

District Plan for Technology Integration
within 3 school years
(2010-2011 through 2012-2013)

Marathon Central School District
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Introduction

In 1996, President Clinton signed the Telecommunications Act of 1996. This law was the first major revision to USA communication laws in over 60 years. Section 254, of this law, declares that state of the art services and technologies will be provided to schools and libraries across the nation in the form of discounted purchase rates. These rates, dubbed E-Rate, are determined by means of the local poverty level to insure equity among all areas within the country, especially within economically disadvantaged areas.

A sub-branch of the Federal Communications Commission (FCC), titled the Schools and Libraries Division (SLD), was created in late 1997 to govern and distribute allocated funds across America. As part of the FCC directive, the SLD was told that all applicants for educational discounts would be required to submit a technology plan to show the resources to use effectively the requested services and that they are in compliance with FCC rules.

The Marathon Central School District (MCSD) submits this plan to satisfy the requirements of the E-Rate program. This plan will specifically address five areas of interest deemed as the core elements to successful school technology initiatives. This is a comprehensive plan that addresses the FCC areas of concern and MCSD initiatives for the integration of modern technologies in our school.

Mission Statement

The mission of Marathon Central School District is to graduate students who will be successful members of the Global Community with 21st Century skills. These skills will enable our students to smoothly transition to the next level of education or enter the work force with the appropriate technical skills necessary to provide a positive contribution to society. The district strives to empower students, with high-tech equipment and systems, to improve their technical experience and become life-long learners. Instructional staff push to integrate worldwide views that strengthen students culturally and to understand and compete in a global market. The focus of the District is:

- All students will have technology literacy skills necessary for 21st century citizenship.
- Instructional staff and instructional support staff will facilitate student learning through proficient use of learning technologies. They will incorporate high quality information resources in their teaching strategies to motivate and engage students and support student growth and exploration.
- Technology applications will improve student achievement, enabling them to become self-directed learners, quality producers and performers, goal setters and pursuers, collaborative contributors, creative/perceptive/critical thinkers, innovative problem solvers, effective communicators, and responsible citizens.
- Learning technologies will provide all students with tools and resources to master important skills and knowledge, including the New York State Learning Standards.
- Technology will be successfully integrated into all curricular and administrative areas so that students will learn in a technology-rich environment, preparing them for life and work in the 21st century.
- The technical infrastructure and instructional technical support staff will adequately serve the educational requirements and administrative/support functions of the district.

Assessment - Hardware

Inventory Lists Management Database

The MCSD technology department has transferred all Excel spreadsheet inventory data into a written Microsoft Access database to keep track of our technology assets. This database is evolving into a powerful tool to track and maintain the current status of all computer hardware. It aids in the shifting of resources and helps keep a record of locations and register these assets into groups that describe if the resource is being used as part of a computer lab, or something else. The following computer groups have been established to help us better identify resources in the district and to better report these subgroups automatically with the fore-mentioned database:

Teacher – This is either a laptop or desktop that has been assigned to a teacher.

Office - This is either a laptop or desktop that has been assigned to an office staff member.

Classroom – This is typically a singleton student desktop assigned to a classroom or it may define that only one device is applicable to a classroom.

Library – This is either a group of laptops or desktops that make up the resources assigned to the library within the building. There is only one library per building.

MiniLab, MiniMobileLab – This is a small group of laptop or desktop computers, usually 4-6 in number, which target specific academic needs of students, such as math or science classrooms. MiniLab are also commonly used in academic intervention programs that typically support small groups of students.

Lab, MobileLab – This is a large group of laptop or desktop computers, usually greater than 15 and less than 25 in number, which supports an entire classroom of students to allow 1:1 accessibility for any particular subject matter.

StudentLoanerLaptop – This is a laptop that we can signout to a student to take home. One use is to catch up in their keyboarding class, which is a MCSD mandatory graduation requirement for all students.

The database tracks commission dates and processing power to help analyze when computers are obsolete. It stores other key asset management information. Below is a pivot table report generated by the database. It quickly shows the current state of our computer assets.

Detail of Computer Inventory Resources throughout the District

EL = Elementary School asset; HS = Jr/Sr High School asset

School	Device Name	Loc Type	CountOfLocType	Internet Capable
EL	Desktop	Lab	28	Yes
EL	Desktop	Library	4	Yes
EL	Desktop	MiniLab	6	Yes
EL	Desktop	Office	9	Yes
EL	Desktop	Teacher	16	Yes
HS	Desktop	Classroom	15	Yes
HS	Desktop	Lab	21	Yes
HS	Desktop	MiniLab	32	Yes
HS	Desktop	Office	18	Yes
HS	Desktop	Teacher	11	Yes
EL	Laptop	Classroom	59	Yes
EL	Laptop	Library	4	Yes
EL	Laptop	MiniMobileLab	22	Yes
EL	Laptop	MobileLab	47	Yes
EL	Laptop	Office	8	Yes
EL	Laptop	Teacher	38	Yes
HS	Laptop	Classroom	4	Yes
HS	Laptop	Library	18	Yes
HS	Laptop	MiniMobileLab	17	Yes
HS	Laptop	MobileLab	46	Yes
HS	Laptop	Office	7	Yes
HS	Laptop	StudentLoanerLaptop	51	No
HS	Laptop	Teacher	36	Yes
HS	Netbook	MobileLab	26	Yes
HS	Tower	Lab	21	Yes
HS	Tower	Office	1	Yes
		Total >>>>	565	
		Internet Capable >>>	506	

Detail of Peripheral Inventory Resources throughout the District

School	Device Name	CountOfDevice	Type	School	Device Name	CountOfDevice	Type
HS	Bar Scanner	3		EL	Bar Scanner	1	
HS	Card Reader	2		EL	Card Scanner	7	
HS	Card Scanner	1		EL	Cart	5	
HS	Cart	3		EL	CRT Monitor	64	
HS	CRT Monitor	74		EL	Desktop	66	
HS	Desktop	98		EL	Digital Camera	17	
HS	Digital Camcorder	2		EL	Docking Station	3	
HS	Digital Camera	12		EL	DVD/VCR	5	
HS	Docking Station	4		EL	Elmo	30	
HS	DVD Burner	1		EL	External HD	1	
HS	DVD/VCR	1		EL	Fax	3	
HS	Elmo	20		EL	GPS	6	
HS	External HD	2		EL	Keyboard	30	
HS	Fax	2		EL	Laptop	179	
HS	Film Scanner	1		EL	LCD Monitor	25	
HS	KeyPad	7		EL	Microscope	6	
HS	Laptop	181		EL	Mimio	12	
HS	LCD Monitor	60		EL	MiniCart	3	
HS	Microscope	1		EL	Printer	65	
HS	Mimio	1		EL	Projector	39	
HS	MiniCart	1		EL	Scanner	6	
HS	Netbook	26		EL	Server	3	
HS	Palm	42		EL	Smartboard	5	
HS	Presenter	2		EL	Speakers	1	
HS	Printer	79		EL	UPS	7	
HS	Projector	27		EL	Wireless Router	25	
HS	Scanner	11		EL	Zip Drive	2	
HS	Server	4					
HS	Smartboard	9					
HS	Speakers	6					
HS	SRL Lens	1					
HS	Switch	2					
HS	Tape Camcorder	2					
HS	Telephoto Lens	1					
HS	Tower	22					
HS	Tripod	2					
HS	UPS	14					
HS	Webcam	1					
HS	Wireless Router	27					
HS	Zip Drive	2					

Quick-look Summary of Computing Areas, arranged by building

MCSD consist of two buildings:

Marathon Central Jr/Sr High School

- Industrial Arts / Tech **Lab** (20 Desktops)
- Business Curriculum **Lab** (20 Towers)
- x2 **MobileLab** (22 and 24 Laptops)
- x2 Read 180 **MiniLab** (6 Desktops each room)
- Digital Photography and Art **MiniLab** (4 Desktops)
- Library (18 Laptops)
- English 11th Grade **Lab** (24 Netbooks)
- Rm 203 Science **MiniMobileLab** (6 Laptops)
- Rm 101 Science **MiniMobileLab** (6 Laptops)
- Rm 105 Math **MiniMobileLab** (4 Laptops)
- Rm 207 Math **MiniMobileLab** (3 Laptops)
- Rm 104 English **MiniLab** (4 Desktops)
- Rm 220 Resource Room **MiniLab** (3 Desktops)
- Rm 201 Resource Room **MiniLab** (3 Desktops)
- Rm 217 Resource Room **MiniLab** (3 Desktops)
- Rm 215 Guidance Room **MiniMobileLab** (6 Laptops)
- x9 SMARTboard **Classroom**
- x20 ELMO/Projector **Classroom**

Appleby Elementary School

- Technology **Lab** (27 Desktops)
- Exploratorium **Lab** (25 Laptops)
- Conference **Lab** (22 Laptops)
- Read 180 **MiniLab** (6 Desktops)
- Library (4 Desktops and 4 Laptops)
- x2 Grade Level **MiniMobileLab** (6 Laptops each Grade 5 & 6)
- Rm 408 Resource Room **MiniMobileLab** (4 Laptops)
- Rm 203 Resource Room **MiniMobileLab** (6 Laptops)
- x24 **Classroom** (2/3 Laptops per room)
- x5 SMARTboard **Classroom**
- x30 ELMO/Projector **Classroom**

Computing Models - Appleby Elementary vs. Jr/Sr High School

Although both buildings have focused on moving toward mobile computers and each building has received **MobileLabs**, the student computing models differ significantly.

At grades UPK-6, the focus is on keeping the computers in the classroom so students can work in continually shifting groups where a few students use the computers for short periods of time and revolve on a scheduled rotation know as "stations". The "stations" model takes away the need for students to relocate to a computer room, however there are times when the entire class needs to work on computers. **MobileLabs** are left in a particular room throughout the school year, and teachers escort the students to these rooms to allow them all to use the computers at once. The UPK-6 cart model provides a whole class option while keeping student traffic at a minimum.

At grades 7-12, the carts are shared by moving them around the building into classrooms where they can be used for the entire day or a few periods. A scheduling calendar is setup on the Internet to sign-out the carts, and the majority of computing is done this way. Classrooms do not contain student accessible computers. Students have access in the Library as well as in the tech room. Laptop carts are the preferred point of access.

Both buildings have designated computer rooms outfitted by 20 or more desktops and these are dedicated to targeted curriculum, like the business or technology sequence. Students only have access to free computer time via the Jr/Sr High school library, which houses 18 laptops, or as prearranged by teachers with computers in their rooms.

Network Connectivity

The Marathon Central School District is made up of two buildings. The Elementary school contains grade levels UPK-6 and the Jr.-Sr. High School building contains grades 7-12. The buildings are located about a mile apart and they are connected to one another via a 100 Mbps microwave link. Computers in these two buildings are connected to the Internet, and the Internet Service enters via the Jr.-Sr. High School building.

There are three (3) closets in each building that house securable rack enclosures. These racks connect to one another via fiber optic cabling and also connect to each of the classrooms via Cat5 copper cabling. Each of these LANs have a Novell Netware 6.5 Server governing the users and at the Jr.-Sr. High School building there is an additional Novell Netware 6.5 Server controlling the access to the Internet and email for staff. This district wide network has some hardware (<10%) in place that provides 1000 Mbps LAN connectivity, but all computers accessing system resources between the schools are limited to the 100 Mbps microwave bridge.

Internet access is currently at 4 Mbps total bandwidth for the district and is a leased fiber optic line provided by the OCM BOCES group via a Time Warner fiber trunk. Each classroom in the district contains six (6) network access jacks that are Cat5 connected and running back to one of the three (3) closets.

There are over 40 wireless 102.11 a/b/g access points strategically placed in these two buildings to support secure wireless connectivity to approximately 400 laptops and/or netbooks district wide.

Server Assessments

Marathon Central Jr/Sr High School

- Jr/Sr High School Novell Netware 6.5 w/ Zenworks 7.0 Desktop Management Server
- Groupwise 7.0 Email Server
- Business Novell Netware 6.5 Server
- Read 180 MS Server 2003

Appleby Elementary School

- Appleby Elementary Novell Netware 6.5 w/ Zenworks 7.0 Desktop Management Server
- Earobics and Read Naturally MS Server 2003

Novell 6.5 end of life

As of March 2010, Novell will cease supporting the Novell Netware 6.5 Server OS. They plan to carry on the SUSE Linux Enterprise Server OS, and this official press release will make a major impact on our current network operation system as well as future purchases. We can no longer expect to see the updated clients to support the ever-changing issues between the latest Workstation OS and Netware 6.5 Server OS. Most bugs have already been worked out of the new clients and these Windows Vista and Windows 7 Novell clients are available for download via the Novell website. However, it may be a penalizing reality that subsequent service packs for the MS Workstation OS' will not work with well with Netware 6.5.

Zenworks 7 imaging issues and incapacibilities

Each year the Novell ZFD (Zenworks for Desktops) imaging process for newly purchased OEM computers have required a patch for tech staff to successfully push and pull images from the Zenworks server. In 2009 the Lenovo S10e netbooks would not accept zenwork desktop management and/or policies due to the MS Windows XP Home edition. This is still being investigated, but it is apparent that these problems will not be solved easily when we continue to use Novell 6.5 and Zenworks 7.

Training is Scarce

Novell Server training is infrequent, and the training locations are just not close. Why should training for these servers be so hard to put together locally? Maybe it's because everyone knew Novell's OS was becoming obsolete, or maybe they are just not as widely used as the MS Servers. MCSD will start looking into the switchover to Microsoft Servers for many reasons. Many server based systems like anti-virus, printer resources, backup, email, email retention, domain authentication, and the pure user accessibility will need to be reviewed.

Email Server

Currently, the MCSD needs to implement an email archival solution. Five solutions have been evaluated and the recommendation to move the staff over to Google Gmail is the most economical. Gmail provides email archive for \$11.50 per user and MCSD will not have to maintain any servers or backup the data. Currently, Gmail archival is not covered under the Erate funds, but even so, is undoubtedly still the best solution to the the tax payer. It also will provide a new account to shed years of accumulated and unwanted mail sources. New user accounts will be "NameS@MarathonSchools.org". Hassles with blacklists will go away due to Google's superior attention to the matter.

New Server Hardware Required

A Proliant DL160 will be installed with MS Server 2008 and MS SQL to allow us to begin a migration of antivirus software to Kaspersky. In addition we will begin our conversion over to MS Servers and Active Directory mainly because of Novell's decision to end the life of Netware 6.5 forcing us to decide on what the next platform will be. The MS Server platform is recommended because of it's ease of use with applications like Read 180, Kaspersky anti-virus, and the newer library system called Mandarin.

Budget consideration: MCSD will change over all email services to Gmail by September 1st, 2010. MCSD will purchase Kapersky antivirus and SQL Server for this antivirus solution. Purchase of a DL160 rack mount server will be required to install for this antivirus solution, and it might end up serving as the server for the library systems to help conserve on purchasing new server hardware.

Workstation Assessments

- The district has approximately 570 computers equally distributed among the K-12 grade levels. Most of these computers are laptops (70%) and they connect to our network via WEP 128 secure wireless access points located throughout the buildings.
- All computers are protected with Norton Anti Virus Enterprise, which on a daily basis automatically updates and protects against newly discovered viruses. However, this software significantly reduces the performance of any computer, due to the large RAM requirements, and during each login NAV has a high CPU utilization for the first 5 minutes. It also continues to tax all computers on every executable and file accessed.
- All district computers are running the Microsoft Windows XP Professional Operating System. Windows XP Pro is a stable OS that provides our District with consistency. Windows XP is not the most up-to-date OS on the market although it performs well and we plan on staying with it as long as possible. Some factors may lead us to update this OS, but for now we see none on the horizon.
- All computers are updated on a regular basis, and Novell's Zenworks desktop management software helps to deploy these updates to this large collection of computers through imaging technology. The growing concern with Novell products is that in March of 2010, Novell 6.5 officially met it's end of life. It will now be apparent that any new OS, especially from the competing Microsoft Corporation, may not work properly with Novell. Novell has released Windows Vista and Windows 7 compatible clients, but any new bugs or incompatibilities will not be addressed. This could easily translate into huge issues when deploying system policies and other critical components of our network system.
- The business computer room is subject to upgrade the tower PCs this year. CRT monitors will be retired in this process and replacement PCs will provide LCD low power monitors as well as faster operations. The older computers will be given some more RAM and re-installed with SMARTboard software to then be placed into the 15 classrooms that have had SMARTboards mounted.
- HS Library laptops are being broken by students slamming the lids after usage. The trend discovered by looking at the Aristotle data showed that the last thing being executed on the machine was an Internet game. These laptops also have a high failure rate due to OS corruption and constantly need re-imaging and sometimes need to have harddrive replaced. To circumvent this trend we are going to put Solid State netbooks into this environment and the block gaming sites.

Budget consideration: MCSD will need to change the current Anti-virus solution. If we fail to do this, then the current fleet of 550 computers will be subject to 5-8 minute login times and this is unacceptable for classroom usage in a 40 minute period. Qty 21 Tower PCs for HS Room 209. 20 Netbooks with Solid State hard drives for the HS Library.

Peripheral Assessments

- There is no shortage of access to devices in the district. Every classroom has a local InkJet or access to a centralized network copier/printer. All students and teachers have access to color printing, and the integration of color into daily instruction has become much more prevalent over the last 5 years.
- There are 78 total classrooms in the district and 48 TVs. Since most AV equipment is mounted on mobile carts, there is 100% access to a TV/DVD/VHS system.
- There are 50 ELMO/LCD projector systems dispersed within these 78 classrooms allowing a wide degree of access to present material in a large screen format. This technology has become a mainstay in the delivery of instruction.
- There are 14 SMARTboards located in classrooms around the district. These interactive devices are growing in number, but it is the policy of our administrators to have teachers trained on this technology before having one placed into their classroom. This training consists of 7 straight weeks, once per week, of application tools taught by a certified SMARTboard trainer.

Budget consideration: MCSD should purchase SMART branded ELMOs to aide in the SMARTboard initiative. Document cameras that work seamlessly with the SMARTboards are preferred over the ones that do not. Any ELMO swapped out via a SMART branded ELMO will be re-deployed to a classroom that is in need of a ELMO/Projector cart setup. Also, we will need to purchase projectors with 1024x768 resolution for these freed-up ELMOS. Epson 450Wi and wireless projectors are planned for review in district to provide a cheaper Interactive board solution and freedom of lecture respectively.

Network Assessments

- A majority of the network switching technology is more than 6 years old. As new computers are being purchased and injected into the current network, their specifications surpass the existing switching technology.
- In November of 2006 the district upgraded its current OC-3 service provider to a larger bandwidth capable system. The Internet connectivity is now at a bandwidth of 4Mbps.
- All main network servers were replaced in 2005 and upgraded to the latest Novell Netware 6.5 OS. This change has brought great stability to the environment.
- 1Gb Switches have been purchased for the last few years to gradually bring our switch capabilities up to 1Gb technology. The IT department is transferring the load of at least 2 network jacks per classroom to be 1Gb capable, and leaving the remaining 6 drops at 100 Mb. This plan fits well with the existing wireless scheme through the district and a majority of the classrooms are not even using their classroom network jacks.

Budget consideration: MCSD should continue to add 1Gb switches to the racks replacing out the exiting 100Mb technology. This will support the wireless-n technology, whereas the 100Mb would hinder network speeds.

Assessment - Software

Currently, the school district heavily invests in several academic intervention and curriculum supplemental software strategies.

Accelerated Reader via Renaissance Place Web Access – Independent Reading

This Renaissance Learning program is server based offsite and supports K-12 according to the following statistics:

- Curriculum Supplement
- 600 enrolled K-12 Students; 420 using the program
- 18 enrolled Teachers; 5 using this program
- Helps teachers manage and monitor student's independent reading
- Access to thousands of book quizzes
- Quizzes provide detailed result of 1 out of 10 questions
- Students take quizzes in the presence of a teacher
- Grade level appropriate guided book selections
- Uses word count and grade reading level to determine a completion point system
- Used by English classes and AP classes at MCSD

Blackboard – Classroom Content Management

This online program is server based offsite and supports K-12 according to the following statistics:

- Curriculum Supplement
- 35 enrolled Teachers; 10 using this program
- 15 active sites
- Allows for pushing out content to Students (if their teacher uses it)

Earobics – Reading First Initiative

This Cognitive Concepts reading program is server based onsite and targets ages 4-10 year old students (typically K-6) according to the following facts:

- Intervention
- 28 K-4 enrolled Students; 28 using the program
- 4 enrolled Teachers; 4 using the program
- Works on 5 key reading components which are:
 - Phonemic awareness
 - Phonics
 - Fluency
 - Vocabulary
 - Comprehension
- Requires minimum of three 20-minute sessions a week with the software
- Requires minimum of 25-30-minute sessions daily with teacher directed activities
- This program was purchased with Reading First Funds

Examgen – Regents Exam Test Question Database

This Scholastic program is server based locally and supports grades 9-12 according to the following statistics:

- Math – Geometry, Integrated Algebra, Algebra II & Trigonometry
- Science - Living Environment, Earth Science, Biology, Chemistry, Physics
- Social Studies - U.S. History, Global History

Fasttmath – Numbers 0-12 Math Fact Fluency

This Scholastic program is server based locally and supports K-12 according to the following statistics:

- Intervention
- 240 enrolled Students; 40 using the program
- 8 enrolled Teachers; 4 using this program
- Research based self-adjusting program targeting problematic math fact areas
- Reports give Teachers instant access to a student's progress
- Requires 10 minutes a day
- Comprehensive Teacher Guide Books provided
- School-wide licensing and installed on every student laptop at Appleby Elementary
- 90 User licensing with selectively located installations at the Jr/Sr High School

Harcourt Math Center – Math Modules

This Scholastic program is server based locally and supports K-6 according to the following statistics:

- Curriculum Supplement
- 240 K-6 enrolled Students; 240 using the program
- 18 enrolled Teachers; 18 using this program
- Intervention, Problem Solving, & Mega Math modules purchased
- Generates Student Progress Reports

Microsoft Office 2007

This is a suite of Office Productivity Programs that is installed on every local computer District Wide.

- Curriculum Supplement
- All Students and Teachers use this program
- Integrated into all Technology Curriculum
- MS Word is integrated into the local Keyboarding Graduation Requirement
- Word Processing, Spreadsheets, Publisher Documents, Email Client and Contact Manager

Read 180 – Reading Intervention Program

This Scholastic program is server based locally and supports K-12 according to the following statistics:

- Intervention
- 60 enrolled Students; 60 using this program (approximately 8% of student population)
- 4 enrolled Teachers; 4 using this program
- 1 MS Server 2003 Server
- 3 dedicated classrooms (elementary, middle, and high school)
- 3 SMARTboard/ELMO/projector systems (1 per room)
- 18 student desktops (6 per room)
- Various supplies (mostly books)
- AV Equipment
- Annual Maintenance Agreement

Read Naturally – Reading Fluency & Comprehension

This program is server based locally and supports K-6 according to the following statistics:

- Intervention or Curriculum Supplement?
- 240 K-6 enrolled Students; 240 using the program
- 18 enrolled Teachers; 18 using this program
- Teacher access to Student's Reading Fluency Benchmark Assessor (RFBA)
- Teacher assisted listen and grading of Student's Reading
- Used to determine who needs Intervention?

Assessment - Technology Integration

A major focus point of the current Technology Plan is for the MCSD is to advocate, to present, and to adhere to the concept that the proper technology integration shall conform to the **National Education Technology Standards** and **Performance Indicators** for **Students** and for **Teachers**.

Student Technology Integration

The standards for students shall be assessed at grade 4, grade 8, and at commencement during the month of June. There are six (6) areas of focus for **Students** and they are:

1. **Creativity and Innovation** – students will use technology to invent and be able to document their products with drawings, procedures, bill of materials, and other pertinent information.
2. **Communication and Collaboration** – students will work in groups to learn, teach, and share information via digital media and technologies allowing them to collaborate without geographical constraints
3. **Research and Information Fluency** – students will demonstrate the ability to collect digital data, organize it, and to evaluate it for authenticity or accuracy. Also, they will understand that data can be misinterpreted as well as falsely portrayed.
4. **Critical Thinking, Problem Solving, and Decision Making** – students will use the digital tools available to properly plan, thoroughly research, meticulously manage, and solve any problem or answer any question through analytically and logical means. With these skills, they will begin to think critically and will be competent in making good decisions.
5. **Digital Citizenship** – students will understand social, cultural, and the humanity aspects of the world they live in while demonstrating legal and ethical behavior, especially with the use of technology.
6. **Technology Operations and Concepts** – students will become advanced users of technology concepts, systems, and operations.

Teacher Technology Integration

The standards for teachers are assessed at the end of every three (3) years paralleling the local district technology plan renewal. There are five (5) areas of focus for **Teachers** and they are:

1. **Facilitate and Inspire Student Learning and Creativity**
2. **Design and Develop Digital-Age Learning Experiences and Assessments**
3. **Model Digital-Age Work and Learning**
4. **Promote and Model Digital Citizenship and Responsibility**
5. **Engage in Professional Growth and Leadership**

Survey Process - TAGLIT Survey Results

- 1 = I don't know how to do this.
- 2 = I can do this, but sometimes I need help.
- 3 = I can do this independently.
- 4 = I can teach my students this topic.

Section 1 – Teacher's Technology Skills

How far along are you in learning to...	NA	Basic Tools				1	2	3	4
		1	2	3	4				
use a Microsoft Word to create documents?			1	12	37	0%	2%	24%	74%
use a spreadsheet to enter/calculate numbers?	0	18	16	4	12	36%	32%	8%	24%
use a spreadsheet to create graphs?	0	20	18	6	6	40%	36%	12%	12%
use Grade Machine (HS) to enter grades and export?	18	10	7	8	7	31%	22%	25%	22%
use Easy Grade Pro (ES) to enter grades?	14	26	1	4	5	72%	3%	11%	14%
use a database to search for and sort information and create reports (ex. MS Access)?	1	26	10	5	8				
Totals	33	100	53	39	75	37%	20%	15%	28%
How far along are you in learning to...	NA	Multimedia Tools				1	2	3	4
		1	2	3	4				
use drawing or painting software to create pictures?	1	21	8	9	11	43%	16%	18%	22%
use a video camera to make a video?	0	23	6	6	15	46%	12%	12%	30%
use a digital camera and/or scanner to get pictures into a computer?	0	11	17	7	15				
						22%	34%	14%	30%
use presentation software to create a presentation?	0	16	8	10	16	32%	16%	20%	32%
use multimedia software to create a product?	0	27	11	7	5	54%	22%	14%	10%
Totals	1	98	50	39	62	39%	20%	16%	25%
How far along are you in learning to...	NA	Communication Tools				1	2	3	4
		1	2	3	4				
use email to send and receive messages?	0	0	1	14	35	0%	2%	28%	70%
use BlackBoard as a web site to communicate with students and parents?	2	21	11	3	13				
						44%	23%	6%	27%
use a web authoring tool to create a web page?	2	36	4	4	4	75%	8%	8%	8%
use Microsoft Publisher to create newsletters?	1	12	12	5	20	24%	24%	10%	41%
Totals	5	69	28	26	72	35%	14%	13%	37%
How far along are you in learning to...	NA	Research/Problem-Solving Tools				1	2	3	4
		1	2	3	4				
use online databases to gather information?	0	7	9	12	22	14%	18%	24%	44%
use automated library catalog?	0	11	13	7	19	22%	26%	14%	38%
use a search engine to find information on the Internet?	0	1	5	15	29	2%	10%	30%	58%
use Science probes to collect and study information?	3	36	6	2	3	77%	13%	4%	6%
Totals	3	55	33	36	73	28%	17%	18%	37%

- 1 = I don't use technology in the classroom.
 2 = I am beginning to use technology in the classroom.
 3 = I use technology in the classroom most of the time.

Section 2 - Teacher's Technology Use in the Classroom

		Basic Tools						
How far along are you in enhancing teaching and learning using...	NA	1	2	3	TOTAL	1	2	3
word processing (ex. Microsoft Word)?	3	7	13	27	50	15%	28%	57%
Spreadsheets (ex. Excel)?	5	34	5	6	50	76%	11%	13%
Databases (ex. Microsoft Access)?	5	33	6	6	50	73%	13%	13%
	13	74	24	39	150	54%	18%	28%
		Multimedia Tools						
How far along are you in enhancing teaching and learning using...	NA	1	2	3	TOTAL	17%	33%	50%
How far along are you in enhancing teaching and learning using... drawing/painting software (ex Photoshop Elements)?	4	35	8	3	50	76%	17%	7%
video production?	5	40	4	1	50	89%	9%	2%
digital cameras and/or scanners?	4	21	15	10	50	46%	33%	22%
presentation software (ex. PowerPoint)?	5	22	14	9	50	49%	31%	20%
Elmo and projection devices?	6	15	9	20	50	34%	20%	45%
smart carts – VHS/DVD player?	4	15	14	17	50	33%	30%	37%
digital audio?	6	31	6	7	50	70%	14%	16%
multimedia software?	6	31	6	7	50	70%	14%	16%
video streaming (ex. Power Media Plus)?	5	35	7	3	50	78%	16%	7%
	45	245	83	77	450	60%	20%	19%
		Communication Tools						
How far along are you in enhancing teaching and learning using...	NA	1	2	3	TOTAL	17%	33%	50%
Groupwise (email)?	5	7	7	31	50	16%	16%	69%
BlackBoard for sharing lessons and assignments?	6	33	6	5	50	75%	14%	11%
the World Wide Web for publishing?	5	28	7	10	50	62%	16%	22%
blogs or podcasts?	7	37	3	3	50	86%	7%	7%
creating newsletters (ex. Microsoft Publisher)?	4	22	7	17	50	48%	15%	37%
	27	127	30	66	250	57%	13%	30%
		Research/Problem-Solving Tools						
How far along are you in enhancing teaching and learning using...	NA	1	2	3	TOTAL	17%	33%	50%
online library databases to gather information?	4	21	15	10	50	46%	33%	22%
automated library catalog (Spectrum)?	4	25	7	14	50	54%	15%	30%
Search engines for research?	4	10	12	24	50	22%	26%	52%
Science probes?	11	37	1	1	50	95%	3%	3%
	23	93	35	49	200	53%	20%	28%

- 1 = Developing your skills (learning how-to-use the program or technology).
 2 = Enhancing Student Learning (incorporating these programs or technology into lessons).
 3 = An Integrated Approach (both additional how-to training and integration ideas for use in lessons).

Section 3 - Teacher's Professional Development Needs

	NA	1	2	3	STARRED	1	2	3
Microsoft Word	31	2	12	5		11%	63%	26%
Microsoft Access	28	15	3	4		68%	14%	18%
Microsoft Excel	26	12	6	6	9	50%	25%	25%
Grade Machine (High School)	38	7	3	2	4	58%	25%	17%
Easy Grade Pro (Elem. School)	33	12	2	3	4	71%	12%	18%
drawing/painting software (ex. Photoshop Elements)	23	11	2	14	8	41%	7%	52%
digital camera/scanner	20	12	6	12	6	40%	20%	40%
digital voice recorders	21	13	6	10	6	45%	21%	34%
Microsoft PowerPoint	24	9	7	10	9	35%	27%	38%
video streaming (ex. Power Media Plus)	25	13	3	9	4	52%	12%	36%
Curriculum Resource Center	31	10	2	7				
Media Booking					2	53%	11%	37%
GroupWise (email)	29	9	5	7	1	43%	24%	33%
BlackBoard	23	11	6	10	5	41%	22%	37%
blogs / podcasts	24	17	1	8	4	65%	4%	31%
web authoring software	30	17		3	5	85%	0%	15%
online library databases	26	13	5	6	2	54%	21%	25%
automated library catalog (Spectrum)	30	12	3	5				
					1	60%	15%	25%
online search engines	32	5	9	4	1	28%	50%	22%
graphing calculator	28	15	3	4		68%	14%	18%
scientific probes	32	14	1	3	1	78%	6%	17%
Inspiration / Kidspiration	30	9	5	6	3	45%	25%	30%
smart carts	30	9	5	6	5	45%	25%	30%
Elmo and projection devices	25	9	5	11	8	36%	20%	44%
Other programs/technologies: (listed below)								
Digital video camera/editing				1	1	0%	0%	100%
Edu-Ware				1	1	0%	0%	100%
Fast math				1	1	0%	0%	100%
Whiteboards/Mimio				1	1	0%	0%	100%
TOTALS	639	256	100	159		50%	19%	31%

Goals and Implementation Strategies

1. **Students** will use technology to develop (21st Century skills) higher order thinking skills, problem solving, creativity, information literacy (research skills) and marketable skills.
2. **Administrators** will make effective decisions regarding appropriate technologies to integrate across the curriculum and grade levels to achieve goal #1 and improve student learning.
3. **Teachers** will meet technology competency standards that, supported by appropriate staff development, ensure their ability to use learning technologies effectively to support student achievement on the areas listed in goal #1.
4. The **District** will use appropriate technologies to improve communication between parents and the **community** and the school staff.

Goal #1 - Strategies:

- The district will continue to develop an integrated curriculum of technology skills in the content areas. These skills will be reviewed by the technology committee annually in July/August, prior to the new school year, and adjustments will be made to include latest technologies. There will be a mid-year test given to students prior to leaving for Christmas vacation in December. This test will be reviewed by the Technology Committee and mid-year adjustments will be made. The final test will be applied early in June, and all test scores will be recored into a spreadsheet for easy verification of student achievement.
- Curriculum development integrating technology across the content areas will be established. Each year at the Teacher Orientation and the first Staff Development day in September, teachers will be supplied with a checklist of technical skills or knowledge to integrate into their lessons pertinent to their grade level assignment. The checklist is a mechanism of awareness that will aid staff in re-addressing the need for technology integration. These checklists will be evaluated on our January staff day.
- Student benchmarks included in this document will be established and assessed at grades 4, 8 and 12. The grades will be reported to the Technology Coordinator for spreadsheet analysis and these outcomes will be discussed in an annual meeting between the Director of Instruction, the Superintendent, and the Technology Coordinator in July.
- All students will have access to up-to-date hardware, multimedia resources, networks, and distance learning to support learning. Each year in April, the Principals of the Elementary and Jr/Sr High School will meet with the Technology Coordinator to discuss the implementation and practical means by which classrooms will be upgraded to accommodate the accessibility and reliability of technical systems. This planning will determine the buying plan for the next school year.
- All students will have adequate hands-on technology time to complete learning tasks during school and non-school hours. Through mandatory technology classes at various grade levels throughtout the student's K-12 experience, these labs will provide more than adequate time allocated to acclimate students to technology.

Goal #2 - Strategies:

- Differentiated staff development will be provided on the integration of technology into the content areas. This training will be integrated into designated staff development days (3xs per year), model schools training provided by OCM BOCES, staff requested professional development offsite classes, and webinars.
- Commencement outcomes will be established and assessed by the district. Curriculum will be developed to advance these commencement goals, and purchasing decisions will be based on the needs of the curriculum. In December and March of each year, the Technology Coordinator, working with Principals and the Technology Committee, will establish needs and wish list items designed to benefit the integration of technology and student outcomes the most. Definite purchasing decisions will be made in May for the following year.

- Areas of need and future development will be established through surveys, interviews with teachers using the technologies, and a review of best practices in research literature and in other districts. Surveys will occur in April each year.
- SMARTboard integration will continue with certificate training required of all instructional users. However, we will also focus attention on other technologies from other vendors that might offer cheaper and better teaching solutions. If a new product such as the ultra short throw Epson BrightLink 450Wi seems to be a better interactive surface solution, then we will change the requirements of this training based on the vendor.

Goal #3 - Strategies:

The District will:

- Develop and maintain an updated list of teacher competencies. Starting with this plan, and in each subsequent year, the Technology Plan will be reviewed in November. The Technology Committee will review other district teacher competencies and modify according to the technologies currently circulating within the K-12 schools nation-wide.
- Schedule set technology training periods periodically throughout the school year, possibly within the staff development and staff work days, as well as other times, for teachers to work on developing these competencies.
- Have teachers develop their own individual technology learning plan in September, or possibly earlier, for each school year and identify the competencies they will master.
- Offer differentiated instruction in technology for teachers to meet varying levels of teacher competency.
- Provide, each summer, staff development opportunities and workshops. Provide on-going technology training during the regular school year.
- Regular assessments of the use of technology by staff will be made by the Technology Coordinator and the Administration. This will come through the form of annual surveys that not only push out information, but will gather the needs assessment as well.

Goal #4 - Strategies:

- Reference books will be available to parents, students and staff to increase integration with content.
- The district website will be redesigned to be more user friendly and will include some communication features for the community, like the District Calendar, by September, 2010.
- An alert system will be acquired to notify parents, students, and staff of events, emergencies, and learning opportunities in a timely manner. This will go into place by September, 2010.
- The District will establish and keep a definitive regular meeting schedule for Technology and Conference Day Planning teams.
- Members of the school and the community will communicate effectively and efficiently using electronic and web-based methods.

MCS D Student Benchmarks for Using Technology

By the End of Grade 4	By the End of Grade 8	By Commencement
Technology Operations and Concepts	Technology Operations and Concepts	Technology Operations and Concepts
Demonstrate basic steps in using hardware and applications (e.g., turn on computer, launch program, use mouse). Identify desktop icons. Use basic features of computer and software.	Identify and use the basic features of a computer operating system to access information (e.g., size and format of a file). Create folders on various storage devices.	Transfer current knowledge to learning of new technologies.
Describe how people use many types of technologies in their daily lives (i.e. computers, cameras, audio/video players, cell phones, televisions).	Recognize, explain, and operate basic input and output devices/peripherals (e.g. digital cameras and printers). Identify troubleshooting strategies for minor hardware & software issues/problems.	Troubleshoot systems and applications.
Recognize and name major components of a computer. Demonstrate understanding of the basic functions (monitor, screen, keyboard, mouse.).	Select a printer, use print preview, and print a document with the appropriate page setup and orientation.	Select and use applications effectively and productively.
Describe and demonstrate the basic care of computer hardware, software, media storage devices (i.e., audio/video tapes, CDs or DVDs), & peripherals.	Expand use of operating system features (e.g., open more than one application/program, work with menus, taskbar/dock).	Understand and use technology systems.
Identify, locate, and use letters, numbers, and special keys (e.g., arrow, space, Shift, Enter/Return, Backspace, Delete) on the keyboard. Demonstrate basic keyboarding skills.	Demonstrate intermediate keyboarding skills techniques (e.g., touch-typing) resulting in accuracy, speed, and efficiency of operation.	Demonstrate commencement level keyboarding skills.
Recognize the functions of basic file menu commands (e.g., New, Open, Close, Save, Print).	Identify/use storage media (i.e. CDs, DVDs, flash drives, school servers, & online storage). Provide rationale for using a certain medium for a specific purpose.	Select and use applications effectively and productively.
Word Processing/Desktop Publishing	Word Processing/Desktop Publishing	Word Processing/Desktop Publishing
Use a simple word processing program to enter, edit, and delete letters and numbers. Copy and paste text and images from one document to another.	Demonstrate use of intermediate features in word processing applications (e.g., tabs, indents, line spacing, headers and footers, end notes, bullet and numbering, tables, symbols/special characters).	Save, retrieve, load, and import a word processing document in different file formats (e.g., RTF, HTML). Import, export, and link data between word processing documents and other applications.

Use proper capitalization, spacing, and sentence punctuation. Use menu/tool bar functions in a word processing program to format, edit, and print a document (i.e. font size/style, line spacing, margins).	Insert graphics (i.e., photographs, illustrations, clip art, graphs) into word processing documents.	Use special features appropriately (e.g., footnotes, track changes, insert comments, search and replace, keyboard shortcuts).
Proofread and edit writing using appropriate resources (dictionary, spell-check, grammar resources).	Proofread and edit writing using appropriate resources (dictionary, spell-check, grammar resources).	Apply advanced formatting features (e.g., columns, templates, and styles) to improve the appearance of word documents.
Use word processing to write, edit, print, and save assignments.	Identify the use of word processing and desktop publishing skills in various careers.	
Database	Database	Database
	Show how computer-based tables, charts, and graphs can be used to display data. Give examples of the use of databases to collect, organize, and display information at various places in the community (e.g., school, grocery store, pharmacy, business).	
	Create a simple database, defining field formats/database terms and adding new records. Demonstrate an understanding that computers can store and organize information that can be searched.	Import, export, and link data between a database and other applications.
	Perform database operations (i.e., browse, sort, filter, search on selected criteria, delete/enter data). Show how a computer can create a graph representing data from a table or chart.	Use database features to create mailing labels, form letters, and to perform mail merges.
	Identify the use of database skills in various careers.	Plan and develop database reports to organize and display information.
Spreadsheet	Spreadsheet	Spreadsheet
	Describe the structure/function of a spreadsheet. Create an original spreadsheet. Demonstrate an understanding of the spreadsheet as a tool to report, organize, and graph information.	Define and use functions of a spreadsheet application (e.g., sort, filter, find).

	Perform calculations utilizing formulas. Enter formulas and functions; use the auto-fill feature in a spreadsheet application. Identify and explain spreadsheet terms and concepts (i.e., cell, column, row, values, labels, chart, graph).	Use multiple sheets within a workbook and creates links between worksheets.
	Distinguish between the different types of charts and graphs. Choose the most appropriate chart/graph to represent data. Produce simple charts/graphs from a spreadsheet. Describe how spreadsheets are used to calculate and graph in a variety of settings (e.g., schools, government, business, industry, scientific research lab).	Use advanced formatting features and various number formats of a spreadsheet application (e.g., reposition columns and rows, add and name worksheets, use percentages & exponents).
	Identify the use of spreadsheet skills in various careers.	Import and export data between spreadsheets and other applications and embed spreadsheets within other files/documents.
Communication and Collaboration	Communication and Collaboration	Communication and Collaboration
Demonstrate an understanding that the Internet links computers around the world, allowing people to access information and communicate. Explain and use age-appropriate online tools and resources (e.g. tutorial, assessment, web browser).	Add and organize bookmarks and favorites on a web site for future reference. Know how to select and use search engines and online directories. Understand the differences between search engines and how they rank results.	Identify and demonstrate the use of various telecommunications or online technologies (e.g., desktop conferencing, listservs, blogs, wikis). Implement a collaborative project using telecommunications tools (e.g., groupware, interactive web sites, videoconferencing).
Demonstrate the ability to use tools in painting and/or drawing programs. Save and retrieve files on storage devices.	Identify probable types and locations of web sites by examining their domain name extensions (e.g., .edu, .com, .org, .gov, .au). Explain effective search strategies to locate and retrieve electronic information (e.g., use syntax and Boolean logic operators).	Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.

Identify different components and capabilities of multimedia (i.e., text, sound, images, color). Manage and maintain (i.e., create, save, save as, move, copy, retrieve, and delete) electronic files on storage devices.	In keeping with school guidelines copy an image from a web site into a document or presentation and write a correct citation for it.	
Recognize, access, and use local storage devices or network server using correct terms (i.e. username, password, network, file server).	Describe good practices of password procedures and authentication strategies.	
Use a variety of age-appropriate technologies to illustrate concepts (e.g., drawing program, word processing, presentation software). Use photographs, digital images, clip art, graphs and tables to communicate ideas, citing sources.	Use a variety of telecommunication tools (e.g., discussion groups, web pages, blogs, web conferences) to collaborate and communicate with peers, experts, and other audiences.	Present information, ideas, and results of work using a variety of media and formats for appropriate audiences (e.g. presentations, newsletters, web sites, podcasts, blogs).
	Create a research report that presents process and findings based on scientific problem-solving methodologies.	Use electronic conferencing tools such as bulletin boards, discussion forums, and interactive video to collaborate with peers, community members, and field experts.
	Plan, design, and develop a multimedia product using information (e.g., graphics charts, analyses) to present research findings in the most effective way, citing sources.	Identify the capabilities and limitations of emerging technologies.
	Use validated rubrics to evaluate multimedia presentations for organization, content, design, presentation, and appropriate use of citations.	Understand the appropriate and responsible use of communication tools such as blogs and wikis.
Creativity and Innovation	Creativity and Innovation	Creativity and Innovation
	Use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products. Identify the components of a slide show or a multimedia presentation (i.e. title, text, graphics, sound, video, animation).	Identify technology tools (e.g., authoring tools or other hardware and software resources) that can be used to create a multimedia product.

	Demonstrate knowledge of strategies used by media (e.g., games, video, radio/TV broadcasts, web sites) to entertain and influence people. Insert, edit, and format text on a slide. Copy/paste/import graphics, and change their size and position on a slide.	Demonstrate using a variety of applications to plan, create, and edit multimedia products (e.g., slide presentations, videos, animations, simulations, podcasts).
	Demonstrate knowledge by creating a multimedia presentation that includes audio and video. Create a series of slides and organize them to present research or convey an idea.	Recognize the different types of file extensions and their respective document types (e.g., doc, ppt, jpg, xls, gif, MP3, QT, MPEG).
By the End of Grade 4	By the End of Grade 8	By Commencement
Digital Citizenship	Digital Citizenship	Digital Citizenship
Show responsible use and care of computers and resources. Explain and demonstrate compliance with school rules regarding responsible use of computers.	Explain and demonstrate ethical and legal behavior in copying files, applications, and media. Demonstrate compliance with the district's Acceptable Use and related policies for responsible use of technology resources.	Discuss and demonstrate issues related to acceptable and responsible use of technology (e.g. privacy, security, copyright). Demonstrate compliance with the school's Acceptable Use Policy.
	Explain how media and technology can be misused to distort or exaggerate information. Evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness.	Explain laws restricting use of copyrighted materials. Evaluate the authenticity, accuracy, appropriateness, and bias of electronic resources, including web sites.
	Explain how Copyright Laws protect the ownership of intellectual property and the consequences of violating these laws. Demonstrate the appropriate use of copyrighted materials when completing class assignments. Explain responsible, safe and ethical uses of technology and digital information (e.g., Internet resources, computers, digital cameras, mobile phones, handheld computers, wireless connectivity, multimedia).	Demonstrate ability to evaluate electronic sources of information. Write correct in-text citations and reference lists for text and images gathered from electronic sources. Identify examples of plagiarism and discuss the consequences of plagiarizing the work of others.
	Explain issues of privacy, security, copyright, plagiarism, spam, viruses, file sharing, passwords, and personal information. Understand that search engine results may identify sites with commercial or political objectives.	Discuss misuse of technology for personal and commercial reasons (e.g., spam, viruses, personal identity and information theft) and related consequences.

<p>Demonstrate respect for others when sharing computers. Identify ways in which technology is used in the workplace and in society.</p>	<p>Identify and discuss the technology proficiencies needed in the workplace and how the need for them impacts students.</p>	<p>Design and implement a personal learning plan that includes technology to support lifelong learning goals.</p>
<p>Follow classroom rules for responsible use of computers. Demonstrate the use of technology to support communication (e.g., with peers, family, school personnel).</p>	<p>Identify and describe the effect technological changes have had on business, transportation, communications, industry, and agriculture in a global society.</p>	<p>Identify and describe the effect technological changes have had on business, transportation, communications, industry, and agriculture in a global society.</p>
<p>Describe acceptable and unacceptable uses of technology (e.g., computers, phones, 911, Internet, email) at home and at school. Identify technology resources that assist with various consumer activities (e.g., budgets, purchases, banking transactions, product descriptions).</p>	<p>Explain and demonstrate an understanding of how technology can support lifelong learning, collaboration, personal pursuits, and productivity. Use technology to identify and explore various occupations or careers. Identify technology resources that assist with various consumer tasks (e.g., creating budget, making purchases, financial transactions, accessing product information).</p>	<p>Explain the penalties of software piracy, virus spreading and hacking.</p>
<p>Follow school's rules for safe and ethical Internet use. Recognize and describe the potential risks and dangers associated with various forms of online communications, including blogs, chat-rooms, personal web pages, photo-sharing, and social networking sites.</p>	<p>Explain why computers, networks, and information must be protected from viruses, vandalism, and intrusion.</p>	<p>Evaluate school and work environments in terms of ergonomically sound and safe practices.</p>
<p>Identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers.</p>	<p>Demonstrate knowledge of responsible, safe, and ethical use of networked digital information (i.e. Internet, mobile phone, wireless, LANs). Validate a web site for authenticity (i.e. find site sponsor, author, and date the site was last updated). Explain safe email use and etiquette.</p>	<p>Demonstrate ways that individuals can protect their technology systems from unethical or unscrupulous users.</p>
<p>Explain that a password helps protect the privacy of information. Explain issues of ergonomics and electrical safety related to using technology. Identify and explain the strategies employed for the safe use of computers, (e.g., passwords, virus protection software, SPAM filters, popup blockers).</p>	<p>Demonstrate knowledge of the potential risks and dangers associated with online communications. Provide examples of safe and unsafe practices for sharing personal information via e-mail and the Internet.</p>	<p>Utilize techniques for the protection of personal safety, including predator identification and reporting.</p>

Explain the potential problems posed by computer viruses and the reason why they must exercise caution in opening email attachments.	Demonstrate an understanding of terms/concepts associated with the safe, effective, and efficient use of telecommunications/Internet (i.e., password, firewalls, spam, security, Acceptable Use Policy).	Use safe and appropriate protocols within online communities, such as blogs and social networking sites.
By the End of Grade 4	By the End of Grade 8	By Commencement
Research and Information Fluency	Research and Information Fluency	Research and Information Fluency
	Recognize web browsers and associate them with accessing resources on the Internet. Download and organize content from digital media collections for specific purposes, citing sources.	Collect, organize, and analyze digital information from a variety of sources (e.g. survey data, data gathered online, data from science experiments). Conduct research using all appropriate electronic resources.
Use various age-appropriate technologies to locate and collect information (e.g. audio/video players, CD-ROMs, DVDs, search engines, Web sites).	Collect, organize, analyze, and graphically present data using the most appropriate tools (e.g., spreadsheet, database, graphing, and concept-mapping tools).	Formulate a research question or hypothesis, use appropriate technology resources to collect relevant information, analyze the findings, and report the results to multiple audiences.
Use teacher-selected Internet resources to identify and discuss the elements that make an online resource useful and appropriate.	Evaluate Internet resources using criteria of usefulness, authenticity, authority, value and absence of bias, and prejudice.	Compare, evaluate, and select appropriate Internet search engines to locate information. Formulate and use evaluation criteria (e.g. authority, accuracy, relevancy, timeliness) for information found on the Internet.
	Perform basic queries on databases and, using two or more criteria, locate, organize, and report information (e.g. library card catalogue, encyclopedia). Use content-specific technology tools to enhance understanding of curriculum content (e.g., environmental probes, sensors, measuring devices and digital cameras).	

Critical Thinking, Problem Solving, and Decision Making	Critical Thinking, Problem Solving, and Decision Making	Critical Thinking, Problem Solving, and Decision Making
	Use a variety of computing devices (e.g. probe ware, handheld computers, digital cameras, scanners) to collect, analyze and present information for curriculum assignments.	Link multiple pieces of information residing in different applications (e.g., a chart imported from a spreadsheet into a word-processed report can be linked to update automatically when the data are changed in the spreadsheet) to assist in understanding problem-solving processes.
	Use appropriate technology tools to define a problem, propose hypotheses, validate information, test conclusions and present findings and proposed solutions. Use and modify databases and spreadsheets to organize, analyze, interpret, and evaluate findings.	Demonstrate how specialized technology tools can be used for problem solving, decision-making, and creativity (e.g., simulation software, environmental probes, computer-aided design, geographic information systems, graphing calculators, art and music composition software).
	Evaluate and use rubrics to assess the content, organization, design, appropriate use of citations, presentation and technologically enhanced projects.	

Professional Development

The district subscribes to an ongoing staff development effort. The focus of staff development is to build the skills necessary for instructional staff, instructional support staff, and instructional technical support to use technology as an effective tool to address educational needs. The district recognizes the need to provide staff with the technology and subsequent training to support student achievement of learning outcomes. Our goal is to provide staff with strategies to integrate and use technology to enhance student learning. The use of technology will help staff to individualize their instruction for students with a variety of learning strategies. These skills include operating computer hardware, software, and peripheral equipment (e.g. scientific probes, cameras, scanners, and projectors), using computer-assisted instruction for remediation and reinforcement, and developing lessons that integrate technology and enhance learning. The district has purchased 12 SMARTboards in the past year. The teachers using these SMARTboards are required to become certified in their use through training provided by Teq consultants. This year 13 instructional staff were trained on using the hardware and notebook software to create interactive lessons for their subject area. The district will contract with Teq again in 2010-2011 to train an additional 12-15 instructional staff. This training is 7 weeks long and is provided during the school day. The administration will be attending professional development during the summer of 2010 on 21st Century Skills. The Director of Instruction and the Superintendent continually develop professional development in conjunction with the Technology Committee and the Conference Day Planning Committee. Beginning in the 2010-2011 school year, that training will be differentiated based on teachers' Individual Technology Learning Plan to be developed and updated at the beginning of each school year.

Each year the District Technology Planning Committee and the Technology Coordinator distribute a survey to staff. This survey solicits information regarding: 1) integration of technology into their respective curricula; 2) the impact of previous staff development on instruction; and 3) their instructional needs for technology. Survey data and the new Individual Learning Plans will be instrumental in the formation of the actual menu of staff development offerings during the school year. A review of student performance on assessments measuring student achievement of technology outcomes (by the Technology Planning Committee, various stakeholder groups, and the administration) will bring about timely staff development offerings as well.

The District-developed survey is usually the staff and student survey given annually. The TAGLIT survey was used for both staff and student surveys (<http://www.taglit.org>). The results of the TAGLIT survey can be found in previously in this document.

Staff development is tailored to the objective(s) of the course (from one evening to several evenings for a period of weeks; early mornings; after school; during the school day; during the summer). Training is provided on equipment that is appropriate to the task. Staff development is provided in a variety of ways:

1. BOCES courses taught at the BOCES centers.
2. Courses taught by the district's computer teacher(s) or other qualified inhouse staff.
3. Courses taught by a contracted Educational Consultant from the CNY RIC.
4. Courses and other offerings through various qualified agencies (Model Schools, CI&A, NYSCATE) and/or conferences.
5. Training provided by contracted independent consultants.

Educational Consultants from the Central NY Regional Information Center provide training as needed to assist teachers with the use and integration of technology.

The district has a Model Schools representative and actively participates in this program to increase the opportunities for our staff to gain professional development in integrating technology.

Technology is used to support many Annual Professional Performance Review plans and is an on-going part of District Professional Development Plans.

Staff Needs

District Technology Committee

The charge of this committee is "to provide guidance to the administration so that appropriate technological advances can continue." It is responsible for reviewing and making recommendations regarding all facets of the technology program, including technology plan formation, policy creation, budget formation, acquisition of equipment and software, and staff development. This team reviews the technology plan annually and creates action items based upon achievement of the mission.

Technology Coordinator – F/T position

This F/T position provides oversight to the day-to-day operations of the technology program and is responsible for maintaining the integrity of the network, its servers, and the software used by the staff. The Technology Coordinator chairs the Technology Committee meetings. Any problems with the file servers and with Internet connectivity that cannot be corrected are directed to the help desk at OCM BOCES located in Syracuse, NY. Job description - *Appendix A*

PC Support Specialist – F/T position

This F/T position is responsible for daily trouble-shooting tasks involving software and hardware as well as various other job duties, as trained and supervised by the Technology Coordinator. Hardware problems that cannot be remedied in house are taken care of by OCM BOCES Technical Support, which is coordinated by this position. Job description – *Appendix B*

Technology Consultants

Two persons, one per building, are responsible for daily issues that the teaching staff encounters. These consultants are acting teachers with technical ability, and they are often called upon to help solve application issues, both software and hardware. Job description – *Appendix C*

OCM BOCES Educational Consultant

A staff member from OCM BOCES is available through contractual services to provide professional development in technology integration as needed.

When staff members encounter problems with hardware, software, the LAN, or Internet access, they contact the technology coordinator. If the problem is not resolved, the technology coordinator contacts the CNYRIC for additional support. Hardware problems that cannot be remedied in house are taken care of by OCM BOCES Technical Support. Problems with the file server and with Internet connectivity that cannot be corrected are directed to the help desk at the CNYRIC.

Supporting Budget

The following budget is a prediction for technology spending for the next three years.

	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>Source of Funding</u>
IT Personnel	\$96,000	\$98,000	\$100,000	District
Software Budget	\$13,300	\$13,300	\$13,000	District
Hardware Budget	\$18,000	\$18,000	\$18,500	District
(BOCES): Software	\$4,000	\$4,000	\$4,000	District
(BOCES): Hardware	\$80,000	\$80,000	\$80,000	District
Professional Development	\$20,000	\$20,000	\$20,000	District
Local Voice Service*	\$22,800	\$24,000	\$26,000	E-rate; District
Long Distance Voice Service*	\$2,000	\$2,000	\$2,000	E-rate; District
WAN (Lease and Maintenance)*	\$45,000	\$45,500	\$46,000	E-rate; District
Cell Phones*	<u>\$1,680</u>	<u>\$1,700</u>	<u>\$1,800</u>	E-rate; District
	\$302,780	\$306,500	\$311,300	

BOCES Invested Budget \$355,661.52

COSER	Code	Department	Dollars
472	ELC (DLS)	E-Learning Connect (Distance Learning Service)	\$0.00
521	GRA	Instructional Graphics	\$10,000.00
540	CRC	Curriculum Resource Center	\$6,971.25
541	TSR	Technical Services and AV Repair	\$9,555.00
562	ITD (CLT)	Instruction Technology & Design (Center for Learning Technology)	\$12,386.75
562	LSE562	Lease - Instructional	\$36,312.00
562	TIS562	Technology Infrastructure Support - Instructional	\$80,000.00
563	MSP	Model Schools	\$3,610.00
572	LIB	Co-Op Music Library	\$1,700.00
601	TLC	Telecommunications	\$46,826.00
602	TIC	Telecommunications Interconnect Service	\$31,668.75
620	DWS	Data Warehouse Services	\$5,499.00
620	FSS	Financial Support Services	\$28,465.00
620	FWS	Food Management Support Services	\$0.00
620	INT	Internet Services	\$3,600.00
620	LSE620	Lease TIS	\$0.00

620	NCL	Telecommunications Network Connection Line Cost	\$0.00
620	PRI	Priority Services	\$6,600.00
620	RTS	Remote Technical Service	\$0.00
620	SED	Special Education Applications	\$5,730.98
620	SIS	Student Support Services	\$40,294.09
620	TIS620	Technology Infrastructure Support - Admin	\$20,615.20
620	TSS	Test Scoring Services	\$5,827.50

GRA - Instructional Graphics Total = \$10,000.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
521.010.001	GRA-01	Instructional Graphics	1.00	\$10,000.00
521.500.001	GRA-02	Copy Centers	0.00	\$0.00

CRC - Curriculum Resource Center Total = \$6,971.25

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
540.010.001	CRC-01	Instructional Media Resource Library Collection	975.00	\$6,971.25
540.010.010	CRC-03	Discovery Education's unitedstreaming	0.00	\$0.00
540.020.001	CRC-02	Classic Film Rental Program	0.00	\$0.00

TSR - Technical Services and AV Repair Total = \$9,555.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
541.010.001	TSR-01	Microcomputer Technical Services & AV Repair	975.00	\$9,555.00
541.020.001	TSR-03	Audiometer Calibration	0.00	\$0.00
541.020.002	TSR-04	Sale of Parts	0.00	\$0.00

541.030.001	TSR-02	Computer Repair Technician - onsite	0.00	\$0.00
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ITD - Instruction Technology & Design Total = \$12,386.75
(CLT) (Center for Learning Technology)

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
562.110.001	ITD-01 (CLT-01)	Common Set of Learning Objectives (2) Training Days	1.00	\$4,975.00
562.110.002	ITD-02 (CLT-02)	Common Set of Learning Objectives (3) Training Days	0.00	\$0.00
562.110.003	ITD-03 (CLT-03)	Common Set of Learning Objectives (4) Training Days	0.00	\$0.00
562.110.005	ITD-05 (CLT-05)	Instructional Support and Integration - Site Based	0.00	\$0.00
562.110.006	ITD-06 (CLT-06)	Instructional Support and Integration - Per Diem	0.00	\$0.00
562.110.007	ITD-07 (CLT-07)	On-line Application Software Training	0.00	\$0.00
562.120.001	ITD-04 (CLT-04)	Software Acquisitions	0.00	\$0.00
562.120.010	ITD-08 (CLT-08)	BlackBoard - Base Fee	1.00	\$1,900.00
562.120.012	ITD-72	BlackBoard Annual Licensing Fee	291.00	\$1,236.75
562.120.300	ITD-30 (CLT-30)	Other	0.00	\$0.00
562.120.401	ITD-35 (CLT-35)	Curriculum Mapper - Base Fee	0.00	\$0.00
562.120.402	ITD-36 (CLT-36)	Curriculum Mapper - User Fee	0.00	\$0.00
562.120.403	ITD-37 (CLT-37)	Curriculum Mapper - Nationwide Search	0.00	\$0.00
562.120.404	ITD-63 (CLT-63)	CLI Standard Score (formerly WebGrader) - Base Fee	0.00	\$0.00
562.120.405	ITD-64 (CLT-64)	CLI Standard Score (formerly WebGrader) License Fee	0.00	\$0.00
562.120.406	ITD-65 (CLT-65)	CLI Standard Score (formerly WebGrader) Import/Export Module	0.00	\$0.00
562.120.415	ITD-40 (CLT-40)	Rubicon Atlas - Base Fee	0.00	\$0.00

562.120.416	ITD-41 (CLT-41)	Rubicon Atlas - User Fee	0.00	\$0.00
562.120.420	ITD-45 (CLT-45)	Techpaths - Base Fee	0.00	\$3,600.00
562.120.421	ITD-46 (CLT-46)	Techpaths - User Fee	0.00	\$0.00
562.120.422	ITD-59 (CLT-59)	Performance Tracker - Per Pupil	0.00	\$0.00
562.120.425	ITD-49 (CLT-49)	Fast ForWord Base Fee	0.00	\$0.00
562.120.426	ITD-50 (CLT-50)	Fast ForWord license Fee	0.00	\$0.00
562.120.430	ITD-51 (CLT-51)	ExploreLearning Gizmos Base Fee	0.00	\$0.00
562.120.431	ITD-52 (CLT-52)	ExploreLearning Gizmos User Fee	0.00	\$0.00
562.120.437	ITD-57 (CLT-57)	Scholastic's Read 180 - Base Fee	1.00	\$3,300.00
562.120.438	ITD-58 (CLT-58)	Scholastic's Read 180 - User Fee	0.00	\$0.00
562.120.450	ITD-66 (CLT-66)	Acuity On-Line Assessment	0.00	\$0.00
562.120.451	ITD-67 (CLT-67)	Acuity On-Line Assessment - License Fee	0.00	\$0.00
562.120.452	ITD-68 (CLT-68)	Acuity On-Line Assessment - Implementation	0.00	\$0.00
562.120.460	ITD-69 (CLT-69)	NovaNet Base Fee	0.00	\$0.00
562.120.461	ITD-70 (CLT-70)	NovaNet User License Fee	0.00	\$0.00
562.120.462	ITD-71 (CLT-71)	NovaNet Setup Fee	0.00	\$0.00
562.120.463	ITD-75	Plato Base Fee	0.00	\$0.00
562.120.464	ITD-76	Plato Licensing & Support Fee	0.00	\$0.00
562.120.470	ITD-74	Ensemble Video	0.00	\$0.00
562.130.150 (562.120.150)	ITD-29 (CLT-29)	Website Design Development & Licensing	0.00	\$0.00
562.130.151	ITD-73	Website Design - Hosting & Support	0.00	\$0.00
562.130.152 (562.120.152)	ITD-61 (CLT-61)	SchoolWorld Website Application - Base Fee	0.00	\$0.00
562.130.153	ITD-62	SchoolWorld Website Application -	0.00	\$0.00

(562.120.153)	(CLT-62)	License Fee		
562.140.020 (562.120.020)	ITD-10 (CLT-10)	Bridges - Career Futures	0.00	\$0.00
562.140.026 (562.120.026)	ITD-12 (CLT-12)	Bridges - Choices Explorer	0.00	\$0.00
562.140.029 (562.120.029)	ITD-13 (CLT-13)	Bridges - Choices CD	1.00	\$975.00
562.140.032 (562.120.032)	ITD-14 (CLT-14)	Bridges - Choices Planner	0.00	\$0.00
562.140.047 (562.120.047)	ITD-19 (CLT-19)	Bridges - Guidance Central	0.00	\$0.00
562.140.048 (562.120.048)	ITD-32 (CLT-32)	Bridges - testGEAR	0.00	\$0.00
562.140.062 (562.120.062)	ITD-24 (CLT-24)	Centris - Guidance Direct (District License)	0.00	\$0.00
562.140.065 (562.120.065)	ITD-25 (CLT-25)	Centris - Guidance Direct (Annual Counselor License)	0.00	\$0.00
562.140.068 (562.120.068)	ITD-26 (CLT-26)	Career Cruising 1 year license per school	0.00	\$0.00

LSE562 - Lease - Instructional Total = \$36,312.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
562.020.001	LSE-01	Instructional Technology Hardware Lease	0.00	\$0.00
562.020.002	LSE-01	Instructional Technology Hardware Lease	0.00	\$0.00
562.020.003	LSE-01	Instructional Technology Hardware Lease	0.00	\$0.00
562.020.004	LSE-01	Instructional Technology Hardware Lease	0.00	\$0.00
562.020.005	LSE-01	Instructional Technology Hardware Lease	0.00	\$0.00
562.020.006	LSE-01	Instructional Technology Hardware Lease	0.00	\$0.00
562.020.010	LSE-02	Instructional Technology Software Lease	0.00	\$0.00

562.030.001	LSE-03	Xerox Digital Printing Lease	0.00	\$0.00
562.030.002	LSE-04	Digital Printing Managed Services	1.00	\$6,360.00
562.030.003	LSE-05	Xerox Overage Charges	0.00	\$0.00
562.030.010	LSE-10	Toshiba Digital Printing Lease	0.00	\$0.00
562.030.011	LSE-11	Toshiba Overage Charges	0.00	\$0.00
562.030.015	LSE-15	Konica Digital Printing Lease	0.00	\$0.00
562.030.016	LSE-16	Konica Overage Charges	0.00	\$0.00
562.030.020	LSE-20	Ricoh Digital Printing Lease	1.00	\$29,952.00
562.030.021	LSE-21	Ricoh Overage Charges	0.00	\$0.00
562.030.025	LSE-25	Savin Digital Printing Lease	0.00	\$0.00
562.030.026	LSE-26	Savin Overage Charges	0.00	\$0.00
562.030.030	LSE-30	Hewlett Packard Digital Printing Lease	0.00	\$0.00
562.030.031	LSE-31	Hewlett Packard Overage Charges	0.00	\$0.00
562.030.035	LSE-35	Canon-Ikon (B) Printing Lease	0.00	\$0.00
562.030.036	LSE-36	Canon-Ikon Overage Charges	0.00	\$0.00
562.030.037	LSE-37	Canon-Usherwood (L) Printing Lease	0.00	\$0.00
562.030.038	LSE-38	Canon-Usherwood Overages Charges	0.00	\$0.00

TIS562 - Technology Infrastructure Support - Instructional Total = \$80,000.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
562.010.005	TIS-40	Use of Video Conferencing Facility	0.00	\$0.00
562.010.010	TIS-42	Insurance for technology projects	1.00	\$63.35
562.010.100	TIS-43	Other not listed	0.00	\$0.00
562.040.001	TIS-41	Hardware Acquisitions - instructional projects	1.00	\$79,936.65
562.050.001	TIS-66	Projects-One Time Billing	0.00	\$0.00

MSP - Model Schools Total = \$3,610.00

WinCap	Service	Service Name	Units	Total
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Code (previous)	Code (previous)			
563.010.001	MSP-01	Model Schools Planning - Base Fee	1.00	\$3,400.00
563.010.005	MSP-04	Model Schools Trainer	0.00	\$0.00
563.020.001	MSP-02	Model Schools Substitute Reimbursement	0.00	\$0.00
563.020.005	MSP-03	Model Schools Workshops	1.00	\$210.00

LIB - Co-Op Music Library Total = \$1,700.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
572.310.001	LIB-01	Co-Op Music Library	1.00	\$1,700.00

TLC - Telecommunications Total = \$46,826.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
601.010.001	TLC-01	Telecommunications - Base Service	1.00	\$2,700.00
601.010.002	TLC-10	Telecommunications - Base Service TST	0.00	\$0.00
601.060.001	TLC-06	Central New York Regional Network - OCM BOCES	1.00	\$44,126.00
601.060.002	TLC-11	Additional WAN bandwidth	0.00	\$0.00
601.070.001	TLC-07	Central New York Regional Network - TST BOCES	0.00	\$0.00
601.080.001	TLC-08	Central New York Regional Network - Cayuga BOCES	0.00	\$0.00
601.090.001	TLC-09	Central New York Regional Network - Oswego BOCES	0.00	\$0.00

TIC - Telecommunications Interconnect Service Total = \$31,668.75

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total

602.010.001	TIC-01	Telephone Interconnect Service - Base Service	1.00	\$2,990.00
602.020.001	TIC-02	Telephone Interconnect Local Expenses	1.00	\$23,800.00
602.030.001	TIC-03	Telephone Long Distance Expenses	1.00	\$1,500.00
602.040.001	TIC-04	E-Rate Applications - Base service	1.00	\$2,940.00
602.050.001	TIC-05	E-Rate Applications - RWADA	975.00	\$438.75
602.060.001	TIC-06	New Voice Services	0.00	\$0.00
602.060.010	TIC-07	Service and Support	0.00	\$0.00
602.060.011	TIC-08	Service and Support - RWADA	0.00	\$0.00
602.060.020	TIC-09	RIC Hosted Voicemail	0.00	\$0.00
602.060.021	TIC-10	Mailboxes	0.00	\$0.00

DWS - Data Warehouse Services Total = \$5,499.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.700.001	DWS-01	Data Warehouse Services Level 1 Basic - RWADA	975.00	\$5,499.00
620.700.100	DWS-04	School District Data Coordinator	0.00	\$0.00
620.700.200	DWS-05	Data Warehouse Support Services	0.00	\$0.00
620.700.210	DWS-06	Data Audit Service	0.00	\$0.00

FSS - Financial Support Services Total = \$28,465.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.010.001	FSS-54	Personnel Office - School Stream	0.00	\$0.00
620.100.001	FSS-01	MUNIS General Ledger	0.00	\$0.00
620.100.002	FSS-02	MUNIS Budget - Distributed	0.00	\$0.00
620.100.003	FSS-03	MUNIS Accounts Payable	0.00	\$0.00
620.100.004	FSS-04	MUNIS Accounts Payable - per check	0.00	\$0.00
620.100.005	FSS-05	MUNIS Accounts Payable - District Specific	0.00	\$0.00
620.100.006	FSS-06	MUNIS Purchasing/Requisitions - Central Office	0.00	\$0.00
620.100.007	FSS-07	MUNIS Purchasing/Requisitions -	0.00	\$0.00

		Distributed		
620.100.008	FSS-08	MUNIS Bidding - Distributed	0.00	\$0.00
620.100.009	FSS-09	MUNIS Accounts Receivable	0.00	\$0.00
620.100.010	FSS-10	MUNIS Payroll-Personnel-Employee Attendance - Central Office	0.00	\$0.00
620.100.011	FSS-11	MUNIS Payroll-Personnel-Employee Attendance - Distributed	0.00	\$0.00
620.100.012	FSS-12	MUNIS Payroll-Personnel-Employee Attendance - per check	0.00	\$0.00
620.100.013	FSS-13	MUNIS Payroll-Personnel-Employee Attendance - Initial Year	0.00	\$0.00
620.100.014	FSS-14	MUNIS Office Support	0.00	\$0.00
620.100.015	FSS-59	MUNIS Crystal Reports	0.00	\$0.00
620.100.020	FSS-15	Tax Roll Payment Tracking - per parcel	0.00	\$0.00
620.100.022	FSS-16	Check stuffing and insertion service	0.00	\$0.00
620.100.024	FSS-17	In District Support Services - Clerical	0.00	\$0.00
620.100.026	FSS-18	Payroll direct deposit set up	0.00	\$0.00
620.100.028	FSS-19	Check reconciliation set up	0.00	\$0.00
620.100.030	FSS-20	Laser check printing - New account or a change	0.00	\$0.00
620.100.032	FSS-21	Laser check printing - Add or change in logo	0.00	\$0.00
620.100.034	FSS-22	Laser check printing - Add or change a signature	0.00	\$0.00
620.100.100	FSS-24	Professional Development Tracking - Base Fee	1.00	\$2,500.00
620.100.101	FSS-25	Professional Development Tracking - Instructional	30.00	\$450.00
620.100.102	FSS-26	Professional Development Tracking - Non-Instructional	0.00	\$0.00
620.100.200	FSS-28	WinCap - Software License Fees	0.00	\$0.00
620.100.201	FSS-29	WinCap - Conversion Fees	0.00	\$0.00
620.100.202	FSS-30	WinCap - Accounting Maintenance Fees	0.00	\$0.00
620.100.203	FSS-31	WinCap - Bid Maintenance Fees	0.00	\$0.00
620.100.204	FSS-32	WinCap - Payroll Maintenance Fees	0.00	\$0.00
620.100.205	FSS-33	WinCap - Employee Attendance Maintenance Fees	0.00	\$0.00
620.100.206	FSS-34	WinCap - Employee Benefits	0.00	\$0.00

		Maintenance Fees		
620.100.207	FSS-35	WinCap - Appointments/Other HR Maintenance Fees	0.00	\$0.00
620.100.209	FSS-56	WinCap-By Item Receiving Maintenance Fees	0.00	\$0.00
620.100.215	FSS-58	WinCap Enhanced Reporting Maintenance Fees	0.00	\$0.00
620.100.220	FSS-36	WinCap - Base Fee	0.00	\$0.00
620.100.222	FSS-37	WinCap - Complete Application Support	0.00	\$0.00
620.100.224	FSS-38	WinCap - Limited Application Support	0.00	\$0.00
620.100.230	FSS-39	WinCap - Server Access Fees	0.00	\$0.00
620.100.232	FSS-40	WinCap - Server Maintenance Fees	0.00	\$0.00
620.100.250	FSS-78	WinCap Enhanced Time & Attendance - License Fees	0.00	\$0.00
620.100.252	FSS-79	WinCap – Enhanced Time & Attendance-Setup	0.00	\$0.00
620.100.254	FSS-80	WinCap – Time Clock Devices	0.00	\$0.00
620.100.260	FSS-81	WinCap – Enhanced Time & Attendance - Base Fee	0.00	\$0.00
620.100.262	FSS-82	WinCap – Enhanced Time & Attendance-Maintenance Fees	0.00	\$0.00
620.100.264	FSS-83	WinCap – e-Timesheets Fee	0.00	\$0.00
620.100.270	FSS-84	WinCap-Professional Development - Base Fee	0.00	\$0.00
620.100.271	FSS-85	WinCap-Professional Development - Instructional User	0.00	\$0.00
620.100.272	FSS-86	WinCap Professional Development - Non-Instructional User	0.00	\$0.00
620.100.276	FSS-87	WinCap-Employee Self Service - Base Fee	0.00	\$0.00
620.100.277	FSS-88	WinCap-Employee Self Service - Annual License Fee	0.00	\$0.00
620.100.300	FSS-41	Finance Manager - Software License Fees	0.00	\$0.00
620.100.301	FSS-42	Finance Manager - PROGRESS Database License Fee	0.00	\$0.00
620.100.302	FSS-43	Finance Manager - PROGRESS Results Report Writer	0.00	\$0.00
620.100.305	FSS-44	Finance Manager - Conversion Fees	0.00	\$0.00
620.100.306	FSS-45	Finance Manager - Basic Package	1.00	\$3,570.00

		Maintenance Fees		
620.100.307	FSS-46	Finance Manager - Requisition Manager Maintenance	0.00	\$0.00
620.100.308	FSS-47	FM-PROGRESS Database License Maintenance	0.00	\$0.00
620.100.309	FSS-48	FM-PROGRESS Results Report Writer License Maintenance	0.00	\$0.00
620.100.311	FSS-61	Finance Manager - Receivables Manager Maintenance	0.00	\$0.00
620.100.312	FSS-62	Finance Manager - NVision Bidding Maintenance	0.00	\$0.00
620.100.320	FSS-49	Finance Manager - Base Fee	1.00	\$13,995.00
620.100.322	FSS-50	Finance Manager - Complete Application Support	975.00	\$6,825.00
620.100.324	FSS-51	Finance Manager - Limited Application Support	0.00	\$0.00
620.100.330	FSS-52	Finance Manager - Server Access Fees	5.00	\$1,125.00
620.100.332	FSS-53	Finance Manager - Server Maintenance Fees	0.00	\$0.00
620.100.350	FSS-72	Finance Manager-Timepiece License Fee	0.00	\$0.00
620.100.352	FSS-73	Finance Manager- Timepiece Set Up	0.00	\$0.00
620.100.354	FSS-74	Finance Manager - Time Clock Device	0.00	\$0.00
620.100.360	FSS-75	Finance Manager-Timepiece Base Fee	0.00	\$0.00
620.100.362	FSS-76	Finance Manager-Timepiece Maintenance	0.00	\$0.00
620.100.364	FSS-77	Fin Man-Timepiece Server Hosting Fee	0.00	\$0.00
620.100.400	FSS-27	Other related customized services and/or training	0.00	\$0.00
620.100.500	FSS-63	BudgetSense - Software License Fees	0.00	\$0.00
620.100.502	FSS-64	BudgetSense - Server License Fees	0.00	\$0.00
620.100.504	FSS-65	BudgetSense - Conversion Fees	0.00	\$0.00
620.100.507	FSS-66	BudgetSense - Software Application Maintenance Fees	0.00	\$0.00
620.100.520	FSS-67	BudgetSense - Base Fee	0.00	\$0.00
620.100.522	FSS-68	BudgetSense - Complete Application	0.00	\$0.00

		Support		
620.100.524	FSS-69	BudgetSense -Limited Application Support	0.00	\$0.00
620.100.530	FSS-70	BudgetSense - Annual Server License Fees	0.00	\$0.00
620.100.532	FSS-71	BudgetSense - Technical Support Fees	0.00	\$0.00

INT - Internet Services Total = \$3,600.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.300.005	INT-16	Additional Internet bandwidth	2.00	\$3,600.00
620.300.010	INT-04	Internet Filtering Base Fee	0.00	\$0.00
620.300.014	INT-06	Centralized Internet Filtering Administration	0.00	\$0.00
620.300.040	INT-13	Virtual Private Network (VPN)	0.00	\$0.00
620.300.045	INT-17	SSL Certificate	0.00	\$0.00

PRI - Priority Services Total = \$6,600.00

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.300.200	PRI-01	Network Server	3.00	\$4,500.00
620.300.201	PRI-01	Network Server	0.00	\$0.00
620.300.202	PRI-01	Network Server	0.00	\$0.00
620.300.203	PRI-01	Network Server	0.00	\$0.00
620.300.204	PRI-01	Network Server	0.00	\$0.00
620.300.230	PRI-04	10/100/1000 Copper Switch	0.00	\$0.00
620.300.231	PRI-04	10/100/1000 Copper Switch	0.00	\$0.00
620.300.232	PRI-04	10/100/1000 Copper Switch	0.00	\$0.00
620.300.233	PRI-04	10/100/1000 Copper Switch	0.00	\$0.00
620.300.234	PRI-04	10/100/1000 Copper Switch	2.00	\$600.00
620.300.240	PRI-06	Gigabit Switch	2.00	\$1,500.00
620.300.241	PRI-06	Gigabit Switch	0.00	\$0.00
620.300.242	PRI-06	Gigabit Switch	0.00	\$0.00
620.300.243	PRI-06	Gigabit Switch	0.00	\$0.00

620.300.244	PRI-06	Gigabit Switch	0.00	\$0.00
620.300.290	PRI-07	Other	0.00	\$0.00

SED - Special Education Applications Total = \$5,730.98

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.400.030	SED-12	SE Web Base Fee	0.00	\$0.00
620.400.032	SED-13	ClearTrack 200 Base Fee	1.00	\$3,527.48
620.400.034	SED-14	ClearTrack 200 Annual Support	975.00	\$2,203.50
620.400.036	SED-15	IEP Direct Base Fee	0.00	\$0.00
620.400.038	SED-16	IEP Direct Annual Support	0.00	\$0.00
620.400.040	SED-17	Annual Support for NYSE Directors	0.00	\$0.00
620.400.041	SED-18	Medicaid Direct Base Fee	0.00	\$0.00
620.400.100	SED-11	Other related customized services and/or training	0.00	\$0.00

SIS - Student Support Services Total = \$40,294.09

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.450.001	SIS-01	SMS Base Fee	1.00	\$2,575.00
620.450.002	SIS-02	SIS Census	125.00	\$675.00
620.450.003	SIS-03	SIS Comprehensive	942.00	\$16,014.00
620.450.005	SIS-25	Third Party Student Management System Software Implementation and Conversion Support	0.00	\$0.00
620.450.006	SIS-26	Third Party Student Management System Software Annual License and Maintenance.	0.00	\$0.00
620.450.007	SIS-27	Third Party Student Management System Software Support	0.00	\$0.00
620.450.012	SIS-23	MyGradebook Support	1.00	\$1,790.00
620.450.015	SIS-06	SIS Summer School	0.00	\$0.00
620.450.020	SIS-07	Envelope Stuffing of Report Cards	0.00	\$0.00
620.450.025	SIS-08	SIS PDA Annual Fee	0.00	\$0.00

620.450.026	SIS-09	SIS PDA Startup Fee	0.00	\$0.00
620.450.030	SIS-10	ID Card Printing	0.00	\$0.00
620.450.031	SIS-11	ID Card - Onsite Support	0.00	\$0.00
620.450.032	SIS-12	ID Card Software License	0.00	\$0.00
620.450.039	SIS-46	AIS Edge	1.00	\$2,500.00
620.450.040	SIS-14	RTIm Direct Web Base Fee	1.00	\$3,042.94
620.450.041	SIS-15	RTIm Direct Web Annual Support	1.00	\$2,500.00
620.450.042	SIS-22	Student Attendance Calling	0.00	\$0.00
620.450.050	SIS-50	Counselor's Office ® by Naviance	0.00	\$0.00
620.450.051	SIS-51	Naviance® - Software Support	0.00	\$0.00
620.450.052	SIS-52	Naviance® Do What You Are Personality Inventory (Career Planner for High School) Annual Use Fee	0.00	\$0.00
620.450.053	SIS-53	Naviance® - Learning Style Inventory Annual Use Fee	0.00	\$0.00
620.450.054	SIS-54	Naviance® Application Training	0.00	\$0.00
620.450.055	SIS-55	Naviance® SAT & ACT Method Test Preparation	0.00	\$0.00
620.450.056	SIS-56	Naviance® SAT Test Preparation	0.00	\$0.00
620.450.057	SIS-57	Naviance® ACT Test Preparation	0.00	\$0.00
620.450.058	SIS-58	Naviance ® - Career Key Survey (Career Planner for Middle School)	0.00	\$0.00
620.450.060	SIS-60	ProgressBook® Implementation Fee (Year 1 Only)	0.00	\$0.00
620.450.061	SIS-61	ProgressBook® Annual Software License Fee	0.00	\$0.00
620.450.062	SIS-62	ProgressBook® Annual Support Fee	0.00	\$0.00
620.450.070	SIS-70	Schooltool IQ Implementation Fee	0.00	\$0.00
620.450.071	SIS-71	Schooltool IQ Annual Base Fee	0.00	\$0.00
620.450.072	SIS-72	Schooltool IQ Annual Support	0.00	\$0.00
620.450.073	SIS-73	Schooltool IQ Optional Services	0.00	\$0.00
620.450.100	SIS-21	Other related customized services and/or training	1.00	\$652.15
620.450.200	SIS-40	Transfinder Implementation Support	1.00	\$10,545.00
620.450.205	SIS-45	Transfinder Annual Support	0.00	\$0.00
620.450.300	SIS-47	SIF Implementation Support	0.00	\$0.00
620.450.305	SIS-48	SIF Annual Support	0.00	\$0.00

TIS620 - Technology Infrastructure Support - Admin Total = \$20,615.20

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.000.001	TIS-16	Hardware/Software Acquisitions - Admin projects	0.00	\$0.00
620.050.001	TIS-67	Projects-One Time Billing	0.00	\$0.00
620.300.300	TIS-01	Network Server Support - Contracted hours	2.00	\$200.00
620.300.302	TIS-03	Network Technician - Contracted Hours	3.00	\$225.00
620.300.305	TIS-04	Daily District Delivery Service - direct to district	0.00	\$0.00
620.300.306	TIS-05	Daily District Delivery Service - to local BOCES	0.00	\$0.00
620.300.311	TIS-07	T1 K Modem Maintenance	0.00	\$0.00
620.300.313	TIS-09	AN Router Maintenance	0.00	\$0.00
620.300.314	TIS-10	ARN Router Maintenance	0.00	\$0.00
620.300.315	TIS-11	ASN Router Maintenance	0.00	\$0.00
620.300.320 (620.010.002)	TIS-63 (FSS-60)	BoardDocs	0.00	\$0.00
620.300.323	TIS-58	Mass Communication Base Fee	0.00	\$0.00
620.300.324	TIS-59	Connect-Ed License Fee	0.00	\$0.00
620.300.325	TIS-60	Mass Communication Connect-Ed Setup	0.00	\$0.00
620.300.326	TIS-61	Mass Communication SchoolMessenger License	0.00	\$0.00
620.300.327	TIS-62	Mass Communication SchoolMessenger Setup Fee	0.00	\$0.00
620.300.328	TIS-64	Mass Communication School Messenger License with SMS Texting	0.00	\$0.00
620.300.329	TIS-70	Mass Communication School Messenger Contact Manager License	0.00	\$0.00
620.300.330	TIS-14	Centralized User account systems support	2.00	\$180.00
620.300.331	TIS-15	Centralized Systems Support - Connection Time	15.00	\$13.50
620.300.335	TIS-17	Insurance for Technology Projects	1.00	\$686.95
620.300.340	TIS-18	Network equipment maintenance	0.00	\$0.00

620.300.343	TIS-57	BlackBerry Enterprise Server Licenses	0.00	\$0.00
620.300.344	TIS-65	BlackBerry Enterprise Server Setup	0.00	\$0.00
620.300.345	TIS-19	Lotus Notes Server Support	0.00	\$0.00
620.300.346	TIS-20	Lotus Notes Licenses	0.00	\$0.00
620.300.347	TIS-21	Lotus Notes User Training	0.00	\$0.00
620.300.350	TIS-22	Remote Server support/maintenance	0.00	\$0.00
620.300.355	TIS-23	Distributed Virus Protection - License Renewal	1.00	\$3,950.00
620.300.360	TIS-26	Distributed Firewall - License Renewal	0.00	\$0.00
620.300.362	TIS-28	Centralized Firewall Protection - Administration	0.00	\$0.00
620.300.363	TIS-29	Centralized Firewall - NATing	0.00	\$0.00
620.300.365	TIS-30	Distributed Novel SLA license renewal	1.00	\$3,000.00
620.300.366	TIS-31	Distributed Visual Casel license renewal	0.00	\$0.00
620.300.367	TIS-54	Microsoft License Renewals	0.00	\$0.00
620.300.368	TIS-55	Spam Filtering License Renewals	0.00	\$0.00
620.300.370	TIS-32	List Serve	0.00	\$0.00
620.300.371	TIS-71	Email Archiving Base Fee	0.00	\$0.00
620.300.372	TIS-72	Email Archiving License Fee	0.00	\$0.00
620.300.373	TIS-73	Email Archiving Storage	0.00	\$0.00
620.300.376	TIS-35	Remote Server/Backup Disaster Recovery - Base Fee	0.00	\$0.00
620.300.377	TIS-36	Remote Server Backup/Disaster Recovery - Additional Storage	0.00	\$0.00
620.300.378	TIS-38	Remote Server Hosting	0.00	\$0.00
620.300.380	TIS-44	Facilities Management Application	0.00	\$0.00
620.300.381	TIS-56	Remote - District based Helpdesk software	0.00	\$0.00
620.300.385	TIS-46	Remote Network Monitoring and Management	0.00	\$0.00
620.300.387	TIS-48	Remote Intermapper Application	0.00	\$0.00
620.300.388	TIS-49	Additional Devices for Network Monitoring	0.00	\$0.00
620.300.389	TIS-50	Network Monitoring - Private Network	0.00	\$0.00
620.300.390	TIS-51	Network Monitoring Initial Configuration and Setup	0.00	\$0.00
620.300.395	TIS-52	Aristotle Behavior Reporting	0.00	\$0.00
620.300.396	TIS-53	Maintenance for Aristotle	1.00	\$1,359.75

620.300.399	TIS-90	Other, not listed	0.00	\$0.00
620.300.410	TIS-68	Visitor Management - Hardware/Software	0.00	\$0.00
620.300.411	TIS-69	Visitor Management - Support	0.00	\$0.00
620.301.001	TIS-37	Supplies and Materials	1.00	\$11,000.00

TSS - Test Scoring Services Total = \$5,827.50

WinCap Code (previous)	Service Code (previous)	Service Name	Units	Total
620.600.001	TSS-45	NYS Test Grade 3 ELA	60.00	\$150.00
620.600.002	TSS-46	NYS Test Grade 3 Math	60.00	\$150.00
620.600.005	TSS-02	NYS Test Grade 4 ELA	50.00	\$125.00
620.600.006	TSS-01	NYS Test Grade 4 Math	50.00	\$125.00
620.600.007	TSS-03	NYS Test Grade 4 Science	50.00	\$125.00
620.600.010	TSS-47	NYS Test Grade 5 ELA	75.00	\$187.50
620.600.011	TSS-48	NYS Test Grade 5 Math	75.00	\$187.50
620.600.013	TSS-04	NYS Test Grade 5 Social Studies	75.00	\$187.50
620.600.015	TSS-49	NYS Test Grade 6 ELA	75.00	\$187.50
620.600.016	TSS-50	NYS Test Grade 6 Math	75.00	\$187.50
620.600.017	TSS-51	NYS Test Grade 7 ELA	60.00	\$150.00
620.600.018	TSS-52	NYS Test Grade 7 Math	60.00	\$150.00
620.600.020	TSS-06	NYS Test Grade 8 ELA	70.00	\$175.00
620.600.021	TSS-07	NYS Test Grade 8 Math	70.00	\$175.00
620.600.022	TSS-05	NYS Test Grade 8 Science	70.00	\$175.00
620.600.023	TSS-08	NYS Test Grade 8 Social Studies	70.00	\$175.00
620.600.030	TSS-09	NYS Intermediate Level Technology Testing	0.00	\$0.00
620.600.031	TSS-53	NYS Alternate Assessment (NYSAA)	2.00	\$5.00
620.600.032	TSS-25	NY State ESL Achievement Test (NYSESLAT)	0.00	\$0.00
620.600.040	TSS-11	NYS Regents Scoring and Reporting	0.00	\$0.00
620.600.041	TSS-54	NYS Regents Exam Processing (Prior Year)	0.00	\$0.00
620.600.042	TSS-55	NYS Regents Remote Scoring License	0.00	\$0.00
620.600.044	TSS-57	NYS Regents Remote Scoring Reporting	550.00	\$550.00

620.600.045	TSS-58	NYS Regents Remote License Support and Maintenance Fee	1.00	\$1,670.00
620.600.062	TSS-13	Regents Competency Tests - Reading & Writing	0.00	\$0.00
620.600.065	TSS-14	Regents Competency Test - Mathematics	0.00	\$0.00
620.600.068	TSS-15	Regents Competency Test - U.S. History & Gov't	0.00	\$0.00
620.600.071	TSS-16	Regents Competency Test - Science	0.00	\$0.00
620.600.074	TSS-17	Regents Competency Test - Global Studies	0.00	\$0.00
620.600.077	TSS-18	Occupational Education Proficiency Exam	0.00	\$0.00
620.600.080	TSS-19	California Achievement Test - (CAT)	0.00	\$0.00
620.600.083	TSS-21	Gates-McGinitie Reading Test - (GMRT)	0.00	\$0.00
620.600.086	TSS-22	Iowa Test of Basic Skills - (ITBS)	0.00	\$0.00
620.600.089	TSS-23	Tests of Achievement & Proficiency - (TAP)	0.00	\$0.00
620.600.098	TSS-26	Stanford Achievement Test - (SAT)	0.00	\$0.00
620.600.100	TSS-27	Stanford Test of Academic Skills - (TASK)	0.00	\$0.00
620.600.103	TSS-30	Terra Nova	150.00	\$472.50
620.600.106	TSS-31	Degrees of Reading Power - (DRP)	0.00	\$0.00
620.600.109	TSS-32	Test of Cognitive Skills - (TCS)	0.00	\$0.00
620.600.112	TSS-33	Cognitive Abilities Test - (COGAT)	0.00	\$0.00
620.600.115	TSS-34	Differential Aptitude Test - (DAT)	0.00	\$0.00
620.600.118	TSS-35	Otis-Lennon Mental Ability Test - (OLMAT)	0.00	\$0.00
620.600.121	TSS-36	Otis-Lennon School Ability Test - (OLSAT)	0.00	\$0.00
620.600.124	TSS-37	TONYSS	0.00	\$0.00
620.600.127	TSS-38	Survey Questionnaire Analysis	0.00	\$0.00
620.600.200	TSS-39	Machine Scorable Test Booklets (Riverside)	0.00	\$0.00
620.600.202	TSS-40	Machine Scorable Test Booklets (CTB-McGraw Hill)	0.00	\$0.00
620.600.204	TSS-41	Machine Scorable Test Booklets (Harcourt Educational Measurement)	0.00	\$0.00
620.600.206	TSS-42	Machine Scorable Test Booklets (Other)	0.00	\$0.00

620.600.300	TSS-43	Customized Test Scoring Services	1.00	\$517.50
620.600.301	TSS-44	Other related customized services and/or training	0.00	\$0.00

Evaluation Process

District Technology Committee

The MCS D Technology Committee developed and revised this plan. Membership includes:

Timothy Turecek	Superintendent
Thayer Miller	Director of Instruction
Karen Braman	School Business Administrator
Shelley Warnow	Elementary Principal
David Rosetti	Jr/Sr High School Principal
Jerry Hence	Technology Coordinator
Gail O'Donnell	Elementary Technology Teacher
Gretchen Jewiss	Technology Consultant/Elementary Teacher
Tammy McDougal	Jr/Sr High School Library Media Specialist
Todd James	Business Teacher & Athletic Director
Buck Campbell	PC Support Specialist

Review, Revision and Board Adoption

Progress towards realizing our goals is reviewed at regularly scheduled meetings of the District Technology Committee. Our progress is assessed annually, and modifications to this plan will be made at that time, as appropriate. The technology plan is submitted to the Board of Education for review and adoption every three years.

There is an expectation that technology and the skills associated with its effective use will be integrated into all curricular areas. This requires both effective staff development and careful review of student achievement.

Evidence of effective staff development may include:

- Records of in-service attendance.
- Yearly training program outlines and survey results.
- Evaluations of technology trainings.
- Records of active participation by teachers in technology projects.
- Computer lab and laptop cart sign out sheets.
- Data analysis of technology use through network monitoring.
- Administrative observations of the use of technology in the classrooms.

Evidence of student achievement may include:

- Test results and analysis.
- Benchmark assessments.
- Teacher observations.
- Student portfolios.
- Student surveys.

Miscellaneous

Acceptable Usage Policies (AUPs)

As required by legislation and online protection laws, the district has developed several AUPs to be strictly adhered to by faculty and students. These policies are listed in the appendices G – K.

Internet Access & Filtering Rules

All Internet access in the district is governed by network filtering software and distributed workstation policies. The filters meet all CIPA guidelines including protecting minors from personal disclosure, protecting minors from Internet predators, and restricting minors' access to harmful materials. These filters are updated automatically and the Technology Coordinator is responsible for assuring the filters are working properly. Internet activity is monitored routinely through the District's Aristotles Security System, and anyone found to be breaking the guidelines lose the privilege of accessing the Internet at school. The Board of Education has adopted an acceptable use policy governing the use of the Internet (Regulation 4526-R.3). The Technology Committee also reviews all related policies each year and makes any suggestions for revisions to the Superintendent.

Equity Statement

The Marathon Central School provides all students with appropriate opportunities for development, assesses the levels to which it has been achieved, and provides assistance and modifications as needed. The educational program for all students focuses on student achievement "through excellence in teaching." Every student in Marathon Central School will have the opportunity to access critical information and learning resources and to develop the skills they need to confidently use and integrate learning technologies (adapted from NYS Technology Plan). The district continues to maintain and sustain a LAN that connects both buildings and an OC3 line for Internet access. All classrooms have at least one networked workstation, and each building has a fully equipped technology lab and a wireless laptop cart. The district continues to replace and expand its computers and technology. Each child in the district has access to the Internet through these computers. All children at the elementary K-6 level have at least one technology class per week with other opportunities during the day to access the Internet. All students in the district have access to the Internet in the library media center and in the classrooms as well. We provide an extended day program that includes a technology class. Students may use computers before and after school as long as there is supervision. It is the belief of the district that all students should have equal access to technology, and the district works to insure that access for all students. The district recognizes that to ensure student equity in technology it is essential that all teachers be fully prepared to integrate technology effectively. The district provides staff development and curriculum development to all staff members. Technology workshops and training are an on going part of district staff development and the district also participates in models schools. The district title II D monies are used to provide staff development and have been instrumental in supplementing the new computer and business technology sequence for grades 9-12. The district strategic plan incorporates technology as an integral part of all its staff development and student achievement goals.

District Poverty Level

The district poverty level based on free and reduced lunch numbers is in excess of 40%.

Appendix A

Technology Coordinator - Job Description

- Update and maintain the District's Computer Network. Troubleshoot and repair problems with the network with assistance from the BOCES Help Desk and other resources as needed.
- Chair the Technology Committee. Coordinate development and update of the District's Technology Plan.
- Meet regularly with District Administrators to review job responsibilities and status, on-going concerns or needs, and plans for the future.
- Plan the District Technology budget and make purchases from that budget in accordance with the District Technology plan and in line with guidance received from the Technology Committee, from District users, and from the District administrators.
- Research new technology options and report back on these options to stakeholders in the District.
- Conduct training of system users- at various levels of expertise- as needed.
- Facilitate the input and retrieval of data in all of the software programs used by members of the staff. Troubleshoot problems as needed.
- Develop procedures for the purchase, repair, maintenance and review of the computer network, software, hardware, and curriculum.
- Keep a log of work done on the network to record changes and system maintenance.
- Communicate standards for the selection and appropriate use of hardware, software, and computer-assisted curriculum materials and monitor procedural compliance.
- Establish and maintain a liaison relationship with departments, administration, school district personnel, BOCES personnel, etc.
- Install approved software and maintain existing resources as directed.
- Maintain a list of computer-assisted curriculum materials that are installed on the building network and communicate procedures for authorized user access.
- Maintain the security system on the computer network to ensure compliance with e-rate regulations.
- Share with users ways to utilize the approved software.
- Monitor physical asset security measures and report concerns to appropriate administrators.
- Attend technical conferences and vendor demonstrations with faculty to bring back helpful information for users as approved by the Superintendent.
- Organize and schedule system backups.
- Direct and supervise the work of technicians, systems operators, and technology consultants throughout the District.
- Maintain software and hardware inventories including warranties, locations, internal components, etc.
- Survey technology needs of users on a periodic basis.
- Ensure that equipment components are kept clean, free of dust, etc. on an on-going basis.
- Maintain a system of access privileges and data security.
- Maintain user accounts and access rights.
- Maintain an inventory of critical supplies.

Appendix B

PC Support Specialist- Job Description

This position involves responsibility for the installation, configuration, and support of PC hardware and software. The employee works under the general supervision of the Technology Coordinator with some leeway allowed for the exercise of independent judgment in carrying out the details of the work.

Workstations Hardware

- Maintain workstations.
- Clean hardware on a regular basis.
- Maintain records and coordinate with external repair shop the work to be done out of house.
- Install and register new software and hardware.
- Advise Technology Coordinator in the budgeting process and computer replacement schedule.

Peripherals: Printers/scanners/digital cameras/modems/PDAs

- Clean and maintain hardware.
- Replace ink cartridges and send used cartridges to redemption center for "points."
- Maintain adequate ink cartridge inventory to assure continued operation of printers.

Assist Technology Coordinator to Maintain Software on Computers

- Provide technical assistance to staff.
- Help monitor student use of computers.
- Update software.
- Troubleshoot software errors.
- Maintain records of technical support.
- Deploy images to computers as needed.
- Tend backup tape retention.

Inventory

- Maintain accurate hardware inventory.
- Maintain accurate software inventory.
- Tag all portable district equipment for identification purposes.
- Coordinate declaration of surplus and removal of inventory.

Other

- Attend training as required by the district.
- Related duties as assigned by the Superintendent or Technology Coordinator.

Appendix C

Technology Consultant - Job Description

- Regularly attend and actively participate in meetings of the Technology Committee.
- Maintain regular communication with the District Technology Coordinator.
- Solve immediate problems with technology for teachers and students.
- Work with teachers in the building to develop technology applications in the classrooms.
- Research staff technology needs, new programs, usage rates of existing programs, and recurring problems or issues to improve District technology services.
- Provide individual and group training for teachers in various technology applications.
- Use a variety of mediums (i.e. e-mails, faculty meetings, demonstrations, classroom visitations, training sessions, etc.) to introduce teachers to new and/or different products and opportunities in the field of technology.
- Serve as the first line of defense for computer applications used in their buildings.
- Update and upload items from their building onto the District website.
- Administer Blackboard sites in their building.
- Maintain user account information in their buildings.
- Provide advice for purchases and the directions the District should move in the areas of technology.
- Participate actively in the development and implementation of the District Technology Plan.
- Maintain a log of their activities as Technology Consultant.

Appendix D: Elementary School Software

Software Title	Targeting
Accelerated Math	Math Grades 3-6; DO #1
Accelerated Reader	ELA Grades 1-6; DO #1
Adobe Photoshop Elements	DO #1; DO #3; DO #5
Bailey's BookHouse	ELA Grades K-2; DO #1; DO #5
Community Construction Kit	SS Grades Pre1-3; DO #1
Diorama Designer	SS Grades 3-5; DO #1
Early Literacy	ELA Grades 2-6; DO #1
Gizmos and Gadgets	Science Grades 4-6; DO #1
Graph Club	Math Grades 1-3; DO #4
Ice Cream Truck	Math Grades 4-6; DO #1
Inspiration	ELA Grades 2-6; DO #1; DO #3; DO #5
Internet Explorer	DO #1; DO #2; DO #3; DO #5
Kid Pix Studio Deluxe	ARL; ELA Grades K-6; Math Grades K-2; DO #5
Kidspiration	ELA Grades K-3; DO #4
Math Arena	Math Grades 5-6; DO #1
Microsoft Office 2000	ELA Grades K-6; DO #5
Mighty Math Calculating Crew	Math Grades 3-6; DO #1
Mighty Math Zoo Zillions	Math Grades 1-3; DO #1
Millie's MathHouse	ARL; Math Grades K-2: DO #1
Neighborhood Map Machine	ELA Grades 3-4; SS Grades 3-4; DO #5
Star Math	Math Grades 3-6; DO #1
Star Reading	ELA Grades 2-6; DO #1
Thinkin' Science	Science Grades K-3; DO #1
Type to Learn	ELA Grades 3-6; DO #1; DO #5

Appendix E: High School Software

Software Title	Targeting
Accelerated Math	Math Grades 7-12; DO #1
Adobe Acrobat Reader	DO #5
Adobe Go Live	ELA Grades 9-12; DO #1; DO #5
Adobe Illustrator	DO #1; DO #3; DO #5
Adobe InDesign	DO #1; DO #3; DO #5
Adobe Photoshop 8	DO #1; DO #3; DO #5
Adobe Photoshop Elements	DO #1; DO #3; DO #5
Adobe Premier	DO #1; DO #3; DO #5
Bridge Builder	DO #1; DO #5
Choices	DO #1; DO #3; DO #5
DreamWeaver	DO #1; DO #3; DO #5
ExamGen	DO #1; DO #3; DO #5
Graphical Analysis	Math; DO #1
Inspiration	ELA Grades 7-12; DO #1; DO #3; DO #5
Microsoft Office 2000	ELA Grades 7-12; Math Grades 7-12; DO #5
ModelSmart 3D	DO #1; DO #3; DO #5
STAR Math	Math Grades 7-12; DO #1
STAR Reading	ELA Grades 7-12; DO #1
Turbo Cad	DO #1; DO #3; DO #5
Typing Tutor 10	DO #1; DO #3; DO #5

Marathon Central School District Acceptable Use Policy and District Guidelines For all Voice, Video, and Data Systems

This document has been developed by the District Technology Team to govern and guide in the use of all voice, video, and data systems. All equipment is District property. Information or data created or stored on the District's computers or data systems is the responsibility of the individual whose name is assigned to the password. These systems include, but are not limited to: television monitors, satellite receivers, computers, electronic mail, servers, stored digital data, Intranets, and the Internet. All users accessing the computer network should not expect nor does the District guarantee privacy for any user of the District computer network. The District reserves the right to monitor all technology resource activity. All computerized files may be accessed by District officials or system administrators for any reason whatsoever. The Marathon Central School District provides these resources to promote educational excellence by facilitating sharing, innovation, and communication with the support and supervision of parents, administration, teachers, and support staff.

The District's equipment is for education and/or research use only and must be used in a manner consistent with the District's goals and purposes. With access to computers and people all over the world comes the potential availability of material that may not be considered to be of educational value in the context of the school setting. Proper behavior, as it relates to the use of technology resources, is no different from proper behavior in all other aspects of Marathon Central School activities. All users are expected to use the technology resources in a responsible, polite, and ethical manner. Use of the equipment which violates any aspect of District policy, the Student Discipline Code of Conduct or federal, state or local laws/regulations is strictly prohibited. The intent of this document is to give an overview of user responsibility, and to outline acceptable and unacceptable use of these resources without exhaustively enumerating all such responsibilities, uses and misuses.

District policies pertaining to accessing electronic information or communications sent or received at school as well as the risks associated with Internet access appear in the Student Handbooks and are published annually in the *Torchlight*. The policies are also posted in key locations throughout the schools. The use of the District's equipment is a privilege, not a right. With notice of policies as outlined above, **any person** using the District system has implicitly consented to adhere to all policies. Inappropriate use may result in disciplinary action, including suspension or cancellation of the privilege.

User Responsibility for Staff and Students

- * Staff and Students will comply with all existing school board policies as they may be interpreted to apply to technology resources.
- * Respect the privacy of other users. Do not obtain copies, or modify files, other data or passwords belonging to other users.
- * Comply with legal protection provided by copyright and license to programs, data, and documents.
- * Protect your password. You are responsible for anything done under your password. Sign on to the system only under your password.
- * Comply with the acceptable use policies of all technology resources to which the district has access.
 - * Conserve server resources. Save only what you need.

Acceptable

- * Use that encourages efficient, cooperative, and creative methods to perform the user's job duties or educational tasks.
- * Use related to instructional, administrative, and supervised extra-curricular activities.
- * Use of District technology resources for appropriate access to voice, video, and data systems, both locally and at other sites.

(Continued on next page)

Unacceptable

- * Providing, assisting in, or gaining unauthorized or inappropriate access to the District's technology resources, including any type of voice, video, or data information server. This includes disclosing others' passwords.
- * Activities that interfere with the ability of students/staff members to use the district's technology resources or other network connected services effectively.
- * Distribution of any material in such a manner that might cause congestion of the voice or data networks.
- * Creating, distributing, collecting, reviewing, downloading, displaying or otherwise gaining access to obscene, pornographic, abusive, harassing or threatening material using district technology resources.
- * Use of technology resources for a commercial, political, or profit-making enterprise.
- * Downloading, installing or using unauthorized software or tampering with hardware on any technology system.
- * Using the network to provide addresses, phone numbers or other personal information.

Consequences of Improper Use

Improper or unethical use may result in disciplinary actions consistent with existing District Policies. This may include revoked, limited or supervised access to district technology resources as well as referral to law enforcement agencies. The District will cooperate fully with local, state, or federal officials in any investigation concerning or relating to misuse of the district's technology resources.

**Marathon Central School District
Acceptable Use of Technology Regulation
District Guidelines
For Students, Staff and Other Users**

Use of hardware and software is viewed as a privilege. A level of trust and responsibility is assumed, and it is anticipated that all who use the technology will adhere to that expectation.

Respect the Software You Are Using:

- Keep the area clean. Food, beverages, etc., should not be near hardware.
- Leave all connections alone. Do not change or remove cables or plugs.
- Do not place foreign objects into the hardware (drives, mouse, keyboard, openings, etc.).
- Be careful with the hardware.

Respect the Software You Are Using:

- Protect your disk so that it works in the hardware. Keep it clean. Do not bend it. Do not allow it to become de-magnetized.
- Do not install software onto any system.
- Do not store more information on the file server than is necessary.
- Obey copyright laws.
- Protect your password. Keep it to yourself. You are responsible for anything done under your password.
- Do not retrieve, display or distribute inappropriate messages or pictures. Harassing students and staff will not be tolerated.
- Information stored on technology is not private and may be viewed or traced by authorized personnel.

Failure to follow guidelines, policies and regulations may result in disciplinary measures including, but not limited to, restriction or suspension from technology access and the use of law enforcement agencies.

**Marathon Central School District
Acceptable Use of Internet Regulation
District Guidelines
For Students, Staff and Other Users**

Privileges

The use of the Internet is a privilege, not a right.

Inappropriate use may result in disciplinary action, including but not limited to, cancellation of the privilege.

You have the full responsibility for the use of your account.

Under no conditions should you share your password with any other person.

All recipients of accounts must participate in training pertaining to the proper use of the network.

District policies pertaining to accessing electronic information or communications sent or received at school as well as the risks associated with Internet access appear in the Student Handbooks and are published annually in the *Torchlight*. The policies are also posted in key locations throughout the schools. With notice of policies as outlined above, **any person** using the District system has implicitly consented to adhere to all policies.

Inappropriate use may result in disciplinary action.

Netiquette

You are expected to abide by the generally accepted rules of network etiquette ("Netiquette"). These include (but are not limited to) the following:

Be polite. Do not get abusive in your messages to others.

Use appropriate language. Do not swear, use vulgarities or any other inappropriate language. Illegal activities are strictly forbidden.

Do not reveal your personal address, phone number or credit card number or those of students or colleagues.

Note that electronic mail ("e-mail") is not private. People who operate the system have access to all mail.

Messages relating to or in support of illegal or illicit activities may be reported to the authorities.

Do not use the network in such a way that you would disrupt its use by others.

Do not retrieve, display or distribute inappropriate messages or pictures. Harassing students and staff will not be tolerated.

All communications and information accessible via the network should be assumed to be private property.

Copyright laws apply.

Failure to follow these and other guidelines, policies and regulations may result in disciplinary measures including, but not limited to, restriction or suspension from technology access and the involvement of law enforcement agencies.

**Marathon Central School District
Acceptable Use of School Web Pages Regulation
District Guidelines
For Students, Staff and Other Users**

All district web pages:

- Must be pre-approved by the Technology Committee and the Administration.
- Must conform to Marathon Central School District's Acceptable Use of Technology Policy No. 4526.
- Must be consistent with the educational objectives of Marathon Central School District.
- Which post any types of student work require written parental approval.
- May not include any personally identifiable information without written parental consent OR unless previously published. "Personally identifiable information" includes, but is not limited to, student names, address, telephone number, email address, or the names of other family members.
- Will only post student pictures or audio clips
- Which have been previously published or will be published in the Torchlight OR
- Which have written parental approval for each and every student in the picture OR
- In which students are not identified.
- May not include personal information about employees may be published only with their written permission. This includes telephone number, e-mail address and picture.
- May not endorse non-educational links.
- Which transmit or link any material that is not consistent with the guidelines established in Policy No. 4526 are prohibited. This includes, but is not limited to, copyrighted material, threatening, derogatory, harassing or obscene material, material protected by trade secret, and material violating state or federal regulations.
- Created by students and student organizations on the District's computer system will be subject to the same treatment as are district-sponsored publications such as school newspapers. Accordingly, the District reserves the right to exercise editorial control over such publications.

**Marathon Central School District
Acceptable Use of E-Mail Regulation
District Guidelines
For Students, Staff and Other Users**

E-mail Acceptable use Policy for Employees, Volunteers, Parents, and Students

When used appropriately, e-mail is a quick and effective means of communication, and we expect all professional employees to make regular use of the school e-mail service. Used inappropriately, however, e-mail may lead to miscommunication, legal liabilities, conflicts of interest, harassment and abuse. For this reason, the Board of Education for the Marathon Central School District has established this policy to distinguish appropriate and allowable uses of the school e-mail system from those uses that are unacceptable and prohibited.

- All new employees will have a school e-mail account established in their name. Each employee is responsible for the security of their individual password to access their e-mail account.
- Professional employees are expected to check their e-mail on a regular basis, as e-mail may be used to communicate important events, information and requests necessary for the smooth operation of the school.
- The school e-mail is intended for business use. Personal use of the school e-mail account should be reasonable and not interfere with an employee's job and responsibilities to the school.
- School e-mail may be used on an occasional basis to share information about community and school resources, events, services, and opportunities. Only occasional and appropriate humorous or inspirational stories are allowed.
- The school e-mail shall not be used to regularly promote an individual's businesses or financial gain.
- School e-mail shall not be used to advocate political agenda(s), political candidate(s), or religious beliefs.
- "Chain letters" are not to be distributed via school e-mail.
- The school e-mail shall not be used to denigrate, humiliate, nor publicly criticize another member(s) of the school or community.
- Users are expected to exercise restraint in their use of e-mail to criticize or debate controversial issues, policies, actions, or other individuals. While such discussion is essential to the health, progress, and well-being of the District and its students, e-mail is not an appropriate vehicle for the resolution of conflict. When conflicts do arise, participants are encouraged to use e-mail or another means of communication to schedule a face-to-face meeting(s) to discuss the issue.
- Student and family confidentiality must be maintained throughout all school communication, including school e-mail. Individual student names shall not be used when dealing with a critical or confidential communication.
- Pornographic jokes or language and swearing of any kind is prohibited in school e-mail.
- School employees are expected to use complete sentences and conventional grammar in all school e-mail communications.
- Every school e-mail has the potential to become a public document and should be treated as such. E-mail users shall have no expectation of privacy in their e-mail communications, as e-mails may be subpoenaed by a court of law or may be viewed by school officials at any time. Employees should, therefore, never send an e-mail that could not be re-posted in a public place.

E-Rate & Technology Plan Evaluation Rubric

This rubric is used by staff members at the Central New York Regional Information Center to review technology plans for E-Rate compliance. Please list the page numbers in your plan where each of the 5 required areas can be found, then attach a copy of this document as the last section of your technology plan. We will use the following key when reviewing your plan, please use it as a guide.

Level 1 = Does Not Meet Requirement

Level 2 = Meets Requirement

Level 3 = Exceeds Requirement

Requirement 1 – Technology Program Assessment

An assessment of telecommunications, hardware, software, professional development, staffing, and other services that are needed to improve education and/or library services.

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- Level 1: An assessment is not included, fails to address areas of need, and/or has little connection to the planned purchases outlined in the budget.
- Level 2: The assessment identifies specific strengths and areas of need, and has a logical connection to the planned purchased outlined in the budget.
- Level 3: The assessment includes detailed inventory lists, evaluation data on many aspects of the technology program, staff/student survey data, and a direct tie to the planned purchases outlined in the budget.

Requirement 2 – Goals & Strategies

The establishment of clear goals and realistic strategies for using instructional technologies and technology services to improve education and/or library services.

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- Level 1: Goals and strategies are not included or fail to identify the major objectives of the plan.
- Level 2: A list of specific goals and strategies is included, with general time frames and other details about how the goals will be implemented.
- Level 3: A comprehensive list of goals is included, with specific target dates for completion, persons responsible, strategies/action steps for implementation, and evaluation measures to determine success.

Requirement 3 – Professional Development

A professional development strategy that ensures staff members know how to use planned technologies to improve education and/or library services.

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- Level 1: Professional development is not mentioned or has no tie to the technology goals set forth in the plan.
- Level 2: A professional development strategy is included which lists specific steps for implementation and has a direct tie to the goals set forth in the plan.
- Level 3: A comprehensive professional development strategy is included which details implementation procedures, staffing needs, major objectives, intended outcomes, and has a direct link to the goals set forth in the plan. A copy of the district’s professional development plan is attached as an appendix.

Requirement 4 - Budget

A detailed budget of planned expenses for acquiring and maintaining hardware, software, professional development, telecommunications, staff salaries, BOCES services, and other items that will be needed to implement the technology plan strategy.

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- Level 1: A budget is not included, fails to list each year of the plan, or fails to include all of the major budget areas listed above.
- Level 2: A budget for each year of the plan is included and lists planned expenditures in all of the major budget areas listed above. The planned expenditures have a clear tie to the goals set forth in the plan. E-Rate eligible expenses are denoted.
- Level 3: N/A

Requirement 5 – Evaluation Process

An evaluation process enabling the district to monitor progress toward the specified goals and make mid-course corrections as needed in response to new developments and opportunities that arise.

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- Level 1: An evaluation process is not included or fails to identify a clear process for reviewing and updating the plan.
- Level 2: An evaluation process is included that lists specific steps for reviewing and updating the technology plan including persons/committees involved.
- Level 3: N/A