

Umatilla School District 6R Technology Plan

January, 2013 – June, 2016

The Umatilla School District (USD) has invested heavily in technology to achieve success in meeting curriculum goals.

This plan presents a vision for use of technology to support all students in achieving their very highest educational and personal potential, to inspire in them an enduring love for learning, and to prepare them to contribute as citizens of our communities.

Introduction

Students in our schools must be given the opportunity to learn about technology, learn through the use of technology, and learn how to access information via many sources, including those that are technologically based. Students must learn to use higher order thinking skills to gather, evaluate, analyze, synthesize, and internalize the information they access and to develop products that are truly their own work. In addition, they must learn to use the information they access ethically and legally.

Teachers, administrators, and other school district employees must have appropriate technology tools and services to do their jobs more effectively and to model for students the use of technology tools in the work and classroom environments.

Technology must be seen and used as a vehicle for enhancing education. Many new roles will emerge with the proliferation of technology in the classroom. Students will have new tools to aid their learning and allow them to become sharers of information. Teachers will have powerful delivery tools to change the teaching/learning process in the classroom. As technology is integrated into the curriculum, the teaching role will also change. Administrators and support staff will do their work in significantly different ways from the past, because electronic tools and ever changing software will change the way their work is done.

Belief Statements

We believe that...

- members of the Umatilla educational community* should be responsible, independent, flexible learners.
- students should leave Umatilla schools with knowledge of the practical application of technology.
- technology in Umatilla School District should be used as a multifaceted tool.
- school district staff needs ongoing technology training.
- technology should improve the quality of education.
- technology is now the way we gather, process and view information and communication.
- technology enhances teachers' effectiveness in delivering instruction.
- all staff members need to stay current with new technology
- technology needs to have budget support.
- technology needs to be supported by the school board and the school administration.
- schools need to enhance communication with parents by using available technology.
- the school district should involve parents in the learning process.
- the school district needs to insure that the technology in use remains in good working order, is reliable and dependable.

* The Umatilla Education Community is defined as parents, students, teachers, and those who live within the Umatilla community

Umatilla School District Technology Mission Statement

Our mission is to ensure that everyone in the Umatilla educational community learns to use current and emerging technologies to enhance the quality of education and life.

Umatilla School District Technology Vision Statement

Learners, using technology as a tool, will collaborate to create a setting in which they continually advance their skills of reading, writing, problem solving, and communication.

Information Technology Services

The InterMountain Educational Service District's (IMESD) InterMountain Technology department is contracted to provide technology solutions that are customized for USD's specific educational needs whereas the Instructional Technology department provides support in areas of instruction, school improvement and staff development. This team approach is able to ensure that money spent on technology is put to the best use to meet organizational objectives.

The InterMountain Technology department's key strength is its staff of over thirty technicians who offer a comprehensive set of services and specialized expertise. Core services provided to Umatilla School District are:

- Wide Area and Local Networking design, implementation and maintenance
- Internet access to Oregon IntraNet™
- Windows, Novell NetWare and Unix/Linux Server Support
- Desktop support and troubleshooting utilizing 24/7 Online Help Desk system
- Web Development
- IP Video surveillance implementation and maintenance
- Specification and purchase of network and computer equipment
- Phone system maintenance
- Printer Repair
- Video conferencing
- Filtering, SPAM, Antivirus, and Spyware protection
- E-Rate program application processing
- Technology project planning, consultation, and leadership services

Local and Wide Area Networking and Internet Access

Infrastructure is the foundation of Internet connectivity, applications delivery, and software systems. An area of support that continues to grow in importance for USD is scalable high-speed Internet access. Districts are anticipated to increase bandwidth utilization and in-building wireless to support mobile devices and access to services such as "on demand" video, Internet delivered applications, student and business information systems, and state testing. IMESD will provide leadership to migrate districts to the necessary capacities that will allow them to fully utilize the technologies of the future.

Internet Web Services

Web Development resources are experiencing rapid growth in demand. Web services have become the prevalent means of communication for school districts and their patrons.

Help Desk and Customer Support

The first line of support to most customers comes through the Help Desk online ticket system. Assistance is available via the online ticket system. Available to all school district personnel, the Help Desk is a resource to request assistance with computers, handheld devices, the network, telephone/voicemail operation or any other technology question. Customer support consultants then address those requests for service and work on projects that are focused on technology solutions.

Telephone and Voicemail Systems

USD is part of IMESD's extensive voice network that provides local, long distance and voicemail services providing centralized voicemail, 4-digit dialing between schools, and toll free long-distance calling across the Umatilla, Morrow, Union, Baker, Malheur Counties in addition to Portland, Salem metro areas. Nearly every room contains a telephone. In addition to the safety aspect and voice mail services, these systems support good communication between school and home.

Improving Student Learning

USD promotes technology literacy and the use of national instructional technology standards for administrators, teachers, and students as defined in the Technology Standards for School Administrators (TSSA), and the National Educational Technology Standards (NETS) for Teachers and for Students. These standards state that technology enhanced learning

environments engage students in activities that have educational technology skills and relevant curricular content interwoven. The NETS for Students describe how these environments provide opportunities for students to apply academic skills and appropriate tools to research, analyze, communicate, collaborate and create solutions to real-world problems. The NETS for Students are guidelines for planning technology-based activities in which students can achieve technology literacy and success in learning, communication and life skills.

Technology is alive, engaging and ever-changing as are our students. We can provide a quality education that builds the bridge to successful futures by staying up-to-date with assessment options (student response systems, Interwrite tablets, Examview, etc.) and ensuring that our students have access to modern instructional technology.

The Oregon Department of Education (ODE) has established specific content standards and benchmarks in technology, aligned to the National Educational Technology Standards;

- Creativity and Innovation
- Communication and Collaboration
- Research and Information Fluency
- Critical Thinking, Problem Solving and Decision Making
- Digital Citizenship
- Technology Operations and Concepts

USD classrooms have integrated technology tools into curriculum; devices include tablets, iPods, data projectors, document cameras, and interactive boards with student response systems. The focus is to improve instruction aligned to Content Standards by utilizing appropriate technology strategies that will increase student achievement and increase technology literacy of both teachers and students.

Ongoing assessment of software standards will be done on a yearly basis. ESD trainings provide information on current trends in instructional technology. Equipment and technologies are listed on a replacement schedule and updated as needed.

Increasing Accessibility to Technology

Our district has long supported instructional technology efforts and thus, has a plethora of resources available. Our current student-to-computer is approximately 3 to 2 when including terminals and more Internet ready mobile devices are increasingly being utilized. Each teacher in the district is now using a laptop with a docking station and has at least one computer available for student use and many classrooms have access to laptop labs. Each school library has a computer lab for student use. All computers in our district have wireless or wired access to the internet.

The Internet has increasingly influenced the way people communicate, work and collaborate. Advances in emerging technologies continue to have a profound effect on occupational and leisure activities in our society and on educational institutions in particular. In order to graduate students with the skills needed for future careers and informed decision making. We must keep pace by planning for new and emerging technologies. We must be positioned to provide the infrastructure, professional development, and resources to support these technologies.

USD recognizes the impact of progressive technology solutions to facilitate the integration of instructional technology and positive student learning outcomes. This vision includes a desire to develop a mechanism, funding sources, training and support to provide innovative technology solutions that foster improved student achievement opportunities.

In collaboration with IMESD, USD continues to explore the potential of emerging technologies for educational use and hopes to expand the implementation of:

- Mobile devices including "Bring Your Own" initiatives
- Virtual reality learning opportunities and experiences
- Delivery of software applications
- Video surveillance for increased school safety
- Centralized data storage
- Thin Client and Citrix
- Web portals allowing access to student information to parents
- Affordable Internet access for teachers and parents.

One USD technology goal is to expand mobile device accessibility through wireless network connectivity in all school buildings. It remains a priority to implement a rotation plan and supporting budget for technology that supports educational needs. In addition to increasing bandwidth requirements, obsolete workstations remain a major impediment to effective use of instructional technology in classrooms.

Professional Development

USD believes in the importance of professional development for all staff. This professional development will correlate to the assessed needs and variety of staff roles. Staff development surveys are given each spring to help guide the training efforts for the following year. The information provided in these surveys is combined with the National Education Technology Standards (NETS) to design appropriate professional development opportunities for staff. This process ensures growth opportunities for staff. These efforts are then passed on to students by the implementation of the new skills in the classrooms.

Teacher trainings throughout the school year include Summer Institute, ITSC conference, Regional Tech cadre, NCCE conferences, and building level instructional trainings in collaboration with IMESD. This process ensures growth opportunities for staff. District personnel serve as Peer coaches to assist with teachers with integrating technology in the classroom. These efforts are then passed on to students by the implementation of the new skills in the classrooms. Our TEAM visit (peer observation) process allows for observation opportunities and feedback to teachers so they may further refine their skills and receive suggestions/feedback on how their students are progressing in their skills. These trainings encourage the use of a variety of technologies to integrate with classroom teaching strategies.

Teachers are required to have annual technology goals (NETS goals) which are a part of their annual evaluation by administrative staff. Teachers are also encouraged to document their technology performances and accomplishments with portfolios.

Telecommunications Assessment

USD recognizes the importance of securing E-rate funding annually to support the increasing connectivity needs; bandwidth usage and project needs to facilitate access to instructional technology resources demand provisions for systematic network upgrades and hardware rotation.

Funds from E-rate discounts will support academic achievement and teacher effectiveness by providing adequate infrastructure, connectivity, the purchase of hardware and software, staff development, curriculum development, and assessment. USD seeks to improve education and library services by attaining sustainable and affordable high-speed connections to schools and building libraries whenever and wherever possible. Grant funding opportunities to upgrade to fiber-optic connectivity is actively pursued.

- USD has a WAN (wide area network) connection with 100 MB capacity that connects to IMESD which has 250 Mb connectivity to NERO (The Network of Education and Research in Oregon). NERO provides connectivity from Pendleton to Portland.
- E-rate dollars were used in 2008-09 to update the existing telephone system. Approximately 130 phones across the district are supported.
- Building Infrastructure (e.g., electrical capacity, cooling system) - Electricity, heating and cooling are adequate to meet the needs of the systems throughout the district.
- Computer hardware and software - There are approximately 1360 workstations in the district (including 120 terminal clients). The district has consolidated servers for efficiency and currently has 10 physical servers (including 2 for video surveillance) and 8 virtual servers for our district.
- Desktop computers have either a minimum of 100 Mbps up to 1000 Mbps connection to the LAN and wireless connections of 54 Mbps to 300 Mbps. Classrooms are outfitted with sufficient telecommunication ports for wired and wireless technology throughout the district.
- There are approximately 34 enterprise level network switches in which some supply power to many of the 55 wireless access points and 40 security IP cameras. The wireless access points are managed by a centralized, enterprise level wireless controller system to provide a high level of service to devices for classroom use. Upgrades are needed to replace the aging wireless controller system and to increase wireless access density for the increase in mobile devices.

Technology Type and Costs

USD's strong technology program permeates all departments and is supported by an established budget that is the result of an annual review to assess needs and realign expenditures to respond to shifting priorities. Expenditures of the technology budget are scrutinized for compatibility among existing and future components. E-rate funds support the cost of telecommunication circuits, voice communications to the Public Switched Telephone Network, and Internet access.

USD's IT Department's budget for fiscal year 2012-2013 was \$266,707. Approximate funds allocated to support technology and connectivity in future years includes:

- Technology Support Contract – \$ 80,000
- LAN and WAN Network Equipment and data cabling – \$18,000.00*
- Servers and Operating Systems – \$8,000.00*
- Software – \$12,000.00
- Computing device purchases, repair and maintenance – \$55,000
- Telecommunications– \$23,000

The district has invested in the Microsoft EES program, a software yearly subscription plan which provides the district with the opportunity to standardize with the latest Microsoft operating system (workstations have been upgraded to Windows 7) and Office Professional suite and antivirus software. The district is now standardized with Windows 7 and Office 2010 for almost all of the computer desktops and can easily update and standardize on a yearly basis, when desired.

*If Umatilla School District receives Internal Connections from E-Rate this represents the discounted portion which may be applicable in two of five years.

Hardware Replacement Plan

Although equipment may continue to function at the level when purchased it is not always the case that they can be upgraded to perform at a higher level without significant investments in time and resources.

Newer technologies endlessly emerge; continual assessment is needed to determine the benefit or need to upgrade as curriculum drives technology.

We will continue to maintain computers, printers and network equipment as long as they perform the functions required according to the current technology standards for software and hardware; if they remain cost effective to repair, and parts are available for their repair that course of action will be taken.

Servers and Desktop PC's are anticipated to have an optimal and warranted lifespan of five years, and laptops three years. Mobile devices such as iPads are often warranted for one year but may have a life span of three or more years depending on the care they are given. Network equipment is anticipated to be usable for five to seven years.

The IT department employs a recycle system of providing the most current technology to teaching staff and student labs, recycling newly replaced equipment to secondary labs and classrooms until they reach end of life.

Evaluation Processes

Review of technology use and implementation is completed by administrators as part of a Curriculum Team. The annual review identifies appropriate software and devices to support instruction in order to meet curriculum goals. The team reviews program information that has been reviewed and relayed to them by program department heads. Each program reviews annual goals to facilitate their mission; staff goals and professional development are tailored to support the overarching goals. The Curriculum Team assures that technology use is supporting student learning in the classrooms as evidenced by state test scores.

Parental Communication

We work to engage our students and families with the school using a variety of technology tools. An online survey tool is used to learn of perceptions and needs of the community and parents. Webpages are used to communicate options and encourage public use of our resources. The use of the web is increasingly embedded in the culture of the school and a regular part of school communications.

Parental contact is made through online announcements and building and district calendars via the website, regular newsletters, parent-student-teacher conferences, open-house, classroom web pages, and student presentation nights. USD utilizes IMESD web design support services and instruction in web design for our school district and staff web pages in addition to GoogleApps for Business.

PowerSchool is the Student Information System (SIS) which allows students and parents to check grades and attendance via secure logins. An automated calling system (SchoolMessenger) is in place to provide immediate notifications about school and extracurricular activities, unexpected closures, meal account status as well as customized messages on academic performance.

District school board minutes and agendas are available online for the public as are board policies. All of these efforts combine to work toward improvement of staff-school-student-community-parent relationships.

CIPA COMPLIANCE SUMMARY

Umatilla School District will comply fully with CIPA (Children's Internet Protection Act) and provide for specific technology that blocks or filters Internet access to visual depictions that are:

- a. Obscene, as that term is defined in Section 1460 of Title 18, United States Code;
- b. Child pornography, as that term is defined in Section 2256 of Title 18, United States Code; or
- c. Harmful to minors