

Maine School Administrative District #75 Total Cost of Ownership

The technology department continues to work on determining the total cost of ownership (TCO) for technology in the District. While this is a lengthy process, we have found several critical needs that can be identified together as setting standards in technology. The technology department recommends we begin by recognizing the need for setting district wide standards and making a commitment to standardize wherever possible. Additional areas that can benefit from standards include centralized purchasing, operational procedures, staffing, hardware, and software. The benefits of standardization realized by the technology department are significant. A strong implementation of standards has provided ability to pilot new and creative technologies that are outside those that were previously available. These pilots have helped drive modifications to the standard and develop new standards. The practice will serve the district well into the future. By standardizing on as few solutions as possible, we can better focus on educational objectives rather than on technology.

Costs associated with implementation and use must include teacher and student time. Time is the scarcest resource in this model and must be included in the analysis.

Standardization sets the foundation of technology the district identifies as important to maintain. This standard must be clearly articulated and accounted for financially to ensure we are able to deliver the technology. Analyzing the total cost of ownership for existing technology will identify the actual costs the district needs to maintain the current technology. We expect that this will be much higher than what the current budget allows for. By identifying the technology that is important to the district we can develop standards and work towards reducing the TCO. It is our goal to manage the increases in costs associated with technology through standardization.

Standardization of desktop productivity packages, Internet browsers, student information systems, and email packages is the beginning of identifying software that is important to the district. This is critical as multiple versions of word processors and Internet browsers cause a wide variety of file format issues and web site connectivity problems. These issues can lead to frustration and greatly hinder communication. As the district explores new software titles for integration with the curriculum, collaboration between schools to establish standards will serve the varied groups of end users across the district, such as; administration, elementary, middle school, and high school students and teachers. Focus groups that include curriculum and technology leaders can assist in developing these additional standards; ensuring the applications are aligned with educational objectives and will function within the existing technology environment.

Platform and hardware standards are increasingly important for conserving resources as our equipment ages and the district selects software packages. Currently, our platform and hardware purchases have been standardized with Dell or Apple, depending on system requirements, with Windows XP Professional or OS X installed as the operating system respectively. Our target goal is two server platforms and one desktop platform. And over a period of five years we can purchase two hardware models per year (laptop and desktop), reducing the total combinations to only ten models. The district has realized significant improvements in technology services across the district through advantages gained with

standardization. Advantages include focused staff development, reduced maintenance, reduced support needs, compatibility of systems and software, and reliability and sustainability provided through extended maintenance contracts included in the per-unit price.

The technology department is currently utilizing the CoSN-Gartner Web-based Total Cost of Ownership tool to evaluate the district infrastructure. *“The Web-based tool is designed to help K-12 schools assess their technology investments. The CoSN/Gartner Total Cost of Ownership (TCO) tool presents an opportunity and mechanism for school district leaders to gather information and make well-informed decisions on how to effectively utilize technology services to meet educational goals. “The tool, a vendor-neutral, free resource, was developed for CoSN by Gartner, a leading research and advisory firm that helps businesses understand technology. The tool was also sponsored by the North Central Regional Technology in Education Consortium (NCRTEC) at the North Central Regional Educational Laboratory (NCREL). Funding for the project was provided by the U.S. Department of Education, and grants from additional corporate sponsors will help support dissemination and education about the tool.”* A copy of the “Preparation for Analysis” document is attached.

Additional benefits are found through the reduction in overall complexity, including reduction of cost and focus of efforts. Savings in both staff and student time can be realized when systems are standardized - this is difficult to quantify but will be realized on an individual basis. The following is a list of some of these benefits:

Financial Growth. Standardization provides a more predictable and accurate management environment over the budgetary impact of new technologies. The costs of new, or increases, in infrastructure are accounted for as a system, taking into account all aspects of the financial and staff burdens, including hidden issues. The total costs associated with a new system can be used as a decision making tool when planning and budgeting for new technologies.

Staff Development. A major advantage is the portability of skills across the district without having to learn to use many different systems. By focusing training on standardized systems, staff can take advantage of systems across the school and district without having to receive specialized training for individual technology versions and systems. Reduction in preparation and delivery of staff development allows for an increase in time spent on focused staff development opportunities. An increase in the peer support base can be recognized as all staff will be utilizing the same tools and information can be shared. This increases support by sharing responsibility amongst staff to assist others in completing their work.

Compatibility. Standardized systems allow for increased compatibility. For example, standardizing on an office automation application increases compatibility between disparate offices as documents and forms can be shared reducing the time and energy associated with development. This also facilitates standardizing training, operations, and general communications.

Maintenance and Supplies. Reduction in the quantity of vendors, required supplies and ongoing maintenance is found by supporting similar devices and configuration. During maintenance operations, the troubleshooting time is reduced as similar systems experience similar problems. In a standardized environment there are still many issues that require

attention, however, more time can be focused on resolution than on troubleshooting a diverse environment.

Staffing. Locating, hiring and retaining technology staff with required skills is easier in a standardized environment. A complex environment requires a greater number of highly skilled and higher paid technicians. Locating technicians with a wide variety of skills in an overly diverse technology environment is often difficult given limited budgets.

Efficiency. When staff members and students are trained and know what to expect when using technology across the district, they can become better-prepared and more efficient users. Common working environments, systems, and procedures allow for more efficient utilization of time.

State and Federal Requirements. In a standardized environment we are more responsive to state and federal requirements because the staff is trained in a common technology and more easily able to communicate and collaborate. Response is improved through an understanding of the current status of district wide technology and an understanding of what the mandate requires and how it will impact the environment. This allows for a response in how much the requirement will cost in real dollars and staff time. Additionally, a standardized environment is better prepared to adjust to the new requirement, as one technology solution may be applied across the district more quickly and efficiently.

Learning Opportunities. As technology becomes more integrated with the curriculum, standardization will provide the necessary technology resources for every student consistently in the classroom. Less time will be spent on managing technology and more time on the learning environment. By providing standard technology tools across the district, all students can take advantage high quality technology experiences.

Improved Accessibility, Stability, Sustainability, Reliability. By focusing efforts on systems that are important to the district, resources can focus on ensuring the services the district identifies are supported at a high level.