



(Required Element: Cover Page – SECTION 1)

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Genesee County, Michigan

(State Code# 25260)

Date of Technology Plan:

July 2012 – June 2015

Contact Group:

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Genesee Intermediate School District
(State Code# 25)

URL for Technology Plan:

www.montrose.k12.mi.us/Technology/TechPlan

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Introduction

(Required Element: Introductory Material – SECTION 2)

District Mission Statement:

The Montrose Community Schools exist to provide the society with competent, responsible, caring citizens who are life long learners and will further the educational goals and ideals of our community. This will be accomplished through a challenging, adaptable, comprehensive curriculum, and fostered by a creative, motivated knowledgeable staff. The curriculum will be provided in a nurturing environment with family and community involvement.

Description of the District

The Montrose Community School District is located in the extreme northwest corner of Genesee County and is considered a rural district. The district is considered an at risk with 53.8 percent of the students participating in the National Food Program. There is no major industry in the community and the school district is the largest employer of the community.

The district is comprised of four buildings: Carter Elementary (Pre-K-4), Kuehn Haven Middle School (5-8), Hill-McCloy High School (9-12) and the Montrose Alternative Education Building. The student population is approximately 1420.

Each building office and classroom is networked with Internet Access. There are telephones in each classroom as well as a video presentation device (either a LCD Projector or a 36 inch color monitor) that are connected to the teacher work stations for presentation purposes. Every teacher in the district has a computer for administrative and planning purposes. All K-12 classrooms are also equipped with four connections to the network and each where applicable, has at least one student computer with plans for two to three computers per class. In a previous survey of the students in the district it was determined that 40% of the students have access to computers at home.

Buildings

Hill McCloy High School 301 Nanita Drive Montrose, 48457	Grades 9-12 30 teachers 402 students
Kuehn Haven Middle School 303 Ray Street Montrose, 48457	Grades 5-8 27 teachers 440 students
Carter Elementary 200 Park Drive Montrose, 48457	Grades K-4 23 teachers 498 students
Montrose Alternative Education Center 303 Ray Street Montrose, 48457	Grades 9-12 4 teachers 64 students

District Technology Planning Team

Technology Support Representatives	Jeffery D. Winchester, Director of Technology
High School Representatives	Jim Ply, Principal, Jeremy Harber, Teacher, Parent Julie Erway, Teacher
Middle School Representatives	Linden Moore, Principal & Curriculum Director Tamela Belson, Teacher Kelly Sanborn, Teacher
Elementary School Representatives	Comer "Pete" Carey, Elementary Principal Brian Metcalf, Teacher Carolyn Casler, Teacher
Choice Alternative Representatives	Linden Moore, Principal Toni Sue Atwell, Teacher, Parent
Central Office Representative	Mark Kleinhans, Superintendent, Parent Cassandra Jackson, Curriculum Director
Board of Education Representative	Kurt Henige , Vice President

Vision and Goals of the Technology Plan

(Required Element: Vision and Goals – SECTION 3)

District Technology Mission Statement

The Montrose Community Schools will equip students and staff with technology to enhance teaching and learning while providing community access to district wide information.

District Technology Goals

- Provide for the integration of media and technology equitably throughout the curriculum to enhance student learning where appropriate.
- Provide continuous leadership, training, and support for staff and students to fully utilize district technology.
- Prepare students for success in the global market place.
- Provide staff and students with current, reliable technology and encouragement for successful integration of technology in the classroom.
- Meet State and National Educational Technology Standards and Expectations for K-12.

I. Curriculum

A. Curriculum Integration (SECTION 4)

Montrose Community Schools has as its primary technology curricular goal to meet the Michigan Educational Technology Standards and Expectations for grades K-12 as found at www.techplan.org.

Specific Goals:

- ❖ **Students will demonstrate an understanding of the basic operations and concepts of technology and its use.**

Strategies will include:

- Students will identify common uses of technology found in daily life.
- Students will identify ways to prevent common hardware and software problems that may occur during every day use.
- Students will identify ways technology has changed life at school and home.

- ❖ **Students will demonstrate an understanding of the Social, Ethical, and Human issues relating to technology**

Strategies will include:

- Students will demonstrate an understanding of technology as a source of information, learning, and entertainment.
- Students will explore various technology resources that could assist them in pursuing personal goals.
- Students will use technology to identify and explore various occupations or careers.

- ❖ **Students will demonstrate an understanding of technology as a productivity tool.**

Strategies will include:

- Students will know how to use a variety of productivity software.
- Students will use a variety of technology tools and applications to promote their creativity.
- Students will use collaborative tools to design, develop, and enhance presentations.

- ❖ **Students will demonstrate how to use technology communications tools.**

Strategies will include:

- Students will create a project using a variety of media and formats to present content information to an audience.
- Students will use basic telecommunication tools for collaborative projects with other students.
- Students will use age appropriate media to communicate ideas to classmates, family and others.

- ❖ **Students will demonstrate how to use technology as a research tool.**

Strategies will include:

- Students will use a variety of technology resources to locate or collect information.
- Students will determine the validity of information accessed from various sources.
- Students will know how to create, populate and perform queries on existing databases.

Identifying and promoting curricula and teaching strategies

Montrose Community Schools currently provides, and will continue to provide professional development that integrates technology into the curriculum and classroom instruction. Specifically we have done training with 5-12 staff in the use of “Blackboard” as an effective tool for technology integration into daily lessons. Continued professional development is available through Genesee Intermediate School District, <http://mi.learnport.org> and through our own trained staff.

B. Student Achievement (SECTION 5)

Four major technology initiatives for Montrose Community Schools in the area of student achievement will be:

- ❖ Utilization of STAR reading and math achievement testing for grades 1-8. This software package is used to test students four times a year in math and reading to measure student growth.
- ❖ Utilization of Blackboard for classes 5-12 as a way of electronically delivering learning material to students.
- ❖ Utilization of Fast Forward computerized reading program for all at risk students in grades 2 –8.

Time line for integration:

Program	Integration	Person(s) responsible
1-8 STAR Reading - Math	1-8 all grade levels	Middle School and Elementary Principal
Blackboard	Grades 9 – 12 all subjects, as applicable. Grades 6 - 12 all grade levels. as applicable.	High School Principal Middle School Principal
Fast Forward Reading Program	At risk students in grades 2-8 Students will be added each year based on need and availability.	Elementary, Middle school and High principals

C. Technology Delivery (SECTION 6)

As a member of the Genesee Network for Education Telecommunications (GenNET), Montrose Community Schools has access to a countywide voice, video, and data network that connects all district buildings as well as all GenNET member districts to one another. In addition to high speed Internet, GenNET interconnects throughout Michigan to other K-12 networks and is capable of global voice and video interactivity. GenNET technology has enabled the following strategies to be implemented with the end results being better access to resources, enhanced instruction, and increased student achievement:

- **Internet:** Students and staff of Montrose Community Schools have the advantage of high-speed Internet access through GenNET, this connection is available in every classroom in the district. This provides teachers and students with resources for research, collaboration, and communication.

- **GenNET ITV Classes:** Local teachers provide instruction using state of the art ITV classrooms located in every member high school to students throughout the county. Hill-McCloy High School students are able to take classes that are not offered in the home school curriculum and are able to experience and learn first hand new communication techniques to qualify them for future employment. Cutting edge technology allows students and teachers to interact in a dynamic classroom environment that enhances learning.
- **GenNET Online Programs:** Hill-McCloy High School Students have access to a wide range of courses delivered through the Internet that are not offered in their home school curriculum. Barriers such as time, space, equality of opportunity, and lack of resources diminish with this application of GenNET technology.
- **Middle School and Elementary ITV Classrooms:** A voice and video interactive center have been installed in the Montrose Community Schools middle school and elementary school. Students are now able to connect with other students both in and outside the district for shared projects. Students can also access authors or experts in specific fields for first hand information, as well as people around the world for increased understanding of the global community. Virtual learning experiences also include interactive e-field trips to museums, art galleries, NASA, science institutes, zoos, state parks, national monuments, and universities. Future plans include exploring the feasibility of direct instruction for middle schools students.
- **Blackboard:** This Internet-based platform has been introduced to teachers, students, and staff. Blackboard has the potential to not only enhance communication between students, teachers, and staff but also with parents. The multi-functionality of Blackboard makes it a powerful instructional tool for teachers and students by providing organization and access to resources. As the base for many online courses in college and business and industry, students will be well served by becoming familiar with it during K-12.
- **Video-on-Demand:** GenNET member districts have been accessing instructional video programs via digital delivery over the last few years. Teachers are currently using Discovery/UnitedStreaming to access over 4000 videos as well as other curriculum materials over a GenNET-based server. Expansion plans include the addition of REMC media materials to be digitally delivered.

D. Parental Communications and Community Relations (SECTION 7)

How the plan will be distributed to the community:

The Montrose Community Schools technology plan is available to the community via our district web site. Our community is informed in the fall via our Automated Calling System about the plan and how to access our web site to view it.

Additional means of communicating with parents via technology:

Currently parents can access student records on attendance, schedules, report cards, and daily assignments over the Internet through the use of ParentWeb. Parents of students are notified by automated phone system of student absences. Montrose Community Schools subscribes to School Reach, an automated phone system, which is used to deliver important information to all parents in the community, such as parent teacher conferences, report card distribution, progress report distribution, snow days, and bus changes.

Involvement of the community with the tech plan:

Our technology committee consists of three members who are parents of students in our district. Parent input is also solicited by building administrators at parent teacher conferences, and open house.

E. Collaboration (SECTION 8)

The Montrose Community Schools is focusing on student achievement and is not currently involved in adult literacy issues due to current financial situations.

II. Professional Development

F. Professional Development (SECTION 9)

Professional development goals:

- ❖ Provide continuous leadership, training, and support for administration, staff and students to fully utilize district technology to enhance student learning.
- ❖ Provide Professional development that involves the learner at the time of instruction and is relative to the technology they will be using/instructing.
- ❖ Provide administrators and teachers professional development on the state and national technology standards and how to integrate them into their curriculum.
- ❖ Provide training on current technology i.e. projectors, scanners, digital video recording devices, external storage devices, district owned software.
- ❖ Provide training that will help all staff and administration meet the minimum technology competencies as addressed by state and national standards for educators.

Time Line:

2012/2013 In-Service

- ❖ Technology vision in-service for the enhancement of student learning.
- ❖ In-service staff on the state standards for technology and expectations on which grades/departments will be responsible for integration and how we will assess that integration has taken place to increase student achievement.
- ❖ In-service based on results of PD survey for integration.
- ❖ Assessment of teacher, administrator, and support staff on technology comfort, knowledge and integration.
- ❖ Training for parents and community members on blackboard, parent web, and high school sports website.
- ❖ Train administration, teachers and support staff on technology/software that may be new to the district.

2013/2014 In-Service Continuation

- ❖ Technology vision in-service for the enhancement of student learning.
- ❖ In-service staff on the state standards for technology and expectations on which grades/departments will be responsible for integration and how we will assess that integration has taken place to increase student achievement.
- ❖ In-service based on results of PD survey for integration.
- ❖ Assessment of teacher, administrator, and support staff on technology comfort, knowledge and integration.
- ❖ Training for parents and community members on blackboard, parent web, and high school sports website.
- ❖ Train administration, teachers and support staff on technology/software that may be new to the district.

2014/2015 Assess

- ❖ Continuation of surveys to determine staff needs for training.
- ❖ Continuation of training based on staff needs.
- ❖ Train staff on technology/software that may be new to the district.

G. Supporting Resources (SECTION 10)

As a constituent district of Genesee Intermediate School District and a member district of GenNET, Montrose Community Schools is able to access the following services and resources to ensure the effective and successful use of technology.

- Internet access with content filter
- Blackboard server, software, subscription
- Network management services
- CEO Imaging – Scanning and archiving documents and graphics
- Teacher Discovery Center – Integration of materials, online resources
- REMC Association of Michigan statewide services and projects
- REMC Cooperative Acquisitions Project - <http://www.remc.org>
- REMC 14 Media Collection including M-ITV programs Webmax accessible
- Video-on-demand through Discovery/UnitedStreaming
- Web-based support and documentation for hardware, software, and integration activities
- Application Helpdesk
- Technical Support Helpdesk
- Virtual Learning interactive opportunities, support, and technology
- Professional development and teacher training
- Michigan Electronic Library (MEL) – <http://mel.org>

Michigan Library Consortium (MLC) – Aggregated purchasing provides savings on technologies, resource databases, and professional development.

III. Infrastructure, Hardware, Technical Support, and Software

H. Infrastructure Needs/Technical specifications, and Design (SECTION 11)

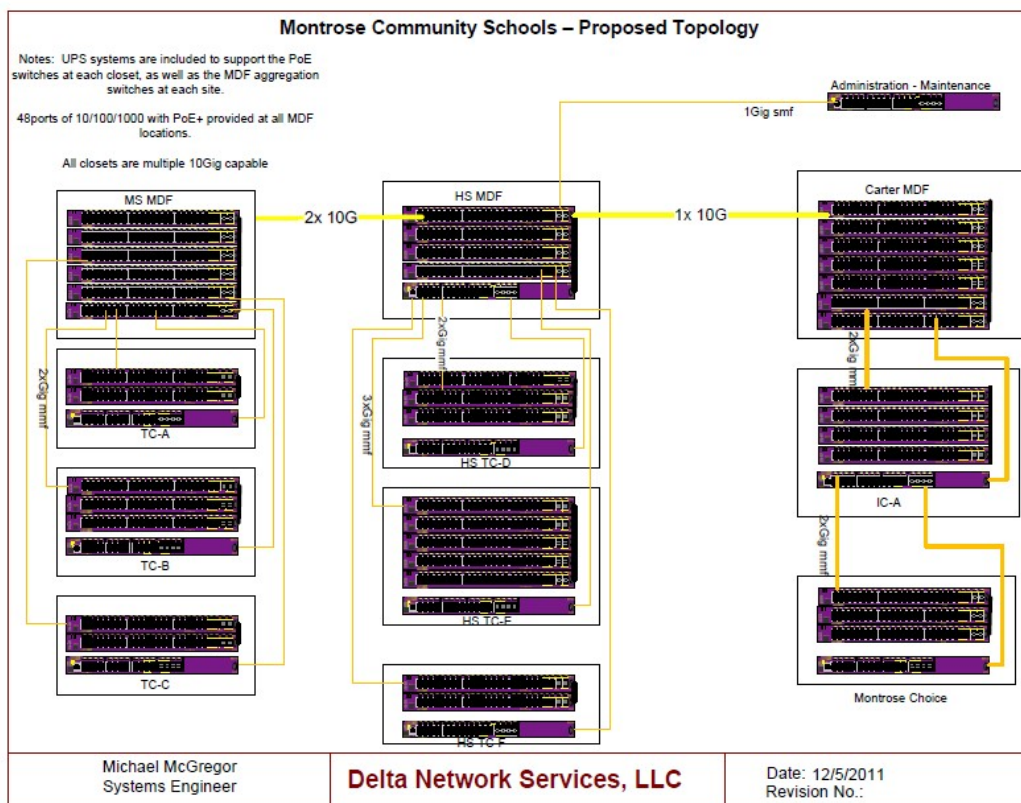
Network Infrastructure

Our previous analysis of our network showed the Montrose network was generally stable but in need of significant upgrade. Although the Montrose network was currently able to support access needs, most potential errors or issues that would cause faculty or staff difficulty in utilizing network resources, for future growth and demand, were related to hubs and/or outdated hardware that would cause high latency times. As this was a general network assessment a more detailed analysis was done to determine particular issues of concern going forward. In the past four years, the network hubs and unmanaged switches has deteriorated substantially.

Montrose Community Schools passed a bond initiative in February 2011 with a directive to replace and update district technology, including the network infrastructure.

Wired

The new hard-wired high-speed Network Infrastructure will consist of a 10-gigabit backbone between buildings with multi-bonded multi-gigabit connections between Telecommunication Closets (TC). The core of the Montrose network as well as the local access layer switches will be replaced with Extreme switches. The switches will form a 10-gigabit backbone connecting all Montrose buildings centrally connected from the Montrose High School back to the GISD. The exception to this is the Alternate Education building that is connected by multiple pairs of Multi-Mode fiber that will be bonded for multi-gigabit to the Carter Elementary Switch. The projected upgrade will be the spring of 2012.



Wireless

A new high-speed wireless infrastructure allowing wireless coverage of all of our building facilities as well as most of our "grounds" will be introduced during the summer of 2012. This will allow for more flexibility in providing more access to our staff, students and community and supporting wireless devices and frameworks for 1-to-1 computing and "Bring Your Own Device".

Switch and Connection Upgrades

The main backbone connections for the Montrose buildings will be 10-gigabit SM fiber connections except for the Alternate Education building. Iperf data results suggest that a SM fiber connection to the Alternative Education building would be the ideal choice. This is still the bottleneck in the design. If bond monies are left over, Montrose is looking at replacing the multi-strand Multimode fiber with SM. All access layer closets will have new high speed managed switches

Physical Security and Issues

Most of the access layer closets are located in locked rooms and/or locked cabinets with very few exceptions. Most of the network equipment is securely in place, though not necessarily the most environmentally controlled environment.

Switch Configuration and Security

The new access layer switches will be manageable. Remote administration or monitoring will be possible for all the hardware. The configuration for all of the equipment will be correct with all the latest software upgrades.

Anti-Virus

Currently, all network computers are managed by the GenNET consortium ePO agent from McAfee. Updates are distributed by the ePO Server managed by GenNET. To reduce our recurring costs, Montrose is looking at the viability of switching to the Microsoft Forefront Endpoint Protection model which is included into our yearly subscription with Microsoft at no additional costs.

Server Environment

Montrose's current Microsoft Windows 2000 servers is slated to be replaced by a clustered VMWare virtual server environment during the Spring/Summer of 2012. The virtual servers will be a mix of Windows and Linux servers to allow for more flexibility to meet the needs and demands of our district and community. The virtual server environment will allow for more robustness, reliability, scalability, flexibility, and dependability to meet the needs of a datacenter in today's computing environment.

Server Security

The new servers will be of the latest versions for Microsoft and Linux Distros. Included in the design and implementation of the new system is a process to provide for regular software and patch management to ensure that the integrity of the servers security are always intact.

Disaster Recovery

With the new system upgrade slated for Spring/Summer 2012, Montrose will be implementing VMware Distributed Resource Scheduler (DRS) and VMware High Availability (HA) reduce the likelihood of unplanned downtime. Along with the solution there will be a Disk-to-Disk-to-Tape solution to allow for quick file recovery as needed.

All servers and key network devices will be on new updated UPS. A generator is being evaluated as a viable option to add to the reliability and protection of the data center head-end. This will help to keep the entire district network running in the event of a localized power failure in a key location.

Overview of Hardware, Software, and Telecommunications

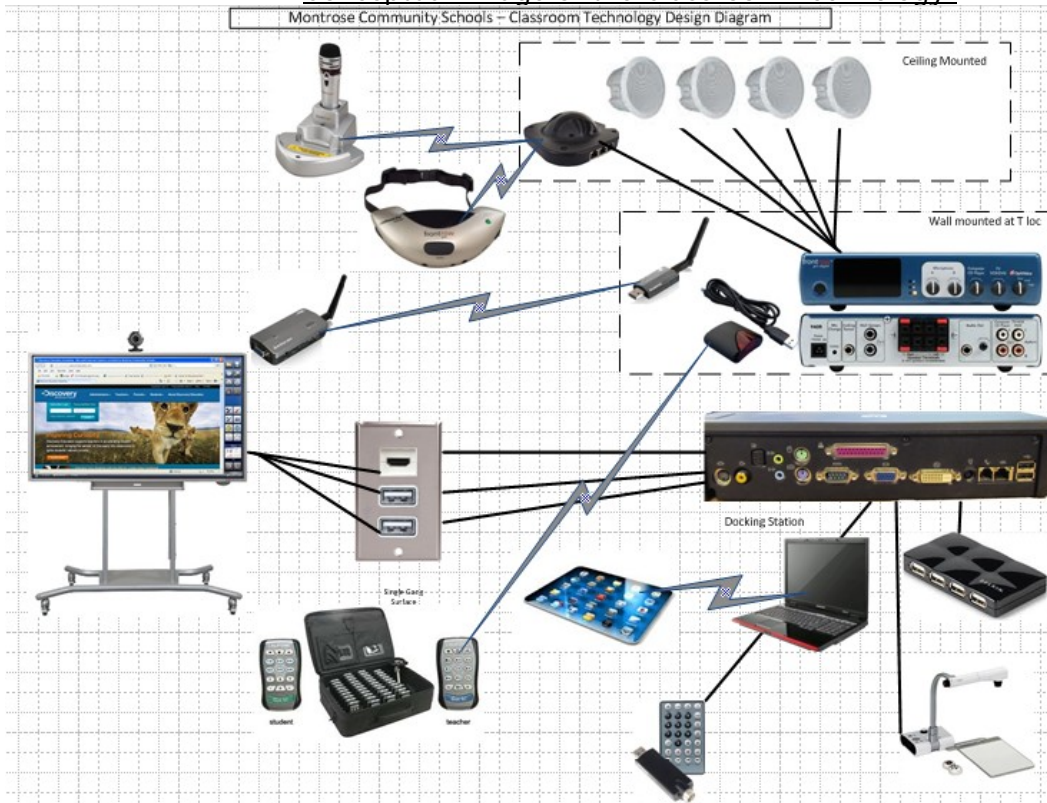
A local area network is in place in the Montrose Community Schools. The district operates on a fiber optic network backbone with copper station runs for both administrative and instructional uses. All buildings are internally connected with a combination of fiber and copper to provide for voice, video and data. This network is connected with the GenNET wide area network that connects Montrose to the other 20 districts in Genesee Intermediate School District. This wide area network provides us access to the Internet, phone lines and data.

The network is filtered using Genesee Intermediate School District's filtering software. It was the decision of the GenNET governing board that it was in the best financial and safety interests of the 21 districts to use a standard filtering program.

Each classroom has a minimum of five hard-wire network drops that allow for a teacher computer, a printer, and three student workstations. Each classroom will have low-density wireless access. The district will be piloting a Virtual Desktop solution (VDI) during the late spring 2012. Where viable, the district is looking to replace all the teachers, students and staff computers with low Total-Cost-of Ownership (TCO) Thin clients where applicable. We have established criteria for all future purchases in regard to functionality, speed and memory. All classrooms are also equipped with a phone that allow outside access as well as working as an intercom system.

In the Fall of 2012, the classroom will be updated to include a new Teacher instructional Laptop to be used for instruction on the new Interactive Whiteboard technology Display. Each core classroom will be equipped with a student Interactive Response System that will allow the teachers to have instant feedback and assessment on the students progress and understanding of the subject matter being taught. Each core classroom will have a Document Camera that will allow for three dimensional projections of physical objects being studied. All core classrooms will have a new Soundfield System that will aid in audio enhancement.

Conceptual Image of the Classroom Technology:



In addition to the student computers in each classroom the following equipment is available. The elementary building has a lab that is used for student projects and program learning. In the middle school we have a technology lab that teaches a variety of technology, a computer lab for teaching computer applications, and a shared resource lab that accommodates teachers who are assigning projects that require technology integration. The high school building has a lab that is designed for applications, two shared resource lab for student projects, a science computer lab, a special education computer lab and a yearbook/journalism computer lab. Each of the buildings also has computer lab in their media centers that have Internet access as well as access to MEL and several other research databases.

All teachers and administrators in the district have access to academic and administrative resources. Desktop access to Student Information System provides the administrative and teacher team with access to student demographic data, an electronic grade book, and financial information. In addition, the media center computers contain access to research software specific to their needs. Access to these software packages is available in all classrooms as well as in the library. Teachers use electronic grade book to maintain grades and to do online attendance. This information feeds into the Student Information System software package.

All teachers have access to Discovery/UnitedStreaming video streaming database via GenNET. Teachers and Students have use of the Learning Management System (LMS) program "Blackboard". This program helps to increase communication between teachers, students, parents and administrators.

The administrative offices are connected and make use of the SchoolsOpen programs; FAS (financial), HRS (human resources) and our new Student Information System and these programs allow us to maintain data that will better assist us in planning for improvement of instruction and learning.

Technical Support

Our district employs a Technology Coordinator and technology mentors in each building, to support the technology. This support is in addition to the support that we receive from the Genesee Intermediate School District. There is a professional development budget identified to provide ongoing training for these support people and they participate in the technology committee at the Genesee Intermediate School District.

Computer users are offered support through the use of a help desk. Problems are identified and are remedied as quickly as possible with the understanding that our teachers, administrators and support staff have become dependent on the system being operable.

Needs

To improve our level of instruction we are replacing current hubs with high-speed switches to ensure the connectivity for implementation of video streaming on demand

I. Increase Access (SECTION 12)

Currently all staff and students have access to technology in the classroom, media centers, and labs. With our bond initiative, we are replacing our network backbone with a high-speed managed backbone network and implementing a high-speed wireless network infrastructure to increase the technology availability to staff, students throughout our district. We are increasing the number of lab stations available in all our media centers. We are increasing the number of student machines in each core classroom where it makes sense based on our instructional plan. Our greatest need will continue to be in the areas of peripherals. Printers, cameras, scanners, and other technology will be the focus with future purchases.

IV. Funding and Budget

J. Budget and Timetable (SECTION 13)

Projected Total Cost (2012-2013)				
Item	Local District	Grants	Donations	Other
Salaries	\$ 81,847.00	\$ -	\$ -	\$ -
Benefits	\$ 43,281.00	\$ -	\$ -	\$ -
Travel/Education	\$ 3,000.00	\$ -	\$ -	\$ -
Supplies	\$ 5,000.00	\$ -	\$ -	\$ -
Contracted Services	\$ 3,000.00	\$ -	\$ -	\$ -
Training	\$ 10,439.00	\$ -	\$ -	\$ -
Equipment	\$ -	\$15,000.00	\$ -	\$ -
License Agreements & Maintenance Contracts	\$ 38,000.00	\$ -	\$ -	\$ -
Total	\$ 184,567.00	\$15,000.00	\$ -	\$ -
GRAND TOTAL	\$ 199,567.00			

Projected Total Cost (2013-2014)				
Item	Local District	Grants	Donations	Other
Salaries	\$ 81,847.00	\$ -	\$ -	\$ -
Benefits	\$ 48,805.00	\$ -	\$ -	\$ -
Travel/Education	\$ 3,000.00	\$ -	\$ -	\$ -
Supplies	\$ 5,000.00	\$ -	\$ -	\$ -
Contracted Services	\$ 3,000.00	\$ -	\$ -	\$ -
Training	\$ 10,439.00	\$ -	\$ -	\$ -
Equipment	\$ -	\$15,000.00	\$ -	\$ -
License Agreements & Maintenance Contracts	\$ 38,000.00	\$ -	\$ -	\$ -
Total	\$ 190,091.00	\$15,000.00	\$ -	\$ -
GRAND TOTAL	\$ 205,091.00			

Projected Total Cost (2014-2015)				
Item	Local District	Grants	Donations	Other
Salaries	\$ 81,847.00	\$ -	\$ -	\$ -
Benefits	\$ 53,200.00	\$ -	\$ -	\$ -
Travel/Education	\$ 3,000.00	\$ -	\$ -	\$ -
Supplies	\$ 5,000.00	\$ -	\$ -	\$ -
Contracted Services	\$ 3,000.00	\$ -	\$ -	\$ -
Training	\$ 10,439.00	\$ -	\$ -	\$ -
Equipment	\$ -	\$15,000.00	\$ -	\$ -
License Agreements & Maintenance Contracts	\$ 38,000.00	\$ -	\$ -	\$ -
Total	\$ 194,486.00	\$15,000.00	\$ -	\$ -
GRAND TOTAL	\$ 209,486.00			

K. Coordination of Resources (SECTION 14)

Our four-year technology rotational replacement plan is temporarily superseded by our bond initiative and is planned to be reevaluated prior to warranty expiration of all new equipment.

Montrose will work with local foundations to continue the grant support that they have been providing to us for the purchase of educational technology.

- The Jennings Foundations – The Jennings Foundation has provided Montrose Community Schools with many grants over the years, to support the purchase of district technology. We will continue to pursue grants from the Jennings Foundation as these expire.
- Thorsby Educational Grant – The Thorsby Educational Grant is a \$1,000 grant to purchase educational equipment. This grant is a continuing grant to the Montrose Community Schools through the generosity of the Thorsby family.

V. Monitoring and Evaluation

L. Evaluation (SECTION 15)

As technology demands and needs change rapidly it is important to document the progress that the district makes. The district technology committee evaluated 24 components of the status of technology in our district.

(See Appendix B for the Technology Plan Evaluation Rubric and the 24 components)

This is a three-level rubric that provided the district with base line data information. The components are broad enough that all aspects of the district's technology plan are covered. On a three-point rubric the district will develop a baseline score that will be used for comparison each year. Success will be determined by a continued growth in our composite score. The technology committee will complete this evaluation yearly. In a yearly review of the 24 components, should the committee discover that improvement has not been achieved in any area, they will develop training for staff to facilitate the improvement in that component.

M. Acceptable Use Policy (SECTION 16)

Montrose Community Schools

Technology and Telecommunications Appropriate Use Policy

Montrose Community Schools recognizes existing federal requirements for privacy and Internet safety as reflected in the Children's Internet Protection Act (CIPA). As a member district of the GenNET Consortium, Internet access and filtering efforts are derived through that membership. GenNET provides content filtering through N2H2 as well as firewall, anti-virus, and spam protections for Montrose Community Schools.

Computers and other technologies provide opportunities for students and staff; they are installed in the schools for the benefit of all learners. In order for technology to be in working order and available to everyone, users must respect the hardware and software in the school's facilities. This policy will serve as a guideline for the use of the computer systems and networks belonging to the Montrose Community Schools. This policy is necessary to ensure that all students and staff have maximum access to ways of generating, storing, and transmitting information.

This policy includes the authorized use of **all** technology and telecommunication resources owned by the Montrose Community Schools. Authorized users are those who have been given specific permission to use the district's telecommunication network resources. This includes, but is not limited to personal computers, servers, electronic mail, Internet, and other technology and peripherals.

Purpose of Telecommunications:

Telecommunications extend the classroom beyond the school building by providing access to informational resources on local, state, national, and international electronic networks such as the Internet. For students and teachers, telecommunications use in the Montrose Community Schools is for educational purposes, such as accessing curriculum-related information, sharing resources, and promoting innovation in learning. Learning how to use this wealth of information and how to communicate electronically are literacy skills that support student achievement and success in the 21st century. The district expects that faculty will blend thoughtful use of the Internet throughout the curriculum and will provide guidance and instruction to students in its use. While student will be able to move beyond those resources to others that have not be previewed by staff, they shall be provided with guidelines and lists of resources particularly suited to learning objectives.

Telecommunications Safety:

Precautions will be taken to ensure that the Internet is a safe learning environment. Students will be supervised while using the Internet and will be instructed in the appropriate and safe use, selection, and evaluation of information. Software that attempts to block access to objectionable material will be accessible on computer networks used by the students and staff.

Privacy:

Electronic and other technology methods must not be used to infringe upon privacy. It is the responsibility of the user to maintain the privacy of personal name, address, phone number, password, and respect the same privacy of others.

Plagiarism and Copyright:

Plagiarism is taking ideas or writings from another person and offering them as original ideas. This policy requires that all users of the network resources owned by the Montrose Community Schools will comply with local, state and federal laws for guidelines. Only the owner of a copyright can copy, modify, distribute, display/transmit, and perform the work. Transferring a work in the form of digital data from one computer system to another is copying and distributing that work. A creative work (text, movies, pictures, etc.) is automatically protected by copyright from the moment it is created. No copyright notice or registration is required. This policy prohibits the illegal use of the data, music, movies and picture, etc. without permission from the owner.

Individual Responsibilities:

Just as certain privileges are given to each person using the district telecommunication network, there are expectations that all users will develop the skills necessary to use this system appropriately and to report any improper usage and/or abuse to the network system and equipment.

Common Courtesy and Respect for Rights of Others:

Be fair to other users. Do not remain on the network for excessive periods of time. Do not use the network in a way that would disrupt other users on the network. Comply with all legal restrictions regarding the use of information that is the property of others. Users are responsible for recognizing (i.e. attributing) and honoring the intellectual property rights of others.

Responsible Use of Resources:

The computer network has been installed to enhance the delivery of instruction. Acceptable activities for students are class assignments and career development. Professional development and community activities are acceptable for employees.

Privileges

Control of Access to Information:

Montrose Community Schools may control access to its information and the devices on which it is stored, manipulated, and transmitted.

Responding to Security and Abuse Incidents and Impositions of Sanctions:

All users have the responsibility to report any discovered unauthorized access attempts or other improper usage of the Montrose Community School's computers and networks or other telecommunications equipment. The user must take immediate steps to insure the safety and well being of information resources. Once the Director of Technology has been notified, corrective action will be taken.

Montrose Community Schools may impose sanctions and punishments on anyone who violates the district policies or laws applicable to computer and network usage. Persons in violation of this policy are subject to the full range of sanctions, such as the loss of computer or network access privileges, disciplinary action, including, but not limited to, dismissal from the Montrose Community Schools and/or legal action. Some violations may constitute criminal offenses, under local state and federal laws. Montrose Community Schools will carry out its responsibility to report such violations to the appropriate authorities.

System Administration Access

A system administrator may access others files or accounts for the maintenance of networks and computer storage systems. He/She may access others' files or accounts to investigate allegations of misconduct, violations of district policy or procedure, or violation of local, state, or federal law. In all cases individual's privileges and rights of privacy are to be preserved to the greatest extent possible.

Monitoring of Usage, Inspection of Files:

The system administrator may, without prior notice to the user, routinely monitor and log usage data, such as network session connection times and end-points, CPU and disk utilization for evidence of violation of law or policy.

Suspension of Individual Privileges:

The district may suspend computer and network privileges of an individual for reasons relating to the safety and well being of students or other staff members or Montrose Community School's property. Access may be restored when safety and well being can be reasonably assured, unless access is to remain suspended as a result of formal disciplinary action imposed by the Board of Education or District Administrator(s).

Enforcement of the Appropriate Use Policy:

Any request from an external organization conducting an investigation of an alleged violation involving the Montrose Community Schools district computing and networking resources must go through the Superintendent.

Educational Objectives:

In making decisions regarding access to the Internet, the Montrose Community School District considers its own stated educational mission, goals and objectives. The school district has a limited educational purpose, which includes the use of the system for classroom activities, professional or career development, and limited high-quality self-discovery activities. Limited recreational game playing may be tolerated only with permission of the teacher.

Use of Computer System:

All users are responsible for the security and integrity of the information stored on the Montrose Community School's network. This can be accomplished by making regular backups of the information and controlling physical and network access to the machines.

Sharing of Access:

Computer accounts, passwords, and other types of authorization are assigned to individual users and should not be shared with others. Users are responsible for any use of their accounts. Users may not run or otherwise configure hardware or software to intentionally allow access by unauthorized users.

Termination of Access:

When a user is no longer a student or employee of the district, network privileges are terminated. Formal authorization must be obtained to use the facilities, accounts, access codes, privileges, or information.

Harmful Activities Prohibited:**Harassment:**

All district policies and procedures regarding harassment, discrimination, publicity, hazing, and non-academic student conduct pertain to the use of network resources. No user shall intentionally disrupt or damage academic, research, and administrative data. Nor shall they invade or threaten to invade another person's privacy, academic or otherwise.

Academic Dishonesty:

Users should always use the high ethical standards outlined in the district policy manual when using computer resources. Academic dishonesty (plagiarism and cheating) is a violation of these standards.

Denial of Service:

Deliberate attempts to degrade the performance of any computer system/network or to deprive others of resources or access to any district computer system is prohibited.

Use of Licensed Software:

No software may be installed, copied, or used on the district resources except as approved by the Director of Technology.

Commercial Advertising, Personal Business and Campaigning Activities:

The district does not permit the use of district owned equipment or network resources for political campaigning or commercial advertising activities without the express permission of the Superintendent. Incidental personal use that has negligible effect on the use of the system may be permitted. Teachers may also use the system for activities supporting scholarly pursuits.

Network Installations:

Users may not connect any network equipment to the Montrose Community School's network without the authorization of the Director of Technology. Network equipment includes, but is not limited to, computers, printers, hubs, routers, firewall, bridges, and switches or any devices that provide network connectivity.

Unacceptable Use for Student Users:

- Users shall not erase, rename, or make unusable anyone else's computer files, programs or disks.
- Accessing another person's materials, information or files without the implied or direct permission of that person is prohibited.
- Users shall not use or try to discover another user's password.

- Users shall not use a computer for unlawful purposes, such as the illegal copying or installation of software, or violation of copyright laws.
- Users shall not write, produce, generate, copy, propagate, or attempt to introduce any computer virus, bus, worm or other similar name onto the district technology networks or equipment.
- Users will not modify any settings on the computers including, but not limited to, the desktop or screensavers.
- Users will not download or install anything on the district's computers.
- Users will not participate in any chat rooms, IRC, ICQ or instant messages.
- Users shall not participate in playing computer games without the direct permission of the teacher. All games should have an educational purpose in line with the district's curriculum and instructional purpose.

Appendix A (Document Retention Policy)

Document Retention Policy

RECORDS RETENTION

Definition of a Public Record

The Michigan Freedom of Information Act (PA 442 of 1976 as amended) defines public records as recorded information "prepared, owned, used, in the possession of, or retained by a public body in the performance of an official function, from the time it is created."

District Responsibility

- Develop and implement a Document Retention Policy that follows Education Bulletin #522 requirements, **Please review District Policies with regards to document retention specifically email retention.**
- All users are required to accept the districts AUP every time they login to the network.
- Will provide annual training/review of these polices to all staff (documented in staff personnel files)

Why Follow a Retention Schedule?

- Risk with keeping records too long
- Risk with destroying records too soon
- Agencies need to know how long they are legally required to retain records
- Agencies need a legal authorization to destroy records
- Agencies should purge records that have fulfilled their retention requirements

Email

- It is the responsibility of each individual employee to know and follow records retention policy with regard to email.
- The District is responsible for establishing the policies and training all staff
- If an email message still exists and is pertinent to a FOIA or litigation, the District is then required to retain that email message for evaluation during the entire period of need (as determined by your lawyer)
- If the email message has been destroyed in accordance with approved Retention and Disposal schedules, they may no longer exist when a FOIA request is received, and the Organization will not be penalized for not releasing the record
- Four categories of email (Official Record, Transitory Record, Non-Record and Personal Record). Each has a different retention schedule
- Again, it is the responsibility of the end-user to abide by the established retention schedule for email (in most cases, the sender is the "person of record", however, a recipient may wish to retain for future reference as well)

Employee Responsibilities

- Understand which email messages to keep and which to destroy
- Identify which retention schedule mandates the message's retention or authorizes its destruction

Management Responsibilities

- Ensure an accurate and comprehensive Document Retention Policy* and Acceptable Use Policy* have been implemented and training provided to all staff
- Communicate with relevant employees, attorneys and IT staff when a FOIA request is received or when litigation appears to be imminent
- Both of these policies must be either created or vetted by the District's Attorney; not by HR, IT or any other department. MSBO is currently working with Thrun Law Firm to develop a local Retention Policy template for School Districts to use

Example

A FOIA is received regarding a particular staff member for a specific period of time:

- **Employee responsibility:** Do not delete any emails that may be relevant (equivalent of shredding hardcopy documentation that may be incriminating)
- **District responsibility:** Immediately cease all destruction of relevant email in active accounts and backup tapes when litigation is imminent. Government agencies do not want to be implicated or charged with destroying potential evidence.

Bottom Line

A District cannot and is not responsible for organizing or policing email – it is the sole responsibility of the end-user

Whenever there is a request that may potentially lead to litigation, it is always recommended that the appointed FOIA Coordinator contact legal representation as soon as possible as well as notify Superintendent, FOIA Coordinator, IT, Attorney.

Appendix B (Technology Plan Evaluation Rubric)

Technology Plan Evaluation Rubric

Vision and Capacity

Variable	Level 1	Level 2	Level 3
1. 1 Vision	The vision is focused on acquiring technology. Little attention is given to changing learning strategies for students, teaching strategies, or task accomplishment strategies by staff.	The vision is shifting toward increasing opportunities and strategies for students and staff, but management of technology resources remains a primary concern of staff.	The vision is focused on increasing learning opportunities and solving problems by using data to determine priorities and the strategic use of technology resources by students and staff.
1. 2 Technology Plan	The technology plan is made of loosely connected pieces not well-known by stakeholders	A comprehensive technology plan exists and efforts are underway to communicate the plan to stakeholders.	Stakeholders help inform and implement plan components and support the vision for technology.
1. 3 Human Resources	No district personnel are available to support the technology. Parents and/or volunteers provide support.	District personnel support the technology but assignments do not go beyond building level support.	Technology support is timely and provided by school-level and district- level staff, supported by a district level technology committee.
1. 3 Financial Resources	Technology funding is sporadic and mostly from isolated resources or on the basis of isolated decisions.	Funding is year to year or based on single events e. g. , bond projects or grant awards; funding includes partial district support.	Categorical budgets exist at the building and district levels. Ongoing funding partnerships exist.
Collaboration	Individuals do not work collaboratively,	There is staff collaboration within the building but not beyond it.	The staff works collaboratively across the district.
Networking	No wiring for connectivity exists.	Some wiring for connectivity exists, but is limited to buildings.	High speed connections tie together all district facilities.
Connectivity	Limited to electronic print. Information is transferred via exchanges of portable diskettes.	Electronic print with some limited multimedia and networking capacity. Information transfer largely limited to connectivity tied to a hard drive in a building.	Multimedia and global telecommunications network infrastructure enable unlimited information transfer and online collaboration.
Hardware and Software Standards	There are no standards for software or hardware.	Some standards for hardware and/or software have been adopted.	Standards for hardware and software exist and are used and reviewed regularly.
Policy	No policies exist to support the district's technology.	Some policies exist but are not intentionally connected to the district's technology plan.	Policies exist, are connected to the state and district technology plan, and include training, AUP, software and hardware acquisition and replacement, budget and technical support.

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To assist students as they learn content subjects supported with technology.

Variable	Level 1	Level 2	Level 3
2. 1 Engaged Learning Instruction Student Role	Students use technology that automates print-based practices with some increase in active hands-on learning.	Student use technology to organize and produce reports, often using multi-media formats.	Students use technology to explore diverse information resources inside and outside school and produce information for real-world tasks.
Engaged Learning – Instruction - Teacher Role	Teachers have limits on structuring the learning due to the closed-end design of the software. The quality of learning depends on the intended learning outcomes set by the software developers.	Teachers use technology to access information, model problem solving, and develop simulations that provide greater understanding of how technology is used in the work world.	Teachers continue to use technology to guide and engage students in self-directed learning activities. They model problem solving that reflects real work but focuses on areas that are otherwise difficult to teach.
Engaged Learning – Instruction - Grouping	The amount and quality of collaboration is highly dependent on the design of the software.	The learning approach is individual, but the outcome is sharing a product with classmates.	The learning approach is a developmental process that is enhanced by working with others inside and outside the classroom.
Standards-based Instruction	The learning content is usually focused on skills and inert knowledge with little attention to standards or research.	The learning content reflects research and best practices but is usually not linked to national standards. Technology use focuses on finding and presenting information.	The learning content reflects national standards, research, and best practices. Technology use is aligned with standards to enhance the application of content learning to real-life situations.
Lesson Design	Technology is not a factor in lesson design.	Lesson design sometimes reflects the use of technology.	Lesson design includes appropriate and sophisticated uses of technology.
Curriculum Integration	One or more of the following is in evidence: Technology is used as a reward for finished work. Students use technology to practice things they already know. Technology use is rare.	Two or more of the following is in evidence: Teachers often consider some technology tools when planning lessons. Student technology use includes information gathering, organizing, and publishing in a variety of media. Technology is used weekly.	All of the following are in evidence: Teachers consider a variety of technology tools when planning. Students use technology for information gathering, organizing, and multi-media publishing. Technology use is part of daily classroom routines.
Learning Outcomes	Outcomes from technology uses are unidentified	Some indication of technology-enhanced learning outcomes is reported in teacher records	A clear correlation between learning outcomes and technology usage is well documented throughout the school or district.

Provide students and staff opportunities to learn about technology and its applications.

Variable	Level 1	Level 2	Level 3
3. 1 Student Options	One or more of the following is in evidence: Students as a reward use technology after they have finished their work. Students use technology to practice things they already know. Technology use by students is rare.	Two or more of the following is in evidence: Students learn about some technology tools while implementing their lessons. Student technology use includes information gathering, organizing, and publishing in a variety of media. Technology is used weekly.	All of the following are in evidence: Students learn about a variety of technology tools while implementing their lessons. Students use technology for information gathering, organizing, and multi-media publishing. Technology use is part of students' daily classroom routines.
3. 2 Staff Options	Technology training rarely occurs.	Technology training is provided. Needs are determined informally, and professional development is based on assessment findings.	Technology training occurs on an ongoing basis and follow-up support exists. All staff members are routinely asked to determine areas of training need.
3. 3 Training Design	Sites provide technology-focused workshops emphasizing basic hands-on skills. Typically workshops are "sit-and-get". Staff members have little time to practice skills and have little access to ongoing support.	Professional development is beginning to focus on instruction and learning as the driver to designing technology-based units. Efforts are still limited by poor access to technology and a poor vision of learning.	Professional development is aligned with research and best practices where staff participant in just-in-time study groups, online seminars, action research, and collaboration with colleagues.

To help staff members become more efficient and effective while doing their jobs.

Variable	Level 1	Level 2	Level 3
4. 1 Staff Performance	Technology systems to support job performance are available for administrators and some staff. Staff has not integrated them into regular practice.	Technology systems to support job performance are available for administrators and all staff. Some paperless systems are in place.	The daily use of administrative systems is required for all staff. Many paper reports are available electronically through a wide area network.

To make technology widely available and easy to use resulting in a focus on learning / task completion for students and staff.

Variable	Level 1	Level 2	Level 3
5. 1 Access	Technology resources are scarce and are not available to all staff and students.	Technology resources are varied and comprehensive with access available to most staff and students.	Technology resources are comprehensive providing all staff and students with depth, diversity, and regular access.

To provide a method of evaluation for the district's technology plan.

Variable	Level 1	Level 2	Level 3
6. 1 Measurement Tools and Use	Rubrics for evaluating technology do not exist separately or in a technology plan.	Rubrics exist but apply only to parts of the technology plan and implementation processes.	Rubrics exist for all plan components and are used annually by stakeholders to assess plan progress.
6. 2 Evaluation	Many data-gathering efforts exist, but they are not tied to objectives. The results are not structured for technology use that would allow easy and customized analysis.	Objective data is available, but technology programs provide only district and classroom data with little desegregation of data for formative evaluation.	Technology data tools are used in classrooms that provide both formative and program information to all stakeholders as appropriate for their individual and collective needs
6. 3 System Development	Initiation Phase – the technology is just arriving into the district. Few tools and training exist to assist with integration. Budget support is aimed at hardware acquisition.	Implementation Phase - Stakeholders are aware of plan goals beyond hardware deployment and training needs. Management is seen as a key issue.	Institutionalization Phase – Stakeholders know plan components. The district has moved into routine use of plan components. Stakeholders are examining how to improve the use of technology for learning and job performance.