



**The Ralph C. Mahar Regional School District
Technology Plan**

**Vision 2015: A Strategic Plan for Mahar
2010-2015**

Updated: June 2010

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Table of Contents

- 1. Introduction**
The Role of Technology in Education Reform
- 2. Background Information**
 - 2.1 School/District and Community Demographics
 - 2.2 Overview of the Technology Planning Process
 - 2.3 District Technology Vision and Mission Statements
- 3. Current and Future Budget Status**
 - 3.1 Staff Survey on Technology Needs
 - 3.2 Inventories
 - 3.2.1 Software
 - 3.2.2 Hardware
 - 3.2.3 Network Facilities and Telecommunications
 - 3.3 Assessment of Current Curriculum Status and Technology Initiatives in Relationship to Education Reform
 - 3.4 Assessment of Existing Professional Development Activities and Structures
 - 3.5 Assessment of Current Technology Support Staff
 - 3.6 Budget: Technology Expenditures from July 1, 2006 to June 30, 2007
Budget: Technology Expenditures from July 1, 2007 to June 30, 2008
Proposed Budget: Technology Expenditures from July 1, 2008 to June 30, 2009
- 4. Program Goals and Rationales**
 - 4.1 Administrative and Management Goals and Rationales
 - 4.2 Communication and Information Access Goals and Rationales
 - 4.3 Instructional and Curricular Goals and Rationales
 - 4.4 Staff Competency Goals and Rationales
- 5. Technology Design**
 - 5.1 Software Priorities
 - 5.1.1 Administrative and Management
 - 5.1.2 Communications and Information Access
 - 5.1.3 Instructional and Curricular
 - 5.2 Hardware, Facilities, and Network Priorities
 - 5.2.1 Hardware: Workstations and Peripherals
 - 5.2.2 Facilities: Network Design
 - 5.2.3 Building and Classroom Wiring: Standards
 - 5.3 Operations, Maintenance, and Upgrades Priorities
- 6. Technology Implementation Action Plan**

6.1 Software Procurement

Living Document

- 6.2 Hardware, Facilities, and Network Acquisition/Implementation
 - 6.3 Operations, Maintenance, and Upgrades
 - 6.4 Professional Development
 - 6.5 Human Resources in Support of Technology
 - 6.6 Funding
7. **Monitoring, Evaluation, and Revision of Technology Plan**
8. **Appendix A: Staff Survey**
9. **Appendix B: Technology Committee Membership**
10. **Appendix C: Electronic Resources Acceptable Use Policy**

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1. Introduction--The Role of Technology in Education Reform

With the arrival of our new Superintendent, Michael Baldassarre at the beginning of the 2009/2010 academic year and in partnership with the community and the technology committee at Mahar, this technology plan was updated. The purpose of the update was to reflect the new Vision 2015, a Strategic Plan for Building Better Mahar, 2010-2015. The schools of today must respond to the Information Revolution by focusing on critical thinking, problem solving, and creative communication. The world of work is changing to a world of collecting, manipulating, processing, storing, and dispensing information. Our economy is now global--to give our students the ability to compete and to succeed in a global society, we must equip them with the new information skills they will need.

As expressed in the Massachusetts Education reform Act of 1993, a paramount goal of the Commonwealth is "to provide a public education system of sufficient quality to extend to all children the opportunity to reach their full potential and to lead lives as participants in the political and social life of the Commonwealth and as contributors to the economy." Smaller rural districts are at risk of being left out as our nation, driven by technological change, moves into the Information Age. A key component of educational reform is equity within the common core of learning and the curriculum frameworks. It is essential that our students have the knowledge, positive attitudes, and technical skills needed to compete in a complex world.

The Mission Statement of our school emphasizes that students will use appropriate technology to communicate, access, and analyze information. Information technology is inextricably woven into this process. We have begun building a "virtual library" that will extend wherever our learners may go. Our goal is to provide access from every classroom to an ever-expanding collection of online library resources. The local network will be linked to local libraries, state educational networks, and the Internet. Our learners will not only be able to access information, but also to create and share it with other learners across the state, the nation, and the world. In order to realize our vision, we must ensure that teachers and students have virtually unlimited, instantaneous access to any kind of information they may need to prepare them to compete and win in a more competitive workplace. A staff well versed in the use of technology in the classroom is a necessary prerequisite for this vision.

A small, but significant, number of our students are unable to access the Internet at home. Orange, the largest of our member towns, has a lower median family income and per capita income than those of the rest of the county, state, and nation. The unemployment rate is higher than the county, state, and nation. Consequently, the only opportunity for many of our students to gain access to modern technology is through the schools and libraries. Our vision must include expanded access to Internet connectivity on a community-wide basis.

The vision of our school is to enable all learners to achieve their maximum potential by providing an orderly, caring, and stimulating learning environment that will enhance each student's emotional, physical, and intellectual development. Our technology plan will help to open otherwise unattainable doors for our entire community. This technology will develop

lifelong learning skills that will prepare our students and community for the twenty-first century.

There are innumerable ways that our teachers and learners will be able to use the enhanced technological facilities. First, they will gain access to the vast wealth of resource materials now available on the Internet. These materials are not only important in themselves, but both teachers and students will be gaining skills in searching for information as they use the equipment. Second, they will use electronic mail to share ideas and information with colleagues across the state, the nation, and the world. Third, teachers and students will join conferences in order to participate in collaborative or team activities. Many of the team projects now under way in our school are well suited to being extended beyond the physical boundaries of our school and can be shared with other students working on similar projects across the state, the nation, or the world.

2. Background Information

2.1 School/District and Community Demographics

The Ralph C. Mahar Regional School District, located in Orange, Massachusetts, along Route 122, serves the towns of Orange, Petersham, New Salem, and Wendell. The District is a grade 7-12 district and consists of only one school, the Ralph C. Mahar Regional School. The school is in close proximity to Routes 2, 140, and 122, and is approximately 38 miles west of Leominster and Fitchburg, Massachusetts, and 24 miles northeast of Amherst, Massachusetts. The rural communities Mahar Regional serves cover approximately 190 square miles and are seen as "bedroom" communities with small local businesses. Many square miles in each of the towns are owned by the state agency that oversees nearby Quabbin Reservoir.

The regional communities have retained much of their rural character throughout the years. The Town of Orange has approximately 7500 residents, Petersham approximately 1200, Wendell approximately 1000, and New Salem approximately 1000. Orange, the largest of our member towns, had a lower median family income in 1999 (\$36,849) than those of the rest of the county, state, and nation. The November 2002 unemployment rate of 6.4% is higher than the county (3.6%), state (4.8%), and nation (5.7%). The ethnic/racial composition of the student body reflects that of the communities--virtually all Caucasians with very small, but increasing percentages of African-Americans, Asians and Hispanics.

Most working residents are skilled or semi-skilled workers, with smaller numbers working in professional, managerial, or other occupations. A few large factories, many small local businesses and many self-employed people make up the commerce of the area. There has been little significant commercial growth within the area in the several decades. The Town of Orange has a fairly substantial town center with commercial and residential areas. Much of the commercial space in the town center is unused. The school building is located on the edge of this center. The rest of Orange and the three smaller towns are characterized by small town centers widely separated by mostly rural areas. The libraries of the three smaller towns especially are physically small, are open a limited number of hours--mostly in the evenings and

Saturdays--and have limited collections.

The Ralph C. Mahar Regional School is a Middle-Senior High School containing grades 7 through 12. Feeder schools consist of five K-6 public elementary schools in three other districts. The enrollment for the 2002-2003 school year is 733 students. This figure has remained relatively stable over the past ten years. In February of 2002, a three-year construction/renovation project was started to improve and expand the one-story brick structure originally built in 1956. This project will result in a vastly improved learning facility.

Although they have no teen center, the towns provide a number of recreational activities for school-age youth through extensive use of school facilities. Cultural opportunities are available in the communities and nearby Athol, Gardner, and other area towns. To the east in Fitchburg, opportunities for educational and cultural experiences are available at Fitchburg State College, while to the west, in nearby Amherst and surrounding communities, opportunities for educational and cultural experiences are available at the University of Massachusetts and the other members of the Five College Exchange. Greenfield Community College and Mount Wachusett Community College are both within easy driving distance of Mahar.

2.2 Overview of the Technology Planning Process

In June of 2010, the technology plan was updated again. This update was part of the new district initiative, Vision 2015, a Strategic Plan for Better Mahar. For this as it was in 1995, District Technology Planning Team was formed at the direction of the Superintendent of Schools. The team was charged by the Superintendent with determining the technology needs of the District and preparing a plan to implement various initiatives to meet those needs. The team consisted of the District Director of Technology, the Principal, the Middle School Coordinator, and the Grant Coordinator/School to Work Coordinator/Public Relations Director, a high school Business teacher, a middle school Social Studies teacher, and a School Committee member.

Various combinations of the core members of the team, as well as others, attended the MSSAA conference on Technology Planning and the four-day workshop series on Technology Planning provided by Mass Ed Online. The team, now called the Technology Committee, has met periodically since its inception and has gathered input from the broader school community. A presentation was made to the School Council, and the School Committee has continued to be informed of the work of the team.

The composition of the Technology Committee has changed over the years and now includes the Superintendent, Principal, Director of Technology, Instructional Technology Specialist, Technology & Engineering Education Teacher, and the Library Media Specialist. The Committee usually has three or four all-day meetings throughout the school year, as well as several shorter meetings as needed.

2.3 District Technology Vision and Mission Statements

Mission Statement

The technology mission of the Ralph C. Mahar Regional School District is to prepare all students to be lifelong learners academically, civically, and socially.

Vision Statement

Students are expected to learn from a variety of sources—from technology including online resources and productivity tools to textbooks or information disseminated by the teachers. At this time, the parents of our students are often only communicated with by the teachers when there is a problem, or during those formal scheduled events such as Parent's Night and the monthly newsletter or the quarterly report card. Because of financial constraints, our teachers are often unable to participate in meaningful in-services, and professional development is an area of concern.

Students, teachers, administrators, and parents must have access to technological tools if we are to change from an industrial-based society to an information-based society. We are shifting from a "knowledge-retrieval" system--where students are passive learners--into an "information-retrieval" system where students will access, analyze, apply, and communicate information. Parents and teachers must be able to communicate quickly and easily on an as-needed basis. A system must be established to provide teachers with the constantly changing skills they will need to work with their students in this dynamic society.

Access to information, combined with teaching and learning strategies to merge information into a balanced, outcome-based, student-oriented curriculum, is the key to effective education. To accomplish this, all classrooms, departments and offices must be electronically linked via voice, video, and data with access to local and national support and data sources. Systems management functions including planning, evaluation, accountability, information management, and fiscal management should realize reductions in paperwork and increases in productivity as a result of the continuing transformation to a technology-based school system. New and existing partnerships and more cooperative, innovative relationships with business, local communities, town libraries, elementary school districts, and institutions of higher education will develop as the technology infrastructure broadens and enhances lines of communication, strengthening the quality of education provided for all of our students.

Our vision of our school in the future includes the following desired outcomes as defined by the Massachusetts Educational Technology Advisory Council's School Technology and Readiness Chart (STaR):

- Patterns of Teacher Use (Column B) – Most teachers will use technology for research, lesson planning, multimedia and graphical presentations and simulations, and share

technology uses with colleagues.

- Curriculum Areas (Column D) - New and emerging technologies will be incorporated into our school curriculum grounded in the Massachusetts Common Core of Learning and Curriculum Frameworks.
- Patterns of Student Use (Column E) – Most students will show proficiency in all Massachusetts Technology Standards.
- Capabilities of Educators (Column G) – A majority of educators will meet ISTE (International Society for Technology in Education) competencies and implement them into the school environment. New and emerging technologies will be integral elements of school improvement and accountability.
- Implementation of Professional Development Software through EdClass, PDPoint and SchoolKit.com.
- Implementation of other secure portals for faculty and staff such as Curriculaarchitect, SIMSViewer, TSS, and EZPost Homework on line through MEC.
- Implementation of the State’s MassOne Initiative district wide.
- Continue the use of Videoconference for workshop offerings, discussions and collaboration with the DOE.
- Technical Support (Column M) – We will maintain a network administrator and at least one technical staff per 200 computers. Same-day in-classroom technical support will continue to be provided. Problems that cause major disruptions to curriculum delivery will be kept to a minimum.
- Curriculum Integration Staffing (Column N) – The district will continue to fund a Technology Director and a dedicated instructional technology specialist. The district will work toward the establishment of a central office position dedicated to data management and assessment. Organizational productivity and efficiency will increase as technology is infused into the workplace.
- Budget Allocated for Technology (Column P) – Include in the district budget \$250 - \$375 per student for technology.
- Universal Design: Physical Access/Software and Hardware Compatibility (Column Q)-- The district will provide equal access to instructional uses of the computer for all students.
- Students Per Instructional Computer (Column R) – The student to computer ratio will not

exceed 5:1. A replacement cycle of 6 years will be established. Each teacher will be issued a computer for school use. The district will expand the use of handheld electronics throughout the curriculum. A list of places students can use technology outside of school will be maintained.

- Internet Access Connectivity/Speed (Column S) – Direct connectivity to the Internet will be available in all rooms. Adequate bandwidth and easy access will be available for students and teachers.
- LAN/WAN (Column U) – A 100 mb switched network will provide all rooms with sufficient bandwidth for effective student access, and will provide secure storage, backups, scheduling, e-mail, and web access. Students, teachers and parents will have easy access to educational resources from home and school (e.g., web portal).

3. Current Status

- Most teachers use technology for research, lesson planning, multimedia and graphical presentations and simulations, and share technology uses with colleagues.
- Most students show proficiency in all Massachusetts Technology Standards.
- Majority of educators meet ISTE (International Society for Technology in Education) competencies
- Implementation of Professional Development Software through EdClass, PDPoint and SchoolKit.com.
- Implementation of other secure portals for faculty and staff such as Curriculaarchitect, SIMSViewer, TSS, and EZPost Homework on line through MEC.
- Implementation of the State's MassOne Initiative district wide.
- Continue the use of Videoconference for workshop offerings, discussions and collaboration with the DOE.
- Technical Support .We will maintain a network administrator and at least one technical staff per 200 computers. Same-day in-classroom technical support will continue to be provided. Problems that cause major disruptions to curriculum delivery will be kept to a minimum.
- The network is a Microsoft Windows environment.TSS is a web based help desk with the use of internal Tech Associates and external outsourcing of technology services as needed.

- Budget Allocated for Technology – Include in the district budget \$250 - \$375 per student for technology. In addition, \$85,000.00 of the Building Project Funds was used for the integration and upgrade of the technology during the 2006-2007 academic years.
- Internet Access Connectivity/Speed – Direct connectivity to the Internet available in all rooms. Each room has an LCD Panel projector. There are four wireless carts available for classroom use which consist of at least 25 laptops.

3.1 Staff Survey on Technology Professional Development Needs

Technology Survey Checklist

Below are the results of the end of the year survey given to all teachers at the end of the 2003–2004 school year. 53 out of 63 staff members responded. This survey reflects percentages of what teachers have already received training on with respect to technology during the 2003–2004 school year.

Maintenance, Repair, and Network Operations

11 % - Computer troubleshooting and repair

9 % - Computer and network maintenance

2 % - Network operations

Computer Applications

66 % - Computer basics

57 % - Productivity tools (word processing, spreadsheet, database)

58 % - Presentation tools

62 % - Use of the Internet (e-mail, World Wide Web)

26 % - Web page construction

28 % - Graphics and multimedia software

15 % - Assistive technologies

57 % - Multimedia peripherals (scanners, digital cameras, video cameras)

8 % - Handheld computers and peripherals

19 % - Single-function word-processors (e.g. AlphaSmart, DreamWriter)

Integrating Technology Into the Curriculum

6 % - Interdisciplinary

9 % - English Language Arts

17 % - Mathematics

- 9 % - Science & Technology/Engineering
- 4 % - History & Social Science
- 2 % - Foreign Languages
- 4 % - Arts
- 2 % - Comprehensive Health
- 6 % - Recommended Pre-K-12 Instructional Technology Standards
- 2 % - Assessment (Electronic Portfolio, etc.)

Other Topics

Programming & Careers/Guidance

Technology Survey Wish List

Below are the results of the end of the year survey given to all teachers at the end of the 2003–2004 school year. 53 out of 63 staff member responded. This survey reflects percentages of what teachers would like to receive training on with respect to technology during the 2004–2005 school year.

Maintenance, Repair, and Network Operations

- 45 % - Computer troubleshooting and repair
- 21 % - Computer and network maintenance
- 23 % - Network operations

Computer Applications

- 9 % - Computer basics
- 26 % - Productivity tools (word processing, spreadsheet, database)
- 17 % - Presentation tools
- 9 % - Use of the Internet (e-mail, World Wide Web)
- 45 % - Web page construction
- 36 % - Graphics and multimedia software
- 19 % - Assistive technologies
- 32 % - Multimedia peripherals (scanners, digital cameras, video cameras)
- 28 % - Handheld computers and peripherals
- 0 % - Single-function word-processors (e.g. AlphaSmart, DreamWriter)

Integrating Technology Into the Curriculum

- 17 % - Interdisciplinary

13 % - English Language Arts

17 % - Mathematics

8 % - Science & Technology/Engineering

9 % - History & Social Science

4 % - Foreign Languages

11 % - Arts

4 % - Comprehensive Health

9 % - Recommended Pre-K-12 Instructional Technology Standards

25 % - Assessment (Electronic Portfolio, etc.)

Other Topics

Repairs & Long Distance Learning

3.2 Inventories

3.2.1 Software Inventory

Superintendent's Office: An upgrade to a Windows version was completed in January 2006 and new financial software for \$70,000.00 was purchased for the purpose of financial transactions and finances. The upgrade was made to BudgetSense Unifund during the FY07. Budgeting, payroll, and purchase order tracking are handled by software from Unifund. This software is installed on the LAN and is accessible by all personnel in the Superintendent's office.

Principal's Area: Attendance, grade reporting, scheduling, discipline records, and other student database requirements are handled by the PowerSchool program published by Pearson Educational Technologies. The program is installed on the LAN and is used by all administrators, counselors, and secretaries. Microsoft Office products are used for word processing and other office operations. Microsoft Outlook E-Mail is used for local and Internet email.

Student Services: The Student Services Department uses Microsoft Office products, and also makes extensive use of the PowerSchool program. The Psych Report Writer by Psychological Support Systems is used by the School Psychologist for report writing.

Special Education: EdPlan software is used to process IEP's for special needs students, and Microsoft Office products are used for word processing and other office operations.

New eSPED Licenses were purchased and an eSPED Secretary was hired per hourly contract to assist in training and upload of data. Day training from the eSPED was provided through

professional development day for all staff.

Network Administration: Symantec BackupExec 12.1 is used for network backup. Trend Micro AntiVirus is installed on the network for virus protection of servers and workstations. As in the rest of the school, Microsoft Office products are used for office productivity tools.

Library: An integrated suite of programs from Follett Software Company is used in the library to manage the catalog, circulation, and accessions. This software is on the network, and the catalog program can be accessed by students from the library workstations as well as from computers in the classrooms. In addition, we subscribe to several online databases that are available from the media center, the classrooms, and from the students' homes--they include a suite of encyclopedias from Grolier, Infotrac (a magazine/newspaper database), a geographical database called Culturegrams, and a general knowledge database of current issues called SIRS Knowledge Source from ProQuest.

As the Internet has become widely available throughout the building, reliance on other reference type computer programs in the academic departments has somewhat lessened. All computers have access to the full suite of Microsoft Office products. Word and PowerPoint are used extensively, and Excel is used to a lesser extent. The Technology Education Department uses AutoCAD LT for computer drafting instruction and also uses various home design and engineering programs. Accelerated Math, a comprehensive mathematics program reflecting a scientific research base has been implemented in both the middle school and high school in support of our mathematics initiatives. Our information processing classes use such programs as Micro Type Pro, Macromedia Fireworks, Hyperstudio, and Corel Word Perfect, as well as the Microsoft Office suite of programs.

3.2.2 Hardware Inventory

Our annual report to the state for the 2003-2004 school year shows the following numbers of computer workstations. All workstations are Windows-based. The definitions for "high-end", "average", and "low-end" workstations are the same as those used by the state.

	High End	Average	Low-End
District Administration	43		0
School Administration	43	0	0
Instructional	420	0	0

Of the above computers, 49 of the instructional and 12 of the administrative computers are laptops. We also purchased additional 10 more instructional multimedia computers.

There were 42 network printers on the network as of the end of the 2005-2006 school year. Every new classroom has one networked laser printer, and the rest are used in various administrative offices.

There are 33 data video projectors, 27 of them ceiling-mounted in various classrooms and 6 on mobile carts.

There are four network servers, a multi-cassette tape drive for backing up all servers, and nine switches distributed throughout six wiring closets. With migration, we added a MS Exchange Sever and three additional high end servers. We also moved the servers in one central location within the building.

3.2.3 Network Facilities and Telecommunications

A 100/1000Mbs network based on managed switches and a fiber-optic backbone has replaced the 10Mbs hub-based network. Each classroom has a minimum of seven data drops, and several rooms will have 25-30 drops.

The phased nature of the project has presented one of the greatest challenges we've faced over the past two years. The network had to be maintained as a single entity in all parts of the building, both old and new, as construction continued. This required some creative solutions as parts of the building and their related infrastructure, including network backbone cables, were torn down, and new sections became occupied. We met the challenge successfully as network connectivity was maintained in all parts of the building throughout the project.

Internet connectivity was provided by a T1 line, and Internet access is provided through Greenfield Community College in conjunction with the Franklin County Technology in Education Partnership's Cooperative Internet Project. The Franklin County Technology in Education Partnership is a group of schools in Franklin County working together on various technology projects, including group purchasing and Internet access. At this time, the T1 line provides sufficient bandwidth for all of the District's needs. However, T1 lines were changed to Merrimack Education Center since the funding for the above grant was discontinued.

3.3 Assessment of Current Curriculum Status ad Technology Initiatives in Relationship to Education Reform.

Accelerated Math, a comprehensive mathematics program reflecting a scientific research base has been implemented in both the middle school and high school to provide coherence across

grade levels, promote achievement of approved state learning standards, support differing achievement levels, and provide for cumulative building of skills over multiple instructional sessions and years. Various technologies are used to promote understanding, address specific content goals and meet the needs of individual students. Students also locate, evaluate, collect, and process information from a variety of electronic sources. Each student and faculty member is required to read and sign the Districts "Electronic Resources Acceptable Use Policy" which ensures the responsible use of technology and an understanding of ethics and safety issues in using electronic media.

3.4 Assessment of Existing Professional Development Activities and Structures

Professional Development starting in 2005-2006 and continued throughout 2009-2010 school year focused on technology training. Technology committee met to form a strategic plan to address the needs of the staff and a clear plan for the delivery of the technology workshops. eSPED, PDPPoint, EdClass, School Kit.com and other innovative and exciting initiatives were the themes of the training. In addition to make a better assessment of the faculty in regard to the professional development. All teachers, administrators and paraprofessionals took part in training in the use of digital cameras, scanners, the SmartBoard, the XP operating system and classroom applications for Microsoft Word, Microsoft Excel, Microsoft Power Point and Microsoft Publisher, as well as training in the use of network laser printers, projectors and DVD players. Training in various online technologies, such as interactive videoconferencing, distance learning and content-rich web sites was also provided to promote proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity. As a result of this training, teachers are effectively integrating technology into lessons and activities.

To provide for the cumulative building of skills, a targeted priority of the 2005-2006 Professional Development Plan is to provide continued support and training for the effective integration of all technology into the classroom environment to support learning standards of the curriculum frameworks.

Technology is still a major aspect of professional development at the Ralph C Mahar Regional School District. The assistant technology director continues to offer after school instructional classes for all teachers and staff.

In the school year just past, we provided professional development through delayed opening release time. All staff was given professional development in the use of office productivity tools, peripherals and the use of the network. By year's end, each instructional and administrative staff member received 10 hours of professional instruction in the above topics.

As part of the end of year checkout process, all instructional staff were asked to list desired technology professional development topics for the next school year. This list is used to create mini-lessons for free, after school workshops. Teachers are given hands on training with a certified instructor about the educational uses of the technology that is available to each teacher

in our school. Frequently requested topics include office productivity tools, and the use of scanners, digital cameras and Smartboards.

Our student database operator and the student services secretary each received two days of training on state reporting requirements and methods.

As always, each new staff member will receive 2 hours of training on our acceptable use policy and email system. An additional hour of PowerSchool instruction is provided to all new teachers. The Director of Technology and Technology Instructional Specialist provide training throughout the year.

Delayed openings will continue to be used to provide technology professional development, although other mandated training subjects will use much of the available delayed opening time.

As outside professional development activities become available, we will take advantage of them as time and funds permit.

As part of our building project, the technology director and his assistant have received and will continue to receive extensive training on such topics as server management, workstation management, and network infrastructure.

3.5 Assessment of Current Technology Support Staff

The technology committee has supported the plan to have a full time Director of Technology, an Instructional Technology Specialist, Teachers as Tech Associates, and further contractual services for the purpose of providing additional support.

**Technology Plan Implementation Report
July 1, 2006 to June 30, 2007
Ralph C Mahar District**

Budget: Technology Expenditures from July 1, 2006 to June 30, 2007

Operational Budget	Administrative Technology	Instructional Technology	Technology Professional Development	Maintenance and Support	Networking	Total
Salaries	12148	25834	1580	88204	25833	153599
Contracted Services	3247	546	3218	0	30949	37960
Hardware	0	0	0	0	0	0
Software	59912	29954	0	0	0	89866
Capital Expenditures	0	0	0	0	0	0
Supplies	479	9147	0	0	23329	32955
Other Expenditures	0	0	0	0	0	0
Total	75786	65481	4798	88204	80111	314380
Bonded Technology	Administrative Technology	Instructional Technology	Technology Professional Development	Maintenance and Support	Networking	Total
Contracted Services	0	0	0	0	1556	1556
Hardware	0	23989	0	9795	0	33784
Software	0	0	0	0	0	0
Capital Expenditures	0	0	0	0	0	0
Supplies	0	0	0	0	0	0
Other Expenditures	0	0	0	0	0	0
Total	0	23989	0	9795	1556	35340
Grants and Other	Administrative Technology	Instructional Technology	Technology Professional Development	Maintenance and Support	Networking	Total
Salaries	748	0	0	0	0	748
Contracted Services	0	6418	0	0	0	6418

? Hardware	0	0	0	0	0	0
? Software	0	15019	0	0	0	15019
? Capital Expenditures	0	0	0	0	0	0
? Supplies	0	0	0	0	0	0
? Other Expenditures	0	60	0	0	0	60
Total	748	21497	0	0	0	22245

**Technology Plan Implementation Report
July 1, 2007 to June 30, 2008
Ralph C Mahar District**

Budget: Technology Expenditures from July 1, 2007 to June 30, 2008

? Operational Budget	? Administrative Technology	? Instructional Technology	? Technology Professional Development	? Maintenance and Support	? Networking	Total
? Salaries	13353	27752	1882	97416	27751	168154
Contracted Services	9561	0	0	0	34451	44012
? Hardware	0	0	0	0	0	0
? Software	0	49043	0	0	0	49043
? Capital Expenditures	0	0	0	0	0	0
? Supplies	0	20727	0	0	22324	43051
? Other Expenditures	0	0	0	0	0	0
Total	22914	97522	1882	97416	84526	304260

? Bonded Technology	? Administrative Technology	? Instructional Technology	? Technology Professional Development	? Maintenance and Support	? Networking	Total
Contracted Services	0	0	0	0	0	0
? Hardware	0	0	0	0	0	0

? Software	0	0	0	0	0	0
? Capital Expenditures	0	0	0	0	0	0
? Supplies	0	0	0	0	0	0
? Other Expenditures	0	0	0	0	0	0
Total	0	0	0	0	0	0

? Grants and Other	? Administrative Technology	? Instructional Technology	? Technology Professional Development	? Maintenance and Support	? Networking	Total
? Salaries	1073	0	0	0	0	1073
Contracted Services	0	6228	0	0	0	6228
? Hardware	0	0	0	0	0	0
? Software	0	833	0	0	0	833
? Capital Expenditures	0	0	0	0	0	0
? Supplies	0	0	0	0	0	0
? Other Expenditures	0	0	0	0	0	0
Total	1073	7061	0	0	0	8134

Living

**Technology Plan Implementation Report
July 1, 2008 to June 30, 2009
Ralph C Mahar District**

Proposed Budget: Technology Expenditures from July 1, 2008 to June 30, 2009

? Operational Budget	? Administrative Technology	? Instructional Technology	? Technology Professional Development	? Maintenance and Support	? Networking	Total
? Salaries	16353	30752	3882	99416	30751	181154
Contracted Services	9561	0	0	0	34451	44012
? Hardware	0	0	0	0	0	0
? Software	0	49043	0	0	0	49043
? Capital Expenditures	0	0	0	0	0	0
? Supplies	0	20727	0	0	22324	43051
? Other Expenditures	0	0	0	0	0	0
Total	25914	100522	3882	99416	87526	317260

? Bonded Technology	? Administrative Technology	? Instructional Technology	? Technology Professional Development	? Maintenance and Support	? Networking	Total
Contracted Services	0	0	0	0	0	0
? Hardware	0	0	0	0	0	0
? Software	0	0	0	0	0	0
? Capital Expenditures	0	0	0	0	0	0
? Supplies	0	0	0	0	0	0
? Other Expenditures	0	0	0	0	0	0
Total	0	0	0	0	0	0

? Grants and Other	? Administrative Technology	? Instructional Technology	? Technology Professional Development	? Maintenance and Support	? Networking	Total
? Salaries	3073	0	0	0	0	3073
Contracted Services	0	6228	0	0	0	6228

Hardware	0	0	0	0	0	0
Software	0	833	0	0	0	833
Capital Expenditures	0	0	0	0	0	0
Supplies	0	0	0	0	0	0
Other Expenditures	0	0	0	0	0	0
Total	3073	7061	0	0	0	10134

4.0 Program Goals and Rationales

Goals--Administration and Management

1. The district will use technology to gather and share current and timely information for record keeping and decision making.

Rationale: Announcements, notices, reports, student information, and most other internal school communications will be delivered in a much more timely fashion and with greatly reduced publishing and duplication costs. As of November 2004, daily announcements and absence lists are available on the network, and the daily announcements are also posted on our Web site. Responses will also be much more efficient, promoting timely and effective decision making. Our email system has already proven to be invaluable in improving the flow of information throughout the building, but must be replaced with a more modern system including conferencing, document sharing, and other collaborative features so all administrators, teachers, and other staff can gain its full benefit. All offices must be equipped with modern workstations so that they may take advantage of modern software applications. Teachers must have access to network workstations to both provide and access current student information.

Goals--Communication and Information Access

1. All students and staff will have access to a local area network interconnecting all offices and classrooms, and offering access to the Internet for communicating and accessing information.
2. The district will use technology to improve communication among all teachers, administrators, support personnel, school parents, and the community.

Rationale: These goals will help our school empower students and staff with the research skills needed to tap into the virtually limitless information available on the Internet. We must give them these skills so that they will have the ability to compete and to succeed in a global society. We have begun building a "virtual library" that will extend wherever our learners may go. Our goal is to continue this process until access is available from every classroom and office. The local network will be linked to local libraries, state educational networks, and the Internet. Our learners will not only be able to access information, but also to create and share it with other learners across the state, the nation, and the world. Professional staff will be able to access instructional and administrative resources and quality research in successful pedagogic practices, which will enhance teachers' performance, and improve class and school management. This technology will develop life long learning skills, which will prepare our students and community for the twenty-first century.

Parents and teachers will be able to communicate quickly and easily on an as-needed basis, thereby enriching the learning environment. Improved home-school communications will provide parents and teachers the opportunity to discuss student progress and activities efficiently and interactively. As of November 2004, the monthly high school and middle school newsletter is available on our web site. Also, the daily announcements are posted in a network folder available to staff, and are also posted on the web site for access by parents and students at home. An initiative was begun in the fall of 2004 to encourage teachers to create and maintain their own web pages on the Mahar web site. Five teachers attended a two-hour workshop to learn the basics of web page constructions, and their efforts can now be seen on the web site. Efforts will be made to get more teachers involved in this. Homework assignments, schedules, planned events, lessons, and other school information can be easily available in each student's home.

Goals--Curriculum and Instruction

1. All students will be able to use technology to improve their reading, writing, and communication skills.
2. All students will be able to use technology to access and analyze information.
3. Students will learn and practice technology skills and the ethical use of technologies that will prepare them for the workplace of the twenty first century.
4. The district will provide equal access to instructional uses of the computer for all students.
5. Student awareness of a multi-cultural worldview will be enhanced through telecommunications access and communication with students at other schools throughout the world.

Rationale: The driving force for education reform within our school, state, nation, and throughout the world is a shift from the Industrial Age to the Information Age. In order to accomplish this, it is basic that technology must be made available to students. Students cannot learn to use technology vicariously--they must have hands on experience in order to explore its use, as well as having a teacher present to deal with the moral issues brought forward by a plethora of information. Technology is an integral portion of learning, enabling access to information from almost anywhere in the world, crossing both cultures and age groups. Technology, which has shrunk the world, gives us the capability of building bridges between educational communities throughout the world. Technology may provide equal access to information regardless of distance or economics, but can only do so if the school takes a leading role in making it available to all students. Because of the economic nature of our community, some students have access to modern technology, but many students only have access within the school walls. Students need to move into the world possessing the skills to gather, manage, and assimilate the vast resources of information. Computer technology takes the drudgery out of producing documents and replaces it with tools that simplify editing. This allows teachers to focus their attention on style and content without being sidetracked by incorrect spelling, run-on sentences, and other errors. Networking computers allow students to edit one another's work and to create portfolios of their own work. This helps the school system to incorporate alternative assessment programs. Students will expand their research/information processing skills by using instructional databases available over the internet to access text and graphical information for individual and group research projects.

Goals--Professional Development

1. Teachers will use technology to enhance curriculum and instruction.
2. Teachers will gain the necessary technology skills to develop assessment tools and manage assessment results.
3. Teachers will use technology to enhance communications with the parents of their students and with the rest of the school community.
4. Teachers will have the opportunity to develop individual professional development portfolios and district will help support his/her portfolio with resources through Massachusetts Department of Education such as MassOne, PdPoint, eSPED Curriculararchitect, SimsViewer and others.
5. Teachers will be given the opportunity to participate in online distance learning professional development opportunities through Harvard University Graduate School of Education's WideWorld Online.

Rationale: For teachers to use technology productively, they must have the time to learn what technology is available and how it can be used to meet the needs of all students. This means that teachers must clearly understand the curriculum frameworks and have a working knowledge of

how they will be carried out in the classroom. Second, time must be set aside time for teachers to review what technology is available and appropriate to enhance curriculum and instruction. There must also be sufficient time for learning how to use the various technologies.

Technology will allow teachers to use such assessment tools as portfolio assessment and exhibition, and to make more effective use of familiar assessment tools such as paper and pencil tests. Teachers must be able to use computerized rank books that allow them to see in a number of ways how students are progressing. This will allow them to provide interactive and ongoing feedback to students. It is hoped that by using such technology, both students and teachers will be better able to see what deficits and strengths students are exhibiting and how well areas of learning within the curriculum frameworks are being achieved. If we expect teachers to individualize learning to meet the needs of the learner, then a doable methodology must be available to the teacher to accomplish this goal.

As a small district, we have a significant number of teachers working in isolation in terms of being the only teacher teaching a particular curriculum or subject (such as physics). Communications technology will allow greater interaction and collaboration with colleagues by sharing successes and best practices. It also allows mentoring with teachers and subject experts who are not necessarily in the school district. The use of email and teachers' web pages will also be used to enhance communications with parents and the rest of the school community.

During the October 2006 Technology Committee Meeting and as a result of the survey completed by all faculty and staff the following main goals were compiled:

1. District Wide Use of MassOne
2. Professional Development
 - Class XP
 - eSPED, eChild
 - Web Design and Email
 - PD Point
 - Library Media and Research Tools
 - Security

5. Technology Design

5.1 Software Priorities

5.1.1 Administrative and Management

An integrated, networked office management package will be available to all staff to facilitate document sharing and scheduling meetings. All teachers will use a grade reporting package, which integrates with the present student database system. For the past two years, all grades have been required to be submitted by disk. During the 2005-2006 school year, a transition was made to direct network submission of grades. Funds were used in the 2005-2006 school year budget to upgrade the present DOS-based payroll/budget program with the Windows version. This upgrade will also require significant hardware upgrades. This new version will include an automated purchase order system, which integrates with the budget/payroll modules to allow submission of purchase orders over the network, eliminating double keying. Software that integrates with the present student database system will be used for automated telephone contact of parents of absent students.

5.1.2 Communications and Information Access

Novell GroupWise will replace our present Pegasus/Mercury email solution by the end of the 2005-2006 school year. This modern, graphical-based email package will be available to all staff for local and wide-area communications. Internet access software will be available for all staff and students. An automated voice mail system allowing improved parent-teacher communications will be installed as part of the replacement of the schools present telephone system.

5.1.3 Instructional and Curricular

A wide range of computer-based analytical tools and simulation software which will present dynamic models of complex real-world situations required to develop critical thinking and problem-solving skills will be available. Access to a modern integrated office suite will be available to all students for word processing and document sharing. A statistical software package will be available on the network for all students. Software allowing the production of individual and collaborative multimedia presentations will be available.

5.2 Hardware, Facilities, and Network Priorities

5.2.1 Hardware: Workstations and Peripherals

Our new building project gave us the opportunity to provide adequate numbers of modern workstations and peripherals to all members of our school community. When our building was in the planning stages several years ago, it was decided that most classrooms would have seven data drops—one for a teacher workstation, one for a network printer, and five for student

workstations. In the past few years, we have decided that in most cases we would not populate all of the student workstation drops at this time, but would rather use some of our building project budget to obtain a number of mobile wireless laptop carts. As of December 2005, we have just taken delivery of five carts with 20 wireless laptops per cart. These carts, along with one fully-equipped computer lab, two business department labs, a CAD lab, the library media center, and several smaller rooms with multiple student workstations will, we believe, allow all teachers, with appropriate planning, to conveniently hold classes with one computer per student. There will still be at least one or two desktop workstations in each classroom. Each special education classroom will have at least five desktop workstations, and each Title I classroom will have at least ten workstations.

As we have moved into our new building, we have been phasing out most inkjet printers because of the high cost of cartridges. Networked laser printers are available in almost every room of the new building. We have purchased one networked color laser printer and have purchase additional units near the end of the project.

Approximately 50 video/data projectors, ten electronic whiteboards, ten scanners, and various other peripherals will also be obtained as parts of the building project and distributed throughout the new building for the use of the teachers and students. As of November 2004, the high school wing and the art/tech ed suite have already been equipped with the ceiling mounted projectors, and they have been enthusiastically received by the teachers. The two middle school wings and several other locations will have projectors installed as part of the final phase of the project.

5.2.2 Facilities: Network Design

The present network is a 100/1000BaseT Ethernet network using category 5 enhanced cable for data drops and a fiber optic backbone connecting to 100/1000Mbps managed switches. As of November 2004, nine switches have been installed, and three more will be purchased and installed before the end of the 2005-2006 school year. As of November 2005, little management is being done through the switches—a greater use of the management capabilities of the switches will be a priority for the 2005-2006 school year as the building project winds down and technical personnel have more time to devote to becoming familiar with these capabilities.

Our four file servers are, as of November 2005, distributed among several wiring closets. A goal of the upcoming school year was accomplished by relocating all servers to the main wiring closet and patching them to the network with fiber optic cables. Internet access is available from all workstations on the local network.

5.2.3 Building and Classroom Wiring: Standards

As mentioned above, all wiring was done using Category 5 Enhanced Unshielded Twisted Pair cable and was implemented according to the EIA/TIA 568B standard.

5.3 Operations, Maintenance, and Upgrades Priorities

During the October 2006 Technology Committee Meeting and as a result of the survey completed by all faculty and staff the following main goals were compiled:

1. Continue to Improve the Network's Efficiency and User Friendliness
2. Implement a Hardware Rotation System to replace the Older Hardware
3. Implement a Technology Support System or TSS
4. Implement the additions of High School and Middle School Technology Associates

The District Technology Coordinator and his assistant will be responsible for the specification and direct purchase of all components, installation and configuration of all hardware and software. They will continue to be responsible for the ongoing management of the network and for providing technical and administrative support services at the Classroom/Office, the School Building, and the School District. They will continue to perform upgrades, repairs, and maintenance to hardware. When necessary, they will use the services of a systems consulting and integration firm which has been contracted with to provide such services.

The establishment of well-equipped computer labs with modern workstations and Internet access in the new building has greatly improved the efficiency with which the Technology Coordinator and his Instructional Technology Specialist will be able to deliver training to the staff.

Annual support plans will continue to be purchased for all mission-critical software systems--the Superintendent's Payroll/Budget program, the Principal's Scheduling/Grades/Attendance package, and the Library Administration package. School licensing agreements have been signed with both Novell and Microsoft so that the network operating system, workstation operating systems, and office productivity tools can be kept up to date in a cost effective manner. In cooperation with the Franklin County Technology in Education Partnership, we are able to purchase licenses for Microsoft products, the Sophos Anti-Virus product, and the CyberPatrol filtering software at greatly reduced prices.

6. Technology Implementation Action Plan

6.1 Software Procurement

The two major software packages still slated for acquisition and rollout are Novell's GroupWise product and the Windows version of our present payroll/budget program. The financial cost of

licensing for GroupWise is extremely reasonable, since it has already been added to our School Licensing Agreement with Novell. The major costs for a GroupWise rollout will be in the installation, configuring, and training of the staff to move over to a new email program.

6.2 Hardware, Facilities, and Network Acquisition/Implementation

We currently have over 200 new student desktop computers, five mobile wireless carts with 20 laptops each, about 35 administrative computers, about 50 computers for teachers, many network printers, data projectors, scanners, electronic whiteboards, and so on. The technology committee has been meeting regularly to discuss the best mix of components, and has obtained input from the various departments and the administration as to their technology needs.

Six wiring closets spread out through the new building and connected via a fiber optic backbone have all gone online as of November 2004. The use of permanently installed wireless access points will be considered for the 2005-2006 school year (our laptop carts use wireless access points installed on the carts). All classrooms will have at least seven data drops, and some will have more. The library media center will have 24 workstations available for student use. In addition to our mobile laptop computer labs, there will be one desktop computer lab, two business labs, and a CAD lab, each with 20-30 desktop workstations. Managed switches will be installed in the wiring closets, and all servers will be upgraded or replaced with new models.

6.3 Operations, Maintenance, and Upgrades

Support contracts for the library administrative software, the budget and payroll program, and the School System software used for attendance, grade reporting, and scheduling will be purchased. We will continue to be involved in the cooperative county-wide purchase of licenses for Microsoft Windows and Office products, Sophos anti-virus protection, and the CyberPatrol content filtering product.

Daily announcements will be distributed over the network via public folders and also web postings. This will duplicate paper announcements in the first year of the plan, but replace them in subsequent years.

6.4 Professional Development

During the October 2006 Technology Committee Meeting and as a result of the survey completed by all faculty and staff the following main goals were compiled:

1. District Wide Use of MassOne
2. Professional Development
 - Class XP
 - eSPED, eChild
 - Web Design and Email

- PD Point
- Library Media and Research Tools
- Security

Technology Committee and the new Superintendent, Principal are meeting regularly to develop a strategic technology plan that would support and be aligned with the school mission and student learning expectations. Since September, we have made significant investments in providing resources such as PdPoint, Redesigned district website with tools for secure webmail and integration of eSPED, Simsviewr, Curricularhitect, and many more. Teachers are given the opportunity to participate in the WideWorld Online Professional Development through Harvard University Graduate School of Education, Paraprofessionals and Aids were provided professional development opportunities to improve his/her own portfolio. Every teacher has been trained to use the Mahar SIS, PowerSchool. Staff, parents and students may access PowerSchool through the webportal.

Every teacher, academic aide, secretary and administrator has been trained to use email and a web browser. This training is part of each new employee's orientation. Microsoft Exchange has been used for Outlook local clients and Outlook Web Access email since 2006.

Each year at checkout time, teachers are surveyed regarding the types of technology training they have received in the previous year and asked what type of technology training they would like to receive in the coming year. Based on the responses to this survey and on other district needs, technology professional development is scheduled for the following year.

The administration is committed to hire substitute teachers as needed to release teachers for professional development. The Professional Development Committee manages the overall needs of professional development as it relates to all initiatives of education reform.

6.5 Human Resources in Support of Technology

The District Director of Technology works full-time at his position. The Instructional Technology Specialist devotes 25%-30% of his time to classroom teaching. This change in his duties was necessitated by a staff shortage caused by the financial problems now facing most school districts in the Commonwealth. The superintendent supports both positions and the district strategic plan has made significant commitment to this effort to provide all the technology support possible for the teachers.

6.6 Funding

The following is a list of potential funding sources for the initiatives in this plan:

A. Federal/State Entitlement Grants and Reimbursements

E-rate: The District has been involved in the E-rate program from its inception. E-rate funds are used to partly reimburse the District for its telephone bills and internet access bills. The Section 3.6 of this Technology Plan demonstrating that Ralph C. Mahar Regional School District has been committed and will continue to pay for the non-discounted portion of our E-Rate request.

The District received over \$10,000 in the 2003-2004 school year to purchase videoconferencing equipment as part of the Rural Utilities Distance Learning and Telecommunications Program funded by the federal government and in cooperation with the Hampshire Educational Collaborative.

Funds from the Title IIa and Title II d grants, as well as the School Support Program and Special Education Program Improvement grants, have been used to purchase technology.

We also received significant money to build the technology infrastructure through the Building project.

B. Competitive Grants

In partnership with the Orange Elementary School District, we have received funds through a Chapter 170b grant, "Building Online Capacity", to purchase over \$5,000 of mathematics instructional software from Renaissance Learning.

C. Local Foundations

Bartolomei Trust: The Bartolomei Trust is a trust fund whose income has been bequeathed to the Science Department of the Ralph C. Mahar Regional School. In the past, income from the trust has been used to purchase computers for the Science Department. It is expected that trust fund income may be available in the future for technology purchases.

D. LEA Budget: In the past, the LEA budget has provided funding for hardware, software, in-service courses, technology support staff, and maintenance. Unfortunately, the Ralph C. Mahar Regional District is among the 5% of districts in the state that have been severely disadvantaged by the financing provisions of the Education Reform Act, and little significant growth can be reasonably expected. As this plan is being written, the District is facing staff reductions, as well as other cuts.

- E. School Building Assistance: The technology budget of the building renovation/construction project now going on at our school is slightly over \$1 million. It is expected that most, if not all, of this budget will be expended on the purchase, installation, and configuration of the technology discussed earlier in this document.

Living Document

7. Monitoring, Evaluation, and Revision of Technology Plan

In order to determine whether the goals and initiatives of the District Technology Plan are being met, an annual assessment of the plan will be carried out. The assessment will evaluate each initiative to determine whether it has been completed and, if so, whether it has had the desired effect in terms of curriculum standards and/or administrative efficiency. Changes in network capacity and hardware deployment will be documented on an annual basis to demonstrate increasing availability of technology resources to support teaching and learning, and administrative effectiveness. Unmet initiatives will be prioritized and modified as indicated by current information. The assessment will be conducted by the team as presently constituted and additional members of the school community, and will result in an Action Plan for the following year. Only by making long-term strategic technology planning a permanent priority of district leadership will the students and teachers of our community be assured of having the resources they need to meet the challenges of the future.

8. Appendix A: Staff Survey

Technology Survey Checklist

Please check all of the items below for which you *have already received* any type of professional development, *formal or informal*.

Maintenance, Repair, and Network Operations

(Check all that apply.)

- Computer troubleshooting and repair
- Computer and network maintenance
- Network operations

Computer Applications

(Check all that apply.)

- Computer basics
- Productivity tools (word processing, spreadsheet, database)
- Presentation tools
- Use of the Internet (e-mail, World Wide Web)
- Web page construction
- Graphics and multimedia software
- Assistive technologies
- Multimedia peripherals (scanners, digital cameras, video cameras)
- Handheld computers and peripherals
- Single-function word-processors (e.g. AlphaSmart, DreamWriter)

Integrating Technology Into the Curriculum

(Check all that apply.)

- Interdisciplinary
- English Language Arts
- Mathematics
- Science & Technology/Engineering
- History & Social Science
- Foreign Languages
- Arts
- Comprehensive Health
- Recommended Pre-K-12 Instructional Technology Standards
- Assessment (Electronic Portfolio, etc.)

Other Topics

Enter any additional topics that do not fit into the categories above.

Technology Survey Wishlist

Please check all of the items below for which you *would like to receive* any type of professional development, *in the future*.

Maintenance, Repair, and Network Operations

(Check all that apply.)

- Computer troubleshooting and repair
- Computer and network maintenance
- Network operations

Computer Applications

(Check all that apply.)

- Computer basics
- Productivity tools (word processing, spreadsheet, database)
- Presentation tools
- Use of the Internet (e-mail, World Wide Web)
- Web page construction
- Graphics and multimedia software
- Assistive technologies
- Multimedia peripherals (scanners, digital cameras, video cameras)
- Handheld computers and peripherals
- Single-function word-processors (e.g. AlphaSmart, DreamWriter)

Integrating Technology Into the Curriculum

(Check all that apply.)

- Interdisciplinary
- English Language Arts
- Mathematics
- Science & Technology/Engineering
- History & Social Science
- Foreign Languages
- Arts
- Comprehensive Health
- Recommended Pre-K-12 Instructional Technology Standards
- Assessment (Electronic Portfolio, etc.)

Other Topics

Enter any additional topics that do not fit into the categories above.

9. Appendix B: Technology Committee Membership

Team Member	Role/Affiliation
Mike Baldassarre	Superintendent of Regional School District
Gary Bunker	Director of Technology
Jay Conway, PHD	Director of Pupil personnel Services
Scott Hemlin	Interim Principal Grades 7-12
Judy Curley	Director of Curriculum, P.D. Title I
Mike Roche	High Social Studies Teacher, MTA President, District Resident
Greg Scotland	District Instructional Technology Specialist
Karen Thorn	Library Media Specialist
Seth Desilets	Technology & Engineering Teacher
Dereck Dowler	High School Mathematics Teacher
Jim Trill	Middle School Dean of Students

10. Appendix C: Electronic Resources Acceptable Use Policy:

Ralph C. Mahar Regional School District
Electronic Resources Acceptable Use Procedures
A joint document drafted by the Technology in Education Partnership of Greater Franklin/Hampshire Counties

Adopted by the following parties:

Amherst School District
Amherst-Pelham Regional School District
Franklin County Technical School
Frontier Regional and Union 38 School Districts
Gill-Montague Regional School District
Greenfield Public Schools

Hadley Public Schools
Hawlemont Regional School District
Mohawk Trail Regional School District
Northampton Public Schools
Orange Elementary Schools
Pelham School District
Pioneer Valley Regional School District
Ralph C. Mahar Regional School District
Rowe Elementary School

Table of Contents

- I. Introduction
- II. General Provisions
 - A. Network and Internet monitoring
 - B. Filtering
- III. User-specific Provisions
 - A. All users
 - B. Students
- IV. Electronic Communication
- V. Software
 - A. Supported software
 - B. Other software
 - C. Unsupported data, media and software
- VI. Data Storage and Backup
- VII. Hardware
 - A. Use of equipment other than that owned by the school/district
 - B. Wiring of network devices
- VIII. Web Pages
 - A. General guidelines for student, teacher & classroom sites
 - 1. Posting
 - 2. Disclaimers
 - 3. Student pictures and work
 - 4. Content
 - 5. Copyright issues
- IX. School and District Specific Procedures

I. Introduction

This document is a joint effort of the Franklin and Hampshire County public schools, adopted by the school superintendents and technology coordinators/administrators for the purpose of guiding appropriate use of technology in education. The electronic resources at the public schools in Franklin and Hampshire County are provided by and in consonance with their mission to:

- Improve education for all students through access to unique resources and partnerships;
- Improve learning and teaching through research, teacher training, collaboration and distribution of successful education practices, methods and materials.

In addition, we seek to ensure a healthy and appropriate use of technology resources by making provisions for:

- Prevention of access by users to inappropriate matter on the Internet;
- The safety and security of users when using electronic mail, chat rooms, and other forms of direct electronic communications;
- Prevention of unauthorized access, including "hacking" and other unlawful activities;
- Prevention of unauthorized disclosure, use and dissemination of personal information regarding minors; and
- The design of measures to restrict minors' access to harmful materials; and
- Prevention of any and all inappropriate or illegal use.

Our electronic resources—including, but not limited to, computers and Internet access—allow users access to local, national, and international sources of information and collaboration vital to intellectual inquiry and democracy, and are intended solely for educational purposes. Every user has the responsibility to respect the rights of every other user in our school communities and on the Internet. Users are required to conduct themselves in a responsible, ethical, and legal manner, in accordance with both school and district policies, rules, regulations and guidelines and the laws of the Commonwealth of Massachusetts and the United States.

The potential exists, outside the school/district network, for users to access inappropriate material. A user may intentionally or innocently access material inconsistent with our educational purpose and policies. While violations of school/district policy are cause for concern, we maintain the educational advantages of using the technology outweigh the disadvantages. It is the burden of parents and guardians to establish standards of use of electronic media consistent with school/district policy and to ensure that users comply with established policy. We respect each family's decision whether their child should or should not have access to the Internet. Parents should notify the school in writing if they do not want the student to use the Internet. The use of electronic resources is at the discretion of the schools/districts according to their individual electronic policy.

The following explains the TEP's common policies for acceptable use of the schools' and districts' technology. Policies specific to individual schools and districts are at the end of this document. Use of computer networks and the Internet are revocable privileges dependent upon compliance with school/district policy and these procedures. A user's failure to comply with policy shall result in limited network/Internet access, suspension of access, and/or other disciplinary action up to and including termination or expulsion.

II. General Provisions

Greater Franklin County schools have established certain protocols to ensure the safety of our school communities, the security of computer networks, and compliance with applicable law. All users should be aware of the following provisions:

A. Network and Internet monitoring

Most schools and/or their vendors have software and systems in place that monitor and record all Internet usage. Most security systems are capable of recording each web site visit, chat, newsgroup, e-mail message, and file transfer into and out of our internal networks for each user. We reserve the right to intermittently monitor Internet traffic and other usage of electronic resources, for instance, by tracking destination URLs of individual users. Users should have no expectation of privacy when browsing the web, sending or receiving e-mail, or using other electronic resources.

B. Filtering

In accordance with the Children's Internet Protection Act (CIPA), passed by the U.S. Legislature in January 2001 (Public Law 106-554), our schools shall employ filtering software to block access to inappropriate content on all computers with Internet access. Our schools and districts certify that a policy of Internet safety and technology protection measures shall be enforced. Users are restricted from accessing visual depictions of subject matter that are obscene, pornographic, child pornographic or harmful to minors. In compliance with CIPA, our schools and districts shall, in furtherance of this set of Acceptable Use Procedures regarding] Internet safety, monitor the online activities of users.

Users should be aware that filtering software will not block ALL inappropriate web sites. Users shall report all inappropriate sites not blocked by filters to a technology administrator for appropriate action. Filtering software may be temporarily disabled for users 18 and over by a technology administrator for educational research purposes.

Our schools and districts cannot be held responsible for misuse of material downloaded from any online service, or for inappropriate or sexually explicit material being obtained through the network.

III. User-specific Provisions

A. All users

Students, administrators, staff and faculty shall not:

1. Use the network to access and/or transmit material in violation of any U.S. or Commonwealth law, including copyrighted material.
2. Access, download, display, transmit, produce, generate, copy or propagate any material that is obscene or pornographic; advocates illegal acts; contains ethnic slurs or racial epithets; or discriminates on the basis of gender, national origin, sexual orientation, race, color, ancestry, religion, handicap or age.
3. Degrade, damage or disrupt equipment or system / network performance (for example excessive bandwidth use that disrupts the network for other users).
4. Gain unauthorized access to network resources.
5. Permit or authorize any other person to use their name or login password.
6. Use an account of any other person or vandalize another user's data.
7. Waste electronic storage space by saving unnecessary files or programs.
8. Download, install, load or use programs without written permission of the technology coordinator/administrator.
9. Use the Internet for personal commercial purposes or for political lobbying.
10. Use inappropriate, offensive, foul or abusive language.
11. Harass or annoy any other party with obscene, libelous, threatening or anonymous messages, objectionable information, images or language.
12. Forward chain letters.
13. Forward e-mail messages of broad interest—including virus alerts and jokes—to the entire school community (see number 5 below in the section "Students, staff and faculty must").
14. Knowingly make use of pirated software or violate software licensing agreements.
15. Engage in the practice of "hacking" or knowingly engage in any other illegal activity using the network.
16. Engage in any other inappropriate use of the system.

Students, staff and faculty must:

1. Use the Internet and other electronic resources only for legitimate educational purposes.
2. Respect commonly accepted practices of Internet etiquette including, but not limited to, use of appropriate language.
3. Be aware of potential security risks at all times and take all reasonable steps to minimize risks by, at minimum, logging off the network when a computer is unattended and reporting all unauthorized use of one's account to a technology administrator.
4. Avoid bulk e-mailing
5. Forward all e-mails of broad interest, such as virus alerts, to a technology administrator for appropriate distribution to the entire school community.
6. Treat all computer areas and equipment with the utmost care and respect.
7. Not change any security settings including their desktop settings.
8. Abide by this procedure and specific school policy

B. Students

Students may access the Internet only with adult supervision, and must notify a teacher or technology administrator immediately if they come across inappropriate content. In addition, students may not use the Internet to give out personal information (such as a home address, telephone number, or picture) about themselves or other students. Student use of electronic resources is restricted to teacher-approved projects and research.

IV. Electronic Communication

School and district resources for electronic communication shall be used for educational purposes. Incidental and occasional personal use of electronic mail may occur when such use does not generate a direct cost for the district, but such messages will be treated no differently from other messages on the network. Prohibited electronic communications include, but are not limited to:

1. Use of electronic communications to send copies of documents in violation of copyright laws.
2. Use of electronic communication systems to send messages, access to which are restricted by laws and regulations.
3. Use of electronic communications to intimidate others or to interfere with the ability of others to conduct school/district business.
4. Constructing electronic communications to appear to be from someone else.
5. Obtaining access to the files or communications of others for the purpose of satisfying idle curiosity, with no substantial school/district business purpose.
6. Users will conform to the rules of e-mail archiving and document retention.
7. Any other communication in violation of this policy or the specific school policy.
8. Web-based e-mail.

V. Software

A. Supported software

Software which the District has standardized will be given priority in terms of installation, troubleshooting and training. A list of standardized and supported software, and other software owned by the district, will be updated from time to time and made available for viewing at a location designated by the superintendent, principal, or technology administrator or his/her designated agent.

B. Other software

Installation, troubleshooting and training for all other software used by faculty, staff and students will be supported as time permits. Software to be used in the curriculum or in a lab environment must be purchased in "lab packs" of sufficient quantities to account for the greatest number of simultaneous users or as site licenses, and must be owned by the school/district. Single copies of software are considered evaluation copies and will not be supported, installed on multiple computers, or made available from the network to multiple computers.

C. Unsupported data, media and software

Software which makes the computers and network harder to maintain and support and which offers little or no benefit over comparable software will not be supported. Do not install software, including downloaded freeware or shareware, on any computer. The technology coordinator/administrator reserves the right to uninstall unsupported media or reimage any computer as necessary. No personal data or files are to be stored on the local hard drive of any computer. Please store data and files in your home

directory.

VI. Data Storage and Backup:

The technology coordinator/administrator has the right to reimage any computer as necessary. No personal data or files should be stored on the local machine.

The school/district makes every effort to run regular backups on data and e-mail hosted on its systems and networks; however, it cannot guarantee that in the event of data loss or catastrophic failure all information will be recovered.

VII. Hardware:

A. Use of equipment other than that owned by the school/district:

1. The school/district does not support equipment brought in from the outside by any user.
2. The technology coordinator/administrator has the right to confiscate any outside equipment that interferes with operation of the system/network.
3. The school/district is not responsible for damage to or loss of equipment brought in from the outside.
4. Permission to set up any outside equipment on school premises must be given in advance by the technology coordinator/administrator or his/her designated agent.
5. Permission must be granted for use of electronic devices not owned or provided by the school/district.

B. Wiring of network devices:

Any wiring of computers and peripherals must be done to in accordance with local and state building codes. The connectivity requests should be made through the IT department. The IT department is solely responsible for this process.

VIII. Web Pages:

A. General guidelines for student, teacher & classroom sites

1. Posting

All web pages produced by faculty or staff that reference or depict the school/district are assumed to be school- or district-owned educational resources, created for the sole purpose of education, and shall be posted on a school-maintained web site, with the exception of school-authorized sites whose purpose is to simplify the process by which a page/site is posted. All student web sites/pages must be approved by authorized school personnel for posting prior to being posted.

2. Disclaimers

If a user's home page is housed on a school/district server, but has links to sites/pages which

are *not* housed on a school/district server, the user must include the following disclaimer:

"The _____ District is not responsible for any content which is not hosted on our servers"

Any school-related web page produced by staff but not housed on the school web site must be posted to an authorized site and must include the following disclaimer:

"The contents of this site/page express the views of the author(s) only and do not necessarily express the views of the _____ School District."

The school/district is not responsible for content on school-related web sites not housed on our site or on another authorized site.

3. Student pictures and work

According to federal and state law, student personally identifying images and educational information cannot be posted on the web without prior written permission by the appropriate individual.

4. Content

Do not advertise, endorse or link to any product or organization whose primary function is not to disseminate educational content (e.g., commercial enterprises or political groups). Certain fundraising information and links may be allowed, such as "shopforschool.com" or "marketday.com" and certain exceptions may be made for commercial entities who have significantly contributed to the school community (e.g., Verizon or Microsoft). These company links are allowed at the discretion of appropriate school administrators; please see school- and district-specific provisions at the end of this document for more information. In all cases, exceptions may be made when links to commercial or political groups are provided for legitimate educational purposes—for instance, links to the sites of political parties for civics courses, or links to commercial entities for media literacy courses.

Proof your content and use a spell checker before posting. As an educational institution with a potentially broad audience, it is incumbent upon us to have grammatically correct content. Viewers often have high expectations and we must maintain a high level of accountability to our community.

5. Copyright issues

Make certain that copyrighted material conforms to the "fair use" test (<http://www.benedict.com/basic/fairuse/fairtest.htm>) and that all copyrighted material on your site is appropriately credited.

By signing this document, I acknowledge that I have received a copy of the Electronic Resources Policy, which is also available at www.rcmahar.org. I understand that failure to comply with the policy will constitute immediate deactivation of the network account and other penalties may apply.

Student/ Faculty /Staff

Date

Living Document