and conferencing systems), curriculum planning, classroom management, student assessment, and teaching and learning in specific content areas;
- School-based technical staff who ensure that the technology is maintained, kept up-to-date and repaired as needed;
- Strategies for ensuring student safety and appropriate use of computers in accord with the Children’s Internet Protection Act (CIPA) and local policies, while still enabling teachers and students access to a wide range of information and communication resources;
- Sustainable funding to support the total cost of ownership (TCO) of the technology resources and the costs of ongoing professional development.

Cost Information on providing laptops to teachers and students Grades 4-12

STUDENTS:	Number of Students/staff	Per Device *	Total Cost
Grade 4-5	1126	\$500	\$563,000
Grade 6-8	1697	\$500	\$848,500
Grades 9-12	2285	\$500	\$1,142,500
Total Students	5108	\$500	\$2,554,000
STAFF			
K-12 Certified Staff	650	\$600	\$390,000
Total amount for students and staff	5758		\$2,944,000

*These device prices are prior to negotiations.
Leasing costs are being explored for informational purposes.