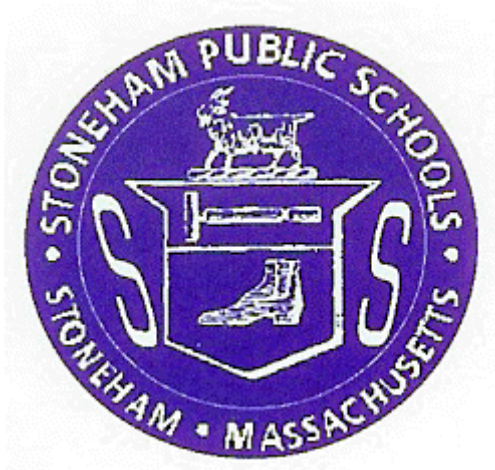


Stoneham Public Schools Technology Plan 2006-2009



The Department of Educational Technology Services Stoneham Public Schools

Technology Department 2007

Robert C. Hogan
Director of Technology

Patrice Fitzpatrick
Technology Secretary

Christine DeFelice
Technology Assistant

Kathleen Peterson
Technology Assistant

Alan Padula
Technology Assistant

Joseph DiMarco
Network Manager

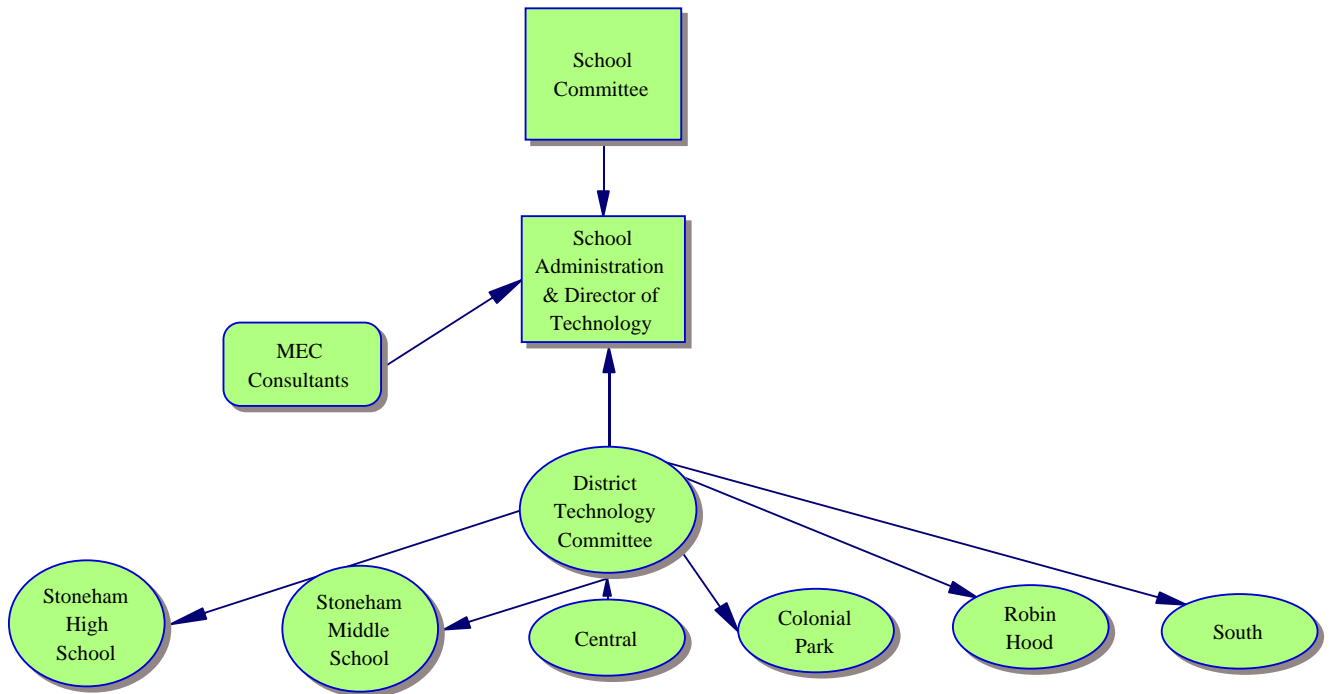
James Carino
Technology Specialist

Christine Homs
Technology Assistant

Vincent Donlan
Technology Assistant

Technology Leadership

Leadership and planning for technology within the Stoneham Public Schools will primarily come from three sources—the school committee, school administration, and the District Technology Committee which contains members from each school. The Assistant Superintendent, the building principal and the program supervisors shall also play a vital role in providing leadership and direction for subject and grade level technology utilization and planning.



The implementation of technology plans and projects is the responsibility of the school administration (Director of Technology). The school administration (Director of Technology) should conduct ongoing technology audits as part of the technology planning process.

Stoneham Public School's Vision and Mission Statements

Our vision of technology for the Stoneham Public Schools is a statement that not only describes how the integration of technology will enhance the process of learning for students' education, but also suggests the prioritization of steps to fulfill our vision as seen in our newly adopted 2006-2010 Strategic Plan.

In concert with Massachusetts education reform initiatives and our own philosophy of education, the Stoneham Public Schools articulates a vision of students who will navigate, operate and participate in successful learning experiences in a technology-rich environment. As active learners, these students will be capable of working collaboratively and independently to pose questions, seek answers, construct knowledge, and solve problems. With the assistance of teachers, who have been trained through quality professional development opportunities to act as guides and facilitators of learning, students will use technology to learn from one another, from other classrooms, from other schools, from their community and from the global community.

Technology Vision Statement

Technology has become an integral part of our daily lives, changing the very nature of how we live, learn and work. Therefore, the Stoneham classrooms of the future will be structured to foster life-long learners capable of the following:

- Understanding and using technology as a powerful tool of exploration that demands user responsibility.
- Adapting to change at home, at school, and in the world-at-large.
- Transferring knowledge and skills across the disciplines and technologies.
- Achieving equal access to appropriate technologies, as well as to the support necessary to use them effectively at all levels and in/among all disciplines.

To realize this vision, the Stoneham Public School district must be a place where:

- All educators have training and support in the use of the technology necessary to meet the instructional needs of all learners.
- All educators have access to technology, training and support in the use of technology to enhance their productivity and to form the ways in which they direct education reform and restructuring.
- All support staff are able to make effective use of technology to enhance their productivity through access to technology, training and support.
- Assessment forms our curriculum, teaching and learning.
- Teachers, administrators and support personnel are trained in the use of technology and the ways it can benefit all students.
- Students and teachers learn through the use of powerful technologies for research, analysis, communication and presentation of knowledge.

Technology Mission Statement

If the Stoneham Public School system is to become an integral part of the “electronic village” that it takes to raise a child, the system must adapt classrooms for a new learning process by utilizing technology and creating networking relationships between educators, students, schools, parents and the larger community. In this way, no learner is denied the opportunity to realize his/her full potential to meet the future and its complex, ever-changing demands. Creating a technology-rich environment for learners is an investment of time, energy, and resources that will be well worth the effort.

The Stoneham Public Schools’ mission asks for the district to do the following:

- Create a technology infrastructure that serves the operational needs of the school system and has the flexibility to meet the system’s current needs and accommodate future needs.
- Provide on-going training of teachers, administrators and support staff in the use of technology and the pedagogy of education reform.
- Support teachers, administrators and support staff in planning, organizing and managing technology tools.
- Hire and maintain the staff necessary to implement the Stoneham Public Schools’ vision of technology, including one or more instructional technology specialist(s), a network manager and a technician, as well as school-based technology facilitators.
- Provide time for teachers and administrators to integrate technology into the learning process and monitor student achievement through joint planning time, meetings and/or release time.
- Develop the capacity to deliver assistive technology where needed to support individual student achievement.
- Broaden our outreach to and partnerships with parents and local agencies in Stoneham and surrounding communities to continue to refine and develop our use of technology in education.
- Work with the larger community to develop post-graduation opportunities using technology for our students.
- Continually develop and refine standards for the ongoing integration of new technologies as they emerge to better prepare our students to be productive citizens of the global community.

It is to this mission that we are dedicated.

Technology Planning

Leadership in planning for technology in Stoneham Public Schools begins with our Director of Technology, who prepares the yearly budget based on the needs and recommendations of our administrative team and instructional staff. Input is also derived from our District Technology Committee, a broad-based group representing all segments of our educational community. Another avenue for technology leadership comes from Stoneham’s Professional Development Committee. This committee meets regularly and provides recommendations for staff technology training and software procurement based on staff surveys and the technology-based professional development offerings.

Regularly scheduled meetings of the administrative team are the forum for technology-related planning, budget and training strategy. The Technology Director presents ongoing issues in planning the implementation of technology throughout the school year.

Stoneham Public Schools' Strategic Plan for years 2006-2010 clearly defines plans for future development, funding, planning, staffing, integration and implementation of technology system-wide. A timeline has been set for implementation of our Strategic Plan which is reviewed and evaluated yearly by administration and the school committee to monitor progress.

Funding Structure

Stoneham Public Schools recognizes that technology requires an appropriate yearly budget reflecting the planning and needs of staff. Areas of this budget include:

- **Personnel** – administrative, technical, clerical and assistive
- **Contract Services** – repair, internet service providers, email provider, consultants
- **Materials and Supplies** – computer and multimedia supplies
- **Professional Development** – staff training, professional books, memberships
- **Capital Replacement** – new and replacement equipment budget

Action Plan

Stoneham Public Schools District Strategic Plan 2006-2010 which has been approved by the D.O.E. calls for additional technology personnel in the following areas: One full time technology aide in each school through grade 8 to maintain current equipment and assist staff in integrating technology into the classroom. Expand system-wide technology support services to all schools by providing a full-time computer technician to repair, update, configure and maintain computers and peripheral technology in all schools. Expand Technology Aid coverage to a 30 hour weekly position in all elementary schools and Middle School.

Contract Services for internet services and email is provided partially through the use of E-rate funding and budget provided from local cable company license funding. Local cable company funding covers \$8000 of the cost annually. Stoneham currently uses Mecnet at a monthly cost of \$1800 for our 5 Mbps RCN fiber connection internet wrap-around Service. Mecnet also provides Mecnet firewall service at a monthly cost of \$299 per month.

Stoneham's annual technology budget includes adequate funding for computer and multimedia supplies. Accurate inventory records plus new supplies are checked during budget preparation to determine the budget necessary to keep technology supplies on hand in our schools. Distribution of supplies is done from Stoneham Public Schools Technology Services main office.

Professional Development budget is planned for technology training annually under the system-wide professional development budget.

School administration recognizes that new and replacement technology requires ongoing support for capital funding year by year to update and replace outdated school technology. Funding for capital replacement is included in Stoneham Public Schools District Strategic Plan 2006 – 2010 in the amount of \$75,000 per year.

Student Access

The Massachusetts Department of Education (DOE) has set a ratio of 5:1 for the number of students per computer types “A” and “B”. The Stoneham Public Schools has recently completed a major building project which targeted our four new elementary schools. New web enabled computers with Microsoft Office were installed in each elementary school. Our elementary school student to computer ratio is 3:1, which exceeds D.O.E. standards.

Our older Middle School has 667 students and 110 Type “A” computers all having web access which falls short of D.O.E. Standards by a 6 students per computer ratio. A community study group to improve or replace the Middle School has been formed. Budget cuts over the past three years have not allowed purchase of new computers planned for the Middle School. The Middle School has two computer labs. Every classroom has an online computer.

Stoneham High School has approximately 200 Type “A” computers all having web access which exceeds D.O.E. Standards by about 4 students per computer ratio. The high school has three modern computer labs and a library of approximately 25 computers online. All 42 classrooms have at least one online computer.

Action plan 2006-2009

We are seeking to continue to update and replace/upgrade our computers to provide more capable Type “A” computers in both our Middle and High School facilities. Capital technology funding is budgeted for each year to replace older computers, but has not withstood budget cuts over the past three years. Planning for new technology within our new Strategic Plan 2006-2010 remains a priority with district administrators.

Technology Integration

The process of integrating computer technology into the classrooms and curriculum is achieved through administrative planning and the efforts of the District Technology Committee and the Stoneham Public Schools’ Professional Development Committee. Together, they provide technology training opportunities for staff to allow best practices to integrate with research-based integration approaches to offer 21st century approach to education that replicates that of the business world. Support for these initiatives comes from the regular budget, our strategic plan and through grants. Grant funding under the control of the Assistant Superintendent of Schools has allowed numerous teacher training sessions in technology.

Program Supervisors continually plan for the implementation of technology within their area of curriculum study. All recommendations are then included in the system-wide technology budget.

Action plan 2006-2009

By the end of the school year 2006-2007, at least 85% of district staff will have participated in 45 hours of high-quality technology professional development covering technology skills and the integration of technology into instruction.

Technology professional development is sustained and ongoing and includes coaching, modeling best practices, district-based mentoring and study groups. Professional development includes concepts of universal design and scientifically-based research models. One aspect of our plan is

to continue teacher training to produce media rich classroom lessons using PowerPoint, Quicktime Pro, SnapZ and iMovie visual software programs.

Staff Access

The Stoneham Public Schools provides every staff member with a computer, training in the operation and use of the computer as a management and instructional tool, an email account, and high speed internet access. Every classroom in Stoneham Public Schools has at least one computer and internet access. We are finalizing the rollout of our district WAN to complement the LANs in each building. This will allow us to distribute and manage staff and student accounts on servers connected by our new fiber network. Access to documents from home computers by staff is also possible where the need exists. Recent plans include delivery of video-based lesson plans over our fiber optic network to classrooms.

Professional Development

As mentioned briefly earlier, Stoneham Public Schools continues to provide training for all professional staff. Our goals for staff using technology are to ensure that our staff can:

- Use technology effectively for delivery of instruction.
- Use technology to manage files, facilitate administrative functions and serve as a communication tool for the school and community.
- Guide students in the effective use of technology for instruction.
- Provide instruction to students in the appropriate use of online resources.

Professional development planning includes an assessment of district and teachers' needs. The assessment is based on the competencies listed in the Massachusetts Technology Self-Assessment Tool. The district and the District Technology Committee and our educational stakeholders will review the levels of competencies in the Massachusetts Technology Self-Assessment Tool on an annual basis.

Stoneham Public Schools continues to improve and upgrade its use of technology and network capability for school business including all areas of administrative computer-based management. Student information, personnel records and financial work are all done using computers over our new fiber optic wide-area-network.

Starting in 2006 and continuing through 2009 a plan to offer professional development online by means of instructional video podcasts served locally from a video server is in process. Technology-based instruction is being produced to provide teacher training in our local education access television studio which will be available as video podcasts to teachers.

Action Plan 2006-2009

Upgrade and implement new special education student record software. Stoneham Public Schools is in the process of moving towards outsourcing our current I.E.P. software from our local server to a more comprehensive web-based system. Special Education teachers will be able to access student records online from classrooms and home.

Improve communications over fiber optics between schools. Stoneham Public Schools is re-imaging and updating software in existing computers to allow teachers and students the ability to

share and store data over our fiber optic network between all school buildings. Each staff member will be given storage space over the fiber optic network to an online server. Training is ongoing throughout the course of each year as new capabilities are implemented.

Stoneham Public Schools plans to implement an online report card starting September 2006 with the High School and Middle School. Staff training will be given during the summer of 2006. We plan to implement an online report card system for the elementary schools in 2008.

Our professional development process will continue to provide teachers training in the development of media-rich PowerPoint and iMovie classroom lessons for the next three years.

Support Personnel

Stoneham employs a full-time district-level Technology Director, a Network Administrator and a full-time secretary who oversees email and the help desk for the district. Stoneham's elementary schools do not employ any instructional technology teachers, but do have part-time technology assistants. The High School employs a full-time technology specialist. Both the high school and middle school currently have full-time licensed librarians who work with staff and students using technology.

Furthermore, the Assistant Superintendent and the Technology Director provide ongoing technology professional development opportunities. These include graduate courses, training on new software purchased by the district, in-house workshops on the district's technology benchmarks, and technology integration. The district has one person dedicated to data management and assessment.

Action plan: 2006-2009

Our newly adopted Strategic Plan includes hiring additional staff to provide instructional and maintenance support for our current network and for the integration of technology into our classrooms.

Year 2007 of our 2006-2010 Strategic Plan calls for the hiring of a full-time system-wide computer technician. For year 2008, the plan is to expand existing part-time technology assistants to 30 hours per week in our elementary schools and to hire a full-time technology assistant for the middle school. The year 2008 plan also includes hiring one full-time licensed library-media specialist for each elementary school starting in 2008.

Hardware Rotation Plan

Stoneham Public Schools considers computers with operating systems older than Windows 2000 and sufficient processing power obsolete. We have removed all of the older systems and are in the process of imaging and upgrading donated computers to replace older, slower computers.

At the end of each year, Technology Services reviews a repair and replacement list. Requests from administrators to the Technology Director are met when possible.

Our newly adopted Strategic Plan calls for annual capital planning for technology hardware and to form a Technology Foundation Committee to procure private funds to support technology needs in our schools for the next five years.

Infrastructure

Stoneham Public Schools has recently completed a total upgrade of all network equipment in all head ends of all schools. It also has completed the installation of a state-of-the-art fiber optic wide area network connecting all school and municipal buildings. The funding for this complete upgrade came from our two local cable companies.

Action Plan 2006-2009

Stoneham Public Schools will upgrade and refine our new fiber-optic network to allow for school-based, district-based and distance learning opportunities for staff and students. Starting the summer of 2006, we will be lighting pairs of fiber for transmission of video to classrooms and homes. Access to student records, media-rich lesson plans and grade reporting over the fiber optic network will be the mission of technology services for the next three years.

Internet Access

Stoneham Public Schools has recently hired a web site development company to replace our existing web site. This will enable parents and student to access current information over the internet. Our new website will set a standard look and style for all schools. Links to our online technology video lesson resource will be made available to students for home viewing. Narrated PowerPoint lessons and Podcast lessons will be made available to students online.

Action Plan 2006-2009

Stoneham Public Schools will hire technical experts in the summer of 2006 to plan, design, and implement a technology services web site that will enable live and recorded video streaming from a video web server to the homes. Experts will create a turn key system for the distribution of local access cable programs over fiber and provide an expanded forum for live streaming video of our school message announcements board, podcast subscriptions and video lesson streaming over the internet.

Donation Policy

Stoneham Public Schools has a policy of only accepting Pentium III and above capable computers with Windows 2000 operating systems. All donations must be approved by the Technology Director and then accepted as a gift by the Stoneham School Committee.