

Hamilton-Wenham Regional
School District
2009-2011
Technology Plan



Technology Committee

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Executive Summary

The Hamilton-Wenham Regional School District is committed to excellence in teaching and learning for all students. Driven by the District's Core Values and educational mission "to educate children to become knowledgeable, healthy, responsible, and productive adults," and guided by the district's strategic plan, a five year technology plan has been developed with input from teachers, administrators and community members. We envision that all students, staff, faculty, and administrators will have access to the appropriate tools to achieve individual goals. We recognize that we have an obligation to be open to the expanding possibilities which technology offers, and we must be prepared to adapt to the changes and uncertainties we encounter and to grow with them. We believe that we will be better equipped to prepare students for success in the 21st century through the implementation of our Technology Plan. We anticipate that we will meet the issues, concerns, and challenges outlined by the state curriculum frameworks, and enthusiastically design and structure environments which promote life long learning. Our original technology goals were written as part of a five year plan. This revision recognizes the rapid advances in technology and therefore is a revision and extension of the plan for the school years 2009-2011. We continue to envision technology as a reflection of our common beliefs and values.

I. Commitment to a Clear Vision and Mission Statement

The Hamilton-Wenham Regional School District will refine and implement a technology plan that includes a clear set of goals and strategies aligned with the district and state expectations that are evaluated annually.

II. Administration and Management

All Hamilton-Wenham staff will be able to communicate, coordinate, analyze data, retrieve and manage appropriate district-wide information.

III. Budget and Funding

The Hamilton-Wenham Regional School District will secure resources to maintain and upgrade our existing technology, to support technology initiatives, curriculum needs and professional development and to improve the infrastructure through district funds and alternative funding sources.

IV. Technology Integration for Students

Students will be provided with the technology tools and the appropriate instruction to prepare them to become productive, contributing and effective citizens and to meet the Massachusetts Instructional Technology Standards.

V. Technology Integration for Staff

Staff will continue to be supported in the integration of technology into curricular areas to prepare our students to become productive, contributing and effective citizens and to

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meet the Massachusetts Instructional Technology Standards.

VI. Technology Professional Development

Hamilton-Wenham teachers, administrators and support staff will gain competency and facility in the use of a variety of technological tools through a well-planned professional development program. These skills will be used to emphasize, enhance, and promote teaching competencies as well as approve administrative efficiency.

VII. Accessibility of Technology

Hamilton- Wenham Regional School District will provide students and staff with equitable access to state of the art technology and ongoing technical support during and outside the school day.

VIII. Infrastructure for Connectivity

Hamilton- Wenham Regional School District will provide and upgrade a communication network that will connect all district classrooms, offices and local government offices and allow access to present and evolving technologies.

IX. Responsible and Ethical Use of Technology

The Hamilton- Wenham Regional School District will insure the responsible use of technology and promote an understanding of ethics and safety issues in using electronic media at home, in school, and in society.

In 2006 the Hamilton-Wenham Regional School District developed a five-year Technology Plan designed to guide our students, staff teachers, and community members in the use of technology to improve teaching and learning in the 21st century. Unfortunately many of these goals remain unrealized. In the past the community has demonstrated a commitment in achieving these goals, but in recent years local, state and federal budget restraints have resulted in reduced financial support for technology. The technology plan presents a framework for defining a direction for educators, determining needs in our schools, and outlining goals for our students. We anticipate that the ever-changing nature of technology will necessitate continued modification of this plan and obligate the district to ongoing financial commitment. We believe that constant revision of the technology plan will provide the best possible education to our students for success in the 21st century.

Introduction

The Hamilton-Wenham Regional School District recognizes that technology is a tool that is embedded in teaching and learning. In many areas we have witnessed the transformative power of instructional technology in our classroom and we are poised to take the next steps to meet the challenges of educating the “millennial” generation. The instructional model continues to evolve. Online learning, distance learning, and “virtual schools” supplement traditional course offerings and provide students, teachers, and parents with a flexible, enriching learning environment. Schools are moving away from textbooks and opting for digital and/or online content.

In 2001 Massachusetts recognized the importance of the role of technology in the classroom by publishing the “Massachusetts Recommended Instructional Technology Standards”. The primary purpose of this document is to define what preK – 12 students should know and be able to do in order to use technologies for learning. Currently the Department of Education has posted a Draft of Revised Recommended K-12 Technology Literacy Standards. Massachusetts is also a member of the Partnership for 21st Century Skills whose mission is “to position 21st century skills at the center of US K-12 education”.

The Partnership for 21st Century Skills states in its policymakers' guide, "To thrive in the world today, students need higher-end skills, such as the ability to communicate effectively beyond their peer groups, analyze complex information from multiple sources, write or present well-reasoned arguments about nuanced issues and develop solutions to interdisciplinary problems that have no one right answer. In this light, technology is not a panacea for education, but a powerful springboard to higher-level learning." A September 2007 survey commissioned by the Partnership for 21st Century Skills reported that American voters ranked computer and technology skills as second only to reading comprehension in importance for becoming successful competitors in the global economy.

As educators we have a responsibility to provide our students with an education that uses technology to engage them and provides them with the tools to compete in a global, information-based economy. We have an obligation to be open to the expanding possibilities which technology offers and we must be prepared to adapt to the changes and uncertainties we encounter and to grow with them.

District Mission

To educate our children to become knowledgeable, healthy, responsible and productive adults.

Technology Plan Mission

To support the education of our children through the use of a variety of technologies designed to enhance learning, teaching, communication, assessment, and management.

Vision

It is our vision that the Hamilton-Wenham Regional School District will create an environment in which state-of -the-art technology

- provides students and staff with the tools to become active, responsible participants in a global society, discerning users of technology and life-long learners
- helps teachers provide students with instructional practices that are challenging and personalized
- is fully integrated throughout the curriculum to support student learning and the development of research and reference skills
- is accessible to all students and staff and available to community members
- supports the district administrative needs
- is flexible and changing based on the needs of the Hamilton-Wenham Regional School District
- is supported by the communities of the Hamilton-Wenham Regional School District

Current Status

Hamilton-Wenham Regional High School

Staffing: .5 F.T.E. Technology Coordinator
 1.0 F.T.E Technician
 .5 F.T.E. Library/Media/VHS coordinator

732 Students
 102 Staff members

Through private donations and grants each high school classroom now has at least one computer connected to the internet and computers have been added to the library. Only limited number of classrooms have interactive whiteboards and teacher presentation stations.

In the fall of 2008 a new writing lab equipped with computers and a SmartBoard will be available for student and staff use. There are still are many areas of need and in need of improvement and upgrade such as the Computer Aided Drafting lab, teacher presentation stations and interactive whiteboards, science classroom computers, the aging Science Technology Engineering and Mathematics lab and the addition of a Foreign Language lab.

In 2005-2006, the high school became a member of the Virtual High School which offers online courses to students in grades 9-12. Approximately 100 students have enrolled in VHS courses.

There is a need for an additional .5 FTE Technician to support student and staff use of technology.

Computers used for instruction	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	13	61	33
Computers used for administration	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	56	38	24
Apple/Macintosh	2	2	1
Total	71	123	83
e. This school's ratio of students per Type A computer (<i>automatically calculated</i>)			55.00
f. This school's ratio of students per Type A/B computer (<i>automatically calculated</i>)			7.45
g. This school's ratio of students per Type A/B/C computer (<i>automatically calculated</i>)			4.64

Miles River Middle School

Staffing: .5 F.T.E. Technology Coordinator
 .5 F.T.E. Library/Media Specialist
 .5 Technician

483 students
 66 staff

Through private donations and grants the Miles River Middle School has added 18 SmartBoards over the past three years and a mobile laptop cart of 30 computers. Upgrades to existing computers has been limited, as a result there is a need to replace many of the aging computers. Approximately 11 classrooms are in need of SmartBoard technology.

Computers used for instruction	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	0	1	0
Apple/Macintosh	7	128	7
Computers used for administration	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	6	0	0
Apple/Macintosh	0	4	0
Total	13	133	7
e. This school's ratio of students per Type A computer			73.00
f. This school's ratio of students per Type A/B computer			3.76
g. This school's ratio of students per Type A/B/C computer			3.57

Buker Elementary School

Staffing: .8 F.T.E. Library Technology Teacher
 1.0 F.T.E. Technology Assistant

237 students
 42 staff

All classrooms are connected to the internet via at least one computer.
 One mobile laptop station with wireless connectivity is available for classroom use.
 Five classrooms and the library/tech /media center have a SmartBoard. Once again most of the new purchases have been possible through private donations and grant.
 There is a need to furnish more classrooms with SmartBoards and interactive response systems, update existing software programs and upgrade the aging computers.

Computers used for instruction	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	0	0	0
Apple/Macintosh	47	58	1
Computers used for administration	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	3	0	0
Apple/Macintosh	0	0	1
Total	50	58	2
e. This school's ratio of students per Type A computer			5.02
f. This school's ratio of students per Type A/B computer			2.25
g. This school's ratio of students per Type A/B/C computer			2.23

Cutler Elementary School

Staffing: 1.0 F.T.E Library / Technology/Media teacher

1.0 F.T.E. Technology Assistant

302 students

46 staff

All classrooms are connected to the internet via at least one computer.

1.5 mobile laptop stations with wireless connectivity are available for classroom use.

Nine classrooms and the library/tech/ media center have SmartBoards. Once again most of the new purchases have been possible through private donations and grants.

There is a need to furnish more classrooms with SmartBoards and interactive response systems, update existing software programs and upgrade the aging computers.

Computers used for instruction	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	0	5	0
Apple/Macintosh	18	33	62
Computers used for administration	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	2	3	0
Apple/Macintosh	0	0	0
Total	20	41	62
e. This school's ratio of students per Type A computer			17.06
f. This school's ratio of students per Type A/B computer			5.48
g. This school's ratio of students per Type A/B/C computer			2.60

Winthrop Elementary School

Staffing: 1.0 F.T.E. Library/Technology Teacher
 1.0 F.T.E. Technology Assistant

332 students
 57 staff

All classrooms are connected to the internet via at least one computer.
 1.5 mobile laptop stations with wireless connectivity are available for classroom use.
 Seven classrooms and the library/tech/media center have a SmartBoard. Sixteen computers and a SmartBoard have been added to the library/media center. Once again most of the new purchases have been possible through private donations and grant.
 There is a need to furnish more classrooms with SmartBoards and interactive response systems, update existing software programs and upgrade the aging computers.

Computer Platform (including laptops)	Type A (high-end)	Type B (average)	Type C (low-end)
Computers used for instruction	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	3	1	0
Apple/Macintosh	26	21	61
Computers used for administration	Type A (high-end)	Type B (average)	Type C (low-end)
Windows/PC	4	0	0
Apple/Macintosh	0	0	3
Total	33	22	64
e. This school's ratio of students per Type A computer			11.31
f. This school's ratio of students per Type A/B computer			6.43
g. This school's ratio of students per Type A/B/C computer			2.93

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District's ratio of students per Type A computer	18.39
District's ratio of students per Type A/B computer	4.72
District's school's ratio of students per Type A/B/C computer	3.31
<i>State's ratio of students per Type A/B computer</i>	3.6

Infrastructure and Management

District improvements include upgrades to the infrastructure, replacement of the phone system at the middle and high schools, installation of new student management software, bandwidth increases, internet filtering, centralization of automatic backups, and outsourcing email.

The following programs were implemented system wide,

- Schoolspring for staff recruitment
- Connect ED for community outreach
- TechPaths for curriculum mapping
- Destiny for library access and cataloging
- Excentera web based program for IEP management
- Rediker for student management
- GradeQuick software program for computerized grading and attendance at the middle school and high school

In the future, the district plans to implement internet redundancy to increase internet reliability, simplify the domain structures to allow single sign on from district computers, complete the fiber network infrastructure, upgrade the current management software, install machine management software, maintain the telephone services throughout the district and allow web based access to personal files.

Staffing

In the fall of 2008 the district hired a .5 data management specialist to assist in maintaining student and staff data bases and reporting to local state and federal agencies. Since most of the technology staff have multiple responsibilities, such as teaching technology skills, troubleshooting technology issues and supporting classroom

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integration, there is a need for additional staff. A full time preK-5 technology coordinator would support technology integration and professional development. A full time technician in each school would support staff and student in addressing technology issues.

Professional Development

Technology professional development for 2007-2008 included in school and after school support workshops (Polar TriFit, UDL, Thinkfinity, Smartboards, Mimios, web page design, etc) and early release Wednesday Special projects and training. Professional development will continue to focus on providing teachers with the training to integrate available technology in the classroom and implementing curriculum mapping software. Funding for professional development has come from private, state and local grants.

Budget

The five year technology plan as presented in 2006 continues to be underfunded in the district budget. Over the past three years, the operating budget reflects approximately 28% of the estimated budget to support the technology plan fully implemented. Fortunately the district has been the recipient of private, state and federal funds to assist in the implementation of the technology plan.

Special Education

With the district commitment to provide quality instructional services to our disabled students, a portion of the technology plan is devoted to implementation of assistive technologies and associated professional development to support our in - district programming.

Appendix A

Technology Action Plans

Technology Action Plan

Goal #1: Commitment to a Clear Vision and Mission Statement

The Hamilton-Wenham Regional School District will develop and implement a technology plan that includes a clear set of goals and strategies aligned with the district and state expectations that are evaluated annually.

Objective #1: *A technology team, comprised of a variety of stakeholders, will propose a new five year technology plan (2006-2010)*

Initiatives and Activities	Responsibility	Timeline
a) A technology team consisting of teachers from all levels and administrators will meet to complete a 5 year technology plan	Director of Curriculum and Instruction Technology Committee	School year 2005 DONE
b) The 5 year technology plan will be presented to staff and community members for input, reaction and suggestions	Director of Curriculum and Instruction Technology Committee	Spring and Fall 2005 DONE
c) The 5 year technology plan will be presented to the School Committee for approval	Director of Curriculum and Instruction Technology Committee	Fall 2005 DONE
d) Community members will be invited to become members of the technology committee	Director of curriculum and Instruction Technology Committee	Fall 2005 DONE
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development Cost: no cost		
Other: Time		
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal #1: Commitment to a Clear Vision and Mission Statement

The Hamilton-Wenham Regional School District will develop and implement a technology plan that includes a clear set of goals and strategies aligned with the district and state expectations that are evaluated annually.

Objective #2: *The technology plan will be reviewed annually and the analysis will be reported to the School Committee*

Initiatives and Activities	Responsibility	Timeline
a) Hamilton- Wenham will have a technology plan that is reviewed and updated on a yearly basis	Director of Curriculum and Instruction Technology Committee	Annually DONE 06, 07, 08
b) The Technology Committee will report annually to the School Committee on the district's progress in meeting the goals and objectives stated in the 5year technology Plan.	Director of Curriculum and Instruction Technology Committee	Annually DONE Available upon request
c) The Technology Committee will review District policies concerning technology	Director of Curriculum and Instruction Technology Committee	Annually DONE 06, 07, 08
Software Cost: no cost		
Hardware/Facilities/NetworkCost: no cost		
Professional Development Cost: no cost		
Other: Time		
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal #2: Administration and Management

All Hamilton- Wenham Regional School District staff will be able to communicate, coordinate, analyze, retrieve and manage appropriate district wide information.

Objective #1: The district infrastructure will support seamless management of student, financial, curricular, and personnel data and information.

Initiatives and Activities	Responsibility	Timeline
a) Consider upgrades to the district infrastructure that will support MASSONE forums, file sharing, shared calendars, electronic portfolios, etc.	Director of Curriculum and Instruction, IT Coordinator Network Administrator Technology staff	Annually Not supported by budget
b) Staff will receive training in and make us of available software such as Rediker, TestWiz, MASSONE, Budget Sense and grading programs	Director of Curriculum and Instruction IT Coordinator Network Administrator Leadership Team Technology staff	Ongoing Need more Rediker , Budgetsense training
c) Implement pilot project using curriculum sharing/ mapping software	Director of Curriculum and Instruction IT Coordinator Network Administrator Leadership Team Technology staff	Fall 2006 Done 2009
d) Investigate upgrading or replacing MMS software	Director of Curriculum and Instruction, IT Coordinator Network Administrator Leadership Team Technology staff	School year 2005-2006 DONE
e) Implement upgraded student management system	Director of Curriculum and Instruction, IT Coordinator Network Administrator Leadership Team Technology staff	School year 2006-2007 DONE
Software Cost: Multimedia and web authoring software/ curriculum mapping software \$5,000; student management system \$20,000		
Hardware/Facilities/Network Cost: additional server for electronic portfolio storage \$10,000, one server for each building, will replace existing NAS server, also see appendices b-e		
Professional Development Cost: Stipends to trainers \$2000.00 total (\$25/hour)		
Other: no cost		
Policy Issues to be Addressed: (ethics, licensing, copyright, standards) licenses are updated and user compliant		

Technology Action Plan

Goal #2: Administration and Management

All Hamilton- Wenham Regional School District staff will be able to communicate, coordinate, analyze, retrieve and manage appropriate district wide information.

Objective #2: *The district infrastructure will support efficient communication systems*

Initiatives and Activities	Responsibility	Timeline
a) Investigate possibility of outsourcing Email and Internet access	Director of Curriculum and Instruction, IT Coordinator Network Administrator Technology staff	Fall 2005 DONE
b) Investigate upgrades to phone systems which would provide more efficient services at a lower cost	Director of Curriculum and Instruction, IT Coordinator Business Manager Network Administrator Technology staff	Fall 2006 DONE/Ongoing <i>Galaxy</i>
c) Fully implement ConnectEd phone system	Leadership Team	Spring 2005 DONE
d) Implement phone system upgrade	IT Coordinator Network Administrator Technology staff	HS/MS done 08 Elem 2010
Software Cost: no cost		
Hardware/Facilities/Network Cost: Connect Ed \$4000.00 per year, MEC services \$13200/year, Phones?		
Professional Development:		
Cost: no cost		
Other: no cost		
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal #2: Administration and Management

All Hamilton- Wenham Regional School District staff will be able to communicate, coordinate, analyze, retrieve and manage district wide information.

Objective #3: *The district will match or exceed state staffing guidelines to support and facilitate collection, analysis and retrieval of data and communication.*

Initiatives and Activities	Responsibility	Timeline
a) Hire full time Information Technology coordinator and a part time Network Manager	Director of Curriculum and Instruction Leadership Team Technology Committee	Spring 2005 DONE
b) Develop job descriptions for IT coordinator, Network Manager, school based Technology Coordinators, and Technology Assistants	Director of Curriculum and Instruction Leadership Team Technology Committee	Fall 2005 DONE/Ongoing
c) Investigate hiring two computer specialists and/or provide training for existing staff	Director of Curriculum and Instruction Leadership Team Technology Committee	Winter 2005 NOT DONE
d) Investigate hiring a data and assessment manager as outlined by DOE guidelines	Director of Curriculum and Instruction Leadership Team Technology Committee	Fall 2006 DONE
e) Add a full time technology coordinator at each level	Director of Curriculum and Instruction Leadership Team Technology Committee	Fall 2006 NOT DONE/Reorganized
f) Increase the Technology assistant hours to reflect the needs of each building	Director of Curriculum and Instruction Leadership Team Technology Committee	Fall 2006 NOT DONE
g) Implement a help desk system for hardware and software support	Director of Curriculum and Instruction Leadership Team Technology Committee	Fall/winter 2005- 2006 NOT DONE
h) Centralize the technology support to ensure delivery of educational and administrative services and acquisition of hardware and software.	Director of Curriculum and Instruction IT Coordinator Leadership Team Technology Committee	Fall/winter 2005-2006 Ongoing
i) Hire a full time computer technician for each school and provide necessary training	Director of Curriculum and Instruction IT Coordinator Leadership Team Technology Committee	Fall 2009 NOT DONE
j) Investigate staffing for support and supervision of technology labs	Director of Curriculum and Instruction IT Coordinator Leadership Team Technology Committee	School year 2009

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SoftwareCost: \$5,000 (help desk software)
Hardware/Facilities/Network Cost: no cost
Professional Development Cost: \$3,500
Other: 1 FTE technology coordinator=\$61422, 1 technician= \$42,000, increase TA hours=\$10,000, Increase summer hours =\$11,031
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) NA

Technology Action Plan

Goal #3: Budget and Funding

The Hamilton- Wenham Regional School District will secure resources to maintain and upgrade our existing technology, to support technology initiatives, curriculum needs and professional development and to improve the infrastructure through district funds and alternative funding sources.

Objective #1: *The district budget will include an adequate and appropriate funding for technology hardware, software and professional development*

Initiatives and Activities	Responsibility	Timeline
a) The budgets for 2006-2010 will include funding for technology hardware, software and professional development (at least \$150,000)	Leadership Team School Committee	Annually NOT DONE
Software		
Cost: see proposed budgets		
Hardware/Facilities/Network		
Cost: see proposed budgets		
Professional Development:		
Cost: see proposed budgets		
Other: no cost		
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal #3: Budget and Funding

The Hamilton- Wenham Regional School District will secure resources to maintain and upgrade our existing technology, to support technology initiatives, curriculum needs and professional development and to improve the infrastructure through district funds and alternative funding sources.

Objective #2: *The district will secure resources from grants, fundraising, and private foundations to provide adequate and appropriate funding for technology hardware, software and professional development*

Initiatives and Activities	Responsibility	Timeline
a) All potential funding resources and partnerships will be investigated and pursued to fund the technology program	Leadership Team Technology Team Development Director School Committee	Annually Ongoing
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: no cost		
Other: no cost		
Policy Issues to be Addressed: (ethics, licensing, copyright, standards) Adhere to district policies regarding private funding, sponsorship, advertising		

Technology Action Plan

Goal #3: Budget and Funding

The Hamilton- Wenham Regional School District will secure resources to maintain and upgrade our existing technology, to support technology initiatives, curriculum needs and professional development and to improve the infrastructure through district funds and alternative funding sources.

Objective #3: *The district will allocate resources from the budget, grants, fundraising, and private foundations to provide adequate and appropriate staffing for technology integration.*

Initiatives and Activities	Responsibility	Timeline
a) All potential funding resources and partnerships will be investigated and pursued to fund the technology program	Leadership Team Technology Staff Development Director School Committee	Annually Ongoing
b) Hire full time Information Technology coordinator and a part time Network Manager	Director of Curriculum and Instruction Leadership Team Technology Committee	Spring 2005 DONE
c) Investigate hiring two computer specialists and/or provide training for existing staff	Director of Curriculum and Instruction, Leadership Team Technology Committee	Winter 2005/2006 NOT DONE
d) Investigate hiring a data and assessment manager as outlined by DOE guidelines	Director of Curriculum and Instruction, Leadership Team Technology Committee	Fall 2006 Partial implementation 2009
e) Add a full time technology coordinator at each level with expertise in technology integration, use and trouble shooting	Director of Curriculum and Instruction Leadership Team School Committee Technology Committee	Fall 2006 NOT DONE/reorganization
f) Increase the Technology assistant hours to reflect the needs of each building	Director of Curriculum and Instruction Leadership Team School Committee Technology Staff	Fall 2006 NOT DONE
g) Hire two computer specialists and/or provide training for existing staff	Director of Curriculum and Instruction, Leadership Team School Committee Technology Staff	Fall 2006 NOT DONE
h) Centralize the technology support to ensure delivery of educational and administrative services and acquisition of hardware and software.	Director of Curriculum and Instruction Leadership Team Technology Staff	Fall/Winter 2005-2006 Ongoing

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i) Hire a full time computer technician for each school and provide necessary training	Director of Curriculum and Instruction IT Coordinator Leadership Team Technology Committee	Fall 2009 NOT DONE
j) Investigate staffing for support and supervision of technology labs	Director of Curriculum and Instruction IT Coordinator Leadership Team Technology Committee	School year 2009
SoftwareCost: no cost		
Hardware/Facilities/NetworkCost: no cost		
Professional Development:Cost: \$3,500		
Other: 1 FTE technology coordinator=\$61,422, 1 technician= \$42,000, increase TA hours=\$10,000, Increase summer hours =\$11,031		
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) Adhere to district policies regarding private funding, sponsorship, advertising		

Technology Action Plan

Goal # 4 Technology Integration for Students

Students will use technology to deepen their understanding of academic content and enhance their knowledge of the world around them.

Objective #1: Educational technology will be infused into all curricula and in appropriate instructional activities.

Initiatives and Activities	Responsibility	Timeline
a) Match existing curricula to State Standards for Technology	CPDC Technology Coordinators Classroom Teachers	Annually Done for Elementary Language Arts Needs to be part of Curriculum process
b) Increase integration of technology where appropriate	CPDC Technology Coordinators Classroom Teachers	Annually Ongoing
c) Assess current hardware and software needs to achieve curriculum.	CPDC Technology Coordinators Classroom Teachers	Fall 2005 Ongoing
d) Implement hardware and software needs to achieve curriculum.	CPDC Technology Coordinators Classroom Teachers	Fall 2008 Ongoing
e) Develop and implement a scope and sequence for integration of Massachusetts Technology Standards for Students	CPDC Technology Coordinators Classroom Teachers	Annually as part of curriculum review and revision process Ongoing
Software Cost: \$6500 curriculum mapping software annual subscription		
Hardware/Facilities/Network Cost: no cost		
Professional Development Cost: no cost		
Other: no cost		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards) Review, revise, update and adhere to licensing and copyright		

Technology Action Plan

Goal #4 Technology Integration for Students

Students will use technology to deepen their understanding of academic content and enhance their knowledge of the world around them.

Objective #2: *All students will demonstrate proficiency in using educational technology and information literacy skills to enhance learning, increase productivity and promote creativity, communicate effectively and work collaboratively. All students will use technology tools and applications for solving problems, making informed decisions, and participating in authentic, project-based learning in all content areas.*

Initiatives and Activities	Responsibility	Timeline
a) Design assessments to evaluate student attainment of state technology goals in grade 8	Classroom Teachers Technology Coordinators Administrators	Annually as part of curriculum review and revision process Not Done/Look at 8th grade Exit Outcomes
b) The district will meet or exceed the State Standards in the use of technology tools and applications for solving problems, making informed decisions, and participating in authentic, project-based learning in all content areas.	Classroom Teachers Technology Coordinators Administrators Library staff	Spring 2006 Not Done
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: no cost		
Other: no cost		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal #4 Technology Integration for Students

Students will use technology to deepen their understanding of academic content and enhance their knowledge of the world around them.

Objective #3: *All students will act responsibly and ethically when obtaining and using onsite and online information resources.*

Initiatives	Responsibility	Timeline
a) All students will act responsibly and ethically when obtaining and using onsite and online information resources.	Library staff Technology Coordinators Classroom Teachers	Spring 2006 See c) DONE Annually
b) All of students will participate in computer and Internet training that focuses on safety and ethics.	Library staff Technology Coordinators Classroom Teachers	Fall 2005 DONE Annually
c) Acceptable Use Policies, district policies relating to technology and Student Handbooks will be reviewed, revised and updated to reflect changes in technologies.	Tech Committee Leadership Team Legal counsel School committee	Fall 2005 and reviewed biannually by school committee DONE
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: no cost		
Other: no cost		
Policy Issue to be Addressed (ethics, licensing, copyright, standards): ethics and copyright		

Technology Action Plan

Goal #4 Technology Integration for Students

Students will use technology to deepen their understanding of academic content and enhance their knowledge of the world around them.

Objective #4: *Students will be offered expanded learning opportunities by providing distance learning.*

Initiative and Activities	Responsibility	Timeline
a) VHS classes will be implemented	Administration VHS Facilitator Classroom Teacher	January 2006 DONE
a) VHS class options will be expanded	Administration VHS Facilitator Classroom Teacher	Fall 2006 DONE/ONGOING
b) Investigate and catalog courses available through VHS and local community colleges.	Curriculum Director Leadership Team Guidance Department	Annually DONE/ONGOING
c) Establish a relationship with on-line education providers.	Curriculum Director	Annually DONE/ONGOING
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: \$5,000 VHS training (2006)		
Other: \$6000 in 2007, .2FTE VHS teacher		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards); Access to computers during the day and after school		

Technology Action Plan

Goal #5 Technology Integration for Staff

Staff will continue to be supported in the integration of technology into curricular areas to prepare our students to become productive, contributing and effective citizens and to meet the Massachusetts Instructional Technology Standards

Objective #1 *One –on-one coaching and small group workshops will be provided to teachers and staff*

Initiative and Activities	Responsibility	Timeline
a) Provide support and workshops in the implementation of hardware and software to supplement lessons to meet the need of the staff an the goal of 85% technology proficient staff.	Director of Curriculum and Instruction Technology Coordinators Technology Assistants	Ongoing More needed
b) Provide education to staff regarding Internet safety, acceptable use, and all other electronic policies designed to produce effective and courteous users and contributors globally	Director of Curriculum and Instruction Technology Coordinators Technology Assistants	Ongoing More needed
f) Assess current hardware and software needs to achieve curriculum.	Director of Curriculum and Instruction Technology Coordinators Classroom Teachers	Fall 2008 Ongoing
c) Implement hardware and software needs to achieve curriculum.	Director of Curriculum and Instruction Technology Coordinators Classroom Teachers	Fall 2008 Ongoing
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: stipends/in service credit for instructors (\$25 per hour) for after school professional development		
Other: no cost		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards); Internet safety, acceptable use, and all other electronic policies		

Technology Action Plan

Goal # 6 Technology Professional Development

Hamilton- Wenham teachers, administrators and support staff will gain competency and facility in the use of a variety of technological tools through a well planned professional development program. These skills will be used to emphasize, enhance, and promote teaching competencies as well as approve administrative efficiency.

Objective #1 *To provide teachers with appropriate and timely professional development in the use of technology*

Initiatives and Activities	Responsibility	Timeline
a) Ensure that every teacher has the opportunity to take online courses and live video workshops by providing staff with list of courses offered through approved education providers	Director of Curriculum Curriculum and Professional Development Committee (CPDC)	ongoing
b) Investigate the possibility of offering in district on line professional development through programs such as Blackboard, and providing opportunities for live video workshops	Technology Staff Director of Curriculum CPDC	Spring 2006 Done/Ongoing
c) Provide new teachers with training in the use of technological tools available for instruction and management	Director of Curriculum Leadership team Technology Staff CPDC	August/September annually Need more training
d) Provide all teachers with training in the integration of new technologies into their classroom instruction and management.	Director of Curriculum CPDC Leadership Team Technology Staff	Ongoing Need more training
e) Conduct end of the year evaluation of professional development in the use of technology	Director of Curriculum Leadership team Technology Committee	May/June 2006 Annually DONE/DOE report
f) Provide funding to support a well planned professional development program in the use of a variety of technological tools for classroom instruction and management	Director of Curriculum Leadership Team School Committee	Ongoing Inadequate funding
g) Provide training for technology staff to enable them to stay current with changes in technology	Director of Curriculum Leadership Team School Committee	Ongoing Inadequate funding
Software Cost:: Online software for PD \$6,500/year		
Hardware/Facilities/Network; Cost: Video conferencing lab/room provided at no cost through cable contract		
Professional Development Cost: Stipends (\$25/hour) must be provided to instructors either through the budget or through grant opportunities		
Other: no cost		
Policy Issues to be Addressed:(ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal 7 Accessibility of Technology

Hamilton- Wenham Regional School District will provide students and staff with equitable access to technology and ongoing technical support.

Objective #1: *To provide all staff and students with the state recommended student per instructional computer (less than 5 students per high capacity, Internet connected computer)*

Initiatives and Activities	Responsibility	Timeline
a) Development a plan and budget to upgrade the computers at each of the schools over a five year period.(replace 20-25% of type C computers)	Technology Committee IT Coordinator Leadership Team	Fall 2005 Not Done
b) Establish a six year replacement cycle for all hardware	Technology Committee IT Coordinator Director of Curriculum	Summer 2006 Not Done
c) Centralize a district technology inventory that is updated annually	IT Coordinator Director of Curriculum	Spring 2006 Ongoing
d) Investigate leasing versus purchasing hardware	IT Coordinator Director of Curriculum. Leadership Team Business Manager	ongoing
e) Replace all level 3 machines including appropriate software upgrades (replace 20-25% of type C computers)	Technology Coordinators Technology Assistants.	Not Done
f) Reassign existing hardware when possible	Technology Coordinators Technology Assistants.	ongoing
Software Cost: see appendices b-e		
Hardware/Facilities/Network Cost: see Appendix B		
Professional Development: Cost: no cost		
Other: no cost		
Policy Issues to be Addressed: (ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal 7 Accessibility of Technology

Hamilton- Wenham Regional School District will provide students and staff with equitable access to technology and ongoing technical support.

Objective #2: To equip classrooms with assistive technologies to facilitate inclusionary practices as needed and appropriate

Initiatives and Activities	Responsibility	Timeline
a) Consider universal design when making purchasing decisions.	Technology Coordinators Special Needs Staff	ongoing
b) Investigate accessibility of district web site	Web master(s)	ongoing
c) Equip classrooms with SMARTboard technologies	Technology Coordinators	ongoing
Software Cost: no cost		
Hardware/Facilities/Network Cost: SMARTboards \$4000/classroom, see Appendix B		
Professional Development: Cost: no cost		
Other: no cost		
Policy Issues to be Addressed: (ethics, licensing, copyright, standards)		

Technology Action Plan

Goal #7 Accessibility of Technology - Hamilton- *Wenham Regional School District will provide students and staff with equitable access to technology and ongoing technical support.*

Objective #3 The district considers students' access to portable and/or handheld electronic devices appropriate to their grade level.

Initiatives and Activities	Responsibility	Timeline
a) Expand the availability of portable and handheld devices	Curriculum Director Technology Coordinators	Ongoing
b) Purchase of handheld probes, PDAs, interactive devices and graphing calculators to assist instruction	Curriculum Director Technology Coordinators	Ongoing
c) Develop and implement a Teacher Portable and Handheld Loaner program	Curriculum Director Technology Coordinators	Ongoing Not Done
Software Cost: no cost		
Hardware/Facilities/Network Cost: see Appendix B		
Professional Development Cost: no cost		
Other: no cost		
Policy Issues to be Addressed: (ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal 8 Infrastructure for Connectivity

The Hamilton-Wenham Regional School district will provide and upgrade a communications network that will connect all classrooms, offices, and local government offices and allow access to present and evolving technologies.

Objective #1: The infrastructure will be robust enough to address the needs of the curriculum and administration.

Initiatives and Activities	Responsibility	Timeline
a) Switches will be upgraded to at least 10/100MB capacity	Curriculum Director Technology Staff	Fall 2005 DONE
b) Replace servers in each building	Curriculum Director Technology Staff	2006-2008 Ongoing
c) The district will meet or exceed Massachusetts recommendations for network capacity (T1 or better for all buildings)	Curriculum Director Technology Staff	Annually 2005-2010 Ongoing/Fiber?/new provider?
d) Investigate continuing, improving, or outsourcing elements of the infrastructure (mail services, web hosting, etc.)	Curriculum Director Technology Staff	Fall 2005 Ongoing
e) Purchase and install tape back up system	Curriculum Director Technology Staff	School year 2005-2006 DONE
Software Cost: no cost		
Hardware/Facilities/Network Cost: see Appendix B		
Professional Development Cost: no cost		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards) outsourcing email and web sites		

Technology Action Plan

Goal 8 Infrastructure for Connectivity - The Hamilton-Wenham Regional School district will provide and upgrade a communications network that will connect all classrooms, offices, and local government offices and allow access to present and evolving technologies.

Objective #2: All students will be provided opportunities for learning beyond the walls of our schools,

Initiatives and Activities	Responsibility	Timeline
a) Create an evolving and growing e-learning environment (VHS, Virtual Field Trips, WebQuests, etc.)	Technology Coordinators CPDC Classroom teachers	ongoing
b) Extend the hours for school libraries and computer labs	Director of Curriculum and Instruction, Leadership Team	Fall 2006 NOT DONE at all levels HS/MS have extended hours
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: no cost		
Other: Increase teaching assistant hours to extend hours of library/computer labs \$10,000		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal 8 Infrastructure for Connectivity

The Hamilton-Wenham Regional School district will provide and upgrade a communications network that will connect all classrooms, offices, and local government offices and allow access to present and evolving technologies.

Objective #3: *All staff and students will have access to the resources available through the MASSONE project.*

Initiatives and Activities	Responsibility	Timeline
a) Student and staff accounts will be implemented on the MASSONE system for file storage, and access to resources for curriculum and class activities.	Curriculum Director, IT Coordinator Technology Staff	Fall 2005 NOT DONE
b) Staff will be provided with professional development on the use of the MASSONE system	Curriculum Director, IT Coordinator, Technology Staff	ongoing
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development: Cost: \$25/hour stipend for instructor		
Other: no cost		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards) NA		

Technology Action Plan

Goal #9 Access to Internet Outside the school Day

The Hamilton-Wenham Regional School District will insure that students, parents, and the community have access to online educational information and resources outside of the school day.

Objective #1: Students and staff will have access to education resources beyond the limits of the school day.

Initiatives and Activities	Responsibility	Timeline
a) Explore extending hours for school libraries	Leadership team, Technology/Library Staff	Fall 2005 DONE but no funding HS/MS have extended hours
b) Document and post resources available and hours available	Curriculum Director Technology Staff Library Staff	ongoing DONE (MS/HS)
c) Work with community groups to coordinate efforts to access educational resources	Curriculum Director Technology Staff Library Staff	ongoing NOT DONE formally
d) Make website accessible from outside the district for staff who need to update websites	Curriculum Director Technology Staff	Fall 2005 DONE
Software Cost: no cost		
Hardware/Facilities/Network Cost: no cost		
Professional Development Cost: no cost		
Other: Increase teaching assistant hours to extend hours of library/computer labs \$15,000		
Policy Issue to be Addressed: (ethics, licensing, copyright, standards) NA		