

## **The Media Center: Solving the technology funding challenge; making a fresh start**

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### ***How did things get so bad?***

Like that of many others, the condition of the technology in our district has declined to the point of continuing frustration. Our recent reality has been a district-wide hodge-podge of hardware, software and operating systems ranging from Mac OS 8.6 to Windows XP. We were at best standing still. Decentralized decision-making and purchasing, resistance to change, limited funding at the federal, state and local level, and two failed technology referendums contributed to the increasing obsolescence of district technology. There were pockets of improvement. We funded two secondary labs with Microsoft\* settlement money; creative teachers received grants to use technology innovatively; special education funds helped purchase PCS largely for teacher use. Elementary schools benefited from the generosity of parent and community groups. Funding limitations and inequities had created in-district haves and have-nots.

For the most part we were limping along with limited enthusiasm for implementing new ideas in the curriculum. There was an increasing negative attitude towards technology; some teachers were reluctant to use it for low-tech PowerPoint projects. The reality of our situation became especially apparent to media specialists when elementary students could not use an online children's encyclopedia or high school teachers could not update classroom web sites without browser failure. Media staff were spending an increasing amount of time on tech support instead of helping students and teachers be effective users of information and technology. The need for change was obvious. Even this long-time Mac user and champion knew we had to do something. I hope that by sharing our district's story media and technology specialists in a similar situation will become a little less discouraged.

### ***Change happens slowly***

In 2005 our technology committee began investigating thin-client solutions for older Macintosh computers and Windows computers. Some solutions seemed possible, but without additional funding we couldn't move forward. Our Information Systems director noted that, "one of the biggest challenges we faced was how to meet the requirements of the State Department of Education as they move towards" mandated online testing. The testing requirements necessitated borrowing computers from an educational co-op. While still largely a Mac-district, the technology committee continued to look at options and recommended a change to Windows and complete standardization as funding became affordable

A proposal developed in spring 2007 specified the purchase new desktop computers for our district's 300 teachers over a three-year period. Student labs and peripherals would also be updated. The plan was still unaffordable and would not bring district-wide improvements and consistencies until year three.

Real progress became possible in the fall of 2007. A partnership with a Winona State University and a leasing company is core to acquiring new computers for all staff. Purchasing a new desktop computer for all staff in year one of a computer replacement plan was not affordable; leasing a two-year old laptop for each teacher is

A portion of the district's staff development money would be used to fund the laptops, an option approved in a recent contract settlement. Labs would be updated with a variety of funding sources including Microsoft settlement money, district funds, and new state technology funding. Title funds and media budgets would also be used to help with software purchases and peripherals,

### ***Piloting student labs***

Thin-client computing from N'computing was selected for student lab. An N'computing system includes a host computer that supports 4 keyboards, mice, speakers and monitors. (The host PC can support up to 7 users.) Each user runs their own applications—and has their own files, settings and preferences. The systems were selected for ease in installation, compatibility and functionality with core software, multimedia capabilities and affordability. With a cost of \$450/seat or 40% less than a traditional desktop computer it is possible for our labs to be standardized district-wide. If computers are replaced in a few years only the host machines will have to be replaced. Energy and wiring savings result needing for fewer electrical connections. An elementary school currently utilizing PCS in classrooms and the high school English department' word processing lab, and the high school career center were selected to pilot the thin-clients. The pilot projects ran November - May. The high school transition was seamless; students appreciated writing in a lab that functioned properly. Macintosh-based software was no longer available to elementary student using the thin-client but students adapted well by using web-based applications to replace older software. Media staff and information staff found workable solutions for problems with sound, headphones and speakers.

Last spring we became the first Minnesota district to use the N'computing labs for statewide testing. According to a high school administrator, "Students and staff felt good about the process; the online test didn't cause anyone to become overwhelmed or frustrated with computers did not perform adequately." As a result of the pilot projects thin-client labs are now available in six elementary school media centers and three secondary buildings. The secondary schools also have traditional desktop computer labs.

A part of the pilot process that did not go as well as hoped software selection. We were disappointed to learn that some of the long-familiar elementary titles did not work even when installed on district servers. While disappointing, the unavailability of older software may lead to positive change as we move away from older computer use models, educational games of little value, and problem-prone CD-ROMS. We are moving towards making better use of web-based applications and databases, and 21<sup>st</sup> productivity tools. Simultaneously, we will be forced to make better use of materials that web based materials that correlate with textbook. We are also in a better position to implement newer information and technology literacy standards without the availability (and easy dependence) on games or drill-and practice. We also identified free downloadable applications and productivity tools that will work. Applications that are graphic intensive or require accessing components on a CD-ROM will not work with these labs. These applications, many of them specialized productivity tools such as those *PhotoShop* or *CAD* tools are installed in the desktop labs.

### ***Teacher laptops***

Each received a Gateway M285 Tablet PC, mouse; 2BG flash drive, new Ethernet cord, (We aren't fully wireless yet!) and carrying case. According to our Information systems director, an attractive part of the partnership agreement is the availability of repair at the University, an authorized Gateway repair center. The leasing company also provides a few spare computers and basic supplies (such as batteries and mice) to the district so some problems can be handled immediately without even having to make the one- mile drive to the University. The University also provided training handouts. In the summer 2009 the laptops will be traded in for a newer model.

All district Media Specialists were involved in developing lab install lists and software application needs for staff computers, a process that meant identifying which teachers would need content specific tools and identifying shareware that would be beneficial to everyone.

### ***Ready-Set-Change***

The transition for teachers began in April when plans to remove teacher computers at the end of the school year were announced. Media staff worked with teachers who needed assistance in cleaning out old files and making sure all files were properly stored in district servers, a procedure not everyone was comfortable with. By mid-summer all computer lab computers and classroom computers had been removed for recycling. A "train-the trainer" model was developed. Media specialists identified teachers in each building to lead the August training required for all licensed staff and to work with media staff to assist teachers throughout the school year. (Figure 1)

The required August staff development sessions were challenging and energizing. Teacher tech coaches and media staff attended four-hour train-the-trainer sessions to prepare them for the 90-minute teacher sessions. These sessions were a test run, a chance to iron out glitches.

Twelve sessions were provided for 300 licensed staff that registered for a session appropriate to their grade level. Sessions were led by the teacher tech-coaches; media staff assisted and Information systems staff were on-hand to provide back up assistance or solve login issues. Class size ranged from 8-20 with 3-5 trainers for each section. The format was teacher-friendly, non-threatening, and effective. For some, the learning curve was steep; for others the classes were a formality. But every teacher received the same information and left with the same model computer. Attendees signed a usage agreement and received a stipend provided by a district-wide staff development grant. Tech coaches will receive a stipend for their ongoing support.

The time for our enormous transition is right. The planning and process were hard work. There were frustrations and setbacks, but careful planning, collaboration and patience have paid off. Our district's Information Systems director and other IS staff especially deserve credit for their careful planning and hard work. We've learned from our past mistakes. We're moving forward. More exciting and long overdue changes are already in process. As a staff member wrote in a survey, "upgrading technology will allow teaches to add depth and interest to our curriculum. Our students will have more opportunities for a multidimensional, "brains-on" learning experience." We're ready for a fresh start.



### Ready- Set- Change: Train-the-Trainer

#### Job Criteria:

- Tech coach must be a current WAPS employee.
- Tech coach must be proficient in the use of a windows based computer.
- Tech coach must be willing to attend on-going training sessions in the use of a PC.
- Tech coach must be willing to train other staff in the use of a PC.
- Tech coach must be willing to offer on-going tech coaching during the 2008-2009 school year.

Using a Train the Trainer model, a group of tech coaches will provide training to WAPS teachers when they receive laptops in August. They will continue to provide building-level assistance throughout the school year.

#### Job Description:

- Attend 4 hours of training Tuesday, August 5-Elementary or August 6-Secondary, 2008 from 8:30 a.m.-noon..
- Provide training to WAPS teachers August 14-15, 18-19, 2008.  
Tech coaches will be expected to provide training for cohorts in their grade groupings.
- Provide assistance to building staff throughout the year. This may be individual assistance or small group assistance.
- Maintain a list of questions and problems that can be addressed in future training sessions
- Provide technology training as designed by the district staff development committee, IS staff, and Media Specialists

**Figure 1 Tech Coach Job Description**

#### References

*The Winona Post*, June 25, 2008, Page 6AA

N'Computing Corporation, <http://www.ncomputing.com/>

“Microsoft Settlement Funds – particularly sweet in a time of tight tech budgets” (The settlements result from class action lawsuits brought by consumers against Microsoft Corporation alleging abuse of power to inflate prices.)

<http://www.qeddata.com/MarketKno/FundInfo/MicrosoftSettlement.pdf>

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