

ORANGE COUNTY  
BOARD OF EDUCATION

AGENDA ITEM ABSTRACT

Meeting Date: November 26, 2012

AGENDA ITEM No. 12-11-(2)-12

ACTION ITEM: (Y/N) N

SUBJECT: Technology Update (Quarterly)

INFO. CONTACT: Angie Veitch PHONE: 919-245-4100

ATTACHMENTS:

- Technology Update Report

---

**PURPOSE:** The purpose of this agenda item is to provide the Board of Education with a status report on the 1:1 program, technology upgrades and professional development in the district.

**BACKGROUND:** In May 2012, the Board of Education purchased laptops for all teachers and 6-12 students. Laptops were distributed to teachers in June and July; students received their laptops during the first month of school. Laptop cases were purchased for teachers and backpacks and sleeves were ordered and distributed to all students to help maintain laptop safety.

Laptop carts from the secondary schools have been moved to elementary 3rd grade classrooms. The laptops for these carts were reimaged and sent to the elementary schools as they were completed.

The wireless network was upgraded at secondary schools and the bandwidth for Cedar Ridge was raised to 1 gigabyte, the same as Orange High School. District bandwidth increased from 100 megabytes to 250 megabytes.

Help Desk Assistants hired for the middle and high schools have been responding to teacher and student technology needs. Students have been assigned to assist at the high school help desk. Weekend help desk support has been established.

Professional development sessions are being provided for teachers on various digital resources.

A more detailed update in several additional areas is attached.

**FINANCIAL IMPACT:** While this report reflects no request for additional funding, the cost of the laptops for teachers and students can be found at [http://www.orange.k12.nc.us/1to1/financial\\_info.pdf](http://www.orange.k12.nc.us/1to1/financial_info.pdf) page 165-B.

**RECOMMENDATION:** The Superintendent recommends the Board of Education receive and discuss this report and provide direction to staff as needed.

## **TECHNOLOGY UPDATE**

The technology update will cover several areas: network, professional development, device repair information, Smart Board information, updating equipment, technology support, communication, community partners and the evaluation of the program.

### **NETWORK:**

Within four days of laptops being rolled out at the secondary schools, the Department of Public Instruction (DPI) notified Orange County Schools (OCS) that they would be upgrading the bandwidth from 100 megabytes to 250 megabytes. This upgrade is recommended when a school system reaches 60% of bandwidth capacity on a continuous basis. This process includes a firewall upgrade. The Cisco ASA firewall was updated on Friday, October 5th.

The bandwidth upgrade was completed October 12th through the collaboration of the North Carolina Information Technology Services (ITS), the North Carolina Research and Education Network (NCRen) and D.P.I.

A new spam filtering system called Zscaler has been installed. The old filtering system (called M86) did not have a client to put on laptops to filter them from home. Also the district was paying for the M86 filtering system.

All three of these services and upgrades are provided through NCRen at no cost to the district.

### **PROFESSIONAL DEVELOPMENT:**

Since the teacher workdays at the beginning of the school year, the two early release days and one teacher work day have been used for teacher workshops on digital resources and the common core and essential standards curriculum. The professional development plan is to continue these workshops and trainings on teacher workdays, free periods, after school and early release days throughout the year. Specific training includes using student management systems of Edmodo and Moodle as well as Techbook and Study Island. We will maintain an ongoing focus on robust staff development in utilizing instructional technology.

### **DEVICE REPAIR INFORMATION:**

The Computer Repair Center and Dispatch Services at the University of North Carolina, Chapel Hill is completing the warranty work for the Lenovo faculty and student laptops. The Repair Center has agreed to track repair data and to send the district monthly reports on the quantity and types of repairs. To date, the district has about 2% of our laptops in repairs; the repair on new devices is usually between 5-10% so this is seen as a good indicator of how students are caring for their laptops.

Most of the repairs have been keys pulled off keyboards; 3 or under keys off a keyboard are covered under warranty. The major repairs are: 32 laptop screens have broken, 12

hard drives have been replaced, 2 motherboards have been replaced and 3 battery connections have been repaired.

#### **SMART BOARD INFORMATION:**

The majority of the Smart Boards were installed in the district in 2008; these went out of warranty last summer. All schools are reporting that some of their Smart projectors are having issues. The district has requested that Smart extend the warranty on their projectors due to there being a known issue with their projectors. Smarter Systems (the company from whom the Smart Boards were purchased) has escalated this issue to "a very high level" in the Smart Company.

#### **UPDATING EQUIPMENT:**

Through a donation from the American Institute of Certified Public Accountants, the district received 48 Dell D630 laptops and 31 Dell desktops. Orange County Schools currently is using both the laptop and desktop models throughout the district. Technicians from the district put a clean image on these devices and have distributed the laptops to Cameron Park Elementary and the desktops to Grady A. Brown Elementary to replace older, slower computers. The district is continuing to replace the old cathode ray tube (CRT) monitors with liquid crystal display (LCD) flat screen monitors. All CRT's at New Hope and Grady Brown Elementary were replaced with LCD's. Synergy Recycling Company received in a shipment of the LCD's and sold them to the district for \$20 each.

#### **TECHNICAL SUPPORT:**

Help Desk Assistants had two days of training during the teacher workdays at the beginning of the school year. They meet the first Thursday of each month and/or whenever there is training needed.

Help Desk Assistants are logging all repairs into a "Ticket System" so the district can review the type and numbers of repairs being performed. The district is reviewing the data and looking for patterns of multiple repairs of the same type and/or a pattern of equipment failure.

A Help Desk manual has been developed and additions to it are made as needed.

The weekend Help Desk started on October 13th and 14th. Hours for the weekend help desk are Saturdays 2-6 pm and Sundays 3-7 pm. The telephone number for weekend Help Desk assistance is 919-732-8048.

Technology Associate Principals (Tech AP's) have been named at each school. Tech AP meetings have been held to discuss issues in their buildings concerning the laptop roll out, service, support, and student needs. A procedure for handling the non-warranty repairs has been created. The Tech AP's suggested that the district set up "on line" payments for parents to use to pay for non-warranty laptop issues and this has been completed.

**COMMUNICATION:**

The district has been communicating to parents/guardians/the community through Alert Now messages, web pages and flyers for students to take home.

Community parent nights have been scheduled as follows:

September 26 and 27	Discovery Education Community Nights
October 23	Internet Safety Night-Lieutenant Troy Comar and Ryan Miller
November 29	Laptop 101--sponsored by Lenovo

Other parent nights will be offered in February and March. In May, there will be grades 4 and 5 parent nights to discuss the elementary 1:1 program.

Superintendent Rhodes, Dr. Morton, Michael Gilbert and Angie Veitch presented at the North Carolina School Board Association conference two sessions covering the "Top Ten Strategies for a Successful Digital Conversion." (Board members have received a copy of the materials distributed to attendees.) A video interviewing the Board Chair, Vice-Chair and staff members about Orange County Schools' vision and how laptops were being used with instruction was shown.

([http://www.orange.k12.nc.us/1to1/1\\_to\\_1.html](http://www.orange.k12.nc.us/1to1/1_to_1.html))

**COMMUNITY PARTNERS:**

OCS has developed partnerships with Orange County Libraries, Lenovo, Discovery Education, and Smarter Systems. These partnerships range anywhere from staff training, to community nights, to special pricing for services.

Another community partnership is the Superintendent's Technology Advisory Committee made up of local technology leaders. The Advisory met again on October 30 and reviewed the upgrades made to the network and the laptop rollout. Several programs were discussed that would enhance the security of the network.

**EVALUATION:**

"Formulating a Theory of Change for a Successful Digital Conversion" is the title of the research Duke is completing on the digital conversion program in OCS. The research delves into how the change in pedagogy is being implemented and the effectiveness of the digital conversion.

Lenovo scheduled a meeting with an outside organization (Text 100) and OCS to discuss an outside evaluation of the effectiveness of the digital conversion program in OCS.