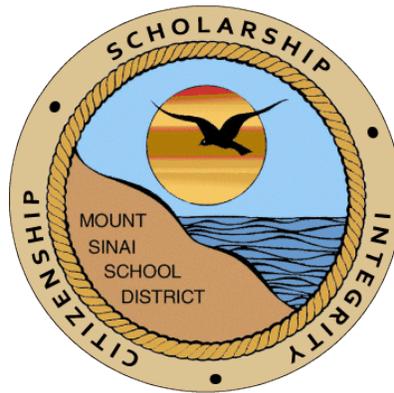


***MOUNT SINAI UNION FREE SCHOOL DISTRICT***  
***TECHNOLOGY PLAN***



**2014-2015 through 2016-2017**

May 2014

# **MOUNT SINAI UNION FREE SCHOOL DISTRICT**

## ***DISTRICT OFFICE***

Mr. Enrico Crocetti, Superintendent of Schools  
Ms. Linda F. Jensen, Asst. Supt. for Business  
Ms. Maureen Poerio, District Clerk

## ***BOARD OF EDUCATION***

Mr. Robert Sweeney, President  
Ms. Donna Compagnone, Vice-President,  
Ms. Lynn Capobianco, Trustee  
Ms. Lynn Jordan, Trustee  
Ms. Kerri Kelly, Trustee  
Mr. John Kostic, Trustee  
Mr. Edward Law, Trustee

## ***TECHNOLOGY COMMITTEE MEMBERS***

Mr. Ken Jockers, Chairperson  
Ms. Tara Davidson  
Mr. Frank LaBianca  
Ms. Allison Maire  
Mr. Andrew Matthews  
Ms. Christine Sfakis  
Dr. Deena Williams-Timo

**Contents**

Introduction and Overview ..... 2

Existing Instructional Technology Environment ..... 3

Goals and Strategy for Use of Telecommunications and Information Technology; Core Element, Criteria 1 ..... 9

Professional Development Strategy; Core Element, Criteria 2 ..... 11

    Outline of Technology Needed; Core Element, Criteria 3 ..... 13

Budget for Acquisition and Maintenance; Core Element, Criteria 4..... 20

Evaluation Process; Core Element, Criteria 5..... 23

Acceptable Use Policy ..... 24

    Student Acceptable Use Policy ..... 25

    Employee Acceptable Use Policy ..... 27

    i-SAFE Professional Development Workshop ..... 32

    Computer Technology Scope and Sequence for Grades K-6 ..... 33

Mount Sinai Network Diagram..... 39

## Core Element, Criteria Items Reference Sheet (page listings)

### Core Element, Criteria 1

- Clear goals ..... 9
- Realistic strategies ..... 9
- Goals and strategies for telecommunications and information technology ..... 9
- Reference to CIPA ..... 10
- Reference to AUP ..... 10
- Internet Safety Curriculum ..... 9, 10
- Include how goals and strategies are linked to student achievement..... 9, 33
- Reference 21<sup>st</sup> Century standards..... 9, 30, 33
- Include strategic planning tables that include goals, timeframes, responsible party and status ..... 9, 10
- Curriculum mapping ..... 10
- Videoconferencing ..... 10
- Web 2.0 ..... 10
- Interactive whiteboards ..... 9
- Student technology literacy..... 10

### Core Element, Criteria 2

- Professional development strategy for educators ..... 11, 12
- Professional development strategy for staff..... 11, 12
- Document professional development opportunities and attendees ..... 11, 12
- Mention opportunities through local teacher centers and BOCES ..... 11, 12
- How related to curriculum ..... 11, 12
- How linked to student achievement..... 11, 12
- Include strategic planning tables that include goals, timeframes, responsible party, and status ..... 11, 12
- Parent training ..... 11, 12

### Core Element, Criteria 3

- e-Rate funding and narrative of project(s) ..... 15
- Assessment of telecommunications services ..... 15
- Inventory hardware ..... 15
- Inventory software ..... 17
- Asset management ..... 19
- Network schematic..... 39, 40
- Staffing and technical support ..... 20
- Email archive system ..... 17
- Financial system..... 17
- Student management system..... 18
- Additional programs ..... 17, 18, 19

- Include strategic planning tables that includes goal, timeframe, responsible party, and status ..... 15

**Core Element, Criteria 4**

- Projected budget for each year..... 21
- Itemized hardware..... 21
- Itemized software..... 21
- Itemized professional development ..... 20
- Itemized staffing ..... 22
- LAN support ..... 22
- BOCES services..... 22
- Internet access ..... 22
- Grants ..... 22

**Core Element, Criteria 5**

- Evaluation process toward specific goals ..... 23
- Explain how mid-course corrections will be made..... 23
- Technology committee meetings (retain documentation of meetings, attendees, agendas) ..... 23
- Principal observations or recommendations ..... 23
- Surveys..... 23
- Include how goals and strategies are linked to student achievement..... 23

## **Introduction and Overview**

Mt. Sinai Union Free School District is a suburban school district serving a student population of approximately 2500 students, K-12. It has a relatively homogeneous student population from a stable middle-class community. The District has worked hard to involve a broad range of stakeholders in developing this new Technology Plan. Central to our planning is consideration of the needs of students in a changing world. What is presented here is a “Work in Progress.” We have taken the state’s standards as the overarching principles in which to design our District framework.

The use of computers and computer networks has become increasingly common in schools, as an aid in instruction and to provide educational enrichment. Computer networks provide schools with unique opportunities for statewide, national and international collaboration on class projects, curriculum materials, and idea sharing. Students (and staff) will have access to various software applications, hundreds of databases, libraries and computer services from all over the world through Internet and other electronic information systems. The Internet allows students the opportunity to reach out to many other people to share information, learn concepts, and research subjects by the sending and receiving of messages using a computer with network and Internet access.

The Mt. Sinai School District is committed to the optimization of student learning and teaching. It considers a computer network to be a valuable tool for education and encourages the use of computers and computer-related technology in district classrooms. Through software applications, online databases, electronic mail, and the vast resources of the Internet the network will significantly enhance educational experiences and provide statewide, national and global communications opportunities for staff and students.

The District has designated a computer coordinator to oversee the use of district computer resources. It has district-wide computer technicians to assist in maintaining the network and keeping the hardware in good running condition. It has hired staff to assist in the development of curriculum projects, prepare in-service programs for the training and development of district staff in computer skills, and for the incorporation of computer use in all subject areas.

Additionally, the District has automated the high school, middle school and elementary school library media centers. This includes software for library automation and obtaining machine-readable cataloging records to replace the card catalog. This software also enables students to use electronic search techniques to query resources in other libraries and on the Internet.

The Technology Committee consists of District employees and other stakeholders who meet throughout the year to monitor and implement the technology plan. Board of Education and community input is also sought to look at technology and the education process from disparate vantage points. Community meetings and events specific to technology communicate its importance to educational goals and the need for its adequate funding. The goal of the Technology Committee is to develop new strategies and projects to meet the needs of our students and reach the goals as stated below.

The Technology Committee is responsible for all ongoing efforts to develop, review, and update the District’s Technology Plan.

## **Existing Instructional Technology Environment**

### **Network and Infrastructure**

#### **Scope**

The Mount Sinai School District network includes the district office, elementary school, middle school and high school. The Mount Sinai Network Diagram can be found in Appendix C.

#### **Network Overview**

The Mt. Sinai School District started implementation of its network plan in 1991 with the wiring of classrooms and administrative offices in all of the district's three buildings. Upgrades to the network have been made periodically as improvements in network technology have become cost effective. Upgrades such as 100 Mbps and 1 Gbps switching have been implemented to improve bandwidth needed to support multimedia on the network.

All instructional and administrative computers are attached to the network and (by extension) its resources which include access to the Internet.

The wired network is based on IEEE 802.3 Ethernet specifications utilizing 1 Gbps UTP and Fiber cabling. The wireless network is based on IEEE 802.11n specifications and utilizing corporate grade system that is centrally managed and security-rich. Microsoft Windows-2003/2008 server is used as the network operating system; each domain is comprised of at least two domain controllers. Server configurations include stand-alone, redundant, and virtual machines. Redundancy and fault-tolerance is built into the network. Future expansion will include upgrading the backbone from 4 Gbps fiber to higher bandwidths as these new technologies become more cost effective. Large capacity (5 TB) RAID servers support the large multimedia files being created by students and staff. As data storage needs continue to expand the district data storage capacity continues to grow to keep in front of the demand.

The network is separated into two domains, one for instructional use and one for administrative functions. There is a one way trust relationship established such that users on the administrative domain can access resources on the instructional domain, but users on the instructional domain have no access to the administrative resources.

Internet access is provided to the network using an in-house server running Microsoft Windows 2003/2008 server, Microsoft Internet Information Server and a high-speed direct fiber Internet connection running at 50 Mbps. E-mail services are also provided to all qualifying users through an in-house mail server running Microsoft Exchange 2010. Remote access technologies provide remote access services to users allowing them to gain access to the network and the Internet from remote locations. Remote users include: administrators, teachers, and support staff.

The district maintains its own Web Servers. The District website's content is managed by the respective School Office. Information is provided by teachers, staff, administrators and school based organizations in all three of the District's buildings. The overall coordination and technical support for the website is provided by the District's Technology Staff Developer. The URL of the web site is <http://www.mtsinai.k12.ny.us> . The district also maintains its own Intranet portal providing both staff and students instant access to information and resources tailored to their needs. The portal provides students with educational links to appropriate search tools and web sites aligned by the grade level curriculum. It provides teachers with the same tools, as well as lesson plans, collaborative sites, staff development resources, their own professional development plan (PDP) and access to all district forms and documents. The site also provides technical support services for solving and reporting problems to our technical support staff. There is a Help Desk ticket reporting system integrated with e-mail that tracks computer & telephone troubles from initial report through final resolution. A ticket history is maintained as well. The district has also implemented a professional development management system using Imperial Software's mylearningplan.com. This web-based software is accessible through our Intranet portal as well as directly on the internet.

## **Network Topology**

All classrooms, libraries and offices in each building are connected to a local network utilizing cat 5e, or cat 6 cable (UTP). In addition, dark fiber was installed in each classroom at the same time the UTP was installed to provide for future expansion and application requiring higher bandwidth. Each building is connected to a high-speed 4 Gbps fiber backbone connecting all the district buildings. All connections to the backbone and all server connections to the network have been upgraded to use 1 Gbps Ethernet switches for improved bandwidth. Ethernet 1000base-T and fiber switches are used within each building for general distribution. As the cost of 10 Gbps switching technology is reduced, functions that can benefit from the greater bandwidth will be upgraded.

## **Network and Data Integrity**

To insure data integrity, all critical user and system data is stored on servers utilizing hot swappable RAID 5 disk arrays with redundant power supplies and controllers. Enterprise wide tape and external disk backup of this data is automatically performed daily allowing restoration of files up to 2 months old. The most current weekly backup is stored at an alternate location.

The Primary Server room is located in the High School building. All District administrative and instructional computer services are provided from this building. Also located there is the connection to the Internet and public voice network. A secondary Disaster Recovery (DR) site is located in the Middle School building. All critical school computer services can be switched to the DR site in the event of an outage at the primary server room.

Battery backups (UPS's) support all servers and primary network equipment including the edge switches. This allows for the systems to remain up during brief power interruptions or to allow for system shutdowns during prolonged power outages. The equipment in the Primary server

room in the High School is supported by both a large UPS system and a natural gas fired emergency generator system. This insures continuous power even during prolonged power outages. The DR site in the Middle School has a smaller UPS system appropriate for its needs.

## **System Maintenance**

Computer system maintenance is performed by fully trained and certified in-house personnel. As a general rule, non-critical equipment such as PC's, printers, scanners, etc. are maintained utilizing a combination of spare parts owned by the district or provided by vendors under their warranty and support contracts. The district maintains a complete inventory of critical equipment spares for network servers and backbone network equipment to provide for immediate replacement.

All software installation, support, system administration and training is provided in-house by district personnel. Support personnel skills are kept current through a combination of self-paced instruction and off-site certified training programs. In addition, the district hires a few of its own students each summer to prepare existing and new equipment for the coming school year. These students become additional resources available to the teaching staff to assist and solve problems during the year.

## **Instructional Models**

A number of instructional computing models are used throughout the district in addition to individual systems used in classrooms where appropriate.

All computing is governed by the District's Acceptable Use and Internet Safety Policies which are detailed in each school's Student Handbook (Appendix A). These handbooks are available to the student and community in the Academics and Curriculum section of the District's web site.

Grades K-4 use a classroom model designed for elementary students. All classrooms include an interactive white board ("SmartBoard") and computers are available for student use. Grades 5-12 use a different classroom model more suitable for secondary education. All classrooms include an interactive white board ("SmartBoard") with access to student computers via a portable computer lab cart.

### **The Classroom Model (K-4)**

The classroom model consists of eight systems, currently multimedia dual-core netbooks in the classroom connected to one shared color ink jet printer. All systems are connected to the district's wide area network and the Internet.

The classroom model has many advantages in the elementary grades. Having eight computers and one printer connected per room is ideal for the elementary grades that typically use their classroom for all subjects. The students are instructed through teacher demonstrations and then rotated and/or grouped on the computers to complete assignments. Due to sharing of the

computers, the classroom model is conducive to student's cooperative learning in small group projects.

In addition to the above, Kindergarten through Grade 4 classrooms have an instructional presentation system consisting of a SmartBoard, teacher computer, projector & audio. The system allows for instruction that incorporates visual, tactile and auditory learning into each lesson through the use of video and audio clips, interactive websites, etc. . This multi-sensory form of learning captures the attention and engages learners at any time of day.

A portable computer laptop cart can also be brought into the room to provide a class set of computers for entire class hands-on student activities.

### **The Classroom Model (5-12)**

The district has equipped all 5-12 classrooms with an instructional presentation system consisting of SmartBoard, teacher computer, projector & audio. Some rooms include a DVD/CD Writer and/or flatbed scanner and/or VCR and/or other specialized equipment requested by the Department/Teacher. This equipment is used to develop enhanced methods of preparing and delivering instructional materials and connecting the classroom to global resources.

Additionally a portable computer netbook cart can be brought into the room to provide computers for hands-on student activities.

### **The Computer Lab**

The computer lab consists of 24 to 34 systems located in a single lab. All the systems are connected to the district's wide area network and the Internet. There are many advantages of a computer lab model for students with some familiarity in the use of computers by enabling entire classes to access a computer at the same time. For example, the class might be working on programming, a business project, a project involving graphics design, or they might research their subject of study on the Internet. The computer lab model allows for class projects to be completed in a timely fashion. The computer lab model also assists the teacher to model instruction to the students while they experience hands-on learning. In some subject areas such as C++ Programming, Java, Visual C/Java, Computer Graphics or CAD/CAM, the lab model is the only appropriate one.

### **SmartBoards and SmartLabs**

The SmartBoard is an interactive whiteboard positioned in the front of the room and connected to the teacher's computer. The image on the computer is projected onto the SmartBoard and the SmartBoard driver converts contact with the interactive whiteboard into mouse clicks or electronic ink. This enables the teacher to use his/her finger as a mouse or write over the top of applications. Any notes that a teacher writes on the board can be saved in .pdf or .html format and available for later use.

When you add a SmartBoard to a computer lab, it becomes a SmartLab. Nine SmartLabs have been installed in the district; four at the High School, four at the Middle, and one at the Elementary. A SmartLab is not only an enhanced version of a standard computer lab but it is functionally used differently. Classes that meet in these rooms typically are scheduled to use the room for the full year. The SmartLabs allow teachers to present new experiences to the students. With instant web access, information is transformed into engaging material. Text is accompanied by pictures, original documents, movies, speeches and other multimedia materials. Manipulation of text and graphics on the Smartboard provides an interactive learning environment creating a more engaging and deeper experience.

Each SmartLab contains 24 to 34 student stations, one teacher station, a ceiling mounted LCD projector, a VCR/DVD player, presentation-class audio, and a SmartBoard.

In addition, *SmartSync* classroom management/instruction software is used in the SmartLabs. With *SmartSync*, student workstations can be monitored and controlled from the teacher's computer. The software displays thumbnail images of all students' screens on the teacher's desktop so student progress can be monitored and questions answered. Advanced control options enable teachers to take control of a student's computer to guide the student through a problem or specify shared control for collaborative problem solving. Teachers can focus students' attention by blanking all student screens and locking mice and keyboards.

## **Wireless Laptop Carts**

Mobile wireless laptop, netbook and notebook carts allow the district to turn any classroom into a fully featured computer lab with all of the attendant benefits. This allows for the creation of a Smart Lab in any classroom.

Two laptop carts, each with sixteen laptops have been deployed in each of the three instructional buildings; a total of 6 carts and 96 laptops. Future plans include maintenance of this level of mobile laptop access.

## **Wireless Netbook Carts**

With the introduction of low-cost netbooks, netbook carts have been added as a lower cost alternative to the laptop cart. One 32 count netbook cart allows for the creation of a Smart Lab in any classroom.

Currently there are 6 netbook carts in the District; 4 in the HS, 2 in the MS; a total of 192 netbooks.

## **Wireless Notebook Carts**

A portable device has emerged in between the laptop and net-book that pulls from the laptop better functionality than the netbook but at a lower cost to the laptop. These devices which we

are categorizing as notebooks are equipped with the same processor and processing power as a medium range laptop but incorporating some of the netbook features where computing capabilities are not compromised.

Currently there is 1 notebook cart in the District in the HS; a total of 32 notebooks. Future plans would include transitioning the netbook carts over to notebook carts as the netbooks become physically and functionally obsolete.

## **Special Needs Students**

The Pupil Personnel Services department provides services for students with special needs. This includes recommendations for assistive devices and processes for each student requiring service.

## **Videoconference Systems**

Videoconferencing offers us the ability to bring together our students with experts around the globe. The District offers videoconferencing capabilities in all instructional areas by request through three videoconferencing systems.

## **Student Response Systems**

Student Response Systems (SRS) are an inexpensive and simple way to have full classroom participation. The system is comprised of a class set of “clickers” where each student can interact with the teacher and others in the classroom to the lessons being taught. The District offers Student Response System use in all instructional areas by request through three SRS systems.

## **Document Cameras**

The Document Camera allows teachers to project any object onto the screen, such as classroom books, student work, science experiments, math manipulatives, and more. The document camera has the ability to magnify objects that normally would be difficult for the entire class to see up-close all at once. It can also take digital ‘snapshots’ of the object to be used in future lessons, added to PowerPoints, or uploaded to the classroom website for review..

**Goals and Strategy for Use of Telecommunications and Information Technology; Core Element, Criteria 1**

*Core Element, Criteria 1: The plan must establish clear goals and a realistic strategy for using telecommunications and information technology to improve education or library services.*

Staff:

Create improved learning environments for increased student success by providing teachers with technology equipment and training to promote infusion into the curriculum.

- Provide technology infrastructure
- On-site technicians maintain systems daily
- Staff developer
  - provide training on the hardware and software
  - provide internet safety training demonstrating search engine strategies and proper internet etiquette
  - create technology enhanced lessons
  - model classroom management and teaching strategies for incorporating technology in the classroom

Students:

Develop 21<sup>st</sup> century skills for academic success and meet technology literacy standards.

- Using our K-6 scope and sequence for technology skills (Appendix B)  
(Projects are developed annually, aligned with the curriculum)
- Research skills and technology literacy are emphasized across the curriculum areas (7-12)
- Computer courses are required for commencement (middle school)
- Additional courses are offered for students at the high school level
- After-school technology clubs are offered

**Criteria 1 Table:**

Strategies	2014 - 2015	2015 – 2016	2016 – 2017	Comments (if app.)
Provide effective technology infrastructure	Ongoing	Ongoing	Ongoing	
Provide all classrooms K-12 with interactive whiteboards	Completed	Completed	Completed	
Provide document camera technology to grade level/subject areas (ES, MS, HS)	Add document cameras	Assess need for additional document cameras	Assess need for additional document cameras	

Provide each building with videoconferencing equipment	Completed	Completed	Completed	
Curriculum Mapping use across all subject areas K-12	Completed	Completed	Completed	
Administer Technology Literacy Assessment to Gr. 8 students	Ongoing (spring)	Ongoing (spring)	Ongoing (spring)	
Office 365 Roll-out (Web 2.0)	Initial year	Year 2	Year 3	
Provide sufficient computer resources for students and teachers	Ongoing	Ongoing	Ongoing	
Continuous updating of internet technology protection measures (as outlined in CIPA regulations)	Ongoing	Ongoing	Ongoing	New firewall implemented Dec. 2012
Review of Acceptable Use Policy (AUP):				
FAC/STAFF- <a href="http://www.mtsinai.k12.ny.us/our_district/policy/Revised2_DistrictPolicy.pdf">http://www.mtsinai.k12.ny.us/our_district/policy/Revised2_DistrictPolicy.pdf</a>	Annually	Annually	Annually	
HS - <a href="http://www.mtsinai.k12.ny.us/highschool/parents/2013-14/2013-2014%20High%20School%20Handbook%20Revised%2010-2013.pdf">http://www.mtsinai.k12.ny.us/highschool/parents/2013-14/2013-2014%20High%20School%20Handbook%20Revised%2010-2013.pdf</a>	Annually	Annually	Annually	
MS - <a href="http://www.mtsinai.k12.ny.us/middleschool/students/policy_academics/1314/2013-14%20Middle%20School%20Parent-Student%20Handbook%20updated%20102013.pdf">http://www.mtsinai.k12.ny.us/middleschool/students/policy_academics/1314/2013-14%20Middle%20School%20Parent-Student%20Handbook%20updated%20102013.pdf</a>	Annually	Annually	Annually	
ES - <a href="http://www.mtsinai.k12.ny.us/elemschool/docs/1213/Parent%20Student%20Handbook%201213.pdf">http://www.mtsinai.k12.ny.us/elemschool/docs/1213/Parent%20Student%20Handbook%201213.pdf</a>	Annually	Annually	Annually	
Add/maintain educational programs listed in Criteria 3 for students/staff:	Ongoing	Ongoing	Ongoing	
Continue conversion from textbooks to CD/DVD/web	Ongoing	Ongoing	Ongoing	(continue-other budget)

**Professional Development Strategy; Core Element, Criteria 2**

*Core Element, Criteria 2: The plan must have a professional development strategy to ensure that staff knows how to use these new technologies to improve education or library services.*

Training opportunities for the staff are identified by the Technology Committee through observations / informal assessments and staff input (via surveys). The Technology Committee consists of district members who meet throughout the year to monitor and implement the technology plan. The goal of this committee is to develop new strategies and projects to meet the needs of our students and reach the goals as stated above.

Training is provided in the form of:

- Superintendent Conference Day Workshops
- A full-time staff developer
  - Provides daily support, training, scheduled workshops, etc.
- Hardware and software training for the technical staff
- Approval of graduate level or in-service technology courses (for credit)
- Summer workshops (for credit/stipend)
- Out of district conferences
- Outside consultants (BOCES, Right Reason, AIMSweb, etc.)
- Release time for out-of-district observation

The Technology Committee consists of: parents, teachers, staff developers, and district/building administrators.

**Criteria 2 Table:**

Strategies	2014 - 2015	2015 – 2016	2016 – 2017	Comments (if app.)
Full time technology staff developer to provide daily support and training	Ongoing	Ongoing	Ongoing	
Superintendent's Conference Day technology workshops	4 per year	4 per year	4 per year	
District sponsored summer technology workshops for compensation	July-August	July-August	July-August	
Approval of appropriate graduate and/or in-service technology courses	Ongoing	Ongoing	Ongoing	
Use of My Learning Plan to manage attendance	Ongoing	Ongoing	Ongoing	

and progress in professional development goals				
Outside consultants as needed	Ongoing as needed	Ongoing as needed	Ongoing as needed	
Approval of appropriate out-of-district technology conferences	Ongoing	Ongoing	Ongoing	
Technology Committee (consisting of administrators, teachers, staff development and parents) meeting to determine where there is a need for training	Throughout school year	Throughout school year	Throughout school year	
Teacher surveys distributed electronically to determine needs of staff for upcoming year	Throughout school year	Throughout school year	Throughout school year	
Hardware and software training for technical staff	As necessary	As necessary	As necessary	
Parent training available through adult education	Fall and Spring	Fall and Spring	Fall and Spring	
Parent training for school applications-tutorials (Power School portal, School Messenger, NutriKids, etc.) available upon request	Ongoing	Ongoing	Ongoing	Parent contact through District Office.
Teacher training for various web based programs used by the district available on school website	Ongoing	Ongoing	Ongoing	
Specific Power School staff member assigned to assist teachers with Power Teacher	Ongoing	Ongoing	Ongoing	
Mentors appointed to first year teachers responsible for helping incorporate/infuse technology into the curriculum	Ongoing	Ongoing	Ongoing	

## **Outline of Technology Needed; Core Element, Criteria 3**

*Core Element, Criteria 3: The plan must include an assessment of the telecommunications services, hardware, software and other services that will be needed to improve education or library services.*

### **Technology Plans**

Future Technology acquisitions fall into two main categories; *Maintenance* and *New*.

#### **Maintenance**

*Maintenance* consists of purchases necessary to keep the current instructional technology environment running. This includes a replacement cycle for equipment such as a six to seven year replacement cycle for computers. It also includes updates to equipment and software. It includes the maintenance of yearly technology subscriptions and equipment service plans.

#### **New**

*New* consists of purchases that introduce new instructional technologies into the existing environment, purchases that introduce existing instructional technologies into new areas or purchases that add to existing instructional technologies in existing areas. A description of the *New* instructional technology follows.

- Teacher iPads
  - Each building will receive 4 iPads to be shared among the teachers in a grade level or department.
  - iPads can connect to the SmartBoard to allow for classroom demonstrations and activities
  - Teacher training will be held
  - Future iPad purchases will be determined by the success of this initiative
  
- iPad Cart for Elementary School
  - Set of 16 iPads on a cart will allow all classrooms to have an opportunity to learn through this mobile technology
  - Teachers can borrow the Teacher iPad and demonstrate on the SmartBoard what activity the students will be working on
  - Teacher training will be held
  - Future iPad purchases will be determined by the success of this initiative

- Document Camera
  - Allows teachers to project any object onto the screen, such as classroom books, student work, science experiments, math manipulatives, and more.
  - The document camera can magnify objects and takes digital ‘snapshots’ of the object to be used in later lessons.
  
- Office 365 Roll-out (Web 2.0)
  - Included with our Microsoft software assurance agreement for Windows and Office is a web-based option for the Office Suite.
  - Students and teachers will have access to the web-version of Office from anywhere that they have internet access (which includes home, etc.) Their accounts will allow them to store and access their files on the web.
  - We are targeting the 14-15 school year for initial introduction.
  - Teacher training will be held.
  
- One-to-One Teachers Netbooks-Notebooks
  - Netbook have been assigned to teachers that share classrooms and/or travel between buildings. We will continue with this as needed.
  - These One-Teacher-to-One-Netbook instances will allow efficient use of teacher time for accessing computer resources such as gradebook, lesson plans, e-mail, etc.
  - We will be substituting notebooks for any new purchase that replaces obsolete netbooks.
  
- Electronic Textbooks
  - The Technology Committee will look to continue the conversion/ replacement of the current physical textbook “system” into one where textbooks are in electronic form.
  - Most of the funding for this conversion will come from the individual department budgets.
  - These textbooks incorporate links to Internet-based information sources that allow for the textbooks to have continuous access to current information.
  - There is the projection for overall cost savings using the electronic version of the textbooks.

**Criteria 3 Table (includes *Maintenance* and *New Items*):**

<b>Currently</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
<b>Telecommunications Services</b>				All e-Rateable
Cablevision Lightpath (Voice & Data).	Same (no change)	Bandwidth upgrade (assess need)	Bandwidth upgrade (assess need)	New reduced pricing starts in 2014-2015
Cablevision TV service (standard school package).	Same (no change)	Same (no change)	Same (no change)	
<b>Hardware Inventory (major items)</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
686 computers	0 computers	150 computers	160 computers	Year 1: Use grant computers to handle maintenance quantities for 8 year old computers. Year 2: Replace 8 year old computers. Year 3: Replace ½ of the 8 year old computers. The balance will be replaced as 9 year old computers the following year.
173 laptops	0 laptops	35 laptops	35 laptops	Primarily maintenance needs. Year 2: Replace 7 year old laptops in HS carts. Year 3: Replace 8 year old laptops in MS carts.
634 Netbooks	0 netbooks	0 netbooks	0 netbooks	No new netbooks. Maintenance quantities covered by notebook purchases
35 Notebooks	52 notebooks (MSI netbook replacement)	70 notebooks (MSI netbook replacement)	140 notebooks (MSI & Asus netbook replacement)	Primarily maintenance needs. Obsolete 5 year old MSI over 3 years. Start first of 3 year obsolescing of 6 year old Asus in year 3.
4 iPads	12 iPads	12 iPads	tbd	To be shared by grade/dept. areas
(6) 16-count Laptop Carts	0 carts	3 carts	3 carts	Begin replacement of laptops in Year 2

(6) 32-count Netbook Carts	0 carts	0 carts	0 cart	Replace Asus cart Year 3 with Notebook cart - see below
(1) 32-count Notebook Carts	0 carts	0 carts	1 cart	Replace Asus Netbook cart Year 3
(0) 32-count iPad Carts	17 iPads (ES)	17 iPads (ES), tbd (MS)	tbd	To be used by students as portable lab
34 Servers (count <u>includes</u> Virtual machines –VM’s)	2 servers (VM’s)	1 server (physical), 2 servers (VM’s)	2 servers (VM’s)	Purchase similarly equipped replacement servers as replacements for obsolete physical servers. Favor VM’s.
269 Printers	41 printers	25 printers	20 printers	Currently completing migration of HS & MS classrooms from color inkjets to less expensive monochrome laser printers. ES continues with color inkjet.
121 SmartBoards	13 SmartBoards	7 SmartBoards	2 SmartBoards	Adding 2 new classroom locations. Balance is replacing obsolete Numonics boards & maintenance
6 Smart Slates	0	0	0	Complete – 2 per building
3 Document cameras	1	3	6	Continue to accelerate additions
3 Videoconferencing systems	Completed	Completed	Completed	Complete – one/building
3 Student Response Systems (SRS)	Completed	Completed	Completed	Complete – one/building
1 Managed 802.11 a/b/g/n Wireless <u>system</u>	Completed	Completed	Completed	Complete – located in HS
(81) Wireless-n Access Points (WAPs)	2 WAPs	2 WAPs	2 WAPs	Add APs as demand grows
1 Network Access Control (NAC) device	Completed	Completed	Completed	Complete – located in HS
(34) 24/48 port 1GB managed switches	(1) 24/48 port 1GB switch	(1) 24/48 port 1GB switch	(1) 24/48 port 1GB switch	1GB network upgrade complete. New purchase to replace failed switches

				only.
(62) 5-8 port 1GB unmanaged switches	(6) 5/8 port switches	(6) 5/8 port switches	(6) 5/8 port switches	1GB classroom/office upgrade complete. New purchase to replace failed switches only.
<b>Software Inventory (major titles)</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Office 365	HS	MS	Ongoing	
Conversion of textbooks to CD	Ongoing	Ongoing	Ongoing	Wherever possible
Microsoft Windows Operating System	Ongoing	Ongoing	Ongoing	Yearly subscription
Microsoft Office (Word, Excel, Powerpoint, Outlook, Publisher, Frontpage)	Ongoing	Ongoing	Ongoing	Yearly subscription
Microsoft Forefront Endpoint Protection	Ongoing	Ongoing	Ongoing	Yearly subscription
Symantec Endpoint Protection	Ongoing	Ongoing	Ongoing	Servers & critical workstations only subscription
Internet filters & protection	Ongoing	Ongoing	Ongoing	Upgraded Dec. '12
Email filter, protection, & archive	Ongoing	Ongoing	Ongoing	Yearly subscriptions
Network protection and compliance (NAC, ID/IP)	Ongoing	Ongoing	Ongoing	Yearly subscription
Data Backup program	Ongoing	Ongoing	Ongoing	Yearly subscription
My Learning Plan (Staff development records)	Ongoing	Ongoing	Ongoing	Yearly subscription
IEPDirect	Ongoing	Ongoing	Ongoing	Yearly subscription
RTI-M Direct	Ongoing	Ongoing	Ongoing	Yearly subscription
School Messenger (school notification system)	Ongoing	Ongoing	Ongoing	Yearly subscription
Finance Manager (finance system)	Ongoing	Ongoing	Ongoing	Yearly subscription
Timepiece (attendance system)	Ongoing	Ongoing	Ongoing	Yearly subscription
NutriKids (food service system)	Ongoing	Ongoing	Ongoing	Yearly subscription

Visitor Management System	Ongoing	Ongoing	Ongoing	Yearly subscription. Introduced Sept. '13
Powerschool Student Information System (SIS)	Ongoing	Ongoing	Ongoing	Yearly subscription
Power Teacher grade book	Ongoing	Ongoing	Ongoing	Yearly subscription
Follett Library system	Ongoing	Ongoing	Ongoing	Yearly subscription
Quia	Ongoing	Ongoing	Ongoing	Yearly subscription
Castle Learning	Ongoing	Ongoing	Ongoing	Yearly subscription
Digital Media Library (DML)	Ongoing	Ongoing	Ongoing	Yearly subscription
Virtual Reference Collection (VRC)	Ongoing	Ongoing	Ongoing	Yearly subscription
SmartBoard Software	Ongoing	Ongoing	Ongoing	Current version
Smart Sync Software	Ongoing	Ongoing	Ongoing	Current version
Adobe Creative Suite	Ongoing	Ongoing	Ongoing	Additional seats – newest version
Adobe Premiere	Ongoing	Ongoing	Ongoing	Recent Version
Adobe Acrobat	Ongoing	Ongoing	Ongoing	Version 9
EdHelper	Ongoing	Ongoing	Ongoing	Yearly subscription
ExamGen & Eduware Test Wizards	Ongoing	Ongoing	Ongoing	Yearly subscription
Visual .NET Programming Suite	Ongoing	Ongoing	Ongoing	Yearly subscription
Enchanted Learning	Ongoing	Ongoing	Ongoing	Yearly subscription
Linguascope	Ongoing	Ongoing	Ongoing	Yearly subscription
Raz Kids	Ongoing	Ongoing	Ongoing	Yearly subscription
AIMSweb	Ongoing	Ongoing	Ongoing	Yearly subscription
Right Reason Technologies	Ongoing	Ongoing	Ongoing	Introduced in 13-14 school year
Brain Pop	Ongoing	Ongoing	Ongoing	Yearly subscription
ReadAbout	Ongoing	tbd	tbd	Look to replace due to company obsoleting sw
Read180	Ongoing	Ongoing	Ongoing	Yearly subscription
Reading Counts	Ongoing	Ongoing	Ongoing	Yearly subscription
Earobics	Ongoing	Ongoing	Ongoing	Yearly subscription

Pixie	Ongoing	Ongoing	Ongoing	Yearly subscription
Rosetta Stone Level 1	Ongoing	Ongoing	Ongoing	Recent version
Typing Tutor	Ongoing	Ongoing	Ongoing	Various versions
Print Shop	Ongoing	Ongoing	Ongoing	Version 11, other versions
Inspiration	Ongoing	Ongoing	Ongoing	Version 6
Roxio Easy Media Creator	Ongoing	Ongoing	Ongoing	Recent versions
Windows Media Player, RealPlayer, Quicktime	Ongoing	Ongoing	Ongoing	Free downloads
Sibelius Music software	Ongoing	Ongoing	Ongoing	Recent version
Auralia & Musition Music software	Ongoing	Ongoing	Ongoing	Recent version
<b>Asset Tracking</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Combination of Excel spreadsheet and Asset tracking process which includes District bar-coded asset tags.	Ongoing	Ongoing	Ongoing	
<b>Staffing and Technical Support</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
(1) Technology Coordinator, (1) Technology Staff Developer, (1/2) PowerTeacher/Other Staff member, (2) Technicians, (1/2) Tech Secretary.	Ongoing	Ongoing	Ongoing	

## **Budget for Acquisition and Maintenance; Core Element, Criteria 4**

*Core Element, Criteria 4: The plan must provide for a sufficient budget to acquire and maintain the hardware, software, professional development and other services that will be needed to implement the strategy.*

A detailed Technology budget is submitted yearly to run the computer-based operations for instructional and administrative. This budget is in accordance with the district's policy of funding technology out of current funds. It is developed by the Director of Information Technology in consultation with administration and the district-wide Technology Committee. The Technology Budget includes funds for technology equipment, services, supplies, and software. These include the costs of our internet service provider. For the technology budget information, please reference the current Technology Budget and also the budget items in the table below.

In concert to the Technology budget, the district employs Technology personnel. These costs are included in the yearly district Salaries budget.

Other budgets that support the technology operations in the district are as follows:

The Library budget includes costs associated with subscriptions to Internet based electronic information services such as Proquest and Literature Research Center. The library catalog and circulation system (currently provided by Follett) is also in this budget.

The Curriculum and Staff Development budget provides funding for those two areas and the technology component of each. It provides funds for technology infusion in the curriculum development. It provides funds for the staff development that includes technology training (hardware and software). It also provides funds for substitutes when district staff is involved in approved technology activities; i.e. trainings, conferences. The budget provides funding for the subscription to the web-based tracking and managing system for Professional Development activities, MyLearningPlan.com. It also provides subscriptions to the AIMSweb and Right Reason Technologies assessment software.

The Guidance budget provides funding for the Student Information System (SIS), Powerschool. This budget provides funding for on-line service Naviance & GuidanceDirect as well.

The Pupil Personnel Services budget provides pupil personnel services for students placed in programs in and out of the district. IEPDirect.com is a web-based Special Education management and administrative system used to assist in this area. This budget provides funding for the service.

The Tech department keeps a detailed Inventory on all technology assets in the district. For technology inventory information, please reference the current Technology Inventory document.

**Criteria 4 Table: Budget for Acquisition and Maintenance**

<i>Needs (major items)</i>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
<b>Total Projected Technology Budget</b> (includes sum of the following plus additional amount for non-major items)	<b>317,414.00</b>	tbd	tbd	
<b>Telecommunications Services</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Voice & Data Services	\$40,150	\$40,150	\$40,150	
TV service (standard school package).	\$280	\$295	\$320	
<b>Hardware Budget (major items)</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Computer Equipment	\$31,750	\$138,650	\$148,550	
Wired network Equipment	\$6,750	\$4,400	\$4,500	Maintenance Quantities
Wireless network Equipment	\$850	\$850	\$950	Maintenance Quantities
Server Room Equipment	\$0	\$8,500	tbd	
Printers	\$5,325	\$5,500	\$5,900	Maintenance Quantities
Peripherals	\$2,240	\$2,200	\$4,320	Document cameras, hi-speed scanners, etc.
Presentation & SmartBoard Equipment	\$15,500	\$8,500	\$3,000	
Repair Parts	\$21,000	\$22,000	\$23,200	
<b>Software budget (major titles)</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Operating Systems and Office Productivity Software	\$22,300	\$24,000	\$24,000	
Subject-specific Instructional Software	\$22,350	\$20,150	\$21,000	
Classroom Presentation & Class/Classroom Management Software	\$1,000	\$1,500	\$2,000	

Internet and e-mail Filtering and Protection, Network and Data Protection Software	\$9,285	\$9,565	\$9,950	
<b>Hardware Maintenance Contracts Budget</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Budget to support and protect hardware.	\$15,500	\$15,950	\$16,425	
<b>Staffing Budget</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
(1) Technology Coordinator, (1) Technology Staff Developer, (1/2) PowerTeacher/DO Staff member, (2) Technicians, (1/2) Tech Secretary.	\$412,880	\$425,264	\$437,579	
<b>LAN Support Budget</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Network consulting services.	\$8,000	\$8,000	\$8,000	
<b>BOCES Services Budget</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
Technology Services purchased through BOCES.	\$70,500	tbd	tbd	
<b>Grants Budget</b>	<b>2014 - 2015</b>	<b>2015 – 2016</b>	<b>2016 – 2017</b>	<b>Status (if applicable)</b>
	tbd	tbd	tbd	These include grants from local organizations such as the PTO, FOA, Sports Booster, Student Class Gift, corporate programs, etc.

## **Evaluation Process; Core Element, Criteria 5**

*Core Element, Criteria 5: The plan must include an evaluation process that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.*

Our evaluation process includes

- Staff Surveys
- Informal Assessments
- Informal Observations/Conversations
- Formal Teacher Observations
- Annual Performance Reviews
- Grade 8 Technology Assessment (state required)
- Sign out of hardware for classroom use
- Sign up of computer labs
- Usage logs of web-based educational programs
- Attendance at summer workshops
- Conference attendance reports (My Learning Plan)
- Conference evaluation summaries (My Learning Plan)
- Usage of computer-based library catalog

Based on the year-round formal and informal evaluations and assessments listed above, we can gauge the needs of the staff and make the necessary adjustments mid-course. For example, when we needed to do a hardware refresh of the netbooks in K-4 classrooms, we conducted a survey of teacher use of the netbooks. This survey allowed us to arrive at data that directed us to continue to replace the netbooks, but in a phased in approach, as opposed to all at once.

The district has a Technology Committee that meets throughout the year to assist in the evaluation of technology and how it is meeting the goals for our staff and students. For example, the Committee recently met to review current survey results of teacher's needs and wishes for technology training and equipment. The results of this survey allowed us to make an informed decision and develop new strategies on how to move forward towards our technology goals. Agendas, minutes, and attendance at meetings are all maintained by the District Technology Department.

# **Appendix A**

## **Acceptable Use Policy**

## **Student Acceptable Use Policy**

### **Internet Protection Policy**

Internet access will be provided to students in accordance with the terms of this policy. Internet access from school computers is reserved solely for educational purposes. Use by outside groups is prohibited. Use by student clubs and organizations is limited to those times when the Internet access points are not in use for instruction, and shall be limited to educational purposes and governed by this policy. Access to the Internet will be under the direction and supervision of the staff assigned to the particular Internet access area or computer.

The school district reserves the right to monitor all Internet activity including transmission and receipt of e-mail. Use of e-mail is limited to school district purposes.

No computer in the district having Internet access shall be operated by a student unless Internet access from the computer is subject to filtering software. To the extent possible, such filtering software shall be designed and it shall operate so that images that are obscene, pornographic or harmful to minors shall not be displayed. Images or language that advocate or promote violence or hatred against particular individuals or groups of individuals or promotes the superiority of one racial, ethnic or religious group over another shall not be displayed. For purposes of this policy, the phrase *harmful to minors* means any picture, image, graphic image file, or other visual depiction that, taken as a whole, and with respect to minors, appeals to prurient interest in nudity, sex or excretion; 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, taken as a whole, lacks serious literary, artistic, political, religious or scientific value as to minors.

### **PROHIBITED CONDUCT**

No student shall while using a computer or other device connected to the Internet:

1. Access, transmit or retransmit material that promotes violence or advocates destruction of property, including information concerning the manufacture of destructive devices, such as explosives, fireworks, smoke bombs, incendiary devices or the like.
2. Access, transmit or retransmit any information that is harmful to minors as that phrase is defined in this policy.
3. Access, transmit or retransmit material that advocates or promotes violence or hatred against particular individuals or groups of individuals or advocates or promotes the superiority of one racial, ethnic or religious group over another.
4. Use or possess bootleg software. Bootleg software means any software that has been downloaded or is otherwise in the user's possession without the appropriate registration of the software, including the payment of any fees owed to the owner of the software.

5. Use or possess gaming software. Gaming from the Internet is restricted by the Internet filter. Students shall not bypass this restriction by directly loading games on the network.
6. Use encryption software from any access point within the school district.
7. Transmit credit card or other personal identification information, including home addresses or telephone numbers from any school district computer.
8. Transmit e-mail through an anonymous remailer.
9. Access the Internet from a school district computer using a non-school district Internet account.
10. Use an instant messenger service or program. Internet Relay Chat or other forms of direct electronic communication, or enter a chat room without the express permission of the staff member supervising the computer resource.
11. Commit or attempt to commit any willful act involving the use of the network, which disrupts the operation of the network within the school district or any network connected to the Internet, including the use or attempted use or possession of computer viruses or so-called hacking or other unlawful activities on line.
12. Disable or attempt to disable filtering software. This includes using redirection, proxy, or other means to access sites that are directly blocked by the filtering software. However, such filtering software may be disabled for bona fide research or other lawful purposes, when the building principal of the building in which such research or other lawful activity will be conducted has given written permission to disable the filtering software.

In addition to those penalties set forth in the student discipline code, a violation of this Internet policy may also result in loss of Internet privileges.

Opinions, advice, services, and all other information expressed on line are those of the on-line authors and not of the school district. The Internet contains information pertaining to a variety of subjects. Not all of this information is accurate or reliable, particularly where the advice of medical, legal, accounting or other professionals would be appropriate. Users are advised not to rely on advice found on the Internet. The school district is not responsible for such advice.

The school district does not guarantee or imply that access to the Internet will always be available when students want access or that the software provided by the district will always work as intended. The school district is not responsible for failures in the operation or technical functioning of the Internet or the computers or software used to access the Internet.

## **Employee Acceptable Use Policy**

### **Internet Access for Employees**

Employees of the Mt. Sinai Union Free School District may be issued a password and e-mail address for use on the District's internal network. The password and e-mail address may also allow the individual user to access the Internet from district computers. Employees should be aware that district computer use is primarily there to support the educational mission of the District.

The Board recognizes the integral and ubiquitous nature of technology in the workplace. Further, it understands and recognizes that such instruments are, in most cases, two-way sources of communication and that e-mails, text messages, voicemail, etc., may arrive from any quarter, some of which may undoubtedly not be school related. The Board also understands and accepts that in this day of instant communications, employees may speak with, e-mail or communicate in some fashion with those who are unrelated to the course of normal school business. For example a spouse e-mailing a spouse about childcare or child pick-up, someone receiving an automated message for a package delivery tracking system, or an instant alert message on a school closing due to weather are just a few examples of the numerous possibilities of such contact and outreach that may occur.

As long as these communications and technology use do not unreasonably interfere with the course of learning and school business and results in no additional cost to the district, the Board understands and accepts that this is part of the interface of daily life, both business and personal. It is also understood and accepted that district personnel may have files/voicemail/etc. that are not school related on their technology as long as these do not unreasonably interfere with learning, school business or school operation, or violate the specific restrictions as noted below.

### **PROHIBITED CONDUCT**

Mount Sinai Union Free School District employees shall not use a District computer:

1. without authorization of the supervisor of the IT Department prior to loading software including free-ware or share-ware not licensed to the District on any district computer resource. This includes peripherals such as printers or storage devices which may be connected to District computer resources unless they are the property of the Mt. Sinai Union Free School District without express permission. No computers other than those belonging to the District may be physically connected to the District's network;
2. to access, transmit, or retransmit material which promotes violence or advocates destruction of property, including information concerning the manufacture of destructive devices, such as explosives, fireworks, smoke bombs, incendiary devices or the like;
3. to access, transmit, or retransmit any information which is or may be harmful to minors or staff, including but not limited to pornographic material;

4. to access, transmit or retransmit material which advocates or promotes violence or hatred against particular individuals or groups of individuals or advocates or promotes the superiority of one racial, ethnic or religious group over another;
5. to use or possess bootleg software. Bootleg software means any software which has been downloaded or is otherwise in the user's possession without the appropriate registration of the software, including the payment of any fees owed to the owner of the software;
6. to use encryption software from any access point within the School District;
7. to transmit e-mail through an anonymous remailer;
8. to access the Internet from a School District computer using a non-School District Internet account;
9. to use an instant messenger service or program, Internet Relay Chat or other forms of direct electronic communication, or entering a chat room;
10. to commit or attempt to commit any act involving the use of the network which disrupts the operation of the network within the School District or any network connected to the Internet, including the use or attempted use or possession of computer viruses or so called hacking or other unlawful activities on line;
11. to disable or attempt to disable filtering software. However, such filtering software may be disabled for bona fide research or other lawful purposes, when the Building Principal, IT Manager, Assistant Superintendent for Curriculum & Instruction, Assistant Superintendent for Business, or Deputy Superintendent has given written permission to disable the filtering software.

In addition to the above, it is also understood that administrators' job responsibilities often require them to take work home. The electronic transfer of work documents and projects will facilitate the completion of "paperwork" that is an ever-demanding, ever-increasing part of administrative duties and responsibilities that often extend beyond the school day and on weekends, vacation periods and holidays. Also, on many occasions the teaching staff has off-site job responsibilities (i.e. reporting of grades, responding to emails, lesson planning, etc.). In recognition of these demands, the Board authorizes the use of District technology outside of school, particularly at home – either portable or fixed technology. The cost of Internet service to facilitate said use will be borne by the administrator/teacher. It is accepted that such technology in residence may have files and information that are not school related.

A violation of this policy may result not only in loss of Internet privileges, but disciplinary action up to and including termination of employment.

## **Appendix B**

### **International Society for Technology in Education Standards (ISTE)**

#### **i-SAFE**

### **Mount Sinai School District's K-6 Scope and Sequence for Technology Skills**

# International Society for Technology in Education (ISTE) Standards for Students

(Developed by the International Society for Technology in Education - <http://www.iste.org>)

## 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes.
- b. Create original works as a means of personal or group expression.
- c. Use models and simulations to explore complex systems and issues.
- d. Identify trends and forecast possibilities.

## 2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. Contribute to project teams to produce original works or solve problems.

## 3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry.
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. Process data and report results.

## 4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- a. Identify and define authentic problems and significant questions for investigation.
- b. Plan and manage activities to develop a solution or complete a project.
- c. Collect and analyze data to identify solutions and/or make informed decisions.

- d. Use multiple processes and diverse perspectives to explore alternative solutions.

## **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- a. Advocate and practice safe, legal, and responsible use of information and technology.
- b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. Demonstrate personal responsibility for lifelong learning.
- d. Exhibit leadership for digital citizenship.

## **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems, and operations.

- a. Understand and use technology systems.
- b. Select and use applications effectively and productively.
- c. Troubleshoot systems and applications.
- d. Transfer current knowledge to learning of new technologies.

NETS·S © 2007 International Society for Technology in Education.

ISTE® is a registered trademark of the International Society for Technology in Education.

## **i-SAFE Professional Development Workshop**

i-SAFE is a non-profit foundation whose internet safety curriculum is utilized by districts throughout the United States. In an effort to teach students how to safely and responsibly use the Internet, Mount Sinai teachers participated in an i-SAFE training held during Superintendent's Conference Day. The teachers learned various skills and techniques to help them during their day-to-day interactions with their students on the computers. The training also provided teachers with internet safety resources and lesson ideas to help students meet the district's Technology Scope and Sequence.

# Mount Sinai School District

## Computer Technology Scope and Sequence for Grades K-6

### **Grade K**

#### **Basic Computer Skills**

##### Awareness of Computer/ Technology

- Students will identify different uses for computers.
- Students will describe occupations that use computers.
- Students will be exposed to videoconferencing technology that supports the curriculum.
- Students will use the Student Response System as an instructional and assessment tool.
- Students will participate in SmartBoard activities that enhance the curriculum.

##### Identify Computer Parts

- Students will identify a monitor, keyboard, tower, and mouse.
- Students will recall what each part the computer does.

##### Computer Use Protocol

- Students will understand rules regarding computer use (clean hands, no food...)

### **Grade 1**

#### **Access**

##### General

- Students will find and open saved work.
- Students will find and open programs.
- Students will open an Internet page.
- Students will play and record a sound.
- Students will enter and understand using passwords.

#### **Basic Computer Skills**

##### Awareness of Computer/ Technology

- Students will be exposed to videoconferencing technology that supports the curriculum.
- Students will use the Student Response System as an instructional and assessment tool.
- Students will participate in SmartBoard activities that enhance the curriculum.

##### Computer Use Protocol

- Students will state the rules of safe Internet use (do not to give out personal information, do not to go on the Internet without adult supervision).

##### Mouse Use

- Students will move the mouse pointer to any location.
- Students will use the left mouse button to select/open/close.

##### Start Programs

- Students will launch programs with shortcut icons on desktop.
- Students will save work.
- Students will print work.

#### **Graphics**

##### General

- Students will make a slideshow.

Students will open and close a picture.  
Students will resize a picture.

#### Draw

Students will select and use appropriate drawing tools to create shapes and lines.  
Students will select color.

### **Word Processing**

#### General

Students will write sentences using the keyboard.  
Students will print work.  
Students will change font, color and size.

#### Keyboarding

Students will identify and type all letters.  
Students will identify and type all digits on the keyboard.  
Students will use the shift key to make capitals.  
Students will use the enter key.  
Students will use the spacebar to separate words.  
Students will type punctuation marks including periods, exclamations, and question marks.

#### Editing

Students will use the mouse/keyboard to place cursor at editing location.  
Students will use the backspace and delete keys.  
Students will use the undo button.

## **Grade 2**

### **Access**

#### General

Students will access saved work from the network drive.  
Students will access saved work using "My Computer".  
Students will access web pages on the Internet.

### **Basic Computer Skills**

#### Awareness of Computer/ Technology

Students will be exposed to videoconferencing technology that supports the curriculum.  
Students will use the Student Response System as an instructional and assessment tool.  
Students will participate in SmartBoard activities that enhance the curriculum.

#### Computer Use Protocol

Students will state the rules of safe Internet use (do not to give out personal information, do not to go on the Internet without adult supervision).

### **Graphics**

#### General

Students will resize a graphic.  
Students will drag and place a graphic on the page.

### **Word Processing**

#### General

Students will write paragraphs.  
Students will highlight text.  
Students will bold text.

## **Grade 3**

### **Access**

#### General

Students will be exposed to classroom digital cameras.

Students will access information on Internet.

### **Basic Computer Skills**

#### Awareness of Computer/ Technology

Students will be exposed to videoconferencing technology that supports the curriculum.

Students will use the Student Response System as an instructional and assessment tool.

Students will participate in SmartBoard activities that enhance the curriculum.

#### General

Students will state the rules of safe Internet use (do not to give out personal information, do not to go on the Internet without adult supervision).

### **Graphics**

#### General

Students will import a photograph taken with a digital camera.

Students will copy and paste graphics from one program to another.

### **Spreadsheet**

#### General

Students will enter data into cells.

Students will create a graph.

### **Word Processing**

#### General

Students will use the writing process to bring a piece of work to the published stage.

Students will insert clipart.

Students will highlight text.

Students will underline and bold text.

Students will center and left align text on a page.

#### Keyboarding

Students will place their fingers on the home keys.

#### Editing

Students will use spell check.

## **Grade 4**

### **Access**

#### General

Students will use the resources on the Portal to search for information on the Internet.

Students will use a digital camera to take pictures.

Students will import graphics from a digital camera or scanner.

#### Computer Use Protocol

Students will state the rules of safe Internet use (do not to give out personal information, do not to go on the Internet without adult supervision).

### **Basic Computer Skills**

#### Awareness of Computer/ Technology

Students will be exposed to videoconferencing technology that supports the curriculum.

Students will use the Student Response System as an instructional and assessment tool.  
Students will participate in SmartBoard activities that enhance the curriculum.

General

Students will use the right mouse button.  
Students will use the right mouse button to cut/copy/paste.  
Students will understand the use of presentation software.

**Spreadsheet**

General

Students will create various graphs using data on a spreadsheet.  
Students will select the correct type of graph to display the data.

**Word Processing**

General

Students will publish a report.  
Students will insert text.  
Students will choose to print a page in landscape or portrait.

**Presentation Software**

General

Students will create a presentation.  
Students will create a bulleted or numbered list.  
Students will insert images.  
Students will present their message with a clear and effective design.  
Students will know that information and graphics obtained from the internet must be cited.

**Grades 5 - 6**

**Word Processing Skills**

Students will create and save a new document.  
    Identify intended use  
Students will open, view, and print documents  
    Use print preview  
    Print entire file or selected parts (in either Word or the Internet)  
Students will format documents  
    Select font style & size  
    Indent text  
    Justify / align text  
    Line spacing  
    Select page orientation  
Students will edit text  
    Change font style & size  
    Cut, copy, paste, and delete text  
    Use spell check  
    Use find and replace feature  
Students will demonstrate desktop publishing techniques  
    Insert graphics  
    Resize graphics  
    Columns

Tables

Students will use a word processor in real world context

### **Fundamental Computer Skills**

Students will use and understand basic computer related terms:

Login (log-in)

Cursor

Icon

Scroll bar

Hour glass/busy

Word processor

Minimize

Maximize

Network

Open File

Edit

Copyright

File

Multimedia

Internet

Spreadsheet

Cell

Column

Row

Formula

Students will utilize care and appropriate use of hardware

Demonstrate appropriate care and use of keyboard & mouse

Demonstrate appropriate care and use of computer disks

Demonstrate ability to turn computer off/on independently

Demonstrate appropriate care and use of printer

Demonstrate appropriate care and use of special keyboard keys. (ESC, Shift, arrow keys, spacebar, backspace, Delete, Enter, Alt, Ctrl, etc.)

Students will use basic computer management skills

Demonstrate ability to access and exit software

Demonstrate ability to manage files (saving, retrieving)

Demonstrate ability to organize file

Demonstrate ability to use disk utilities (formatting, copying, deleting, creating backup, saving)

### **Computer Networking and Telecommunication Skills**

Students will use the network by:

Demonstrating appropriate use of log-in numbers/names

Accessing on-line information for research

Knowing the importance of password security

### **Spreadsheet Skills**

Students will create and save spreadsheets

Identify intended use

Specify data organization

- Determine columns and rows
- Set cell attributes
- Create simple calculation formulas
- Enter and edit data
- Students will retrieve data
  - Sort data
  - Create chart(s)
  - Print spreadsheets
- Students will generate graphs from spreadsheets

### **Multimedia Skills**

Students will:

- Save a presentation as a new and/or existing presentation and close the file
- Save As presentation to a new location (shared directory for presentation)
- Save As HTML for use on a web page

### **Legal/Ethical Skills**

Students will show understanding of appropriate legal/ethical conduct by:

- Demonstrating appropriate use of computers
- Demonstrating appropriate computer etiquette
- Obeying copyright laws

## **Appendix C**

### **Mount Sinai Network Diagram**

Elementary School/ District Office

Middle School

High School

