

The Mohawk Trail School System

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Long Range Technology Integration Plan

2006 – 2010

October 2004

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INTRODUCTION

The Mohawk Trail Regional School District is committed to preparing its students to enter our technologically complex society with the technological and critical skills, knowledge, and ethical attitude necessary to become well-rounded, creative and contributing members of the local and global community.

The MTRSD will strive to:

- ❖ Incorporate all manners of technology into its classrooms on a daily basis;
- ❖ Integrate the latest technologies, e.g., distance learning, multimedia, and school-based interactive web portals, into the daily instructional curriculum in conjunction with the Common Core of Learning and The Curriculum Frameworks;
- ❖ Provide ubiquitous Internet access inside and outside of school, both during and after of school hours;
- ❖ Develop individualized learning goals for each student using technology resources, as appropriate, while adhering to the concepts of Universal Design for Learning;
- ❖ Nurture the creativity, inventiveness and curiosity of its students by cultivating real-world problem solving skills using technology resources where applicable;
- ❖ Introduce and model the latest advances in technology to maximize efficiency and minimize costs in the administration of District business;
- ❖ Introduce its students, via the Internet and distance learning technologies, to a variety of domains of knowledge and world cultures;
- ❖ Employ data-driven decision-making to ensure the highest levels of student achievement;
- ❖ Provide both economic parity and gender parity with respect to student computer access and use; and,
- ❖ Provide high quality professional development opportunities to its teachers and staff so that they are able to use the technology resources available to their fullest potential.

1 – Technology Integration

Goal 1.A: To develop a district-wide, School Interoperability Framework (SIF)-compliant data warehouse that will allow for authoritative data to be entered once into the system by the person/persons who are closest to the data. The data will then be shared with those who need access, including teachers, administrators and the DOE. The data will comply with DOE standards.

2 – Goals and Initiatives

2.1 -- Communication and Information Access Goals and Initiatives

Goal 2.1.A: To add three additional T-1 lines and load-balance demand.

Goal 2.1.B: To provide an open-source solution for web caching and CIPA compliance at the school level.

Goal 2.1.C: To build a protected network with a secure firewall in order to insure that school resources are not being compromised by nefarious Internet activities.

Goal 2.1.D: To provide web-based file access to all students, staff and administrators from off-campus locations and to provide a web-based content management system for staff.

2.2 -- Instructional and Curricular Goals and Initiatives:

Goal 2.2.A: To continue the process of integrating technology into the classroom by establishing a formal procedure by which staff develops, teaches and evaluates a technology-rich lesson with the aid of on-site TPD's and district ITS staff.

Goal 2.2.B: To insure that all teachers are familiar with and able to apply the principles of UDL, AT and differentiated instruction in the development of their lessons.

2.3 – Teacher and Student Use of Technology

Goal 2.3.A: 100% of teachers will attain mastery of the TSAT competencies at the proficiency level by 2009 and 60% will reach the proficiency level by 2007.

Goal 2.3.B: At least 85% of teachers use technology inside and outside the classroom on a weekly basis by 2007.

Goal 2.3.C: At least 85% of 5th through 8th graders show proficiency in the District Student Technology Competencies by 2007.

2.4 – Staffing

Goal 2.4.A: Hire 1 FTE WAN Network Administrator by FY06.

Goal 2.4.B: Hire 1 FTE Curriculum Coordinator/Data Analyst by FY06.

Goal 2.4.C: Hire 4 FTE computer technicians to support the District schools by FY10.

Goal 2.4.D: Hire .5 FTE computer technician to support the Central Office by FY07.

3. – *Technology Professional Development*

Goal 3.A: By the end of the 2006-2007 school year, at least 85% of district staff will have participated in 45 hours of high-quality technology professional development covering technology skills and the integration of technology into instruction.

Goal 3.B: To institutionalize the newly created Professional Development Advisory Board (PDAB).

Goal 3.C: Annual self-assessments that evaluate the skills described in the TSAT will be administered to all staff.

4 – *Accessibility of Technology*

4.1 – Student/Computer Ratio

Goal 4.1.A: A 1:1 student-computer ratio utilizing laptop computers in grades 7 – 12 will be achieved by 2010.

Goal 4.1.B: Gradually integrate handheld devices into the curriculum as appropriate and develop a policy for their use during the school day.

Goal 4.1.C: Computers will be replaced every five to six years.

4.2 – Technical Support

Goal 4.2.A: Just-in-time (JIT) support will be provided by either dedicated support staff or trained teachers at every school by the fall of 2004.

Goal 4.2.B: A 1 FTE Network Administrator position will be in place by the 2005-2006 school year.

Goal 4.2.C: Three FTE technical support positions will be supported in the District budget by the 2006-2007 school year.

5 – Infrastructure for Connectivity

Goal 5.1.A: Beginning in 2004 – 2005, the District will gradually increase its bandwidth so that by 2010 it will have the equivalent of (4) T-1 lines of bandwidth to the Internet.

Goal 5.2.A: Beginning in 2004 – 2005 the District will gradually replace the Windows NT file servers with Linux file servers that provide web access from anywhere on the Internet.

Goal 5.2.B: By the end of 2006, a common Linux-based server at the District office will offer account replication at each school and will provide web access from anywhere on the Internet for all students and staff.

Goal 5.2.C: By the end of 2005, all email will be filtered before being delivered to clients.

Goal 5.3.A: Beginning in 2004 – 2005 the District will gradually introduce staff and students to the opportunities available through distance learning utilizing both low and high end technology solutions.

Goal 5.3.B: By the end of 2006, the District will begin offering on-line courses to staff utilizing an open source course management system. This system will also be available to staff to use in their classes with students.

6 – Budget

The annual operating budget reflects the total cost of ownership (TCO) of technology resources. It contains line items for the following technology components:

- ❖ Salaries
- ❖ Contracted services
- ❖ Hardware;
- ❖ Software; and,
- ❖ Supplies

Goal 6.A: To work with the Superintendent, the School Committee and community stakeholders to ensure that adequate funding for technology is included in the annual budget

Goal 6.B: To work with each town to adopt a line item in its budget to be used for the replacement of the oldest computers in their respective schools

Goal 6.C: To provide opportunities for school district staff to attend grant-writing workshops and to explore other avenues for obtaining funding for technology

Year	2006	2007	2008	2009	2010
Item					
Salaries	\$151,986	\$156,546	\$161,242	\$166,079	\$171,062
Contracted Services	\$30,864	\$31,364	\$31,864	\$32,364	\$32,864
Hardware	\$30,770	\$60,960	\$91,440	\$121,920	\$152,400
Software	\$29,870	\$37,338	\$44,805	\$52,273	\$59,740
Supplies	\$13,925	\$17,406	\$21,758	\$27,197	\$33,997
Total	\$257,415	\$303,613	\$351,109	\$399,833	\$450,062

Notes:
Support: Increasing gradually until we are supporting 3 FTE at the 6 elementary schools and 2 FTE between HS and C.O. by 2010
Contracted Serv:Telcomm: T-1 Internet services. By adding 500.00 / yr. Per school, we could have 7 T-1's by 2010, one for each school.
Hardware: Replacing 20% of our hardware by 2010, starting with 4% in 2006 and adding 4% per year.
Software: \$40 / machine, and doubling over five years, based on TCO of 10% of budget.
Supplies: Starting at \$25 / machine for 50% of machines and increasing by 25% / year.