

South Shore Charter Public School

Norwell, MA



**Technology Plan
2007-2010**

*“Improving the quality of teaching and learning
through innovative uses of technology”*

Approved by Board of Trustees

September, 2007

South Shore Charter Public School

Technology Plan Steering Committee

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The South Shore Charter Public School was established in 1995.
We are a K-12 school serving students from almost thirty communities on the south shore. South Shore Charter Public School unites an imaginative academic curriculum with hands-on experiential learning “projects” to form a comprehensive program.

South Shore Charter Public School Technology Plan

“Improving the quality of teaching and learning through innovative uses of technology”

Technology Mission Statement

The South Shore Charter Public School provides students with the technological tools to optimize their potential for learning and achieving academic excellence.

Multi-Year Plan

For students to use technology effectively and appropriately to enhance their learning, faculty and staff members must have access to state-of-the-art technology and receive on-going training on new hardware and software programs. Administrative software and training are additional components of the school’s multi-year technology plan so that the school is able to operate in an organized and efficient manner and communicate with students, their parents and faculty in a timely manner.

South Shore Charter Public School has two technology committees. The Technology in Education Committee is a standing committee which meets monthly. This is a voluntary committee with members consisting of faculty, staff, administration, and parents. A second committee is made up of faculty and staff members that are currently participating in the Massachusetts Department of Education’s Educational Data-Driven Decision Making (D3M) project. These staff members have participated in a number of seminars and will continue to be active participants in this project.

Every student in the school has access to DOE type-A computers within the classroom and in the school’s computer lab. Students use these computers to complete research on book reports and science projects, build computer aided robots, study plants and animals in the kindergarten to grade 6, build web sites in grades 7 to 12, play educational games under teacher supervision, learn to type under teacher supervision, and use the reading tool Lexia under teacher supervision. All desktop or laptop computers have connections to the school’s network and the Internet.

Administrative staff has the appropriate software and training to support the efficient running of the school. The school’s current software includes an office suite, on-line grading software, on-line course management software, web-based Special Education software, and on-line school database management software that maintains student transcript information.

The Board of Trustees has adopted an Acceptable Usage of Technology policy. At the beginning of each school year, administrators provide every student, faculty and staff member with a hardcopy of this policy. This policy is also published in the student handbook and can be found on the school’s web site.

Technology Training for Students and Software Applications

Students at South Shore Charter Public School learn and apply technology skills as recommended in the May 2007 Massachusetts Department of Education Instructional Technology Standards for Grades K-12. The technology standards “describe what students should know and be able to do in order to use technology for learning in school and lifelong learning.” The technology skills that students acquire are integrated into the different subject areas and the projects/workshops are designed to have applications to our increasingly digital world.

As part of the elementary reading program, students in kindergarten to grade five learn how to use Lexia, a software program that helps them with phonetics and reading. In 2007-2008, selected students in grades one to five will be introduced to and learn how to use Soliloquy software, a program designed to improve fluency in reading. Students in grades three to eight learn typing using the Mavis Beacon software program.

Project-based learning and group projects are an integral part of the curriculum at South Shore Charter Public School. For some of the projects, students are required to create a web-site to explain and show the progress of their particular project. Classroom teachers and tech staff provide training, guidance and support in web-design to the students.

Beginning in 2007-2008, graduating senior students will be required to take and pass a technology proficiency assessment in Microsoft Office. Students that do not meet the proficiency requirement will receive individual training from the Instructional Technologist on staff. Students enrolled in senior seminar will have training in compiling E-portfolios.

Students at all grade levels receive classroom training on how to use Questia, the school’s new web-based library software. Tech staff works with teachers to provide the training to students in the school’s computer lab on how to access and use Questia.

Classroom teachers train the students on the proper and efficient use of search engines. Students learn how to properly determine if the information they see at a particular web site is accurate, informative and up to date. Classroom teachers instruct students on how to compose a proper email and email etiquette. Students are also taught by teachers and tech staff on the safe usage of the Internet and postings on the Internet.

The school recently implemented a new File Transfer Protocol (FTP) server within its network to allow students to access their school files from home in order to continue work that they started at school. In the fall of each year, the tech staff with faculty assistance demonstrates how the FTP works in each classroom. On-going training, on an as needs basis, is provided by the tech staff.

Classroom teachers provide initial and refresher training to students on how to access and use Edline, the district’s web-based tool. Students work with teachers in the classroom on Edline to acquire the information they need to complete their work. The technical staff is

called into a classroom when the teacher needs to provide more technical training to students on the use of Edline.

To provide support and assistance to students with special needs, the school's technical staff works with Learning Services' teachers to provide training to students that use assistive technology programs such as Lexia, Kurzweil and Dragon Naturally Speaking so that they can use the tools properly and gain the maximum benefit from them.

To provide students with hand-on training and apprenticeship experiences, the school's technical staff trains a number of high school students on how to maintain and provide technical support to technology equipment. The students do minor repairs on desktop computers, minor software implementation on desktop computers and build Category 5e/6 cables that can be used throughout the school. These students also aid the technical staff in surveying the number of computer equipment that the school owns.

Professional Development for Faculty and Administrative Staff

The South Shore Charter Public School teachers receive initial and on-going training on a variety of multi-media tools to improve instruction and student learning. Teachers learn how to use web-based training resources in their curriculum and they receive training on the use of audio/visual teaching tools including LCD projectors and electronic white boards. Teachers also have access and training to integrate educational cable TV programs into their curriculum effectively in accordance with current frameworks. Whenever possible, the school uses the "Train the Trainer" model. Technical staff receives the initial training on new hardware and software and then they train the teachers and other staff members.

In 2007-2008, students will be required to submit e-portfolios for promotion and graduation. All teachers are being trained to use Microsoft Word, Microsoft PowerPoint or Microsoft FrontPage to assist the students in creating their electronic portfolios. In addition, teachers will be trained on how to put together their own professional development e-portfolios.

Teachers receive initial and on-going training on Assistive Technology software products for integration with Individual Education Plans. Once trained in how to use the software, Learning Services teachers teach students how to use these software programs appropriately. Assistive Technology software at South Shore Charter Public School includes but is not limited to Speech-to-Text software (Dragon Naturally Speaking), Text-to-Speech software (Kurzweil), Mapping/Graphing software (Inspiration), and Social Skills Building software (Board Maker).

Learning Support teachers also receive initial and on-going training in the selection and use of Assistive Technology hardware products. Assistive Technology hardware products include but are not limited to AlphaSmart keyboards, Franklin Spellers, Talking Calculators, and SmartBoards. South Shore Charter Public School uses the "Train the Trainer" model whenever possible.

Administrators and key staff members have been trained on the school's database management system (DBMS) called Administrator Plus and follow-up training is provided as needed. The technical staff maintains the software on the school's network and provides on-site support and assistance for administrators and the Level Coordinators.

Grade Quick is the software program used by the school for grading. At the beginning of the school year, new faculty members attend a Grade Quick workshop and all faculty members receive refresher training, as needed, to keep them up-to-date any changes or software enhancements. Technical staff maintains the software on the schools network and are trained to assist faculty with the operation of the software.

Edline is the web-based tool that the school uses for communication between students, parents, and teachers. Edline makes it possible for teachers to communicate with students in the form of bulletins and calendar events, posting of syllabi, homework, class assignments, and course grades. The entire faculty has been trained on how to use Edline and follow-up training will be provided when new program components/modules become available.

Questia is the new web-based library software that the school purchased for teachers and students to use to conduct research. An outside consultant provided the initial training for faculty and staff on the use of the software. The technical staff received specialized training from the Questia consultant on how to maintain the student and faculty population within the Questia framework. The technical support staff now conducts the initial training for new teachers as well as any follow-up training needed for faculty, students, and staff on how to use the Questia program.

SEMSNet is the software program used by the Learning Services faculty and staff for IEP and 504 reporting. The staff members in the Learning Services Support Department completed a full-day training session on the web-based IEP and 504 software programs. Outside trainers conducted the initial training and the school's tech staff received additional training on how to support teachers and troubleshoot the SEMSNets program.

Networking and Administrative Software Training

Administrators and key staff members have been trained on the database management system, Administrator Plus and follow-up training is scheduled on an as needed basis. Technical staff maintains the software on the school's network and provide on-site support and assistance for administrators and the Level Coordinators.

The technical staff instructs teachers on how to use all technology effectively and appropriately. They provide training on the proper usage of the school's copiers/printers/scanners and the fax machine, how to perform minor repairs on classroom computers as well as on-going training on how to use intranet tools such as the school's email; the school's FTP service; and the school's Terminal Service, which is available to teachers only.

South Shore Charter Public School Communication Systems

South Shore Charter Public School communicates with students, parents and teachers on a regular basis. Edline is the most important communication's tool used by teachers to correspond with students and parents regarding academic performance and progress. During the school year, the school administration posts a weekly update newsletter for parents and guardians on its website. The website is updated weekly with information regarding school events, parent association meetings, and Board of Trustee meetings.

The school subscribes to a school-to-parent-staff communication service, Alert-Now, that enables school administrators to record voice messages in the event of an emergency. This service uses phone and email to contact the school community. Parents will be surveyed annually regarding the use of the school's Alert-Now service.

In the spring of 2007, a new state-of-the-art phone and public address system was installed. The new phone system is more reliable than the previous one and the new PA system improves communication throughout the building during the school day.

The school currently has cable television in one area of the school. The technology plan includes the wiring of all classrooms for cable by 2010.

Providing Sufficient Resources to Provide On-Going Support for Administrative and Instructional Technology, Training and Infrastructure

The South Shore Charter Public School is committed to providing the necessary funding to achieve its multi-year goal of "improving the quality of teaching and learning through innovative uses of technology."

Since moving to its new site, the Board of Trustees has supported increases in the instructional and administrative technology budget lines. Currently, the instructional technology budget is one of the largest.

SSCPS will continue to maintain the 3 to 1 ratio of students to computers given appropriate budgeting. The school has a three year lease on Class A computers for its students with a plan in place to replace these computers in 2008-2009 with new Class A computers.

The school will continue its agreement with Microsoft to purchase and maintain state of the art software with productivity tools such as Microsoft Office and the school's computer operating system.

Meeting its goal of providing more media to students in 2007-2008, South Shore Charter Public School will have five self-contained multi-media carts for teachers to use for lessons and student presentations. Each media cart has one Windows XP based laptop computer, one LCD projector, one DVD/VHS player, and one powered UHF/VHF speaker with wireless microphone. Additional carts will be purchased each year.

In 2007, the school purchased four additional servers to maintain a networking system that is efficient, reliable, and timely for administrators, teachers, students, and parents. The new

servers have the latest Microsoft Operating System software. The purchase of these servers brings the total number of servers to nine. These servers provide file services, network and user management and daily file back-ups.

The school's tech staff regularly monitors the network and the servers to provide consistent and reliable service to students, faculty, staff, and administrators. An example of the oversight and maintenance of the system is the purchase of new high speed switches and firmware for its wireless access points for 2007-2008.

The South Shore Charter Public School has state of the art firewall software and hardware that it maintains along with outside technical assistance to provide CIPA compliant Internet access to its students. The firewall is updated on a continuous basis by the vendor to protect students when they are working on research using the Internet.

The school continues to upgrade its network cabling infrastructure by adding new cabling in areas of the school that do not have intranet connection and to upgrade classrooms on an on going basis. By 2010, all classrooms will be wired for cable television.

The school retains the services of an outside consulting firm to support the school's technical staff. This service is a line item in the school's technical budget.

The school budget will continue to fund, and replace as needed, high speed copiers and printers for its faculty, staff and students. The school budget has a line item for the yearly maintenance contract for printers and copiers.

Three Year Technology Improvement and Upgrade Plans

In 2007, the school purchased a SmartBoard for the new high school science lab. Two SmartBoards will be purchased each of the next three years so that teachers at each level will have access to one. This technology will greatly aid teachers in the delivery of their lessons and student presentations.

All of the school's PCs and laptops will be replaced in the next two years. Currently the school has all Type-A computer desktops and laptops, many of these instruments will have their lease end within the next two years and the plan is to replace them with more superior models than the current Type-A computers.

Over the next three years, the school will upgrade its ability to maintain computer and phone services, including voice mail, during a power outage. The plan includes connecting an existing emergency diesel generator to the two server rooms.

The school is currently working with an outside web-consultant to make improvements to its website so that it will be easier to maintain than the current one. The target date for reconstructing the new website and adding new features is January, 2008.

The school's technical staff will continue to monitor advancements in technology, researching and assessing their potential for improving student learning and achievement.

In conjunction with teachers and administrators, the technical staff will submit their proposals for future purchases during the annual budget review process.

The school's tech staff and administrators will investigate the possibility of integrating Personal Digital Assistance (PDA) devices to aid the daily administrative tasks of taking timely and accurate attendance. The tech staff will also explore the feasibility of installing and utilizing a conference room type telephone system. This system would support student progress and achievement by allowing for teleconferencing between parents and teachers.

South Shore Charter Public School is investigating the need to hire a full-time Instructional Technologist to train students, faculty, staff, and administrators in an efficient and effective manner.

Process to Monitor and Assess Progress of Plan Goals

To monitor the progress of the plan's major goals and its impact upon student performance and achievement, annual surveys will be developed. Students will be asked for feedback on the technology curriculum, instructional software, EdNet, and Questia. Parents will be surveyed on the effectiveness of its parent-school-student communications, the technology curriculum, and the use of technology by students and teachers. Administrators, faculty and staff will be asked to provide feedback on hardware purchases, instructional software, on-line grading software, on-line course management software, web-based Special Education software, on-line school database management software, and assistive technology software. All of these surveys will be web-based and will be posted in December. The results of the surveys will be tabulated in January of each year so that the feedback can be used by the administration in developing the proposed budget for the next fiscal year and identifying future training needs for students, staff, and administrators.

School administrators will observe the use of instructional technology in the classrooms and provide feedback to teachers in written observations and annual evaluations. Informal feedback, evaluations (in the aggregate), and survey results will be collected and submitted to the Technology Plan Steering Committee for its review. The Board of Trustees will receive an annual progress report on the plan's implementation and impact upon student learning and achievement.

The Director of Learning Services will monitor the usage of the SIMSNet software and its effectiveness in maintaining IEP records. The Director will also monitor the use of Assistive Technology and submit an annual report to the Technology Committee.

The faculty of the school will continue to participate in the Massachusetts Department of Education's Technology Self-Assessment Tool (TSAT) program. School administrators will use the results of these surveys to plan future professional development programs and identify the amount of technical support needed by staff.