

# Morrow County School District Technology Plan

## January 1, 2013 – June 30, 2016

### **Vision Statement**

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.

### **MCSD Technology (IT) Overview**

Morrow County School District (MCSD) has contracted with the InterMountain ESD (IMESD) Technology (IT) Department for several years to provide nearly all IT support for the district. The IMESD IT Department's mission is to meet the technology needs of MCSD by providing professional, high quality, cost effective solutions that support the K-12 community. The IMESD IT Department strives to engage in creative, cost effective solutions that meets MCSD's goals and objectives.

IMESD provides technical support, infrastructure, networking, hardware, and operational guidance to MCSD on an annual basis.

The goal of this document is to help provide a technology guide to the district, schools, administration, school board, and other. This document will provide an outline of direction and specific goals for technology as it relates to the learning environment, students, curriculum, and schools.

### **Instructional Services Overview**

The direction of instructional services is hand and hand with technology. MCSD envisions the continuing expansion of web based instruction for all students. There are multiple facets to web based instruction and are illustrated by a few of the following: Greenways Academy, Study Island, Rosetta Stone, Kahn Academy tutorial labs, Career Cruising, Read Naturally, Edmodo, Plato, Acellus, Read 180, SuccessMaker, and Odyssey Ware. The instructional services provided by technology/software include credit recovery, expansion of electives offered, intervention programs that help students learn necessary concepts and skills to reach grade level as well as enrichment programs for students performing above grade level.

### **Information Technology Services**

IMESD's IT Department's core services include:

- 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
- 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 MCSD 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*

MCSD 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.

#### *E-Rate*

The Federal Communication Commission (FCC) established the E-Rate fund as a result of the Telecommunication Act of 1996. Administered by the Schools, E-Rate provides reimbursement for telecommunication, Internet and some infrastructure/internal connection services to schools on a poverty based sliding scale. As with many federal programs, the paperwork and procedure is complex and can be overwhelming. IT has been involved in E-Rate application processing since the first program year of 1998-99. IMESD currently provides these contracted services for MCSD.

### **Improving Student Learning**

MCSD 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 and ensuring that our students have access to modern instructional technology. MCSD utilizes numerous computer based programs including but not limited to: SuccessMaker, Rosetta Stone, Career Cruising, Accelerated Reader, STAR reading program, Read Naturally, Study Island, Kahn Academy tutorial labs, Read 180, Odyssey Ware, PLATO, and Acellus.

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

MCS D classrooms have integrated technology tools into curriculum; devices include tablets, iPads, 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.

### **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 two to one when including virtual devices (nComputing terminals) and more Internet ready mobile devices are increasingly being utilized. The goal will be that each teacher has an iPad to help in the instructional process. Each school has computer labs 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.

MCS D 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, MCS D 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
- Centralized data storage
- Thin Client and Citrix
- Web portals allowing access to student information to parents
- Affordable Internet access for teachers and parents.

One MCS D 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.

### **Telecommunications Assessment**

MCS D 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, and assessment. MCS D seeks to improve education and library services by attaining sustainable and affordable high-speed connections to schools and building libraries whenever and wherever possible.

- MCS D 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 to update the existing telephone system in 2010.
- Computer hardware and software – The district has been working the last couple years to update their computers, thus, they have acquired approximately 400 computers to replace outdated computers.
- Desktop computers have either a minimum of 100 Mbps up to 1000 Mbps connection to the LAN and wireless connections of 54 Mbps. Many classrooms and labs would benefit from additional telecommunication ports for increased wired technology throughout the district.
- The district is in the process of having all schools monitored with the installation of video surveillance cameras. We are expecting the camera project to be completed by summer 2013.

### **Technology Type and Costs**

MCS D is constantly reviewing IT projects to ensure our systems are setting the district and students up for success now and into the future. Projects that have been completed over the last few years include the following:

- New computers and monitors – approximately 400 computers and 150 monitors.
- Additional student software – Read 180 and SuccessMaker and Acellus
- Cameras – Cameras are currently being installed in all our schools. We also have cameras in all buses that transport MCS D students.
- Tablets – Numerous teachers and classrooms have tablets (IPads) and the goal is to ensure all teachers have an iPad by next year.
- Teaching Software – Reflection software that allows teachers to project images from their computers and tablets.

MCS D's IT Department's budget for fiscal year 2012-2013 is approximately \$242,500 and is planned to be allocated in the following manner:

- Technology Support Contract – \$ 137,500
- Software – \$25,000
- Computing device purchases, repair and maintenance – \$55,000
- Telecommunications– \$25,000

MCS D's IT Department Plan for fiscal year 2013-14 is as follows:

- Technology Support Contract – \$ 137,500
- LAN and WAN Network Equipment and data cabling – \$100,000
- Software – \$10,000
- Computing device purchases, repair and maintenance – \$10,000
- Telecommunications– \$25,000

The \$100,000 expenditure is the MCS D portion of the E-Rate funds that are being used to increase capacity at all MCS D schools. The expenditures will include: cabling, servers, switches, and other wireless technology. The timing of the project is planned for June and July 2014 and will include all schools. The increased wireless capacity will allow all schools to implement wireless devices including tablets in all classrooms in the future. The district is in the process of applying for the E-Rate funds and if we don't receive the funding we will be looking at a reduced implementation plan.

### **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 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 district will continue to use refurbished desktop computers when and where it's cost effective and efficient which has a warranty of 3 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. The district will also ensure we remove dated and/or less efficient machines when new machines are added to the schools. We want to ensure our computing capacity stays consistent with our needs and we don't over extend our computing needs.

### **EVALUATION PROCESSES**

On an annual basis the Morrow County School Board will evaluate the information technology plan to ensure the district goals are aligned with the board goals. The technology plan will be developed by the district and ensure there is input from IMESD, curriculum teams, and administration.

### **CIPA COMPLIANCE SUMMARY**

MCSD 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