

Seekonk Public Schools



Technology Plan 2005-2010



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Seekonk Public Schools Technology Plan 2005-2010

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Seekonk Public Schools Technology Plan 2005-2010

"We cannot assume that our schools will naturally drift toward using technology effectively. We must commit ourselves to staying the course and making the changes necessary to reach our goals of educating every child. These are ambitious goals, but they are goals worthy of a great nation such as ours. Together, we can use technology to ensure that no child is left behind."

– President George W. Bush

Introduction

Education, like the workplace, is not what it was in the 20th century. Technology drives all fields, and if we turn our backs on providing our children with sound technological skills, we are failing them and ourselves. The town has invested a considerable amount of money in equipping our schools with technology. If we do not provide the support staff needed, we will waste that investment. Like the workplace, educational advancements are slowed or stalled when technology is not adequately updated, replaced, or utilized. The town of Seekonk and the Seekonk Public Schools bear the responsibility for investing in our future and that future is our children. Our responsibility as community members, educators, parents, school committee members, and taxpayers is to provide them with the keys to unlock their futures. The District Technology Committee in coordination with school based technology committees focuses on the technology equipment, plans, and curriculum in our schools.

District Technology Committee Members

District Employees

Joy Anderson – District Technician
Kim Basile – District Technician
Deborah Blakeney – District Tech. Director
Raleigh Buchanan – Superintendent
Margaret Cartin – Elementary Teacher
Patricia Connors – High School Principal
Angela Cunard – High School Teacher
Kimberly DeLeo – Middle School Tech. Teacher
Joseph Delude – Assistant Superintendent – Business
Dennis Fernandes – Middle School Principal
Nancy Gagliardi – Elementary School Principal
Maureen Kellogg – Elementary Teacher
Jacqueline Marovelli – District Network Technician
Stephen Mendrzychowski - Elementary School Principal
Sarah Mooney - Elementary Teacher
Joan Mullen – Elementary School Principal
Fred Nelson – High School Asst. Principal
Monica Piquette – High School Tech. Teacher
Holly Quaratella – Elementary Tech. Integration
Joann Rondeau – Elementary Teacher
Judith Sullivan – Elementary Media Specialist
Alan Thivierge – Middle School Asst. Principal
Shanna Vachon – Elementary Teacher

Community Members

Peter Andreozzi
Robert Braunsdorf
Anita Lamoureux
Robert McLintock, School Committee
Al Mendes
David Pitassi
Daniel Riccitelli
Robert Richardson
Robert Sweeney

Technology Vision and Mission Statement

Our Mission Statement.....The Seekonk Schools are dedicated to creating a quality, dynamic learning environment so that each individual learner becomes a respected, contributing member of the community with values, skills, and resources that promote the advancement of the quality of life for all Seekonk residents.

Seekonk Public Schools Technology Vision

The Seekonk Public Schools are committed to providing the students and staff with a technology rich environment designed to enhance and support a world-class curriculum built on the foundation of the Massachusetts Curriculum Frameworks. We recognize that technology is a tool to be used by all students and staff members to assist in the attainment of established learning outcomes and to increase the efficiency with which day-to-day tasks are accomplished. Technology will support communication, cooperation, and sharing among students, staff members, and the community. Through technology we will better meet the varied needs of learners and engage students as active participants in the learning process. Finally, it will be used to broaden the educational opportunities for both students and staff and to help foster a community of lifelong learners.

Technology Goals

The district has established the following technology goals:

- ❖ Technology will be an integral and routine part of the curriculum in order to improve student achievement and actively engage students in their learning.
- ❖ All students will become technologically literate by the end of eighth grade.
- ❖ Technology will be used to support communication, cooperation, and sharing among students, staff, and the community.
- ❖ Technology will be used to efficiently process information related to student records, school business functions, and support services thereby allowing more of the school system's energy and resources to be focused on student education.
- ❖ Ongoing comprehensive professional development together with technology integration support will provide teachers and staff members with the knowledge of instructional strategies and the necessary technological skills to use the resources with which they will be provided to meet the varied needs of learners.
- ❖ Assistive technology will be employed to meet the educational requirements of students with special needs, and various technological resources will be used to enrich the educational experience of the advanced learner.
- ❖ A purchasing and replacement plan will provide an up-to-date technology system for student, staff, and community use.

Technology Team

The district has a district wide Technology Committee as well as Technology Committees in each school. The district wide team consists of both district staff members as well as community members. A list of members is on page 1. The team is divided into two subcommittees: Benchmarks and Community Service. Each school also has a Technology Committee. The committees focus on the planning for all aspects of technology in our schools.

Budget, and Other Sources of Funding

There are line items in the district as well as each school budget for the various phases of technology from hardware/software purchases to maintenance to professional development. Each building principal as well as the district administrative and technology staffs vigilantly search for grants and other types of additional funding for technology. In addition, each elementary school has an active PTO (Parent Teacher Organization), which provides additional funds for small projects. In addition, the district utilizes erate funding for telecommunications and internet access. Funding will be requested starting with the 2006-2007 school year for web site hosting. Every source of funding is analyzed each year to determine availability of funds necessary to promote the district's technology goals.

Appendix A provides budget requirements for implementing this plan.

Yearly Evaluation of Technology Plan

Technology and technology integration best practices are constantly evolving. The District Technology Committee as well as the school based technology committees will review this Technology Plan on a continuing basis to ensure that technology resources are being used effectively. All technology purchases will be evaluated against this plan. Addendums will be published yearly indicating progress towards and necessary modifications for attaining the district goals.

Technology Integration

Teacher Use and Proficiency

Currently all teachers use the district email system. In addition, all teachers at the Middle School and the High School utilize GradeQuick for reporting grades. Teachers at the Middle School also utilize GradeQuick for reporting daily attendance. Many of the teachers at the elementary schools also utilize GradeQuick for managing grades. In order to monitor teacher use both outside and inside the classroom, the district will utilize a questionnaire each spring to determine the percentage of usage. In addition, each teacher will access the TSAT (Teacher Self Assessment Tool) through VES (Virtual Education Space) at least once a year. Each building technology committee will utilize these questionnaires in determining how best to ensure that teachers have the necessary knowledge and access for effective use of technology. The annual questionnaire can be found in Appendix B.

Student Proficiency

The district has an ongoing curriculum development process. Currently, the technology integration piece is just starting. By the end of the 2006-2007 school year, the recommended state student standards for technology will be integrated into the curriculum. In order to monitor the process, each spring a questionnaire will be given to each 4th, 8th, and 12th grader. These questionnaires will be used to determine the proficiency of our students and the efficiency of our technology curriculum. The student questionnaires can be found in Appendix C.

Acceptable Use Policy

The district has an Acceptable Use and Internet Safety Policy (AUISP) for staff and students that was approved by the School Committee on August 26, 2002. The AUISP is CIPA (Children's Internet Protection Act) compliant. The AUISP is available on the district website www.seekonk.k12.ma.us (***Click resources tab***).

Staffing

Current staffing is as follows:

- ❖ District Technology Director (1 FTE) – The district technology director provides support for all aspects of technology – technical support, budget, policy, curriculum integration, network administration, and data management.
- ❖ Senior Technician (1 FTE) – The senior technician supervises the support technicians as well as providing network administration and installation and maintenance support.
- ❖ Technician (1 FTE) – Installation and maintenance support.
- ❖ Instructional Technology Teacher (0.5 FTE) – Provides instructional technology and professional development support at North School.
- ❖ In addition, approximately 20% of the High School/Middle School Library Media Specialist's time is spent in instructional technology support (20% of 1.0 FTE).
- ❖ Approximately 20% of the Library Media Aides time is utilized for tech support such as managing printers, managing network accounts, and basic troubleshooting (20% of 2.0 FTE- Middle School and High School).
- ❖ Currently, the secretaries in each building are responsible for ensuring that the student data requested by the state is accurate. Administrator's Plus software is used to manage student data and to provide the state report in the correct format.

Proposed staffing changes are as follows:

2005-2006

- 1.3 FTE Elementary Library Media Specialist (to be dedicated 1.0 Instructional Technology Support)
- 0.5 FTE Elementary Curriculum Coordinator to facilitate technology integration into curriculum
- 0.5 FTE Instructional Technology Teacher – High School

2006-2007

- 0.5 FTE Elementary Curriculum Coordinator (to facilitate technology integration into curriculum)
- 0.5 FTE Support Technician

2007-2008

- 1.0 FTE Instructional Technology Teacher – Middle School
- 0.5 FTE Support Technician

Changes for the 2008-2009 and 2009-2010 school years will be determined during the 2007-2008 school year.

Technology Professional Development

Currently, only North School has dedicated Instructional Technology Support staff (0.5 FTE). Due to lack of funding, 1.5 FTE dedicated Instructional Technology Support staff were eliminated for the 2004-2005 school year. In addition, 1.0 FTE Library Media Specialist and 3.0 FTE Library Media Aides were eliminated. The current Library Media Specialists (2.0 FTE) provide limited non-dedicated Instructional Technology support. The district technology support staff provides limited technology training and instructional technology support.

The district will work to increase the level of Instructional Technology support provided. Proposed staff additions are listed above. In addition, staff members will be encouraged to select Professional Development opportunities that include instructional technology training. A survey will be administered to all staff each spring to determine participation. The staff members will also use the TSAT through VES at least once a year. Ongoing technology professional development planning will be based on the results of these surveys. Ongoing technology professional development will include mentoring and collaboration, sharing best practices, workshops and classes, and support from Instructional Technology staff.

Accessibility of Technology

Current Technology Environment

Currently all schools have an average ratio of fewer than five students per computer. Each school has a computer replacement plan. All computers in the schools are connected to the Internet. The District has established standards for equipment. These standards are continuously reviewed to ensure effectiveness. All purchase requests for equipment and software are reviewed and approved by the District Technology Director to ensure that the equipment meets these standards and that software is compatible and meets district and school goals.

Elementary Schools

Currently, most classrooms have three or more computers and a printer. A computer lab is available with 25-30 computers. Each building has at least one digital camera and digital camcorder. Each building has at least one smart-board. A laptop is provided for each teacher. Martin and Aitken have a TV in each room that can interface with the teacher laptop. All buildings have video cabling throughout the building with Aitken having a Ranger video distribution system. Martin has a mobile computer lab with 15 laptops. Martin and North both have AlphaSmart carts. Each school has at least two LCD projectors.

Middle School

Generally each classroom has 3-6 student computers and a 32" TV. There are centrally located printers and scanners. There is a Ranger video distribution system with access from all classrooms. Three computer labs are available. These are:

- PC Lab with 28 student computers, laser and inkjet printers, a scanner and a smart-board
- MIDI lab with 12 student computers with piano keyboards
- Drafting lab with 10 student workstations

Currently, these labs are utilized extensively for technology related classes. In addition, 25 computers are available in the Media Center. A laptop is provided for each major subject teacher. The middle school also has an AWS weather station and a TV studio equipped with two video editing computers and a mobile television lab. In addition, a digital camcorder, a digital camera, scanners and two LCD projectors are available for checking out from the media center. Graphing calculators are available for use in math classes.

High School

Current technology is as follows:

- For each non-Language Arts classroom – one student computer and a 32" TV
- For each Language Arts classroom – four student computers, a printer, and a 32" TV
- A laptop is provided for each teacher
- Four wireless mobile computer labs of 15 computers each and a printer with one dedicated to the Science wing.

- Two general-purpose computer labs with 24 computers each, a color printer/scanner. One lab is utilized exclusively for technology related classes and Virtual High School (VHS)
- One publishing/accounting lab of 11 computers, a color printer/scanner, and a B&W laser printer.
- One TV studio. The studio has all equipment necessary for video production as well as the equipment necessary to provide Cable 17 programming.
- Two art rooms with 2-4 computers, and color printer/scanner.
- Seventeen computers in the library for reference use, six computers dedicated for general use, two computers for the SAILS network, one computer for the checkout desk, and one for the office, a color printer/scanner, and a B&W laser printer.
- One Learning Center with four student computers and one Special Ed. room with two student computers
- One smart board with a LCD projector
- Scanners, digital cameras, and digital camcorders available in the library for checking out.
- Graphing calculators available for science and math respectively. CBL units with probes available for science.

All Schools: A computer is provided for each administrator and for administrative staff such as secretaries, nurses, psychologists, and guidance counselors. In addition, a computer is provided in each kitchen and custodial office.

Proposed Technology Environment Changes for 2005-2010

Elementary Schools – Add a mobile lab cart to North and Aitken.

Middle School – The Middle School will move toward eliminating classroom student computers. Instead they will be using team based mobile lab carts. Printers will be cart based. Building wide wireless access will be provided. A wireless lab cart will be provided for the TV production classes. Laptops will be provided for all teachers.

High School – A wireless lab cart will be provided for the TV production classes.

Each school technology committee will provide ongoing review of the building technology plan. Each budget will be reviewed annually to determine building needs for peripheral items such as digital cameras, camcorders, AlphaSmarts, and printers.

Five Year Replacement Plan

A five year replacement plan for each building is included in Appendix A which also includes budget requirements for implementing the replacement plans. The building replacement plans are reviewed every year as part of the budget process.

Technology Infrastructure

Network Services

The Seekonk School District participates in a WAN (Wide Area Network) (see Figure 1.). The WAN utilizes the cable INET for transferring data. The cable provider (Comcast) maintains the INET physical plant. The Town and the School Department technology support staff work together to support the WAN. Internet service is provided at no cost in each school through Comcast on the commercial cable plant. Service and support for the GroupWise email/messaging is provided by a T-1 line from the Middle School to Broadview. This line also provides access to the Middle School weather server and in-house hosted web pages such as web quests. This service is maintained by the school district. All classrooms have internet access.

Seekonk Public Schools Internet Access and Network Configuration

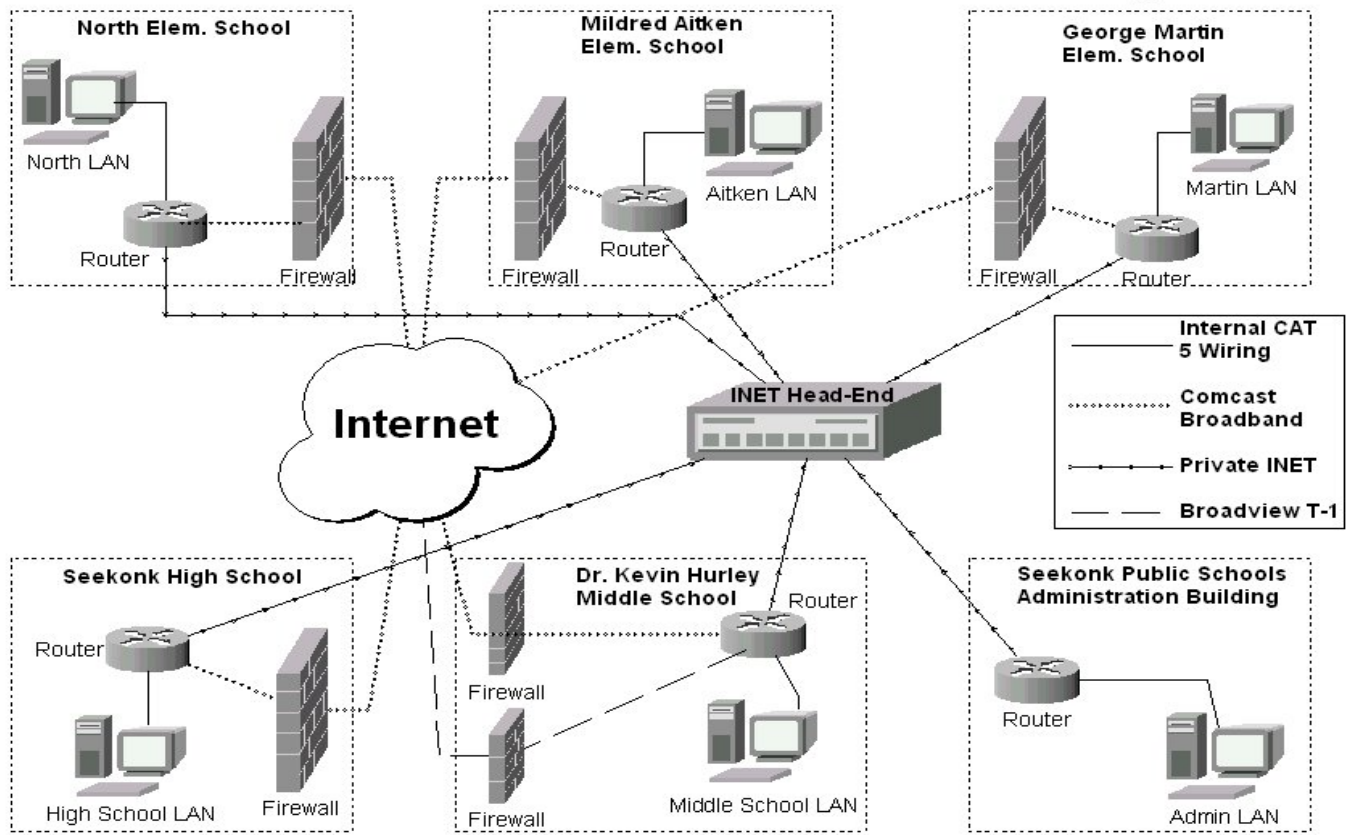


Figure 1. Seekonk Wide Area Network

Each building maintains an Ethernet LAN (Local Area Network) and a server to host user home directories and building specific applications. The LANs run at a minimum bandwidth of 10MB. Each building maintains a BorderManager server which provides proxy, filtering, and firewall services. A server farm at the Middle School contains a web server, and an e-mail/messaging server. All servers except for the web server are running Novell Netware. In addition, ZenWorks is utilized to manage applications on the network, to provide Windows computer imaging services, and workstation security for Windows computers. The administration building is also linked to Town Hall to access the Munis financial system.

E-Learning Environments

The High School is actively involved in VHS (Virtual High School) which provides online educational opportunities for high school students. The elementary and middle school staffs have created web quests for enhancing lessons. The district is continually exploring other e-learning opportunities.

Technical Support

The current Seekonk Schools technical support team is as follows:

- Full-time district Technology Director
- One Full-time Senior Technician
- Two half-time technicians
- The Middle School and High School have Media Aides who provide printer and password management as well as basic troubleshooting.
- A student tech team is utilized each summer to perform year-end maintenance.

These staff members provide the day-to-day help necessary to troubleshoot and repair problems encountered by staff and students. Their time is spent in corrective maintenance as well as adding new capabilities and enhancements and ensuring that the system operates efficiently, reliably and is easily maintained. In addition, with help from the Library/Media Specialists and Technology Integration teachers, the staff performs the following activities:

- Demonstrate advanced features of systems
- Help recover lost files
- Offer tips for better operation
- Explain undocumented software features
- Provide information about system specifications and the cost of new hardware/software

ZenWorks is utilized throughout the district to provide Windows computer and server management including remote services. Apple Remote Control is utilized to provide Macintosh computer management. SchoolDude ITDirect is used for requesting and tracking tech support requests. This is a web based help desk and inventory program. ITDirect also includes a knowledgebase. The knowledgebase was started in Spring 2005 and is continuously updated. In addition, a phone help desk operates four hours a day. Current average time for repair is 24 hours. Current technician to computer ratio is about 450 to 1. Short repair times are critical to technology use in a school system. The technology support staff strives to answer all support requests on the day they are received. Many tasks are automated requiring less hands on or travel time to provide support.

The district goals for tech support for 2005-2010 are as follows:

1. Develop a formal program that ensures new staff members receive appropriate training. Also that all staff receive training should significant system changes occur. Currently training is done on a person to person basis and is inconsistent across the system.
2. Ensure that Tech Support staff is trained and knowledgeable. Provide training as needed to keep tech skills up-to-date.
3. Add additional technician staff to decrease the computer to technician ratio.

Access to the Internet outside the School Day

The district maintains an active website, which links to individual web sites for each school. Web services for all schools and the district are provided through contracted services. Aitken utilizes the services of MySchoolOnline. The district, as well as the other schools, utilizes the services of LucasProject. The district and school web sites strive to provide up-to-date information for parents, students, and staff members.

The Seekonk Public Library works closely with the schools and provides after school access to the Internet for both students and staff.

Appendix A

Budget and Hardware Replacement Plans

Current Computer and Printer Inventory

(Age for 2005-2006 School Year)

<i>Building</i>	<i>Type of Computer</i>	<i>1 year old</i>	<i>2 years old</i>	<i>3 years old</i>	<i>4 years old</i>	<i>5+ years old</i>	<i>Totals</i>	<i>Total Computers per building</i>	<i>Printers</i>
Admin	Desktop	5	9	1	1		16	19	6
	Laptop		1	2			3		
Martin	Desktop		2	105	2	2	111	156	23
	Laptop		1	43	1		45		
North	Desktop		40	20	1	15	76	103	16
	Laptop	1	10	10	6		27		
Aitken	Desktop		40	11		18	69	88	14
	Laptop	1	7	11			19		
Middle School	Desktop		39		46	153	238	296	18
	Laptop	1	24	33			58		
High School	Desktop	1	2	168	16	1	188	305	25
	Laptop			3	114		117		
District Totals		9	175	407	187	189	967		102

Current Network Servers

<i>Type of Computer</i>	<i>1 year old</i>	<i>2 years old</i>	<i>3 years old</i>	<i>4 years old</i>	<i>5+ years old</i>	<i>Totals</i>
Servers		5	7	1	3	18

Budget Requirements

Hardware Replacement Plans and Technology Environment Changes

Purpose	Item	Building	Estimated Annual Cost									
			2005-2006		2006-2007		2007-2008		2008-2009		2009-2010	
			Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
R E P L A C E M E N T S	Computers	Admin. Office			4	\$4000	4	\$4000	4	\$4000	4	\$4000
		Aitken	18	\$18000	18	\$18000	18	\$18000	18	\$18000	18	\$18000
		High School	60	\$60000	60	\$60000	60	\$60000	60	\$60000	60	\$60000
		Martin	30	\$30000	30	\$30000	30	\$30000	30	\$30000	30	\$30000
		Middle School	30	\$30000	10	\$10000	21	\$21000	20	\$20000	20	\$20000
		North	7	\$7000	30	\$30000	26	\$26000	21	\$21000	21	\$21000
	AlphaSmart NEO cart AlphaSmart NEO cart AlphaSmart NEOs	Martin							1	\$8550		
		North			1	\$8550						
		Aitken	2	\$500								
	Printers	Martin	3	\$1500	3	\$1500	3	\$1500	3	\$1500	3	\$1500
		North	3	\$1500	7	\$3500	6	\$3000	2	\$1000	2	\$1000
		Aitken			2	\$1000	2	\$1000	2	\$1000	2	\$1000
		Middle School			1	\$500	1	\$500	1	\$500	1	\$500
		High School			1	\$500	1	\$500	1	\$500	1	\$500
	Tech. Env. Changes	Mobile Computer Labs	Aitken	2	\$37000			1	\$18100			
Mobile Video Prod. Lab		High School			1	\$16750						
Mobile Computer Labs		Middle School	1	\$24000	1	\$24000	2	\$48000	2	\$48000	2	\$48000
Mobile Computer Labs		North	1	\$18100								
Mobile Video Prod. Lab		Middle School			1	\$16750						
Video Editing Computer		Martin	1	\$2000								
Video Editing Computer		North	1	\$2000								
Video Editing Computer	Aitken							1	\$2000			
Replacements	Network Server	District Wide	2	\$6000	3	\$10000	3	\$10000	3	\$10000	3	\$10000
	Network Managed Switches	District Wide	2	\$3100	2	\$3100	2	\$3100	2	\$3100	2	\$3100
	Network Un-managed Switches	District Wide	5	\$1000	5	\$1000	5	\$1000	5	\$1000	5	\$1000

			Estimated Annual Cost											
			2005-2006		2006-2007		2007-2008		2008-2009		2009-2010			
Purpose	Item	Building	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost		
Replacements/ Changes	Digital Camcorders	Martin Middle School			1	\$350			1	\$350				
		Aitken North High School			1	\$350			1	\$350				
								1	\$350					
										1	\$350			
	Digital Cameras	Martin Middle School	1	\$200					1	\$200		1	\$200	
		Aitken North High School							1	\$200		1	\$200	
									1	\$200		1	\$200	
										1	\$200		1	\$200
										1	\$200		1	\$200
	LCD Projector	Middle School	2	\$3400	2	\$3400	2	\$3400	2	\$3400	2	\$3400	2	\$3400
		North							1	\$1700		1	\$1700	
		Aitken							1	\$1700		1	\$1700	
Martin High School								1	\$1700	1	\$1700	1	\$1700	
									1	\$1700	1	\$1700		
Annual Support and Maintenance	Administrator's Plus Software and GradeQuick	District Wide	n/a	\$12800	n/a	\$13500	n/a	\$13700	n/a	\$13900	n/a	\$14100		
	Anti-virus Subscriptions	District Wide	n/a	\$2784	n/a	\$2784	n/a	\$2784	n/a	\$2784	n/a	\$2784		
	Novell SLA Contract	District Wide	n/a	\$8200	n/a	\$8500	n/a	\$8700	n/a	\$8900	n/a	\$9000		
	SNAP	District Wide	n/a	\$1125	n/a	\$1125	n/a	\$1250	n/a	\$1250	n/a	\$1250		
	Web Site Hosting	District Wide	n/a	\$3118	n/a	\$3500	n/a	\$3500	n/a	\$3500	n/a	\$3500		
	Networking Consulting	District Wide	n/a	\$5000	n/a	\$5000	n/a	\$5000	n/a	\$5000	n/a	\$5000		
	SchoolDude - ITDirect and Maintenance Direct	District Wide	n/a	\$2500	n/a	\$2500	n/a	\$2500	n/a	\$2500	n/a	\$2500		
	"Networking Monitoring, Email Anti-virus and SPAM filter"	District Wide	n/a	\$2152	n/a	\$2400	n/a	\$2400	n/a	\$2400	n/a	\$2400		
	Internet Filtering	District Wide					n/a	\$9000	n/a	\$9500	n/a	\$10000		
Software	K-2 Science Software	Aitken	n/a	\$600										
	Keyboarding Software	Middle School	n/a	\$1100										
Totals				\$284,679	\$282,559	\$304,734	\$287,734	\$281,334						

Appendix B

Teacher Questionnaire

Seekonk Public Schools Teacher Technology Use Survey

1. During this school year, how often did you use technology for professional activities such as lesson planning, administrative tasks, communications, and collaboration?

- nearly every day
 about once a month
 about once a week
 rarely or never

2. During this school year, how often did you use technology with students for activities such as research, multimedia, simulations, data interpretation, communications, and collaboration utilizing tools such as software programs and word processing?

- nearly every day
 about once a month
 about once a week
 rarely or never

3. Have you assessed your own technology skills using the *Technology Self-Assessment Tool* (available on the web site of the Massachusetts Dept. of Education and on Virtual Education Space – VES)?

- yes
 no

4. During this school year, how many hours of technology professional development did you take? _____ hours. Include one-on-one coaching, mentoring and co-teaching.

5. During this school year, did you receive informal professional development from a technology expert/technology integration teacher in your school (including support such as coaching, mentoring, and co-teaching)?

- yes
 no

6a. Did you take professional development workshops or courses via distance learning during this year?

- yes
 no

6b. If so, what format was used?

- web-based
 web-based videoconferencing
 satellite based

7a. During this school year did you teach distance learning courses to students or staff in your district as part of your employment with your district?

- yes
 no

7b. If so, which of the following did you teach?

- courses for students
 professional development workshops for teachers and administrators
 credit courses for teachers and administrators

8a. During this school year did you teach distance learning courses to students or staff in other districts as part of your employment with your district?

- yes
 no

8b. If so, which of the following did you teach?

- courses for students
 professional development workshops for teachers and administrators
 credit courses for teachers and administrators

Appendix C

Student Questionnaires

STUDENT TECHNOLOGY ASSESSMENT SURVEYS

These technology surveys have been designed for assessing student competency based on the *Massachusetts Recommended PreK – 12 Instructional Technology Standards*.

Survey Evaluation

The student surveys cover three standards of proficiency:

Standard 1. Proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity.

Standard 2. Responsible use of technology and an understanding of ethics and safety issues in using electronic media.

Standard 3. Ability to use technology for research, problem-solving, and communication. Students locate, evaluate, collect, and process information from a variety of electronic sources. Students use telecommunications and other media to interact or collaborate with peers, experts, and other audiences.

Using the Student Survey

The table below shows the percentage of skills that students should have acquired in order to be considered to have mastered all or nearly all of the standards.

	Standard 1 Technology Operations & Concepts	Standard 2 Ethics and Safety	Standard 3 Use of Technology
Mastery	90%	100%	90%

Reporting to the state is done in three categories:

- Mastered all or nearly all standards
- Mastered half or more than half of the standards
- Mastered less than half of the standards.

Grade 4 Student Technology Questionnaire

I Know	<i>Std. #</i>	Standard 1 – Technology Operations and Concepts
	1.1	How to open and close a file, move around the screen using scroll bars, arrow keys, special keys, and a mouse.
	1.2	What a monitor, keyboard, disk, printer, and mouse are and what they do.
	1.3	How to type (keyboarding skills).
	1.4	How to open a word processing document, change the font along with its size and style, save the document and print it.
	1.5	What a database is and how to use it.
	1.6	What a spreadsheet is and how to use it.
	1.7	How to work with classmates to use teacher-selected Web sites.
	1.8	How to work with classmates and my teacher to send a class e-mail message
	1.9	How to work with classmates and my teacher to create a slide presentation with existing template. (HyperStudio or PowerPoint).
	1.10	How to use drawing and painting programs for class projects (AppleWorks and Hyperstudio).
Standard 2 – Ethics and Safety		
	2.1	How to follow classroom rules for responsible use of computers.
	2.2	How to follow the school’s rules for safe and ethical Internet use.
	2.3	How to decide if Web sites are useful for school work.
	2.4	And understand that the computer is a tool for learning.
	2.5	And understand the correct posture and hand position when using computers.
Standard 3 – Learning with Technology		
	3.1	How to gather information from web sites, CD-ROM encyclopedias, and an automated card catalog.
	3.2	How to organize information into charts, tables, and diagrams using programs like AppleWorks.
	3.3	How to use content-specific tools (e.g., environmental probes, sensors, robotics, simulation software, and measuring devices).
	3.4	How to work with classmates and teacher in creating a presentation (PowerPoint or HyperStudio)
	3.5	How to work with classmates and my teacher to exchange e-mail with another classroom

Dr. Kevin Hurley Middle School

Eighth Grade Technology Questionnaire

The purpose of this questionnaire is to provide data to compare the 8th Grade technology knowledge, skills and abilities to the Massachusetts Department of Education Instructional Technology Standards. This questionnaire will be reviewed by the District Technology Department, and **will not** impact your grades in any manner.

We appreciate your fair and honest answers of your own personal abilities as you work your way through this questionnaire. This should only take you about 5 minutes.

Please rate ***your personal abilities*** in the following areas of technology. Place a circle around the appropriate answers.

Number 1 = No idea what the question is talking about.

Number 2 = Know what it is, but can't do it.

Number 3 = I can do the basics completely on my own.

STANDARD 1. (Use of computers, applications, hardware, software, and connectivity.)	<i>No idea</i>	<i>Know what it is</i>	<i>Can do</i>
1.11 I can identify components of a computer system, understand their functions, and use appropriate terminology in speaking about them (e.g., operating system, hard drive, memory, window).	1	2	3
1.12 I can identify and use basic features of a computer operating system (e.g., format/initialize disks, access information on size and format of a file, create folders on the local hard drive).	1	2	3
1.13 I can save a file to the desktop, the hard drive, and the network.	1	2	3
1.14 I can select a printer and print a document with appropriate page setup and orientation.	1	2	3
1.15 I can operate peripheral equipment (e.g., scanner, digital camera, camcorder)	1	2	3
1.16 I have developed an efficient keyboarding technique.	1	2	3
1.17 I can identify and use editing and formatting features of a word processing program (e.g., centering, line spacing, margins, cut and paste, fonts, styles, spelling, page numbers).	1	2	3
1.18 I can insert images (e.g., graphics, clip art, tables) from other files into a word-processing document.	1	2	3
1.19 I can describe structure and function of a database and identify components (e.g., record, field).	1	2	3
1.20 I can create an original database, defining field formats and adding new records.	1	2	3
1.21 I can perform simple operations in a database (e.g., browse, sort, search, delete, add data).	1	2	3
1.22 I can describe the structure and function of a spreadsheet (e.g., cells, rows, columns, formulas) and apply formatting features.	1	2	3
1.23 I can create an original spreadsheet, entering simple formulas.	1	2	3
1.24 I can produce simple charts from a spreadsheet.	1	2	3
1.25 I can identify and use navigation features of browser (e.g., "go," "back," "forward")	1	2	3
1.26 Using a browser, I can "bookmark" a Web site for future reference.	1	2	3
1.27 I can identify the basic elements of a Web site (e.g., URL, hyperlinks, site map, etc.)	1	2	3
1.28 I can copy an image from a Web site into a file on the desktop and write a correct citation caption in keeping with copyright law.	1	2	3
1.29 I can use e-mail, create and send a message.	1	2	3
1.30 I can open an e-mail attachment and save it to the desktop.	1	2	3
1.31 I can use correct terminology in speaking about electronic communications (e.g., browser, search engine, online)	1	2	3
1.32 I can create a slide presentation using appropriate applications.	1	2	3
1.33 I can identify and use drawing and painting applications as appropriate for class projects	1	2	3
1.34 I can identify appropriate applications for a classroom project.	1	2	3

STANDARD 2. (Responsible use of technology, understanding of ethical/safety issues in electronic media.)		<i>No idea</i>	<i>Know what it is</i>	<i>Can do</i>
2.6	I understand of classroom rules regarding responsible use of computers (responsible behavior around equipment, respect for other people’s work, and appropriate collaborative behavior) and can follow these rules.	1	2	3
2.7	I can explain and use ethical and legal behavior in copying files, applications, and media.	1	2	3
2.8	I can explain the potential problem of computer viruses and use exercise caution in opening e-mail attachments from unknown sources.	1	2	3
2.9	I can explain safe practices for sharing personal information via e-mail and the Internet.	1	2	3
2.10	I can explain proper e-mail etiquette.	1	2	3
2.11	I can describe the school’s Acceptable Use Policy, and know the consequences of violating that policy.	1	2	3
2.12	I can validate a Web site for authenticity (e.g., find site sponsor, author, and date the site was last updated)	1	2	3
2.13	I can explain how media and technology can be misused to distort or exaggerate information.	1	2	3
2.14	I can write correct citations for text and images gathered from electronic sources. I understand that the use of materials is limited by the fair use rule of copyright law.	1	2	3
2.15	I am aware of the issue of ergonomics (e.g., Repetitive Stress Injuries) and how to use equipment safely.	1	2	3
STANDARD 3. (Ability to research, problem-solve, and communicate with the tools of technology.)		<i>No idea</i>	<i>Know what it is</i>	<i>Can do</i>
3.6	I can identify electronic sources of information (e.g., Internet, CD-ROM, online periodical databases, and online catalogs).	1	2	3
3.7	I can use search engines effectively to find relevant, unbiased, and current information on a subject.	1	2	3
3.8	I can organize information that is collected using a variety of tools (e.g., spreadsheet, database, saved files).	1	2	3
3.9	I can communicate results of research and learning with others using the most appropriate tools (e.g., desktop-published or word-processed report, multimedia presentation).	1	2	3
3.10	I can use charting tools and graphic organizers (e.g., concept mapping, flow charting, and outlining software) to connect ideas and organize information.	1	2	3
3.11	I can use e-mail to communicate with others (e.g., students in other classrooms, experts in a subject, teachers)	1	2	3

Thank you for your time!

Seekonk High School

Senior Technology Questionnaire

The purpose of this questionnaire is to provide data to compare the Senior Class technology knowledge, skills and abilities to the Massachusetts Department of Education Instructional Technology Standards. This questionnaire will be reviewed by the District Technology Department, and **will not** impact your grades in any manner.

We appreciate your fair and honest answers of your own personal abilities as you work your way through this questionnaire. This should only take you about 5 minutes.

Please rate **your personal abilities** in the following areas of technology. Place a circle around the appropriate answers.

Number 1 = No idea what the question is talking about.

Number 2 = Know what it is, but can't do it.

Number 3 = I can do the basics completely on my own.

STANDARD 1. (Use of computers, applications, hardware, software, and connectivity.)

SPREADSHEETS

	<i>No idea</i>	<i>Know what it is</i>	<i>Can do</i>
1.49 I can customize the formatting of charts/graphs in a spreadsheet.	1	2	3
1.50 I can define/use spreadsheet functions (sort, filter, find).	1	2	3
1.51 I can use number formats (such as scientific notations, %, exponents).	1	2	3

BROWSER

1.52 I can organize bookmarks into folders.	1	2	3
1.53 I know how to select/use search engines, and I understand the differences between search engines.	1	2	3
1.54 I can explain search strategies to locate and retrieve electronic information (using syntax and Boolean logic operations).	1	2	3

E-MAIL

1.55 I can create an address book for my e-mail.	1	2	3
1.56 I can share files as attachments in e-mails.	1	2	3

MULTI-MEDIA

1.57 I can create multi-media presentations, desk-top published reports, or Web pages to incorporate data from other files.	1	2	3
1.58 I can create/manipulate illustrations using a drawing or painting program.	1	2	3

TECHNOLOGY EDUCATION

1.59 I understand the capabilities of technology and its importance for lifelong learning.	1	2	3
1.60 I can select the right technology tool for a given task.	1	2	3

STANDARD 2. (Responsible use of technology, understanding of ethical/safety issues in electronic media.)

2.16 I know ways in which technology is used at work and in society.	1	2	3
2.17 I clearly understand the school's Acceptable Use Policy.	1	2	3
2.18 I can explain laws restricting the use of copyrighted materials on the Internet.	1	2	3
2.19 I can explain how to evaluate electronic sources of information.	1	2	3
2.20 I can cite electronic sources correctly.	1	2	3
2.21 I know what ergonomics means and how to practice safe use of equipment.	1	2	3

STANDARD 3. (Ability to research, problem-solve, and communicate with the tools of technology.)		<i>No idea</i>	<i>Know what it is</i>	<i>Can do</i>
3.12	I can conduct research using appropriate electronic sources. (Web sites, online periodical databases, online catalogs, etc.)	1	2	3
3.13	I can integrate (with correct citations) electronic research results into a research project.	1	2	3
3.14	I automatically evaluate Web site authenticity when using the internet.	1	2	3
3.15	I can present information, ideas and results of work using any variety of communication technology. (Web pages, videotapes, multimedia, etc.)	1	2	3
3.16	I can collect, organize, analyze and graphically present data using the most appropriate tools (spreadsheets, database, graphing, and concept-mapping tools).	1	2	3
3.17	I can import graphics, photos, and other media into report or presentation, citing sources appropriately.	1	2	3
3.18	I can create multiple links among various pieces of information residing in different applications (e.g. a chart imported from a spreadsheet into a word-processed report can be set to update automatically when the data is changed in the spreadsheet.)	1	2	3
3.19	I know how specialized technology tools can be used for problem-solving, decision-making, and creativity. (e.g. simulation software, computer-aided design, dynamic geometric software, art and music composition software.)	1	2	3
3.20	I know how to use electronic conferencing tools such as Internet bulletin boards, listserv, electronic classroom, and interactive video.	1	2	3
3.21	I can exchange e-mails independently.	1	2	3

We value your opinion and are interested in knowing your thoughts on the area of educational technology at SHS. What would you like to see introduced to the SHS technology curriculum? What kinds of classes, equipment or projects do you think would benefit your SHS technology education?

Thank you for your time!