Educational Technology Plan, 2012-2015
Montague Area Public Schools

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District Technology Plan for July 1, 2012 through June 30, 2015
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DISTRICT MISSION STATEMENT

It is the mission of Montague Area Public Schools to educate and inspire all students to become

Motivated,
Articulate,
Productive,
Successful

citizens for today, tomorrow, and forever.

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Section 2 – Introductory Material

Mission Statement
The MAPS District Technology Committee (see Appendix A) believes our Technology Plan is an important component of our mission as defined above. We truly believe technology can help us educate and inspire all students to become **M**otivated, **A**rticulate, **P**roductive, **S**uccessful citizens for today, tomorrow, and forever.

Introduction and Demographics

Montague Area Public Schools (MAPS) serves approximately 1500 students from northern Muskegon and southern Oceana counties. The district includes three schools: R.R. Oehrli Elementary (RRO), Nellie B. Chisholm Middle School NBC) and Montague High School (MHS). All buildings are within a one-mile radius in the city of Montague, located near the shore of Lake Michigan 15 miles north of Muskegon. Approximately 90 teachers, 74 support staff and 6 administrators work for the MAPS. The free and reduced lunch count of Montague Area Public Schools, an indicator of our socio-economic status, is approximately 50%.

Section 3- Vision and Goals

In order for students to be prepared for the next challenges they will face, they must learn with and about technology. Montague Area Public Schools is committed to creating a learning environment where technology enhances the learning and experiences of each and every child enriching their ability to:

Seek, analyze and evaluate information
Think critically and solve problems
Communicate and collaborate effectively

The following district goals were developed by the District Technology Team for implementation between July 1, 2012-2015. A complete list of team members is found in Appendix C. The following section contains each goal and a general summary of the strategies to be used to achieve this goal. A table depicting each goal's including strategies, timelines, needed resources and evaluation are found in Appendix A, Goals and Strategies.

Goal 1:
Use technology to improve student achievement through curriculum integration and differentiated learning strategies.
This goal focuses on improving student achievement through the use of technology integration. Strategies include educating the teaching staff about the new METS (Michigan Educational Technology Standards) and assistive technologies aimed at helping at risk students access information currently unavailable to them. We intend to provide training and support to ensure teachers are integrating technology into instruction while also making the METS standards part of the learning targets in every unit of instruction. This goal corresponds to our District Strategic Plan goal of improving curriculum and instruction.

Goal 2:

Provide ongoing training to assist teachers in effectively integrating technologies into the curriculum.

This goal ensures the on-going training of school staff in optimal ways to integrate technology in the classroom on a daily basis. Strategies include providing ongoing and "just in time" professional development activities in the use of available district hardware/software that will allow for successful integration of technology for instruction and assessment. This goal corresponds to our District Strategic Plan goal of improving curriculum and instruction.

Goal 3: **Continue to improve the collection, analysis and use of data to improve instruction and increase student achievement.**

The goal focuses on developing stronger common assessments that provide needed information for improving instruction and curriculum. Utilizing our Pinnacle system we will collect the data that will reflect student strengths and weaknesses on essential outcomes. Analysis of this local data, along with state data will help us to make instructional decisions that will positively affect the achievement of our students. This effort mirrors our Strategic Plan and District Improvement Goals to improve student achievement and teacher instructional practices.

Goal 4: **Improve communication throughout the school community.**

Technology is providing wonderful tools for communication among people across the world or across the street. MAPS already uses many of these tools, but we want to make better use of our current tools and make use of evolving tools as well. All members of MAPS community—Board members, administration, teachers, support staff, parents, students, local businesses and community members—can look forward to better connections.

Goal 5: **Provide teachers with the best tools to teach and students with the best tools to learn.**

So many tools are available today for teaching and learning; more are evolving each year. We intend to identify, acquire, install and support the most useful, reliable tools for staff and students. These tools include hardware, software, peripherals, and training and support options. This goal, more than the previous goals, is dependent upon the acquisition of monies beyond our general fund's capability.

Section 4 - Curriculum Integration

The main focus of our technology plan is to provide teachers and students increased access and training to technology tools in order to promote student achievement. We believe integrating technology into instruction and assessment practices will lead to improved student achievement. To ensure that all staff have adequate time and instruction to master needed technology skills, it is essential to provide ongoing quality professional staff development beginning with a current technology needs assessment. Evaluation of our success will be measured in students' achievement results on the METS standards as well as increased integration of technology into current content area units.

Section 5 - Student Achievement

The integration of technology into instruction and assessment has been ongoing in our district. As new curriculum units are developed, it is our practice to integrate technology as part of instruction and assessment in all curriculum areas. With the assistance of the Curriculum Director and curriculum review committees for each content area, teachers modify units to include technology they feel proficient in using. Additionally, the tech literacy assessment provides information on our student's knowledge and proficiency of technology standards. We intend to work with teachers to identify the appropriate METS standards to be integrated into each grade level and course. As standards are assigned to grade levels and course, we will ensure teachers have access and skills needed to help students become proficient. We will use local assessment and tech literacy data to monitor progress of student achievement.

The following unit learning targets and description demonstrates a typical example of technology integration into our curriculum.

Grade 4 Science: Relationships and requirements of living things.

Learning Targets:

- Students will use menu options in applications to print, format, add multimedia features; open, save, manage files; and use various grammar tools (e.g., dictionary, thesaurus, spell-checker) to create a multimedia presentation on an identified topic. (3-5 METS)
- Students will insert various objects (e.g., photos, graphics, sound, video) into word processing documents or power point as part of a multimedia presentation.(3-5METS)
- Students use a variety of technology tools and applications to demonstrate their creativity while developing a multimedia presentation on an identified topic. .(3-5METS)
- Students will use designated internet sites to research a given topic in preparation for a multimedia presentation. .(3-5METS)
- Students will use a graphic organizer to assist in data collection. (ELA GLCE)
- Plants and animals have basic requirements for maintaining life. (Science GLCE)
- Plants and animals can be classified by certain observable traits and physical characteristics. (Science GLCE)
- Organisms physical traits help them to survive in their environments.(Science GLCE)

Performance Assessment:

Students will use designated internet sites to research plant an animal adaptations of a particular region. This information will be collected in a graphic organizer. Students will then use the information to create an imaginary plant or animal that could survive in the assigned region. Students must create a multimedia presentation that depicts the environment of the imaginary animal. In addition, students must compare their imaginary animal's adaptations for survival with actual animals living in similar environments. Students will be scored using the performance assessment criteria checklist.

Section 6 - Technology Delivery

Web-based instruction is common throughout the district. United Streaming video, Moodle, many instructional websites and blogs have become routine. Secondary students use Michigan Virtual University for extra course offerings and Nova-net through White Lake Community Education for credit recovery. In addition, RRO uses Polycom videoconferencing equipment thanks to a PLAD grant from the MAISD, enabling our students to converse with students across town or across the globe. Our District Strategic Plan calls for expanded student use of these and other online resources.

The 2009 bond project provided new methods of technology delivery in our district. We also expect that new technologies developed over the next several years will significantly increase opportunities in online learning.

Section 7--Parental Communications and Community Relations

Community relations and parent communication are a district goal in Montague. We strive to inform parents and community members about not only their children's progress but also about the programs, successes and goals of the district. A wide range of relevant information, including this Technology Plan, is available to our community on our district website at www.mapsk12.org. It is our goal to make this website more useful to our entire community.

MAPS has implemented the Honeywell Instant Alert system which can instantly inform the school community of important events via telephone or email. Our Google calendaring system provides information about all district events. Our staff develops more and better blogs each year, providing interactive opportunities for students and parents. The Powerschool Parent Portal is an important tool for parents and students to view student progress at any time.

Montague maintains a District Strategic Plan for the 2009-2014 school years. The district committee is composed of community representatives, staff, parents, principals, and board members. The addition of a technology goal was a major addition from the previous 3-year plan. Much time was spent developing goals and strategies to make technology part of our district's mission in educating students. The parents and community members of District Strategic Committee were instrumental in identifying the goals and strategies used in this technology plan. They will be called upon to evaluate this plan annually as part of the District Strategic Team's responsibilities.

The elected representatives of the community, the board of education of the Montague Area Public Schools, will also be closely involved with all aspects of planning, implementing and assessing this Plan.

Section 8--Collaboration

MAPS collaborates with the White Lake Community Education program in consortium with other northern Muskegon counties as our adult service learning providers Any non-graduate is able to enroll in the WLCE programs which currently include Adult High School Completion, Adult Basic Education, G.E.D preparation, and English as a Second Language (ESL) programming. In addition, the WLCE consortium provides access to a variety of technology courses for all ages beyond the regular school day that are within close proximity.

Montague Area Public School's technology resources have traditionally been made available for various community education programs through the White Lake Community Education program. Community needs are identified through close contact with career prep advocates and high school counselors, as well as community comment boxes. Past programs have included CAD, word processing, Internet access, graphics, etc. In addition we have had, and will have, "open lab" nights in which community members are able to use our computer labs with supervision and assistance provided by school staff. Our technology committees will continue to discuss ways to expand the community's use of our technology resources.

Representatives of WLCE have evaluated and provided direction in the formulation of this technology plan.

Section 9 - Professional Development

Professional development is an important component of Montague's Technology Plan. We are relying on the teaching staff to integrate the METS into their everyday teaching. In order to ensure teachers have the skills necessary to in fact do this, we will begin with a current teacher survey to determine the gaps in technology skills. Professional development provided through on-line tutorials, peer coaches and roundtable trainings will provide "just in time" learning for teachers. With the assistance of administration, teachers will integrate METS standards into each grade level and course, identifying clear learning targets to be met at the end of each unit of study. More in depth professional development on how to integrate technology effectively will be provided to a cadre of teachers each year. We have already begun this process and will continue to use this model in the coming years. The technology integration series is a full year with monthly training days. It provides teachers with a network with whom they can rely on for support as they integrate their new technology skills into instruction. Additionally, technology that supports access to information for at risk students will continue to be explored and presented to staff as a means of differentiating instruction. Support for implementation of these technologies will be provided through the MAISD and our Northern Service Unit, along with locally trained special education teachers. See Goal #2 in Appendix A

Section 10--Supporting Resources.

Most of the resources that are utilized to support the entire technology program are described in other parts of this Plan. We also are happily taking advantage of many supporting resources provided free by the state and by the MAISD. Our libraries make extensive use of the Michigan Electronic Library resource and all its components. The

Discovery Center and video lending library at the MAISD are often utilized by our teachers. The MAISD fiber project which has made more and more educational resources available online.

We will continue to make use of the high quality technology workshops for teachers offered at the MAISD. We encourage attendance. Some teachers attend various technology conferences throughout the year, especially MACUL. Local colleges and community education programs are also popular with our staff.

Various software companies such as Powerschool (attendance and gradebook software) and Meal Magic (food service software) continue to provide training on their products in the district.

Our staff continues to discover more and more supporting resources on the internet. The Michigan Virtual University has proven helpful to our staff as they have a wide variety of websites offering assistance with curriculum integration, internet usage, web page design and Microsoft Office troubleshooting. Our teachers are taking more and more advantage of tutorial websites, including Atomic Learning and Discovery Education. We expect increased use of these sites over the years as a result of professional development practices.

Our district Acceptable Use Policy, both for students and staff, helps promote best practices in use of district technology.

Our goal is that our school website will also become a useful tool helping the school community maximize use of technology.

Section 11—Infrastructure Needs/Technical Specification and Design

A. Current Status

1. Cabling and network electronics

District (MAPS): The Muskegon Area Intermediate School District (MAISD) fiber project, completed in 2005, connected our district via fiberoptic cable to the MAISD and it's many resources. This connection is supported by a CISCO Catalyst 3750 router housed in the MHS MDF.

MAPS has taken full advantage of this fiber connection. Most of our servers and other resources, including telephone system management, backup, internet filtering, etc. are located at MAISD facilities in Muskegon.

Montague High School (MHS)

Infrastructure at MHS was improved as part of the 2009 construction project. All desktops in the district connect to the network at 100 mps or greater.

MHS has an MDF on the southeast end of the building. This houses the Verizon Dmarc for analog line telephone access, Shoretel Shoregear 90V telephone switch, and the district core switch (HP Procurve 8212). MHS, NBC, RRO and the MAC are connected by buried fiber optic cable to this switch.

The video surveillance system servers also reside in this MDF.

IDF B is located in the mechanical room adjacent to the library. This IDF contains an HP Procurve 2910 POE switch and 3 HP Procure 2510 switches with fiber connections to the MDF.

IDF C is located at the west end of the building near the principal's office. This houses 1 HP Procurve 2910 POE switch and 1 HP Procurve 2510 switch, connected by fiber to the MDF. In addition, the clock management system is housed in this IDF.

IDF F is located in the costume storage room. This houses 1 HP Procurve 2910 POE switch and 1 HP Procurve 2510 switch within a locked cabinet, connected by fiber to the MDF.

NBC Middle School has 3 data closets. The MDF is located across from the NBC office. This closet contains a Shoretel Shoregear 90V telephone switch, an HP Procurve 5400, HP Procurve 2910 and 3 HP Procurve 2510 switches. These switches are connected by fiber to MHS and to the NBC data closets. Fiber from the MAC also enters this closet and is passed on to the MHS MDF.

IDF B is located along the south hallway. This closet houses 1 HP Procurve 2910 POE switch and 3 HP Procurve 2510 switches. These are connected by fiber to the NBC MDF.

IDF C is located across from the teacher's conference room. It houses 1 HP Procurve 2910 POE switch, 2 HP Procurve 2510 switches and 1 HP Procurve 2650 switch. These are connected by fiber to the NBC MDF.

RRO Elementary contains 3 data closets: The MDF is located in a corner of the small room north of the library. This closet houses an HP Procurve 4108 connected by fiber to MHS and to other data closets.

IDF B is located in a small room at the back of the downstairs computer lab. This closet houses 1 HP Procurve 2910 POE switch and 2 HP Procurve 2510 switches. These are connected by fiber to the RRO MDF.

IDF C is located across from the RRO Office. This closet houses 1 HP Procurve 2910 POE switch and 3 HP Procurve 2510 switches. These are connected by fiber to the RRO MDF.

The MAC Childhood Center contains 2 data closets. The MDF is located in the North hallway. The MDF houses 1 HP Procurve 2910 POE switch and 3 HP Procurve 2510 switches. These are connected by fiber to the NBC MDF.

This MDF also contains the Shoretel Shoregear 90V telephone switch.

The MAC IDF is located in the South hallway. This closet houses 1 HP Procurve 2910 POE switch and 3 HP Procurve 2510 switches. These are connected by fiber to the NBC MDF.

2. Video Infrastructure

MHS receives cable TV in the MDF area. This is presently distributed to classrooms by an amplified network of coaxial cable. Classrooms can show television programming using VHS/DVD units and ceiling mounted projectors. As in all district buildings, we hope to acquire video content through the internet and an IPTV system in future, and don't expect to support the old COAX system for long. NBC, RRO and the MAC no longer use COAX based TV, instead finding video resources using the internet.

3. Telephone System

MAPS installed a new VOIP telephone system as part of the 2009 building project. Shoretel Shoregear switches are located in all buildings. Our Shoretel voicemail and telephone management servers are housed at the MAISD. 188 Shoretel VOIP telephone handsets, primarily Shoretel 115 models, are used thoughout the district.

4. Internet Access:

All district buildings, labs and classrooms currently have internet access. This access is made possible by the infrastructure described above and by internet service provided through the MAISD. The MAISD also provides internet filtering and firewall services for our district.

5. Servers.

In general, our server needs are now being supplied by contract with the MAISD. Currently MAPS uses 2 MAISD file and print servers. MAPS is also part of the MAISD Active Directory tree and therefore benefit from both hardware and software support of the MAISD. The MAISD also houses our Powerschool (student information system), Meal Magic (food service) and HVAC servers.

MAPS now uses Google for email.

6. Computer systems.

Montague High School

The 2009 construction project provided all MAPS buildings with new computers all running Windows 7 Professional 64 bit. Most of these computers are HP Deskpro 6005 computers with AMD Phenom II processors and 4 gb RAM; or HP Deskpro 6000 computers with Intel Core Duo E8400 processors and 4 gb RAM.

MHS deploys about 200 desktop computers. Each classroom (25 cpus total) has at least one computer with network/Internet access. Large numbers of computers are located in the

North Lab (28 cpus), South Lab (26 cpus), Library (39 cpus), and Technology area (18 cpus), all with network access.

In addition, MHS employs two laptop carts, each containing 20 HP Probook 4520s laptops.

NBC Middle School.

NBC uses about 250 computers, including at least 1 computer in each classroom and in other concentrations as follows: The library (32), the adjacent computer lab (33), 8th grade lab (32), 7th grade lab (26), 6th grade lab (26).

In addition, NBC employs two laptop carts, each containing 20 HP Probook 4520s laptops.

RRO Elementary.

RRO uses about 150 computers, including at least 1 computer in each classroom and in other concentrations as follows: The downstairs computer lab (15 desktop and 19 laptops), library (8), upstairs computer lab (33), Title I room (5).

MAC Childhood Center.

The MAC has at least 1 computer in each classroom. The MAC lab contains 26 computers.

7. Software
a. Network/system wide software.
MAPS signed a Microsoft EES agreement in 2012 that provides licensing for Microsoft Server, Windows 7 and Office 2010—all standard throughout the district. District email is provided by Google Apps for Education. We're using FOG for desktop imaging, Powerschool for gradebook, attendance and other student information system functions, AVG for antivirus protection, Deep Freeze for desktop security.
b. MAISD services. Most essential computer functions are provided for us by the MAISD. File and print services, Powerschool, MUNIS (financial management), internet content filtering, firewall services, Blog hosting, Moodle, and United Streaming video services are all hosted at the MAISD. MAPS is part of the MAISD network.
3. Desktop operating systems. As described above, all MAPS computers run Windows 7 provided through our Microsoft EES agreement.
4. Other business/productivity software.
a. Microsoft Office 2010 is our standard productivity suite throughout the district. Google docs are also widely used to facilitate collaboration and off site file access.
b. Library automation. All buildings use the Follett software system. MHS uses Follett's Destiny web-based product.
c. Food Service management. Meal Magic software of Grand Haven, Michigan provides this service.
4. Other educational software in use by building:
MHS: Microsoft Front Page for web development; MS Publisher; Career Cruising career planning software; Integrated Accounting v. 8; Indesign--desktop publishing for yearbook

production; video and graphics software: Pinnacle Studio, Adobe Photoshop, Macromedia Flash, IBM CAD,
NBC: Career Cruising, Inspiration, EMC typing software; Accelerated Reader
RRO: Inspiration and Kidspiration; Accelerated Reader; Kidpix—graphics; Type to Learn 3 and Type to Learn Jr; Photostory, MaxWrite, MaxPaint, MaxCount, Read Naturally, Lego Robotics software.

Special needs: Boardmaker, Co-writer and the Premier accessibility suite are important tools to help students with special needs. We're grateful for the help of the MAISD in acquiring, installing and learning to use these products. Rosetta Stone is used to help ESL students.

In addition, all of our schools are making greater use each year of open source software such as GimpShop and Audacity as well as many free web-based applications such as Google Apps. We expect this trend will become increasingly important over the next years.

8 Printers.
In order to save costs, almost all printing in our district is done on network laser printer and multifunction copiers. Papercut software monitors printer usage by user, and helps increase printing accountability and reduced printing costs.

Ideas for the Future:
1. Network infrastructure.
Our network depends on the viability of our fiber link to the MAISD. We need to explore alternate routes to the internet to cover us when this fiber link is disrupted. We are also currently dependent on electric power from Consumer's Energy and would like to develop enough internal generator capacity to maintain critical system functions during power outages.

Our network switches are working well, but we'll need more ports to accommodate increased computer usage, especially wireless access. We'll want to achieve greater redundancy in our network electronics as well.

Expanding our capacity for wireless connectivity will be important over the next several years. Tablets, one to one computing, BYOD, etc. will demand better wireless infrastructure.

2. Video infrastructure. MAPS could probably benefit from an IP video distribution system. We're currently investigating some of these systems, including eVideon, but will need more money to implement.

3. Classroom technologies. The 2009 bond project provided excellent 21st century technologies to all MAPS classrooms. However, more helpful technologies continue to emerge and we want to evaluate their effectiveness in improving teaching and learning. Tablets, student response systems, video recording technologies, etc. are on our radar.

4. Software. Teachers have made requests for more licenses of more programs. This trend will continue as software continues to evolve. We will monitor developments and purchase software that works as funds become available. In addition, we will continue to enjoy and explore the expanding universe of open source and web-based tools.

5 Printers. We will continue to explore ways to reduce our printing costs with more efficient network resources.

Interoperability—Specific interoperability challenges need to be addressed by the Technology Coordinator as they arise. While it's impossible to list all the interoperability challenges and their solutions in this document, in general the components of the existing plan have been determined to function well together.

Continuous upgrading. Upgrading of our technology needs to follow the vision, goals and procedures set forth in this plan. In keeping with our intention to manage technology thoughtfully, we will upgrade after deliberation, not automatically. Budget shrinkage makes continuous upgrading an increasing challenge. Hopefully this plan will strengthen district resolve to fund technology improvements as fully as possible.

Timeline. A timeline for reaching the goals described above is included in section ? below. The Committee is well aware that both emerging technology and our budgets are hard to predict 3 years in advance. This plan is a living document that will be revised as appropriate.

Technical Support
The district employs a full time technology coordinator and two part time assistants. The technology coordinator facilitates the planning, acquisition, maintenance, training, assessment and funding of technology in our district. Under his direction, various vendors, consultants, teachers and students assist with technical support and training.

Our Google email system is used to communicate requests for technical support.

Many other employees provide technical support. Each media center director provides instruction, advice and troubleshooting on a wide variety of technical issues. Computer instructors in each building provide technical support to students and teachers. Finally, as teachers become more technically proficient they have been invaluable in helping others master technological skills as well.

We also continue to benefit from the excellent technical support resources provided by the Muskegon Area Intermediate School district. The MAISD provides training and support for payroll, accounting, student accounting; organizes group and special training on Microsoft Office, Inspiration, digital cameras and many other relevant issues; organizes and supports distance learning projects; hosts and supports our district web site; organizes group meetings and listserves to keep our key people informed of developments in technology. Tim Brown, the MAISD's regional network manager, provides advice about network design and helps troubleshooting internet and network problems. The help provided

by the MAISD staff has been accurate, timely, user-friendly, cost-effective and in general wonderful.

We also maintain support contracts with several vendors: Follett Software—library automation; Meal Magic Software—food service management; Grand Valley Automation—HVAC systems management.

Section 12-Increase access.

MAPS has greatly increased access to technology for all students and staff during past years. All students and teachers currently have access to computers in both their classrooms and in the various computer labs and libraries throughout the district. In order to increase access to technology we'll need to address two main issues:
a. eliminating barriers to use of technology by special needs students and
b. providing more effective computer person-hours for all members of the MAPS community.
c. providing more web-based opportunities so school community members can continue learning and interacting outside the school buildings and outside of normal school hours.

The first issue has been, and will continue to be, addressed by our special education teachers working closely with staff at the MAISD. The assistive technology specialists at the MAISD have been extremely helpful and responsive in finding appropriate assistive technology for the MAPS students who have needed this help. The MAISD folks have provided training for both staff and student in order to make this assistive technology work. The Premier Assistive Technology suite has become the primary tool by which many special needs students have gained increased access to the benefits of technology in learning. Other solutions will be developed in cooperation with the MAISD in response to student needs.

The second issue will be partially addressed by earlier sections of this plan. As we increase our network speed, modernize our computers and increase the effectiveness of our technical support our users will gain more from each hour they spend on a computer.

The third issue has seen both great progress and significant challenges. More and more resources are web-based today, including our blogs, gradebook, library resources, etc. The challenge is that many of our families lack internet access at home. Economic conditions have exacerbated this problem, and we'll need to find creative solutions.

Section 13--Budget and timetable

This budget/timetable is a "living document." Neither the State of Michigan nor our school are really sure what our budgets will look like in future; our assessment of our technological needs may change as well. The following is our best estimate. We may not be able to fund all of these projects and will reassess our resources and needs as part of the evaluation of this Plan.

Item	2012-2013	2013-2014	2014-2015
Tech Coordinator salary and benefits	86,000	86,000	86,000
Tech Assistants, salaries	20,000	20,000	20,000
Network licenses and service contracts	$5,500	$5,500	$5,500
Antivirus licenses	$1,500	$1,500	$1,500
Website maintenance, upgrades	3,000	3,000	3,000
Internet Service-MAISD	7,000	7,000	7,000
Internet filtering--MAISD	$1,600	$1,600	$1,600
Fiber project payment	13,000	13,000	13,000
Fiber project maintenance	3,500	3,500	3,500
Powerschool maintenance	$5,000	$5,000	$5,000
Other software maintenance	$2,000	$2,000	$2,000
Equipment and repairs	$8,000	$8,000	$8,000
Telephone repairs and service	$5,500	$5,500	$5,500
Title programs	$15,000	$15,000	$15,000
Totals:	$176,600.00	$176,600.00	$176,600.00

Section 14--Coordination of Resources.

By law, Montague Area Public Schools approves budgets one year at a time. This budgeting process is subject to variations in funding from the state and federal governments. Nonetheless our district has consistently shown the will to fund crucial technology projects. The technology department has each year been awarded a budget sufficient to maintain the network, perform repairs and make small enhancements in computer systems. The various building and department budgets have also been able to fund various technology improvements. We hope our financial condition will allow this to continue in coming years.

We also have used, and will continue to use, the appropriate Title programs to fund improvements in teaching and learning with technology. Our Title I director supervises this process.

We have taken full advantage of any Universal Services Fund (E-Rate) monies available to us.

The MAISD had done a fine job of keeping us appraised of grant opportunities. Our staff is encouraged to pursue grant opportunities available to them as well; several have received grants for technology over the past years. MACUL and TeachersCount grants have been awarded.

Our community has been supportive of MAPS requests to improve technology through bond issues. These projects will continue to be important as larger technology purchases are needed.

Section 15--Evaluation

Face to face meetings of all people interested in district technology are expensive and difficult to arrange. We are working on strategies to evaluate the Technology Plan using of technologies like email, threaded discussions, blogging, etc. These methods will facilitate continuous evaluation of our technology progress. The District Technology committee will meet face to face once per year and formally review this plan at that time. The committee will examine all plan goals, issue a report on the year's progress to these goals, and revise the plan as necessary.

Some of our goals are measurable, and the Committee will examine all relevant data. Other goals are not easily quantifiable; evaluation of these issues will require the best judgement of Committee members, in consultation with all stakeholders. The committee will use survey instruments, involving efficient use of technologies like Zoomerang, to get additional input from community members as appropriate.

The chairpeople of the committee, the Technology Coordinator and the Curriculum director, will moderate the discussion and compile committee opinions into the revised document.

Section 16—Acceptable Use Policy. **See Appendix B.**

Appendix A: Goals and Strategies

Goal One: Use technology to improve student achievement through curriculum integration and differentiated learning strategies.

- Increase the number of units integrating technology by 5% each year.
- Improve student proficiency levels in all content areas by 3% over the next 2 years.

Strategy	Who is responsible?	Timeline	Resources needed
1. Educate the teaching staff on the new METS (Michigan Educational Technology Standards)	Tech teachers, Tech Director Curriculum Director MAISD Staff	2012 - 2015	Time
2. Integrate appropriate METS into each grade level/content area/course.	Curriculum Director Tech Committee Teaching Staff	2012 - ongoing	Time
3. Complete a needs assessment/current practice survey to determine needed professional development	Tech Director District Tech Committee Administration Teaching Staff	2012 - 2015	Time Survey Tool
4. Provide professional development in technology integration in collaboration with the MAISD.	Tech Director Curriculum Director Administration Teaching Staff	2012-2015	Title IIA/D funds MAISD Time
5. Provide continuous follow up and just in time training sessions to support integration of learned skills.	Tech Director Curriculum Director Administration Teaching Staff	2012-2015	time
4. Provide release time for the elementary tech teacher to work with elementary staff to integrate technology experiences into one or more current content area units.	Curriculum Director Tech Director District Tech teachers classroom teachers	2012-2015	Time
5 Develop a Middle School technology curriculum which meets the METS and better prepares students for Tech literacy assessment	MS and Elementary Tech Teachers/ Curriculum Director/Tech director	2012-13	Time
7. Integrate technology skills and resources into K-12 curriculum maps.	Curriculum Director Teaching Staff Administration	Ongoing-2012	Time
8. Provide PD and access to assistive technologies that will assist at risk learners in	Special ed teachers, classroom	2012-ongoing	Title I / At risk funds, Time

accessing and encoding information in all content areas.	teachers, Title I Director		
9. Train staff on the use of the Data Warehouse house at the MAISD.	MAISD Tech Director Administration Tech Support Staff Teaching Staff	Fall 2012 - Spring 2013	Time Money for Licensing Fee
10. Expand the opportunity for students to access online learning courses for initial credit and credit recovery	Curriculum Director Tech Director Administration	2012-2015	Time At Risk and general funds
11. survey teachers on effectiveness of technology PD opportunities accessed annually	Curriculum Director Tech Director Administration	2012-2015	time

Goal Two: Provide ongoing training to assist teachers in effectively integrating current technologies into the curriculum.

- Increase by 5% annually staff reporting effective technology PD that positively affected their classroom instruction.

Strategy	Who is responsible?	Timeline	Resources needed
1. Provide professional development in technology integration in collaboration with the MAISD.	Tech Director Curriculum Director Administration Teaching Staff	2012-2015	Title IIA/D funds MAISD Time
2. Provide continuous follow up and just in time training sessions to support integration of learned skills.	Tech Director Curriculum Director Administration Teaching Staff	2012-2015	
3. Provide PD and access to assistive technologies that will assist at risk learners in accessing and encoding information in all content areas.	Special ed teachers, classroom teachers, Title I Director, Tech Director	2012- ongoing	Title I / At risk funds, Time
4. Train staff on the use of the Data Warehouse house at the MAISD.	MAISD Tech Director Administration Tech Support Staff Teaching Staff	Fall 2012 - Spring 2012	Time
5. Make us of web based tools to train staff (eg. Learnport, district website, web 2.0, MAISD, Wikis	MAISD Tech Director Administration Tech Support Staff Teaching Staff	Fall 2012 - ongoing	Time
6. Develop survey tool to assess PD effectiveness	Curr Director, Tech Director	Fall 2012 - Spring 2013	Time
7. Use survey tool to assess PD effectiveness	Curr Director, Tech Director	2013- ongoing	Time

Goal 3: Continue to improve the collection, analysis and use of data to improve instruction and increase student achievement.

- Improve student proficiency levels in all content areas by 3% over the next 2 years.
- Increase the number of common assessments for which valid data is collected to make instructional decisions to include one per trimester for all core classes by 2015.

Strategy	Who is responsible?	Timeline	Resources needed
1. Collect common assessment data each marking period in all core areas in Powerschool which links assessments to standards.	Administration Classroom teachers SI teams	2012-ongoing	Time Powerschool/MAISD
2. Analyze common assessment data by grade level department in order to make instructional decisions	Administration Classroom teachers SI teams	2012-ongoing	PD in analyzing data Time Title IIA
3. Access information through the MAISD Data Warehouse at the district, school and classroom levels for use in decision making	Administration Classroom teachers SI teams	2012-ongoing	PD in analyzing data Time Title IIA
4. Use the data warehouse to import local assessment data to allow for better disaggregating of data for use in school improvement decisions	Administration Classroom teachers SI teams	2012-ongoing	PD in analyzing data Time Title IIA
5. Use technology to improve ease of data collection and analysis (eg cps system, exam view, web tools	Administration Classroom teachers SI teams	2012-ongoing	PD in analyzing data Time Title IIA

Goal 4—Improve communication throughout the school community

- Use survey tool to determine level of customer satisfaction with school communications.
- Improve level of customer satisfaction by 5% each year through 2015

Strategy	Who is responsible?	Timeline	Resources needed
Continue to update school website, including better video and audio features	Tech Director	2012-ongoing	Time $3k per year
Provide training for parents on various communications options available to them	Tech Director, Curr Director, Administration	2012-ongoing	Time
Solidify strategies of communicating with parents via email,social media	Tech Director, Tech Committee Administration	2012-ongoing	Time Potential software cost
Continue to train and encourage staff to maintain updated webpages and blogs	Tech Director, Curr Director Administration	2012-ongoing	Time Potential PD time
Explore facebook, twitter and other relevant social networking strategies	Tech Director, Tech Committee	2012-ongoing	Time
Develop survey tool to assess success of communication strategies	Tech Director	2012-2013	Time Potential software cost
Use survey tool to assess success of communication strategies	Tech Director	2012-ongoing	Time

Goal 5: provide teachers and students with the best tools—hardware, software and support--for teaching and learning.

- We can assess progress toward this goal by inventory of district technology resources.
- Increase staff satisfaction by 3% each year through 2015 using staff survey

Strategy	Who is responsible?	Timeline	Resources needed
More devices for student use—laptop carts or tablets	Tech Director, Bond consultant administration	2012-ongoing	Time Money—bond?
Continue to explore and train staff and students in online learning opportunities	Tech Director, Curr Director, Tech teachers, Bond consultant, administration	2012-ongoing	Time Potential PD time
Develop and publicize web 2.0 tools for student, staff and parent learning	Tech Director	2012-ongoing	Time Potential PD time
Develop survey tool to assess tech satisfaction	Tech Director	2012-2015	Time Potential software cost
Use survey tool to assess tech satisfaction	Tech Director	2012-ongoing	Time

Appendix B.
Internet Safety Policy

INTERNET SAFETY 4510

The Board authorizes the Superintendent to develop services linking computers within and between buildings in the District, and to provide access to the international computer network (Internet) for students, staff and, if requested, members of the Board of Education. All computer and (network) implementation shall be in line with the Board policy on technology and the District's educational goals.

Use of computer and the (network(s)) as a part of any class or school assignment shall be consistent with the curriculum adopted by the District. The District's general rules for behavior and communications shall apply when using any computer equipment.

Personal Accounts
The Board authorizes the Superintendent to provide personal accounts for students, staff, and, if requested, members of the Board, to access District computers, the District computer network, and the Internet, including file server space in accordance with this policy. Such access shall be provided in furtherance of the District's educational mission, to enhance student knowledge of and familiarity with technology, and to facilitate communication, innovation, and sharing of resources. To ensure the integrity of the educational process and to guard the reputation of the District, student and staff expression in public electronic media provided by the school may be subject to review, comment, editing, and/or removal by school officials.
No student, staff, or Board member Personal Account shall be activated until the individual has submitted a signed Technology Code of Ethics and has been notified of the District rules for acceptable use of technology. Unless the student is 18 years of age, a parent (legal guardian) must also sign the agreement. Upon receipt of the contract, the Technology Coordinator will provide account, password, and other log-on information and instruction. Most users will be given access to a "home directory," a private network storage area in which they can save, modify and delete files as they wish. Users may request additional disk space, which may be provided by the Technology Coordinator according to availability and priority of the use.

Personal accounts and all use of District computer resources are considered a privilege, not a right, and are subject to the District's rules and policies. Electronic communications and stored material may be monitored or read by school officials. Electronic mail in personal accounts will not generally be inspected by school officials without the consent of the sender or recipient except as required to investigate complaints, which allege a violation of the District's rules and policies. Student electronic storage space shall be subject to the District's policy and rules on student records.

It is the policy of MAPS that access to the Internet provided by the District is expected to be used as an educational and/or work- related resource and that such access shall be

made available subject to rules and regulations as may be established. No use shall be permitted which, in the judgement of the District, is in any way prejudicial to the best interests of the school or in conflict with the District.
The District reserves the right to refuse access to the Internet by the district to anyone when it deems it necessary in the public interest.

Definitions (Most of these definitions are taken from federal law)
1. Access to the Internet- A computer shall be considered to have access to the Internet if such computer is equipped with a modem or is connected to a computer network that has access to the Internet.
2. Minor shall mean an individual that has not attained the age of 19.
3. Obscene shall have the meaning given such term in section 1460 of title 18, United States Code.
4. Child Pornography shall have the meaning given such term in section 2256 of title 18, United States Code.
5. Harmful to minors shall mean any picture, image, graphic image file, or other visual depiction that:
a. taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex or excretion;
b. depicts, describes, or represents, in a patently offensive way with respect to what is suitable for minors, an actual or simulated sexual act or sexual contact, actual or simulated normal or perverted sexual acts, or a lewd exhibition of the genitals; and
c. taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.
6. Hacking shall mean attempting to gain unauthorized access to computer and network systems connected to the Internet.
7. Technology protection measure shall refer to a proxy server managed by the district that blocks and /or filters Internet access or other means by which access may be blocked and/or filtered.
8. Authorized staff member as used herein shall refer to an adult staff member appointed by the District Technology Committee.
9. Technology committee as used herein shall refer to a group of the District staff including the following:

a. Superintendent
b. Technology Coordinator
c. Building Principals
d. 3 Staff Members

4510-R-1 Access to Internet by Minors

Minors accessing Internet services provided by the district shall be subject to the following rules and regulations:
1. Minors shall not access material that is obscene, child pornography, harmful to minors, or otherwise inappropriate for educational purposes.
2. Minors shall not use the District's technology or Internet resources to engage in hacking or attempts to otherwise compromise any computer or network system's security.
3. Minors shall not engage in any illegal activities on the Internet.

4. Minors shall not disclose personal identification information on the Internet.
5. Minors shall be monitored while using the Internet.

Access to Internet by Adults
Adults accessing the Internet services provided by the District shall be subject to the following rules and regulations:
1. Adults shall not access material that is obscene, child pornography, or otherwise inappropriate for training or work-related uses.
2. Adults shall not use MAPS technology resources to engage in attempts to compromise any computer or network system's security.
3. Adults shall not engage in illegal activities on the Internet.

Technology Protection Measure
The District shall use a technology protection measure that blocks and/or filters Internet access to prevent access to Internet sites that are not in accordance with the policies of the district. The technology protection measure that blocks and/or filters Internet access may be disabled by an authorized staff member for bona fide research purposes with permission of the immediate supervisor of the staff member requesting said disabling or with permission of the administrator of the school.

Policy Violations
Any violation of this policy may result in the loss of access to the Internet administered by the District. Additional disciplinary action may be determined in accordance with existing administrative procedures and practices, employee contracts and student codes of conduct, and as stipulated in the district board policy, and including applicable law enforcement agencies when necessary.

4510-R-2
Policy Challenge Procedure
An individual who has been granted access to the Internet by the District and desires to access an Internet site that is not compliant with this policy may challenge the enforcement of the policy according to the following provisions:
1. Internet site review requests should be directed, in writing, to the District Technology Coordinator and Building principal for consideration, followed by a meeting of the individual making the request, the coordinator, and the principal.
2. An appeal may be made to the Technology Policy Committee to review the site within a reasonable time for a final determination of the appropriateness of the site for educational purposes.
3. MAPS Principals will regulate enforcement of the policy, including disciplinary actions, and shall forward to the Superintendent of the District any challenges to the severity of the applied discipline.
4. Challenges to the application or enforcement of the District Internet Safety Policy that cannot be resolved at the levels outlined in the preceding step may be taken by appeal to the Board of Education.

The District's computer and network use rules shall be consistent with the following requirements:

- Users may not use District equipment to perform or solicit the performance of any activity which is prohibited by law.
- Users may not use the system to transmit or publish information that violates or infringes upon the rights of any other person, or information that is abusive, obscene, or sexually offensive.
- The District computer equipment shall not be used for commercial purposes by any user, or for advertisement or solicitation without prior written approval from the Superintendent.
- Students may not access or attempt to access the records or files of other users or of the District, nor delete, alter, or otherwise interfere with the integrity of computer-based information or resources.
- Users may not use the electronic mail facility to send unsolicited, bulk, chain, harassing, anonymous, or other messages which are an annoyance to the recipient or which may cause a degradation of system performance.

4510-R-3

Users may not use the network facility to access or bring into the school environment material which is inconsistent with the educational goals of the District, including but not limited to material which is defamatory, abusive, obscene, profane, sexually explicit, threatening, racially offensive, illegal, or which aids or advocates illegal activity other that non-violent civil disobedience.

Supervised Use

Teachers are encouraged to use the District network in researching material for classes, collaborating with colleagues, developing innovative approaches, or otherwise enhancing their background, skills and teaching. Teachers are encouraged to make use of the District network in their classes when the use of this resource enhances the education of students, is appropriately supervised, and is consistent with District goals and objectives. School administrators shall monitor technology use in the curriculum to ensure its effectiveness and develop ideas for further in-service instruction of staff.

School libraries and media centers will provide networked computers for students and staff to use for research purposes. Library/media center staff shall make every attempt to assist users in the operation of the network and to monitor the content of material being accessed. Academic assignments have priority over personal research.

Any staff member who becomes aware of student network use in violation of the District's acceptable use rules shall refer the incident to the system administrator for action, and may remove the student from the computer.

Violations of Conditions

Upon receiving notification of a violation of District rules or policies, the principal and Technology Coordinator may suspend or terminate a staff member or student's personal account. The principal and Technology Coordinator may access any and all relevant files of the user in attempting to determine the veracity and/or the extent of the violation.

Prior to a suspension or termination, or as soon after as is practicable, the principal and Technology Coordinator will inform the student or staff member user of the suspected violation and provide an opportunity for explanation. If the alleged violation should involve a member of the Board of Education, the system administrator shall relay that information to the Superintendent who shall relay the complaint to the President of the Board, or in the case of a complaint against the President, to the Vice-President of the Board. A Board member's personal account shall not be terminated unless by a majority vote of the Board.

4510-R-4
Staff users may request a review hearing with the building Principal and/or a different system administrator that the one who imposed the suspension or termination within seven days of the action, if the user feels the action was unjust.

System Integrity and Security
The District computer network will be protected by an electronic "firewall" from unauthorized access by outside entities.

All users, particularly staff, shall be instructed in password security. Passwords in general should not be based on information which is readily associated with the user (addresses, phone number, spouse's name, etc.) The system administrator may require a user to change a password if it fails to meet these criteria, or may issue randomly generated passwords to all users. Staff passwords should be changed every six months.

No user in a District building should leave a computer which is logged on to the network unattended, and all users should promptly report any suspected breach of security or data integrity to the system administrator.

District Web Page(s)
The following are guidelines for construction of Montague Area Public Schools WWW pages.

Purpose: District web pages should promote a positive image of the District and its programs. Web pages should facilitate and enhance the communication and educational goals of the District in a timely and professional manner.
Responsibility: The Technology Coordinator and Superintendent are responsible for overseeing the content and design of all District web pages. The building Principals and/or their designees are responsible for developing web pages and content for their buildings and programs. The Technology Coordinator is responsible for entering data and uploading web pages.

Guidelines: These guidelines have been developed to ensure consistent quality and appropriate content of Montague Area Public Schools' web pages.
1. Any and all Web pages that can be accessed through the Internet representing the District in part or in whole shall be carried and posted only on the District's server and shall be designed and published in accordance with the rules promulgated by the Superintendent.
2. The home page of each school and/or school program will present a consistent appearance. Contents, menus, background colors, heading styles, fonts, point sizes, buttons,

icons, page sizes, and other graphic and design elements should create unity within the array of the District's building and program pages. (District to provide suggested template.)
3. Web pages will strive for high standards of professionalism with current and accurate information; correct grammar and spelling; and with no inappropriate reference to race, gender, religion, politics, alcohol, drugs, firearms, or sex.
4. District web pages shall be free of all advertising and/or promotion of causes inappropriate to a public school educational setting.
5. No copyrighted text, graphics or sound files will be used on District web pages without the express consent of the originator. Everything must be assumed to be copyrighted unless otherwise stated.
6. All updated and new pages must be proofread by a member of the staff prior to uploading. Making sure the information is proofread is the responsibility of the person doing the uploading.
7. All links must be verified by someone other than the author/typist prior to uploading. This verification is the responsibility of the person doing the uploading.
8. Web pages linked from District web pages must have educational or school related value and be free of inappropriate references as stated in 3 and 4 above.
9. Permission of a parent or guardian must be on file prior to using a student's photo, name, and/or original work on the Internet (see attached form). Personal information, including name, home address, and telephone numbers, for staff or students, will not be indicated on District web pages or used, in any form, on any District web page.
10. The District website will include a disclaimer similar to the following:
"Schools make every effort to provide a high quality web site with information and links that facilitate the accomplishment of our educational mission. Because of the unpredictable nature of the Internet however, we cannot be responsible for the content of pages not directly linked to this web site."

Appendix C.
MAPS Technology Committee Members

Nathan Robrahn, Superintendent
Jon Rockwood, Technology coordinator
Allison Hier, Curriculum Director
Kevin Kruger, MHS Principal
Ken Diamond, MHS Assistant Principal
Curt Hansen, NBC Principal
Jeff Henderson, RRO Principal
Van Lawrence, MHS teacher
Rachel Netcott, MHS teacher
Dave Vermeulen, NBC teacher
Kris Day-Hinken, RRO teacher
Tom Englesman, RRO teacher
Nancy Grinwis, support staff
Bob Lash, Transportation Director
Tom Cederquist, Operations Director