

MALONE CENTRAL SCHOOL DISTRICT
MALONE, NEW YORK 12953



DISTRICT TECHNOLOGY PLAN

July 2009 - June 2012

CREATED AND ENDORSED
BY THE

District Technology Planning Committee

Board Approved 9/22/09

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PREFACE

There are certainly many good reasons for school districts to create and maintain plans for the use of computer and other emerging technologies. First, each public school district in New York State is required to have such a plan as a matter of practice. Schools may also maintain eligibility for specific state and federal funds, such as the e-rate. Certain forms of aid reimbursement also require that a plan be developed, approved, and kept on file. Technology plans also give the school community a sense of where the district is headed and which specific forms of technology are priorities for implementation.

Committee members agree that meeting the needs of our students by preparing them to be productive and competent lifelong learners is paramount. To say that technology has saturated the world in which we live, falls short of the realization that proficiency in the use of technology is absolutely essential. Before any plan is constructed, an institution must clearly contemplate what impact it hopes to make on the academic success of the students that it graduates. The sole use of technology for “technology’s sake” is improper. Rather, each implementation of educational technology is only to be used as a tool to assist in reaching curricular goals. Students must be able to analyze critically an assigned task, define a viable course of action, and select from the available tools (including technology) to reach the intended outcome. Our nation’s primary resource for the new millennium is information technology. In recognition of the scope and importance of information literacy, the committee has constructed this Plan using a sound rationale that reflects intended learner outcomes in each component created.

To achieve our goal, as a district, we acknowledge a need for the following:

- A Technology Plan that demonstrates what we wish to achieve and is supported by the faculty, administration, Board of Education, and community;
- Sufficient monetary resources and budgetary support to achieve our technology goals;
- Adequate Instructional Technology (IT) staffing resources necessary to implement this Plan;
- Annual review and revision of this Plan; and
- A significant amount of training and support for classroom technology integration and for clerical and administrative use of technology.

Preparing our students for a rapidly changing future is only the beginning of what the committee hopes to accomplish. We must go beyond the present and prepare our students to use available technology resources as they prepare themselves for a future that we cannot yet envision.

Respectfully submitted on behalf of the Technology Planning Committee,
Mark Dalton, Instructional Technology Coordinator, Committee Co-Chairperson
Donna Bushey, Assistant Superintendent, Committee Co-Chairperson

Executive Summary

Mission Statement

The MISSION of the Malone Central School District is to produce a healthy, responsible, productive citizen who has acquired learning and is capable of contributing to a global community. We will accomplish this by providing an effective, innovative, dedicated, motivated staff using a developmentally appropriate, relevant curriculum in an exciting, interactive environment conducive to learning by students prepared to learn.

Technology Mission Statement

Informational resources are changing the way that we learn, think, and live. Recognizing the need for innovation, the Malone Central School District will use technology to enable students, staff, and the community to enhance overall achievement in support of the Mission Statement of the District.

Introduction and Background

Like many schools, the Malone Central School District has found that the Age of Information, brought on by the explosive growth of computer and Internet technology, offers great potential for our students. It also has its share of pitfalls. Schools must exercise caution in selecting from the vast array of available choices. The comparatively rapid obsolescence of computer equipment makes careful planning even more important. We must, therefore, plan carefully to make the best use of district dollars and still provide our students with the information and skills necessary to fulfill our Mission Statement.

Vision Statement

The vision of the Malone Central School District technology plan is curriculum based. Technology is a key component of an active learning environment, extending and deepening students' experiences. By carefully choosing the appropriate technology to support learning, educators create a learning environment that encourages collaboration, constructivism, and higher order thinking skills. Technology is not used as an end in itself, but rather to support the teaching and learning process. Implementation of the technological infrastructure and support systems necessary to empower staff in every classroom and every school to enhance the individual learning of every student drives this plan. In a lifetime of learning and employment, technology will be used to connect Malone students and staff to each other and to the larger world to make learning and educational management more relevant and efficient in their quest.

Information Technology Assessment

The Malone Central School District has been able to make significant gains in providing modern technology tools throughout the district. The Davis building project and the Franklin Academy building project and an installment purchase plan provided significant funding infusions that advanced the state of IT resources throughout the district.

Franklin Academy

A strong network is in place utilizing three interconnected Data Communication and Server Rooms. A fiber optic connection to the North Franklin Education Center is also in place. External communication is through a 1Gb line to NERIC. Ninety nine computers are deployed in seven labs. There are forty presentation stations and six Interactive Learning Systems¹ in use in classrooms. Eighteen classrooms still lack presentation stations and thirty-nine (62%) classrooms do not meet the “two computers per classroom” minimum that the district has established as a goal. Several are by teacher choice.

The FA library/media center has twenty-three computers and a mobile presentation that may be signed out and a presentation center in its computer lab.

A state-of-the-art Distance Learning facility is in use at FA, expanding course opportunities for students.

Middle School

A Middle School network utilizes three interconnected Data Communication and Server Rooms. External communication is through a 400Mb fiber optic line to NERIC. Ninety nine computers are deployed in five labs. There are two mobile presentation stations for use in classrooms. Twenty (37%) classrooms do not meet the “two computers per classroom” minimum that the district has established as a goal. There are two presentation centers, five Interactive Learning Systems, and two other classrooms with smartboards.

The Middle School library/media center has eleven computers and one mobile presentation station.

Flanders

The Flanders network is supported by one Data Communication and Server Room. External communication is through a 100Mb fiber optic line to the Middle School. Twenty computers are deployed in one lab. There is one fixed presentation station in the lab. There is one mobile presentation station for use in classrooms. All classrooms meet the “two computers per classroom” minimum that the district has established as a goal except for one classroom where the teacher requested that the second computer be removed.

¹ An *Interactive Learning System* is a presentation station combined with a SmartBoard™.

The Flanders library/media center contains six computers and one mobile presentation station that may be signed out.

St. Joseph's

The St. Joseph's network is supported by one Data Communication and Server room. External communication is through a 100Mb fiber optic line to the Middle School. Twenty-one computers are deployed in one lab. There are two mobile presentation stations. All classrooms meet the "two computers per classroom" minimum that the district has established as a goal.

The St. Joseph's library/media center has eight computers and one mobile presentation station that may be signed out.

Davis

A strong network is in place utilizing two interconnected Data Communication and Server Rooms. External communication is through a 100Mb fiber optic line to the Middle School. There are twenty-four computers in one computer lab at Davis. There are two mobile presentation stations for use in the classrooms. Three (5%) classrooms do not meet the "two computers per classroom" minimum that the district has established as a goal.

The Davis library/media center contains eleven computers and one mobile presentation station that may be signed out.

Bus Garage

The bus garage has three computers connected to the district network via wireless connection.

Maintenance Building

The maintenance building has one computer connected to the district network via wireless connection.

Current inventory of equipment and services

Includes District Office, Business Office, IT,

Principals and Secretaries, FA Administrators, Guidance, Custodians, Nurses

District and IT Offices Administrative	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Computers								
Core 2 Duo				35				44
Core Duo				4			4	
Pentium 4	12			61				
Pentium 3				2				
Pentium 2								
Celeron								
Pentium 233 and lower								
Presentation Stations (cabinet, amplifier, VCR, computer, projector)								
Interactive Learning Systems (cabinet, amplifier, VCR, computer, projector, SmartBoard)								
Number of computers listed above that are Internet ready	12			96				
District and IT Offices								
Peripheral devices	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Printers				18				
Scanners				4				
Assistive/Adaptive devices								
Digital Cameras								
TV monitors				1				
DVD Players								
DVD/CD Recorders								
SmartBoards								
VCRs/Laser disk players								
Data Projectors								
Overhead Projectors								
Video Cameras								
Software								
Windows Vista				11			4	44
Windows XP	12			85				

District and IT Offices Administrative	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Windows 2000								
Windows 98								
Windows 95								
Microsoft Office	12			96				
Microsoft Works								
Network Equipment								
Hubs				2				
Routers								
Servers				2				
Switches				6		6		
Number of rooms wired for internal connections	ALL	ALL	ALL	ALL	ALL			
Telecommunications Links								
Full or fractional T1								
DS-3								
Dedicated cable/microwave								
Fiber	X	X	X	X	X			
WIFI Bridge				2				

Davis Elementary School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Computers								
Core 2 Duo	24	73	11					12
Core Duo							1	
Pentium 4		3	1		11			
Pentium 3			1					
Pentium 2								
Celeron								
Pentium 233 and lower								
Presentation Stations (cabinet, amplifier, VCR, computer, projector)		2 mobile	1 mobile			2		
Interactive Learning Systems (cabinet, amplifier, VCR, computer, projector, SmartBoard)		6				2	4	2
Number of computers listed above that are Internet ready	24	84	13		12			
Peripheral devices								
Printers		38			3	4	4	
Scanners		4			1			
Assistive/Adaptive devices								
Digital Cameras		2						
TV monitors								
DVD Players			1		1			
DVD/CD Recorders								
SmartBoards							4	
VCRs/Laser disk players					2			
Data Projectors							4	
Overhead Projectors	2	66	2					
Video Cameras								
Software								
Windows Vista								12
Windows XP	24	84	13			13	4	
Windows 2000					12			
Windows 98								
Windows 95								
Microsoft Office	24	84	13		12	No Net Gain	No Net Gain	No Net Gain

Davis Elementary School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Microsoft Works								
Network Equipment								
Hubs								
Routers					0			
Servers					2			
Switches					7		7	
Number of rooms wired for internal connections	ALL	ALL	ALL	ALL	ALL			
Telecommunications Links								
Full or fractional T1								
DS-3								
Dedicated cable/microwave								
WIFI Bridge								
Fiber	X	X	X	X	X			

Flanders Elementary School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Computers								
Core 2 Duo		39	6		1			28
Core Duo								
Pentium 4	22	2			3			
Pentium 3			1					
Pentium 2								
Celeron								
Pentium 233 and lower								
Presentation Stations (cabinet, amplifier, VCR, computer, projector)		1 mobile	1 mobile					
Interactive Learning Systems (cabinet, amplifier, VCR, computer, projector, SmartBoard)	1	10				2	2	2
Number of computers listed above that are Internet ready	23	52	7		4			
Peripheral devices								
Printers	1	33	2		2			
Scanners					1			
Assistive/Adaptive devices								
Digital Cameras								
TV monitors								
DVD Players					1	4	2	2
DVD/CD Recorders					1			
SmartBoards		3						
VCRs/Laser disk players	1				1			
Data Projectors		3						
Overhead Projectors	1	30	2					
Video Cameras								
Software								
Windows Vista								
Windows XP	23	52	7					
Windows 2000		1						
Windows 98								
Microsoft Office	23	52	7					
Microsoft Works								
Windows 95								

Flanders Elementary School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Network Equipment								
Hubs								
Routers					1			
Servers					2			
Switches					3	1		
Number of rooms wired for internal connections	ALL	ALL	ALL	ALL	ALL			
Telecommunications Links								
Full or fractional T1								
DS-3								
Dedicated cable/microwave								
WIFI Bridge								
Fiber	X	X	X	X	X			

St. Joseph's Elementary School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008- 2009	2009- 2010	2010- 2011
Computers								
Core 2 Duo	21	32	8					4
Core Duo								
Pentium 4					4			
Pentium 3			1					
Pentium 2								
Celeron								
Pentium 233 and lower								
Presentation Stations (cabinet, amplifier, VCR, computer, projector)		1 mobile	1 mobile					
Interactive Learning Systems (cabinet, amplifier, VCR, computer, projector, SmartBoard)		8				2	2	2
Number of computers listed above that are Internet ready	21	41	9		4			
Peripheral devices								
Printers	1	20	2	2		4		
Scanners			1					
Assistive/Adaptive devices								
Digital Cameras								
TV monitors		14						
DVD Players					1	4	2	2
DVD/CD Recorders								
SmartBoards		2						
VCRs/Laser disk players		10			3			
Data Projectors		2				1		
Overhead Projectors	2	14	1					
Video Cameras								
Software								
Windows Vista								4
Windows XP	21	41	9		4	1		
Windows 2000								
Windows 98								
Windows 95								
Windows 3.1								
Microsoft Office	21	41	9		4			

St. Joseph's Elementary School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008- 2009	2009- 2010	2010- 2011
Microsoft Works								
Network Equipment								
Hubs								
Routers								
Servers					2			
Switches					4	1	3	
Number of rooms wired for internal connections	ALL	ALL	ALL	ALL	ALL			
Telecommunications Links								
Full or fractional T1								
DS-3								
Dedicated cable/microwave								
WIFI Bridge								
Fiber	X	X	X	X	X			

Malone Middle School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Computers								
Core 2 Duo	44	56	11					93
Core Duo								
Pentium 4	54	39			2	20		
Pentium 3								
Pentium 2								
Celeron								
Pentium 233 and lower								
Presentation Stations (cabinet, amplifier, VCR, computer, projector)	1	1 mobile	1 mobile					
Interactive Learning Systems (cabinet, amplifier, VCR, computer, projector, SmartBoard)		10				2	3	2
Number of computers listed above that are Internet ready	99	106	12					
Peripheral devices								
Printers	2	60	4	8	2	4		
Scanners	1		1					
Assistive/Adaptive devices								
Digital Cameras								
TV monitors		30			1			
DVD Players	1				1	4		
DVD/CD Recorders								
SmartBoards		2					3	
VCRs/Laser disk players	1	20			1			
Data Projectors	1	3						
Overhead Projectors	2	36						
Video Cameras								
Software								
Windows Vista							3	93
Windows XP	99	106	11		2	1		
Windows 2000			1					
Windows 98								
Windows 95								
Microsoft Office	99	106	16		2			
Microsoft Works								

Malone Middle School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008-2009	2009-2010	2010-2011
Network Equipment								
Hubs								
Routers					1			
Servers					5	2		
Switches					7			
Number of rooms wired for internal connections	ALL	ALL	ALL	ALL				
Telecommunications Links								
Full or fractional T1								
DS-3								
Dedicated cable/microwave								
WIFI Bridge								
Fiber	X	X	X	X	X			

Franklin Academy High School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008- 2009	2009- 2010	2010- 2011
Computers								
Core 2 Duo	63	47	23					98
Core Duo								
Pentium 4	38	80	3		2		4	
Pentium 3		3						
Pentium 2								
Celeron								
Pentium 233 and lower								
Presentation Stations (cabinet, amplifier, VCR, computer, projector)		52	1 mobile 1 other					
Interactive Learning Systems (cabinet, amplifier, VCR, computer, projector, SmartBoard)		9				2	4	
Number of computers listed above that are Internet ready	101	139	27		2			
Peripheral devices								
Printers	12	57	3	20		6		
Scanners			2	3				
Assistive/Adaptive devices								
Digital Cameras	1							
TV monitors		20	2	1				
DVD Players		3	1					
DVD/CD Recorders			2					
SmartBoards						2	4	
VCRs/Laser disk players		62	2	1				
Data Projectors						3	2	2
Overhead Projectors		52	2					
Video Cameras	1		2					
Software								
Windows Vista								
Windows XP	101	139	27		2			
Windows 2000								
Windows 98								
Windows 95								
Microsoft Office	101	139	27		2			

Franklin Academy High School	Computer Labs	Classrooms	Library or Media Ctr.	Admin. Offices	Other Locations	Planned Future Acquisitions		
						2008- 2009	2009- 2010	2010- 2011
Microsoft Works			1					
Network Equipment								
Hubs					1			
Routers					1			
Servers					7			
Switches					22	1		
Number of rooms wired for internal connections	ALL	ALL	ALL	ALL	ALL			
Telecommunications Links								
Full or fractional OC1								
DS-3								
Dedicated cable/microwave								
WIFI Bridge								
Fiber	X	X	X	X	X			

Technology Goals and Implementation Activities

Goal 1: Student Performance Indicators

The district should establish learner outcomes for technology to be incorporated into all curricular areas. These outcomes will encompass technology fundamentals, information access and interaction, ethics and etiquette, and the application and communication of learned skills. Wherever possible, learners will experience the direct correlation of technology to the world of work.

Rationale: It is clear that there are certain “fundamentals of technology” that all Malone students need. Providing these fundamentals to all students will be an important step in building technology knowledge. Beyond the fundamentals, there will be other learner outcomes that will need to be incorporated into other curricular areas.

By establishing these “learner outcomes” and performance indicators, students and parents will know what is expected in the area of technology. Also by incorporating these performance indicators into curricular areas, it will be clear that the emphasis is on the curriculum and not the technology being used.

The Technology Planning Committee has developed performance indicators for Pre-Kindergarten – 12th grade that reflect our vision and provide a framework for determining the necessary goals for hardware, software, personnel /staffing, and budgeting.

Educational technology is of little value if it does not prepare the learner for the world of work, which waits after formal schooling ends. Therefore, students should have first-hand knowledge of how technology is used in the workplace.

As an educational institution we need to make learning more relevant to the students. We can do this by providing access to the World Wide Web in every classroom. We can integrate the web and instructional technology into lesson plans. Another way is to provide state of the art computers and software for students to use. For example, students should learn to prepare reports or documents using a currently popular word processing application.

The implementation of this plan is expected to provide the following benefits:

- The quality of assistance we offer students will improve.
- The relevance of learned skills to the workplace will increase.
- Students will become more skillful in acquiring information and more adaptable to change.
- The quality of student and teacher-created presentations and materials will improve.
- Information will be current and accessible.

- Decisions will be based on accurate and current data.
- Communications will improve.

Activities:

- Annual review of the student performance indicators by the Technology Planning Committee (See below for current version)
- Presentation of student performance indicators to all instructional staff no later than October of each school year through the use of staff development days or faculty meetings.
- Incorporation into lesson plans and instruction throughout the year

**Profiles for Technologically Literate Students
Standards and Performance Indicators**

Technology Standards:

1. Basic operations and concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

2. Social, ethical, and human issues

- Students understand the ethical, cultural, and societal issues related to technology.
- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

3. Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.

4. Technology communications tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

5. Technology research tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

6. Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

Performance Indicators

The numbers in parentheses refer to the corresponding technology standard.

Grades Pre-kindergarten- 2

All students should demonstrate the following performance indicators prior to completion of Grade 2:

1. Use input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. monitor, printer) to successfully operate computers and other technologies. (1)
2. Use a variety of media and technology resources such as CD ROMs and audiotapes for directed and independent learning activities. (1, 3)
3. Use developmentally appropriate multimedia resources (e.g. interactive books, educational software, and elementary multimedia encyclopedias) to support learning. (1) Work cooperatively and collaboratively with peers and others when using technology in the classroom. (2)
4. Demonstrate positive social and ethical behaviors when using technology. (2) Practice responsible use of technology systems and software. (2)
5. Gather information and communicate with others online with support from teachers or student partners. (e.g. share data, create web pages) (4)

GRADES 3-5

All students should demonstrate the following performance indicators prior to completion of Grade 5:

1. Have demonstrated performance indicators for grades PK-2.
2. Students will have a working knowledge of touch-typing. (1)
3. Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (3, 4, 5, 6)
4. Use technology resources (e.g. computers, calculators, videos, and educational software) for problem solving, research, self-directed learning, and extended learning activities. (4, 6)
5. Create developmentally appropriate multimedia products (cards, stories, Kidpix, HyperStudio, Inspiration, and Print shop banners) with support from teachers or student partners. (3)

GRADES 6-8

All students should demonstrate the following performance indicators prior to completion of Grade 8:

1. Have demonstrated performance indicators for grades PK-2 and 3-5.
2. Use draw and paint programs to create original illustrations and diagrams and to modify clip art and scanned illustrations. (6)
3. Operate a digital camera with the opportunity to edit images electronically. (6, 7)
4. Understand current technological terms in order to follow instructions on using technology.
5. Use manuals and tutorials for learning new software. (8)
6. Access networked databases and other resources to gather information and utilize it to generate reports in several of the content areas. (7)
7. Assess the validity of data available from technological sources. (10)
8. Understand and comply with the District's Acceptable Use Policy. (3)
9. Use on-line resources (e.g. on-line discussions, and web environments) to access information, communicate with others, and participate in collaborative problem-solving activities in support of direct and independent learning, as well as pursuing personal interests. (4, 5, 6)

GRADES 9-12

All students should demonstrate the following performance indicators prior to completion of Grade 12:

1. Have demonstrated performance indicators for grades PK-2, 3-5, and 6-8.
2. Make informed choices among technology systems to decide which best serve the students' needs. (1, 2, 3)
3. Show and advocate an understanding of copyright, ethics, and plagiarism. (2)
4. Routinely use technology to meet personal and educational needs. (6)
5. Be aware of technology-based options for lifelong learning, including distance and distributed education. (3, 5)
6. Use technology to collaborate with others to produce creative works. (e.g.. creating web pages, slide shows, etc.) (3, 4, 5, 6)

Goal 2: Infrastructure

Based on the current needs assessment, the necessary hardware and software will be installed to provide the district with a highly functional network capable of carrying various necessary volumes and types of data. We will build an integrated information system that will allow every member of our educational community to access information resources; manipulate data, graphics, text, video, and sound; and communicate at any time, in any place, and on any topic with ease and efficiency.

Rationale: As with any project, incorporating technology into the Malone Central School District will require a certain amount of infrastructure be put in place for the effort to be successful. In the case of technology, the requirements may be for the district to establish what kind of interconnecting of schools, personnel, students, and community it wants to accomplish. The establishment of this infrastructure would provide a “road map” for purchases, budgeting, and assist in establishing priorities. The infrastructure will be flexible enough to allow the district to accomplish all its goals in technology, yet allow flexibility in the means by which those goals are accomplished.

Activities: **Build a district-wide information infrastructure capable of carrying the necessary volume of video, text, data, graphics, and voice at high speeds.**

- Provide for a minimum of two workstations per classroom by June 2009.
- Guarantee capacity and access during peak times and minimal downtime.
- Develop a plan for conversion technology, such as high definition interactive television (HDTV) by December 2008.

Activities: **Develop an information system that is highly functional, adaptable to change, yet has great ease of use.**

- Distributes such resources as library card catalogs, networked CD-ROMs, and electronic reference materials from school and home.
- Provides network security and protection of personal types of information.
- Automates routine record-keeping tasks, such as a student record database, student assessment software, networked grading and attendance programs, etc.

Activities: **Provide technology resources and equipment in such a way as to make them pervasive and convenient.**

- Equip each instructional and administrative area with a desktop computer adequate to meet software needs and planned replacements (an ongoing process).
- Provide easy access to technology resources such as video projection devices, digital cameras, scanners, multimedia devices, TVs, VCRs, CD/DVD recorders, DVD players, digital storage devices, etc.

- Planned replacements/upgrades will occur on a six-year schedule with approximately eight hundred fifty (850) computers deployed throughout the district, this will necessitate the purchase of one hundred and fifty (150) computers each year on average.

Goal 3: Staff Development

Provide staff development options that allow the Malone Central School District staff to be properly trained to provide support to students who are using the district technology resources.

Rationale: It is clear that any technology initiative will need to have the support of the of the Malone Central School District staff. This is particularly important because of the decision to let the curriculum dictate technology instead of technology dictating curriculum. It is therefore important that we establish what is critical for all staff to know and to provide multiple opportunities for them to receive this training. It is also important that we support those staff members who need more than the basics by offering a more in-depth learning opportunity. Staff members may receive one in-service credit for the completion of every ten hours of approved training. The Technology Committee promotes the *Minimum Teacher Competencies in Technology* (see Appendix A)

Activity:

- The Technology Committee will review current courses for relevancy by June of each school year.

In the Fall of each year, the District staff will receive a survey. The information gathered through the survey will be used by the District Technology Committee in two main ways.

First, it will be used to determine whether staff have access to technology which is adequate in seeking to meet the Mission and Vision Statements found within this plan. This data will allow trouble spots to be identified, and solutions to be planned.

Second, the survey will be used to gauge the level of proficiency among the staff with pieces of hardware and software deployed within the district, and give staff the opportunity to identify technologies for which they would like training. The District Technology Committee will use the results of this portion of the survey to plan future staff development offerings.

Activity: Establish a set of core classes that support the minimum needs of all district employees, establish guidelines for their completion, and create options for their delivery. Through the guidance of the Technology Committee and the Professional Development Committee, the courses will be established. This will be a two-year project from September, 2008 to September 2009.

The core classes are the subject areas that would give each teacher the training necessary to deliver the level of technology instruction applicable to the individual grade/subject area. Additional classes to help individual teachers to further their knowledge will be scheduled and determined by need and interest. The district must utilize multiple resources in order to offer the variety and number of courses that must be offered. Possible instructors should include any of the following:

- The Instructional Technology Coordinator
- Teachers who have experience using special hardware or software, both from inside and outside the district.
- Instructors from the Adirondack Teacher Center.
- Instructors from Franklin-Essex-Hamilton BOCES.
- Building Level Instructional Technology Assistants
- Consultant services, which can provide training not otherwise available.

Presenters will be compensated for their services.

Once the courses are established, the Instructional Technology Coordinator monitors and provides feedback to the Assistant Superintendent.

Activity: Establish an additional set of technology classes to assist staff with other needs they may have. No computer curriculum can be static. New courses or other training must be continuously planned and offered in order to take advantage of the ever-changeable world of computer hardware and software. All new courses and other training options should fall into the following general areas:

- Computer hardware, including peripherals
- Operating systems, such as Windows 2000/XP
- Networking operating systems such as Windows 2000

Activity: Provide direct assistance to teachers in their classrooms.

- *Instructional software for use with students in the classroom.* This should be coordinated with the software choices made by the District software evaluation committee. This will be reviewed annually with recommendations for requisitions to be used in the budget process.

- *Administrative software.* As the district requires that more and more student data be keyed into computer databases from networked computers, training must be implemented to achieve a smooth transition to the new software. Each year the administrators will review the available software and provide requisitions for the budget process.

Goal 4: Reduce Administrative Paperwork

Educators and administrators will have access to technologies that provide for the maintenance, reporting, and analysis of student and administrative data and that reduce redundant paperwork.

Activity:

- Train staff on new software (an on-going process).
- Build and maintain a unified student database; distribute it as needed (an on-going process).
- Provide e-mail accounts for staff. Train staff to use their e-mail accounts. Encourage the use of e-mail accounts instead of paper.

Goal 5: Budget

Establish a 3-year technology budget subject to annual review.

Rationale: By establishing an ongoing budget goal, all stakeholders will know in advance what will be spent on technology and when it is scheduled to be spent. The budget will also be reviewed annually to make any adjustments needed. Budgeting will also allow for a more proactive process of bidding for equipment purchases and technology services for the district.

Activity:

- Develop a budget and revise annually. (See current version in the plan.)
- Relocate or dispose of older equipment as appropriate when new equipment is purchased. This will be done on an ongoing process.

Malone Central School District Proposed Technology Budget 2009-2010

Item	Quantity	Cost	Total
Computer Hardware:			
Replacement Computers/Upgrades	60	\$1000	\$60,000
Additional Computers	20	\$1000	\$20,000
Replacement Servers	3	\$5000	\$15,000
Presentation Stations (cabinet, amplifier, computer, VCR, projector)	8	\$2500	\$20,000
Printers	15	\$600	\$9,000
Data Projectors (separate from presentation stations)	14	\$800	\$11,200
SmartBoards	8	\$1,100	\$8,800
Subtotal			\$144,000
AV Equipment – Repairs:			
	-	\$1,500	\$1,500
Computer Supplies:			
Ink/toner/cables/photoprint/incidentals	-	\$35,000	\$35,000
Software:			
Licenses for new and existing software	-	\$42,500	\$42,500
AV Supplies:			
DVD/VCR Combo Players	10	\$120	\$1,200
DVD/CD burners	6	\$250	\$1,500
Digital Cameras	6	\$250	\$1,500
Spare bulb for distance learning	1	\$600	\$600
Replacement data projector bulbs	10	\$350	\$3,500
Document Scanners	6	\$250	\$1,500
Misc	-	\$6,400	\$6,400
Subtotal			\$16,200
Telephone Services:			
Centrex Lines	9	\$2.50 per line, per month	\$270
Other:			
Staff development stipends/in-service/software	-	\$10,000	\$10,000
Furniture (standup presentation centers, computer workstations and desks)	-	\$12,000	\$12,000
Subtotal			\$22,000
Total			\$261,470

Malone Central School District Proposed Technology Budget 2010-2011 *

Item	Quantity	Cost	Total
Computer Hardware:			
Replacement Computers/Servers/Printers (purchased with funds from the NERIC IP)	500	\$900	\$450,000
Replacement Servers	3	\$5000	\$15,000
Presentation Stations (cabinet, amplifier, computer, VCR, projector)	8	\$2000	\$16,000
Printers	8	\$500	\$4,000
Data Projectors (separate from presentation stations)	8	\$800	\$6,400
SmartBoards	8	\$1,100	\$8,800
Subtotal			\$500,200
AV Equipment – Repairs:			
	-	\$6,000	\$6,000
Computer Supplies:			
Ink/toner/cables/photoprint/incidentals	-	\$35,000	\$35,000
Software:			
Licenses for new and existing software	-	\$42,500	\$42,500
AV Supplies:			
DVD/VCR Combo Players	10	\$120	\$1,200
DVD/CD burners	6	\$250	\$1,500
Digital Cameras	6	\$250	\$1,500
Spare bulb for distance learning	1	\$600	\$600
Replacement data projector bulbs	10	\$350	\$3,500
Document Scanners	6	\$250	\$1,500
Misc	-	\$6,400	\$6,400
Subtotal			\$16,200
Telephone Services:			
Centrex Lines	9	\$2.50 per line, per month	\$270
Other:			
Staff development stipends/in-service/software	-	\$10,000	\$10,000
Furniture (standup presentation centers, computer workstations and desks)	-	\$12,000	\$12,000
Subtotal			\$22,000
Total			\$622,170

* This proposed budget is contingent upon the District's renewal of the Installment Purchase (IP) through NERIC. The IP amount of \$150,000 per year for the three years is provided in total in the first year, thus \$450,000.

Malone Central School District Proposed Technology Budget 2011-2012

Item	Quantity	Cost	Total
Computer Hardware:			
Replacement Computers/Upgrades	60	\$1000	\$60,000
Additional Computers	20	\$1000	\$20,000
Replacement Servers	3	\$5000	\$15,000
Presentation Stations (cabinet, amplifier, computer, VCR, projector)	8	\$2500	\$20,000
Printers	15	\$600	\$9,000
Data Projectors (separate from presentation stations)	14	\$800	\$11,200
SmartBoards	8	\$1,100	\$8,800
Subtotal			\$144,000
AV Equipment – Repairs:			
	-	\$1,500	\$6,000
Computer Supplies:			
Ink/toner/cables/photoprint/incidentals	-	\$35,000	\$35,000
Software:			
Licenses for new and existing software	-	\$42,500	\$42,500
AV Supplies:			
DVD/VCR Combo Players	10	\$120	\$1,200
DVD/CD burners	6	\$250	\$1,500
Digital Cameras	6	\$250	\$1,500
Spare bulb for distance learning	1	\$600	\$600
Replacement data projector bulbs	10	\$350	\$3,500
Document Scanners	6	\$250	\$1,500
Misc	-	\$6,400	\$6,400
Subtotal			\$16,200
Telephone Services:			
Centrex Lines	9	\$2.50 per line, per month	\$270
Other:			
Staff development stipends/in-service/software	-	\$10,000	\$10,000
Furniture (standup presentation centers, computer workstations and desks)	-	\$12,000	\$12,000
Subtotal			\$22,000
Total			\$265,970

Appendix A – Minimum Teacher Competencies in Technology

The National Council for Accreditation of Teacher Education (NCATE) has adopted a set of competencies for the accreditation of pre-service teachers. The Technology Planning committee recommends that the Malone Central School District adopt the following list as the minimum technology competencies for its instructional staff. This list is a slightly modified version of the NCATE competencies.

1. Computer and Windows Operation

- 1.1 Start up and shut down computer system and peripherals.
- 1.2 Identify and use icons, windows, and menus.
- 1.3 Use a file server (log on, use network drive, change password).
- 1.4 Start an application and create a document.
- 1.5 Name, save, retrieve, and revise a document to a specific location.
- 1.6 Create, name, and rename folders and sub-folders for good file management.
- 1.7 Save, open, and place documents inside folders.
- 1.8 Use printing options (landscape/portrait, specific pages, change printer, etc.).
- 1.9 Insert and eject floppy disk, CD-ROM , USB devices safely.
- 1.10 Copy a document from one disk to another (including hard drive, floppy disk, network drive, USB drive).
- 1.11 Open and work with more than one application at a time.
- 1.12 Use the clipboard feature of Windows to copy data from one application and paste it in another.

2. Word Processing

- 2.1 Enter, edit, cut, copy, and paste text and move blocks of text.
- 2.2 Save and use "Save as"; open and print documents.
- 2.3 Change text format and style, set margin, line spacing, tabs.
- 2.4 Check and correct spelling, grammar, and word usage.
- 2.5 Create a header or footer.
- 2.6 Insert date, time, and page number.
- 2.7 Create multi-column text.
- 2.8 Insert and format clip art, WordArt, and other objects (such as textboxes, symbols, and pictures) into a document.
- 2.9 Create numbered lists and bulleted lists.
- 2.10 Create simple tables.

3. Internet and E-mail

- 3.1 Type or paste a URL in the address box to access a specific web site.
- 3.2 Access appropriate search engines and find appropriate sites related to a specific topic.
- 3.3 Use and manage Electronic Mail (compose, send, retrieve, read, respond, forward, delete).
- 3.4 Attach a file to an e-mail and send.
- 3.5 Prepare an MLA style citation for electronic media.
- 3.6 Select and access online and server-based streaming video and tutorials.
- 3.7 Understand and use safe networking practices (virus protection, spyware, e-mail attachments).
- 3.8 Report computer problems via SysAid or other Helpdesk software.
- 3.9 Be aware of the District policy on plagiarism and copyrighted material.

4. Spreadsheets

- 4.1 Enter data in an existing spreadsheet.
- 4.2 Create spreadsheet with rows, columns, and headings.
- 4.3 Create and copy formulas and functions to perform calculations.
- 4.4 Create a graph from spreadsheet data.
- 4.5 Insert a spreadsheet into a word processing document.

5. Media and Presentations

- 5.1 Set up and operate a presentation station, including VCR, DVD player, data projector, stereo amplifier, remote control, etc.
- 5.2 Connect a video output device (e.g., LCD projector) to computer for large screen display.
- 5.3 Use painting and/or drawing tools.
- 5.4 Use a digital camera and scanner to capture images.
- 5.5 Use a computer to create slides or overheads.
- 5.6 Add and format text, backgrounds, graphics, and pictures to slides.
- 5.7 Use the slide sorter to rearrange slides.
- 5.8 Use custom animation features for sounds and to animate text and graphics.
- 5.9 Develop and demonstrate an instructional presentation.

6. Library Resources

- 6.1 Use OPALS (Enhanced Online Library Catalog), mediated search engine, and full-text databases in the library and remotely.
- 6.2 Access/use commercial databases, inter-library loan, etc., available through the library web page.
- 6.3 Prepare an MLA-style citation using web-based tools.

7. District/Grade Specific Software

7.1 Use the appropriate grade reporting software for your level/building.

7.2 SysAid (everyone) – or other Helpdesk software.

7.3 Be aware of other district/grade-level software:

- Power Media Plus
- School Island
- My Learning Plan
- Moodle
- Reading A-Z
- Science A-Z
- E-School Data