

MSAD #58 / RSU 58

Technology Plan

2013-2016

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[Community & Parental Involvement](#)

[Vision](#)

[MSAD #58 Mission Statement](#)

[Guiding Beliefs](#)

[Goals](#)

[Identify Necessary Technology](#)

[Assessment of Current Technology](#)

[District-wide](#)

[Mt. Abram High School](#)

[Phillips Elementary School](#)

[Kingfield Elementary School](#)

[Stratton Elementary School](#)

[Strong Elementary School](#)

[New Technology Necessary to Meet Stated Goals](#)

[Goal 1: Technology will be used to foster connections between all members of our learning community including staff, students, parents, and community residents.](#)

[Goal 2: Technology will be used to help all students in our school district to meet their Personal Learning Goals in all subject areas with equity and disregard for socioeconomic status.](#)

[Goal 3: Students in our schools will be taught to use technology intelligently and appropriately to become responsible members of society.](#)

[Goal 4: A technology support infrastructure will be maintained such that teachers can focus on teaching and technology integration rather than on the technology itself.](#)

[Collaboration with Adult Literacy and Service Providers](#)

[Strategies for Improving Academic Achievement and Teacher Effectiveness](#)

[Integration of Technology with Curricula, Instruction, and Assessment](#)

[Technology Type ad Costs and Coordination with Funding Sources](#)

[Supporting Resources](#)

[Steps to Increase Accessibility](#)

[Promotion of Various Curricula and Teaching Strategies that Integrate Technology](#)

[Professional Development](#)

[Innovative Delivery Strategies](#)

[Accountability Measures](#)

Community & Parental Involvement

The technology planning committee is comprised of school administrators, teachers, parents, and community members. Historically, community involvement has been a difficult hurdle to overcome in MSAD #58 due to our extreme geographic diversity. During the past year, MSAD #58 has been developing an overall strategic plan for the district and conducted a “World Cafe” facilitate workshop involving over one hundred community members. Technology has been a key topic of conversation during this process and the results of the cafe have influenced this Technology Plan.

Improving communication with parents and community members through the use of technology is always a critical part of our district planning. Since 2004, parents and students have had access to PowerSchool allowing them to monitor grades, attendance, and fee transactions while having direct email access to teachers. During 2011, we added PowerAnnouncement messaging system which allows administrators to email, text message, and “robo-call” parents with information about school events and cancelations. This has been an extremely popular service to our school community.

Our web presence is updated on a weekly basis and we will be expanding our web presence to include social media sites in the upcoming year to increase our visibility and open more avenues of communication.

Communicating the availability of technology to families is always a challenge. We send home flyers and include information in school newsletters. Our teachers have also become very adept at discussing technology with parents during conferences. We offer parent training sessions during school open house evenings.

The district’s Computer Use and Internet Safety policies are published in the Student Handbook which is distributed to all homes and the policies are discussed with students at the beginning of each school year and throughout the year.

Vision

MSAD #58 Mission Statement

It is the responsibility of MSAD 58's school community to prepare all students to become productive, caring citizens of our democracy.

Guiding Beliefs

Education is a shared responsibility

- Education is a shared responsibility among students, parents, employees, and community. Community and schools must be integrated in learning and work.

Flexibility & Decision Making

- Students must be given the opportunity for choices regarding their learning and be responsible for their decisions.
- Individual schools should be allowed to operate with flexibility within the boundaries established in the District.
- Decisions made in MSAD 58 should be made as closely as possible to their level of implementation.

Professional Development

- Continuous, visible support of the adults in the school community must be given in order to create and sustain school communities that support the learning of students. Students learn best and lead by observing good role models.
- The District must provide opportunities for teachers to work and learn together. (i.e., student groups, action research)

Diversity of Learning

- All children can learn at high levels, but not always the same way or at the same time. Teaching practices must reflect knowledge about diversity of learning. The uniqueness of people must be valued.

Safe & Healthy Learning Environment

- Every student is entitled to a safe, supportive, clean, and caring learning environment.

Technology

- The tools that support learning must be integrated in all facets of the educational process.

A Structure for Systemic Improvement

- MSAD 58 must create a structure for continuous learning. Inquiry, assessment, and reflection must become part of every school, and every learner.

Goals

The three following goals are the foundation upon which this plan is based. Detailed steps for accomplishing these goals and a summary of necessary resources are included in the next section.

1. Technology will be used to foster connections between all members of our learning community including staff, students, parents, and community residents.
2. Technology will be used to help all students in our school district to meet their Personal Learning Goals in all subject areas with equity and disregard for socioeconomic status.
3. Students in our schools will be taught to use technology intelligently and appropriately to become responsible members of society.
4. A technology support infrastructure will be maintained such that teachers can focus on teaching and technology integration rather than on the technology itself.

Identify Necessary Technology

Assessment of Current Technology

District-wide

MSAD #58 is comprised of 11 towns and townships supporting four elementary/middle schools, one high school, and a maintenance/bus garage.

Each school within MSAD #58 has a constant, high-speed connection to the Internet. These connections are provided at no cost to the district through the Maine Schools and Libraries (MSLN) network. Current speeds and bandwidth needs will be discussed under each individual school.

MSAD #58 is a very geographically diverse school district covering nearly 500 square miles. Due to the distances between school buildings, it has been determined that physical network connections between our schools is not economically feasible. However, we recognize the benefit of sharing server resources, curriculum resources, library software, and IT management resources between buildings. For these reasons, we currently have established VPN connection tunnels between the buildings. This allows for

sharing of some technology resources, but has not allow us to centralize as effectively as we would like to in the future. With recent and planned upgrades to the telco infrastructure in this area, we should be able to establish a WAN in the very near future.

PowerSchool has been our Student Information System since the fall of 2003. This system has served us very well and has continued to be updated and developed to meet current technology standards and the changing needs of our schools and our district. PowerLunch through PowerSchool is used to record food service transactions. PowerSchool is hosted on a central district server.

All school libraries are using Alexandria Library Software for collection management. This software allows anyone in our community to search our collections online. In addition, we have partnered with two local public libraries to give students access to eBooks through MaineInfoNet.

MSAD #58 has a Google Apps for Education domain and uses Google Apps for staff and student email as well as document creation, editing and collaboration. Students in grades K-4 have Google Apps accounts without email access and students in grades 5-12 have Google Apps accounts which include email. Staff are also provided with Google Apps accounts and email through this domain. Staff email is currently archived locally using MailArchivia though we plan to transition to Google Vault.

Mt. Abram High School

The building is a round design built in 1968 with plenty of exposed wood ceilings and cement block walls. While this is appealing to the visual senses, it makes network wiring more challenging. This school serves approximately 250 students in grades 9-12.

The current server room is a closet with a window at one end. A professional re-wiring of the building was completed in April 2004. Racks were installed in the Main Data Closet and two Intermediate Closets with a fiber backbone between the closets. Fiber and CAT 5E was also run to each classroom. Through an ERate funded Internal Connections project, the network was upgraded and new wireless access points were installed during the summer of 2010. Nearly all of the computers in the building connect to the LAN and the Internet through the wireless access points. A few desktop computers are connected via ethernet.

Currently there is a 50MB fiber connection into the school supplied by Maine Schools and Library Network. This bandwidth is currently sufficient to meet the needs of staff and students. There is an Adtran router in place that provides VPN services as well as a an additional firewall for the building. The MSLN-supplied JoeBox provides content filtering using MECGuard.

Mt Abram High School has a tendency to lose electricity often and for extended time periods. There is only back up generator power for emergency lighting. This has caused us to move most of our district-wide servers to an elementary school with better back-up power generation. While Mt Abram would in some ways be the logical “hub” of district technology, the lack of a reliable electrical supply has made it not a practical location.

Since September 2004, every student, teacher, and ed tech at Mt Abram High School has been provided with an Apple iBook/MacBook as part of a district-funded one-to-one computing initiative. The current MacBook lease expires in June of 2013. In addition, there are a small number of desktop computers still in use. These are primarily used in administrative offices.

There are two leased digital copiers, one for use by students and the other dedicated to staff use. These copiers provide nearly all of the printing capacity in the building as well as providing document scanners. Scanning documents has become a common occurrence. There are also a few color scanners available and a color laser printer. While we continue to have digital cameras and digital video cameras available for check-out from the library, they are seldom used as each MacBook is equipped with camera technology.

There are several classrooms with Interactive whiteboards installed and every classroom has a digital projector.

Basic network services are provided by an Apple XServe purchased in 2010. These services include DHCP, DNS, MCX user permissions, and directory services. The district library server is also located at Mt Abram. In addition, there are two proxy servers at Mt Abram which route Internet traffic separately for students and staff allowing us to adjust content filtering for each group.

The telephone system at Mt Abram was upgraded in 2010 to a ShoreTel Phone system. This system was installed with the ability to connect all of the buildings together for direct extension dialing between buildings as soon as we have sufficient bandwidth. Currently, we have nine analog copper phone lines feeding the system, but the system was designed with the ability to connect to a PRI. There are times daily when all lines are in use and calls can not be made or received. The local telco has made PRI available in this area as of the fall of 2012 and we will plan to upgrade with the new ERate cycle in July 2013.

All of the Apple computers in the building are using Apple’s OS X operating system. The few Windows computers in the building are for specific purposes and are running Windows XP or 7. Software currently provided to all staff and students includes iWork, NeoOffice, NoteTaker, iLife, Rosetta Stone, Pasco DataStudio, GoogleEarth, Firefox, Chrome, and Safari. Some curriculum areas make use of specialty software that is appropriate for their needs.

There are two Tandberg video conferencing systems in place at this school, both funded through USDA Rural Utility Service grants. One unit is portable. The second is connected to the

interactive whiteboard in a particular classroom. These units have primarily been used to allow our students to attend college-level courses without excessive travel time that would otherwise be required. They have also been used for teacher collaboration between buildings and for other professional development opportunities.

Phillips Elementary School

The school was built in 1988 with an expansion project being completed in 2004. This school serves approximately 170 students in grades K-8. The district central office is also housed in this building and includes the offices of the superintendent, business manager, and technology director.

The Phillips School is equipped with a generator with sufficient capacity to run the entire building and a switch that automatically engages the generator when there is an external power outage. In addition, the server room at this school is equipped with air conditioning. For these reasons, the Phillips School is a likely choice to serve as a district technology hub in the future.

Currently, there is a 10MB Internet connection to the building provided by MSLN. This connection is an agglomeration of six copper T-1 lines as fiber is not currently available in this area. This is usually sufficient to meet the needs of staff and students, but we do use our maximum bandwidth several times per month indicating that increased bandwidth will be needed in the future. Content filtering is provided through OpenDNS.

The internal network infrastructure has been updated and includes a fiber connection between the upstairs server room and the downstairs intermediate closet. All areas of the building have wireless internet access and each classroom and office has an ethernet connection available. There is an Adtran router in place that provides VPN services as well as segments network traffic between the central office and the rest of the building.

Basic network services for the school are provided by an Apple XServe purchased in 2010. These services include DHCP, DNS, MCX user permissions, and directory services. In addition, the district PowerSchool server is located at the Phillips School.

The central office network segment makes use of a Windows 2003 server providing DNS, DHCP, and file sharing and a Windows 2008 server that runs ADS ProFund (the district's financial software) and TimeClock Plus.

The telephone system at Phillips School was upgraded in 2012 to a Shoretel Phone system. This system was installed with the ability to connect all of the buildings together for direct extension dialing between buildings as soon as we have sufficient bandwidth.

There are two leased digital copiers for staff and student use, one upstairs and one downstairs. These copiers provide nearly all of the printing capacity in the building as well as providing document scanners. Scanning documents has become a common occurrence. There is also a networked color laser printer.

In addition, the central office has a leased digital copier, a networked laser printer (for printing of checks), and a networked color laser printer.

As part of the Maine Learning Technology Initiative (MLTI), all 7th and 8th grade students and teachers are issued an Apple MacBook. All 5th and 6th grade students are issued Apple iBook computers which were purchased by the district at the end of the previous MLTI lease. Students in grades K-4 share a 20-unit mobile MacBook lab. All teachers at all grade levels in the building have been provided with an MLTI MacBook. Those who are not eligible through MLTI have been funded locally.

While we continue to have digital cameras and digital video cameras available for check-out from the library, they are seldom used as each MacBook is equipped with camera technology. There are several classrooms with Interactive whiteboards installed and nearly every classroom has a digital projector.

There are two Tandberg video conferencing systems in place at this school, both funded through USDA Rural Utility Service grants. One unit is portable. The second is connected to the interactive whiteboard in a particular classroom. These units have primarily been used to teach cooperative classes between buildings. For example, a single teacher has students from two different buildings who attend the same Algebra class. This has allowed us to offer more options to our students and still have a reasonable class size. They have also been used for teacher collaboration between buildings and for other professional development opportunities.

Kingfield Elementary School

The school has been remodeled several times with the most recent construction occurring in 2005. This school serves approximately 140 students in grades K-8.

The Kingfield School is equipped with a generator with sufficient capacity to run the entire building, but does not have a switch that automatically engages the generator when there is an external power outage.

Currently, there is a 10MB Internet connection to the building provided by MSLN. This connection is supplied via fiber. This is usually sufficient to meet the needs of staff and students, but we do use our maximum bandwidth several times per month indicating that increased bandwidth will be needed in the future. Content filtering is provided through OpenDNS.

The internal network infrastructure has been updated. All areas of the building have wireless

internet access and each classroom and office has an ethernet connection available. There is an Adtran router in place that provides VPN services.

Basic network services for the school are provided by an Apple XServe purchased in 2010. These services include DHCP, DNS, MCX user permissions, and directory services.

The telephone system at Kingfield School was upgraded in 2010 to a Shoretel Phone system. This system was installed with the ability to connect all of the buildings together for direct extension dialing between buildings as soon as we have sufficient bandwidth.

There are two leased digital copiers for staff and student use in the front office. These copiers provide nearly all of the printing capacity in the building as well as providing document scanners. Scanning documents has become a common occurrence. There is also a networked color laser printer.

As part of the Maine Learning Technology Initiative (MLTI), all 7th and 8th grade students and teachers are issued an Apple MacBook. All 5th and 6th grade students are issued Apple iBook computers which were purchased by the district at the end of the previous MLTI lease. Students in grades K-4 share two 20-unit mobile MacBook labs. All teachers at all grade levels in the building have been provided with an MLTI MacBook. Those who are not eligible through MLTI have been funded locally.

While we continue to have digital cameras and digital video cameras available for check-out from the library, they are seldom used as each MacBook is equipped with camera technology. There are several classrooms with Interactive whiteboards installed and nearly every classroom has a digital projector.

There are two Tandberg video conferencing systems in place at this school, both funded through USDA Rural Utility Service grants. One unit is portable. The second is connected to the interactive whiteboard in a particular classroom. These units have primarily been used to teach cooperative classes between buildings. For example, a single teacher has students from two different buildings who attend the same Algebra class. This has allowed us to offer more options to our students and still have a reasonable class size. They have also been used for teacher collaboration between buildings and for other professional development opportunities.

Stratton Elementary School

The school was built in 1988 and remodeled in 2005. This school serves approximately 80 students in grades K-8.

Currently, there is a 10MB Internet connection to the building provided by MSLN. This connection is an agglomeration of six copper T-1 lines as fiber is not currently available in this area. This is sufficient to meet the needs of staff and students. Content filtering is provided through OpenDNS.

The internal network infrastructure has been updated. All areas of the building have wireless internet access and each classroom and office has an ethernet connection available. There is an Adtran router in place that provides VPN services.

Basic network services for the school are provided by an Apple XServe purchased in 2010. These services include DHCP, DNS, MCX user permissions, and directory services.

The telephone system at Stratton School was installed in 2004. It is a Nortel system and is not compatible with direct dialing to the other schools. Because the percentage of students who qualify for free & reduced lunch is much lower at Stratton School than any of the other schools, internal connection projects for Stratton School have not been funded through ERate for several years. Upgrades to the network and phone infrastructure have been completely at local expense unlike the other schools.

There are two leased digital copiers for staff and student use, one in the front office and one in the teacher's room. These copiers provide nearly all of the printing capacity in the building as well as providing document scanners. Scanning documents has become a common occurrence. There is also a networked color laser printer.

As part of the Maine Learning Technology Initiative (MLTI), all 7th and 8th grade students and teachers are issued an Apple MacBook. All 5th and 6th grade students are issued Apple iBook computers which were purchased by the district at the end of the previous MLTI lease. Students in grades K-4 share a 20-unit mobile MacBook labs. All teachers at all grade levels in the building have been provided with an MLTI MacBook. Those who are not eligible through MLTI have been funded locally.

While we continue to have digital cameras and digital video cameras available for check-out from the library, they are seldom used as each MacBook is equipped with camera technology. There are several classrooms with Interactive whiteboards installed and nearly every classroom has a digital projector.

There are two Tandberg video conferencing systems in place at this school, both funded through USDA Rural Utility Service grants. One unit is portable. The second is connected to the interactive whiteboard in a particular classroom. These units have primarily been used to teach cooperative classes between buildings. For example, a single teacher has students from two different buildings who attend the same Algebra class. This has allowed us to offer more options to our students and still have a reasonable class size. They have also been used for teacher collaboration between buildings and for other professional development opportunities.

Strong Elementary School

The school was built in 1959 and remodeled in 1997. This school serves approximately 180 students in grades K-8.

Currently, there is a 10MB Internet connection to the building provided by MSLN. This connection is an agglomeration of six copper T-1 lines as fiber is not currently available in this area. This is usually sufficient to meet the needs of staff and students, but we do use our maximum bandwidth several times per month indicating that increased bandwidth will be needed in the future. Content filtering is provided through OpenDNS.

The internal network infrastructure has been updated. All areas of the building have wireless internet access and each classroom and office has an ethernet connection available. There is an Adtran router in place that provides VPN services.

Basic network services for the school are provided by an Apple XServe purchased in 2010. These services include DHCP, DNS, MCX user permissions, and directory services.

The telephone system at Strong School was upgraded in 2009 to a ShoreTel Phone system. This system was installed with the ability to connect all of the buildings together for direct extension dialing between buildings as soon as we have sufficient bandwidth.

There are two leased digital copiers for staff and student use in the front office. These copiers provide nearly all of the printing capacity in the building as well as providing document scanners. Scanning documents has become a common occurrence. There is also a networked color laser printer.

As part of the Maine Learning Technology Initiative (MLTI), all 7th and 8th grade students and teachers are issued an Apple MacBook. All 5th and 6th grade students are issued Apple iBook computers which were purchased by the district at the end of the previous MLTI lease. Students in grades K-4 share two 20-unit mobile MacBook labs. All teachers at all grade levels in the building have been provided with an MLTI MacBook. Those who are not eligible through MLTI have been funded locally.

While we continue to have digital cameras and digital video cameras available for check-out from the library, they are seldom used as each MacBook is equipped with camera technology. There are several classrooms with Interactive whiteboards installed and nearly every classroom has a digital projector.

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New Technology Necessary to Meet Stated Goals

Goal 1: Technology will be used to foster connections between all members of our learning community including staff, students, parents, and community residents.

1. Access to our PowerSchool student information system will be available to parents and students.
 - a. Annual service and support fees will be maintained to keep PowerSchool current.
 - b. Enterprise Management Service will be maintained to ensure server uptime and monitor for problems.
 - c. Parent training will be offered at the schools on a regular basis.
2. PowerAnnouncement will be used to communicate events and cancellations to parents and community members.
 - a. Annual service and support fees will be maintained.
 - b. Letters will be sent to parents communicating the availability of this service.
 - c. School and district administrators will use this service as appropriate.
3. A positive, informative, and current web presence will be maintained for the District and each school school.
 - a. An annual stipend will be provided to a staff member at each school to maintain the school's web presence.
 - b. An official district social networking presence will be established and maintained.
4. All staff will be provided with an email address on the district domain and the use of email will be an expectation of employment.
5. The district will establish a Wide Area Network (WAN) that ties all of the schools together with a high-speed connection for both data and VoIP telecommunications between buildings.

A financial analysis has shown that that establishing a hard-wired WAN in MSAD #58 is not feasible given the distance between buildings. Currently we have a VPN in place that allows for limited sharing of services between buildings. Conversation with MSLN and TDS Telecom have indicated that improved telco infrastructure may make a WAN feasible within the timeframe of this plan.

 - a. Conversations with MSLN and TDS Telecom will continue with the goal of establishing a WAN using telco infrastructure.
 - b. ERate funding will be sought for whatever costs are associated with the WAN infrastructure or services.
7. The district will provide the necessary telecommunications infrastructure such that parents and teachers can easily communicate as needed.
 - a. Each school in MSAD #58 will be equipped with an IP phone system providing room-to-room and external phone access from each classroom. Maintenance contracts will be maintained to ensure the systems continue to operate effectively and receive software upgrades as appropriate.
 - b. Each school will be equipped with teacher and staff voicemail and a sufficient number of outside lines to accommodate the call volume in that building. As newer technology becomes available, external lines will be moved from analog to

- PRI or SIP as appropriate.
- c. Phone systems will be designed and installed to allow for direct dialing between buildings using VoIP.
 - d. Cellular phones will be provided as needed at each building. These phones will be provided to administrators, teachers, bus drivers, and other support staff as needed to ensure that they can be contacted as necessary. Where appropriate cellular data plans will be provided to ensure that staff can perform their duties efficiently without being tethered to an office space.
 - e. All new staff will be provided with training when they begin employment that will include instruction on how to use email and the phone/voicemail systems. Each classroom will annually be provided with written documentation on how to use the phone and voicemail systems.
8. Adequate bandwidth will be maintained to provide Distance Learning classes as well as data access for all schools.
 9. The district will comply with the Children's Internet Protection Act.
 - a. Internet content will be filtered at each school through the MSLN system.
 - b. Internet safety and responsibility will be a part of students' education at all grade levels.

Goal 2: Technology will be used to help all students in our school district to meet their Personal Learning Goals in all subject areas with equity and disregard for socioeconomic status.

1. The district will provide a portable computing device for each student in grades 5-12 and a maximum ratio of 4:1 for students in grades K-4.
 - a. Portable computing devices will be provided for each student at Mt Abram High School either through MLTI or through local means with a replacement cycle that ensures that no device is more than 8 years old.
 - b. Portable computing devices will be supplied to all teachers in the district with a replacement cycle that ensures that no device is more than 8 years old.
 - c. MSAD 58 will continue to participate in MLTI to provide portable computing devices to all 7th and 8th grade students and teachers.
 - d. End-of-lease MLTI devices will be purchased by the district to replace older equipment for students in grades K-6.
2. MSAD 58 will investigate and develop or procure technologies to help students and teachers monitor Personal Learning Goals and progress toward learning standards.
3. Video conferencing equipment will be acquired and maintained at each school to facilitate distance learning and shared professional development between our buildings and other schools. A maintenance contract will be sought to ensure the upkeep of this equipment.
4. The district will purchase projection devices for use in classrooms and other areas of the school and community.

Goal 3: Students in our schools will be taught to use technology intelligently and appropriately to

become responsible members of society.

1. Professional development will focus not only on how to use technology, but on how to effectively teach using technology. All lessons involving technology in our classrooms will focus on intelligent and appropriate use.
2. Each year all students in grades 5-12 will participate in a "Safe Internet Practices" workshop.
3. Teachers will incorporate principle of safe internet use into their lessons using "Common Sense Media" as a guideline.
4. Students in grades 5-12 will be encouraged to use the district's email system as a training area to learn appropriate email etiquette.
5. Librarians in each of our schools will be trained to assist students in research using technology and to help students differentiate the quality of data sources.

Goal 4: A technology support infrastructure will be maintained such that teachers can focus on teaching and technology integration rather than on the technology itself.

1. The district will employ a Technology Director who will coordinate technology efforts between the schools, spearhead technology planning efforts, oversee all other technology department personnel, obtain grant funding when possible, oversee the ERate program, and act as a liaison to all state technology initiatives.
2. The district will employ two full-time technology staff who will coordinate and perform all maintenance, installation, and repairs of technology-related equipment. The technology staff will also assist with teacher training and technology integration.
3. A teacher in each elementary school will receive a stipend as Technology Mentor in the building and will act as a first point of contact for staff in the building with technology questions or problems.
4. A student help desk will exist at Mt Abram High School to assist students and teachers with basic repair needs and to provide basic training for teachers and students.
5. The district will continue to upgrade individual school networks to maintain adequate performance and stay current with developments in technology.
 - a. Wireless access points and network switches will be replaced as needed to maintain current standards.
 - b. Servers will be maintained and upgraded or replaced in each building as needed. A minimum of one server will be purchased per year to maintain adequate file storage, DHCP, DNS, web services, and to meet application specific needs.
6. The district will use appropriate tools to monitor network performance and networks will be upgraded as needed to maintain adequate access for all users.
 - a. Annual needs analysis will be done to determine whether network equipment needs to be upgraded to comply with current standards.

Collaboration with Adult Literacy Service Providers

We will coordinate with the MSAD#58 Adult and Community Education staff to ensure that all needs are met for adult learners in our communities. This includes having laptops available for

adult learners and providing infrastructure for distance learning when needed.

Strategies for Improving Academic Achievement and Teacher Effectiveness

The key to improving both academic achievement and teacher effectiveness through technology is continuous opportunities for professional development. MSAD 58 accomplishes this through a combination of hands-on workshops and individual coaching. Each building has a “tech mentor” who is an experienced teacher who receives a stipend to guide other teachers in their use of classroom technology and to help them find resources that they need. In addition, the technology department staff frequently makes appointments with individual teacher to assist them with lesson planning and/or with actual classroom instruction.

Integration of Technology with Curricula, Instruction, and Assessment

Teacher workshop days have been dedicated to grade-level and content-area teacher groups who are actively working on curriculum planning and revision. This process is being guided through the use of eCurriculum software. The goal of these groups is to vertically and horizontally align curriculum to the Common Core State Standards with the understanding that curriculum is a “living” document that will be revised annually to ensure it is meeting the needs of students.

During these group discussions, teachers also share ideas and resources for instruction including ways to effectively integrate technology. The technology department staff rotates through the groups to provide assistance and to evaluate what the hardware and software needs are for each group.

Technology Type and Costs and Coordination with Funding Sources

See attached spreadsheet or [CLICK HERE](#).

Supporting Resources

The District technology budget is dedicated to ensuring that the technology infrastructure is sufficient. In addition, specific content areas have a district budget line for curriculum support materials. While most technology needs are met with the built-in or free resources that are available on the provided devices, other support materials are occasionally purchased with curriculum support funds (such as science probes for a specific unit). The need for these purchases is determined by the subject area curriculum committees.

Steps to Increase Accessibility

All employees and students of MSAD 58 have access to computer technology every day and most have access every period that school is in session. The continuation of 1:1 computing at the middle school and high school levels will also serve to increase accessibility as these devices are allowed to be taken home by students. Parents will be encouraged to learn how to use the devices and training sessions will be offered at the schools to provide opportunities for parents and students to learn together.

Equally important in the discussion of accessibility is the consideration of Universal Design for Learning. MSAD #58 is keenly aware of the fact that technology can make learning in general more accessible for students. All teachers are encouraged to train students in the built-in universal design features of the devices that we make available. In addition, the technology department works closely with the special education teachers and the 504 coordinator to provide for the needs of individual students. Bookshare and Co-Writer are examples of programs that are widely used by our students with special needs.

Promotion of Various Curricula and Teaching Strategies that Integrate Technology

In addition to the Technology Mentors discussed above, we have a group of teachers who are interested in the integration of technology into the classroom who voluntarily join our online group discussion about integration of technology. These teachers share ideas and challenges among themselves. They share ideas at faculty meetings and on teacher workshop days.

Professional Development

The district will develop training programs that create an environment where technology use is commonplace.

- The district will provide a variety of on-going training activities for staff development for district personnel.
- Continue to fund the stipends for Technology Mentors to provide in-building assistance to teachers.
- Adult education will be directly involved in planning and delivering training programs for community and staff members.

Innovative Delivery Strategies

MSAD #58 is challenged by geographic diversity. Covering over 500 square miles, many of the towns, townships, and villages in MSAD #58 are quite isolated. The use of online and distance learning technologies has aided many of our students to meet their individual needs in their high school experiences.

Many of our teachers have begun work on delivering content in different ways. For example, a

group of high school teachers are working to “flip” their classrooms. By providing “lecture” content digitally and assigning students to view it outside of class time, they can maximize their student interaction time by working on deeper understanding.

Accountability Measures

The following evaluation plan will assess and report on the effectiveness of each goal.

Component	Methodologies for Data Collection
PowerSchool	Evaluation of Use Logs
Web Presence	Google Analytics
EMail System	Evaluation of Use Logs
WAN Performance	Evaluation of Use Logs
Telecom Infrastructure	Evaluation of Use Logs
Bandwidth	Evaluation of Use Logs & Graphs
Compliance with CIPA	Evaluation of Filtering Logs; Conversations with Teachers about use of Common Sense Media
Device Ratios	Hardware Inventories
LAN Performance	Evaluation of Use Logs
Curriculum	Evaluation of lessons using technology and how they relate to the curriculum
Staff Development	Surveys, Attendance Logs

MSAD #58 Technology Plan Projected Costs

	2013-2014	2014-2015	2015-2016	Fund Source
Goal 1: Technology will be used to foster connections between all emmbers of our learning community including staff, students, parents, and community residents.				
1 PowerSchool				
a. Service & Support Fees	\$3,800	\$3,800	\$3,800	District Budget
b. Enterprise Management Fees	\$2,000	\$2,000	\$2,000	District Budget
c. Parent Night Supplies	\$100	\$100	\$100	District Budget
2 PowerAnnouncement				
a. Annual Fees	\$700	\$700	\$700	District Budget
b. Letters to parents	\$0	\$0	\$0	
c. Use of system	\$0	\$0	\$0	
3 Web Presence				
a. Stipends for website maintenance	\$2,000	\$2,000	\$2,000	District Budget
b. Social Networking	\$0	\$0	\$0	
4 EMail System				
5 Wide Area Network (WAN)				
a. Conversations with TDS & MSLN	\$0	\$0	\$0	
b. WAN Services (MetroEthernet)	\$21,900	\$21,900	\$21,900	District Budget Y1 ERate following years
6 Telecommunications Infrastructure				
a. Phone System Maintenance Contracts	\$7,000	\$7,000	\$7,000	ERate
b1. Analog Phone Lines	\$15,000	\$15,000	\$15,000	ERate
b2. SIP/PRI Service	\$15,000	\$15,000	\$15,000	ERate
c. Phone System allowing Direct Dialing (Stratton)		\$30,000		Local / ERate
d. Cellular Phone Service	\$10,000	\$10,000	\$10,000	ERate
e. Staff Training	\$0	\$0	\$0	
7 Adequate Bandwidth				
Bandwidth provided by MSLN	\$0	\$0	\$0	
8 Compliance with CIPA				
a. Filtering through MSLN	\$0	\$0	\$0	
b. Internet Safety Curriculum	\$0	\$0	\$0	
Goal 2: Technology will be used to help all students in our school district to meet Personal Learning Goals in all subject areas with equity and disregard for socioeconomic status.				
1 Portable computing devices				
a. Devices at Mt Abram HS	\$54,000	\$54,000	\$54,000	District Budget
b. Devices for Teachers	\$5,000	\$5,000	\$5,000	District Budget
c. Devices for Grades 7&8	\$0	\$0	\$0	MLTI
d. End of Lease devices for K-6 use	\$28,000	\$0	\$0	District Budget
2 Personal Learning Goal Software Investigation				
3 Video Conferencing Equipment Maintenance				
4 Projection Devices				
Goal 3: Students in our schools will be taught to use technology intelligently and appropriately to become responsible members of society.				
1 Integrated technology PD & classroom use				
2 Safe Internet Practices Workshops				
3 Use of Common Sense Media				
4 Email for Students				
5 Training for Librarians				
Goal 4: A technology support infrastructure will be maintained such that teachers can focus on teaching and technology integration rather than on the technology itself.				
1 Technology Director - salary & benefits				
2 Technicians - salary & benefits				
3 Technology Mentor Stipends				
4 Student Help Desk Supervision				
5 Network Upgrades				
a. Switching and access points	\$15,000	\$15,000	\$15,000	ERate
b. Servers	\$5,000	\$5,000	\$5,000	ERate
6 Network Monitoring and Needs Analysis				



Paul R. LePage
GOVERNOR

STATE OF MAINE
DEPARTMENT OF EDUCATION
23 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0023

Stephen L. Bowen
COMMISSIONER

May 29, 2013:

This letter is to certify **RSU 58** has an approved technology plan valid July 1, 2013 through June 30, 2016.

In accepting this plan, the Maine Department of Education certifies that the school administrative unit has met requirements for technology planning. The Maine technology planning guidelines include:

- technology planning requirements for the *No Child Left Behind Act*.
- four elements for the E-rate program to qualify as an approved technology plan for a discount and to meet the requirements of the FCC's Sixth Report and Order (FCC 10-175, released September 28, 2010).
- "use of technology for student learning and efficient school administrative unit operations" for the Comprehensive Education Plan as described in Chapter 125 Basic Approval Standards: Public Schools and School Administrative Units.

Sincerely,

Pamela L. Goucher
SLD-Certified Technology Plan Approver
School Library/Technology Planning Coordinator