Regular Board Meeting – January 19, 2010

SUBJECT**:** **TECHNOLOGY UPDATE**

Overview

Over the past eighteen months, a concerted effort has been made in the district to infuse both the instructional program and general operations with updated technology resources. The use of federal funding provided through Title I and the American Recovery and Reinvestment (ARRA) has supported a rapid increase in hardware purchases and specialized software across the district. Technology usage to support instruction as well as to enhance communication within the District 68 school community is a 2006 Strategic Plan initiative.

Hardware Updates

Whiteboards and Peripherals

During the 2008-2009 school year, thirty-seven interactive whiteboards were installed across the district during the first phase of a multi-year plan to have all classrooms equipped with this technology. In most cases, the installation also included LCD projectors, document cameras, hand held student response systems which allow for instant polling and assessment, and interactive teacher slates which allow the teacher to manipulate the lesson from anywhere in the room. During the current school year, another forty-two interactive whiteboards and corresponding peripherals will be purchased and installed.

Training in the use of the whiteboards and peripherals was provided to recipients throughout this past spring and again this fall. A workshop was also provided in November to prospective users in order to expedite the use of this technology once this year's equipment purchases are installed. Ongoing training provided by our vendor and current users will be scheduled in both after school sessions and Institute Day programs.

As of the end of this school year we will have approximately forty-seven remaining classrooms to be equipped with whiteboard technology. A two-year phase-in program for purchasing and installation is anticipated.

Student Use Classroom Computers

Currently, teacher and lab computers are updated on a five to six year replacement cycle. Our practice has been to repurpose the replaced computers as unsupported student use workstations in classrooms. Due to the expansion and increasing sophistication of instructional software used by students in the classroom, particularly in our ELL and special education programs, more robust student-use computers are needed to support these students while they participate in the general education classroom. During the current school year, we plan to purchase thirty

new computers to be placed as student-use computers in classrooms with ELL students by using Title I funds for Highland and Stenson and district funds for Devonshire.

The long-range plan for expansion is to have at least one new, fully supported student-use computer in each elementary classroom. A multi-year purchase schedule is under development for classroom student-use computers with first priority to classrooms with Level I ELL students.

Supplementary Hardware

During the 2008-2009 school year, each K-5 school received six digital cameras (one per grade level) and three video cameras. The junior high received an additional digital camera and two video cameras. The science department at the junior high implemented a probeware software program designed to provide students an authentic science experience which included 14 tablet computers and a number of other peripherals. The band classroom at the junior high was equipped with studio recording equipment and music learning software. Our P.E. Department received heart rate monitors and Wii fitness equipment. Several laptops, webcams, and microphones were also purchased to support classroom technology use. A new set of 32 laptop computers was also purchased to support student instruction at the junior high.

Software Updates

ELL Instruction - *Imagine Learning* Software

Imagine Learning software is a researched-based compilation of programs designed to support language acquisition of ELL students. The programs include academic vocabulary development, voice-supported listening and speaking activities, and school readiness concepts.

Installation is planned for February, 2010 on 16 computers in each elementary school, including those classrooms with Level I ELL students using the new student-use computers (noted above). Forty installations are planned for the junior high, primarily in ELL classrooms and in lab settings. Purchase of additional licenses is planned in the future to allow for expanded use of the program in more classrooms. Training on the new program will begin by mid-February.

Reading Intervention (RtI) – *Q Reads* Software for Middle School

Q- Reads is a researched-based reading intervention program targeted for junior high students. The program builds reading proficiency by focusing on fluency, vocabulary development, and background knowledge. *Q- Reads* offers non-fiction, short texts that are read quickly and with meaning, and the student's oral reading is recorded through headsets. Success is rapid and motivating for students.

The program was installed over the summer in 2009 in the computer labs and on laptops at OOJH and is actively in use on a daily basis.

Special Education - *Solo 6* Software

Solo 6 is an assistive technology software package designed to support literacy programs. The software includes voice-assisted Co-Writer, Read Outloud, Write Outloud and Draft Builder programs. While the programs are specifically focused to address special education students, the voice-assisted technology has universal appeal through its talking word processor, word prediction, and graphic organizer prompts. Installation is anticipated later this winter on unlimited classroom computers and in the computer labs.

The license includes the ability for students to use this software at home once it is downloaded on the home computer. Once students have been instructed and are comfortable using the software in school, information will be shared with parents so students may access the program at home. It is anticipated that it will be used by both special education and regular education students who may need support in one or more of the program areas.

Library Media Center Services - *Follett Destiny* Software

After our LMC Directors researched various upgrades to our current system, we selected *Follett Destiny* software, which combines library circulation, cataloging, searching, reporting, and general library management in one central software system. *Follett Destiny* will provide our LMC programs with the ability to efficiently align book titles to students' reading levels and to build a collection aligned with both state and national standards.

Additionally, the Library Media Center directors updated the informational literacy curriculum in the spring of 2009. Student applications for PhotoStory 3 and digital camera/video use have been added to the library media curriculum. Curriculum development will continue into the 2010-2011 school year on Web 2.0 tools for student use, digital citizenship, and research and information fluency.

Finally, wireless access was installed last spring in each LMC.

Web Page Infrastructure - *Dream Weaver CS4* Software

In order to streamline the development and maintenance of district websites and to provide all faculty with an efficient system they can use to independently update their classroom/program web pages, an updated web page infrastructure is needed. Our goal is to further simplify navigation, refresh the overall appearance of our websites, and implement active web pages for all faculty by the start of the 2010-2011 school year.

Our district web masters have selected the Dream Weaver CS4 software system, which provides them with the tools they need to achieve our goals. We are currently researching cost-effective options for site licensing. Additionally, we will be uploading a free PDF creator program on each workstation to ensure that any attachments from a web page can be opened at home by our parents and students.

General Operations

Wireless access points have been installed at Devonshire to allow laptops to connect to the network throughout the building. Similar installations will take place at Highland and Jane Stenson this winter after testing for overall coverage at Devonshire is complete. The structure of the junior high presents a greater challenge to providing wireless access throughout the building. Additional study is planned to allow for implementation of wireless access to the network next year.

Networked copiers were installed at the junior high and ESC last spring and at the elementary schools last month to improve printing and copying efficiency. This equipment includes features such as scanning to email and booklet making to increase productivity.

A major upgrade of the telephone and voice mail software was completed this fall. Implementation of a system to automatically archive all e-mail, as required by law, will be completed this winter as will the upgrade of the district e-mail system (Groupwise) to the newest version. The transition to the Windows 7 operating system is planned as a multi-year project as new computers are purchased. Planning is underway for upgrading district computers to the newer version of Microsoft Office (we are currently still using Office 2003), however, licensing costs will likely result in this being a multi-year process as well.

Conclusion

Seamless integration of technology with instruction, efficient communication within the district, and effective information management are the goals of our technology program. The increase in technology expenditures over the past eighteen months has encouraged an exciting momentum of new ideas.