

TECHNOLOGY PLAN – SWAMPSCOTT PUBLIC SCHOOLS 2006-2007

In 1998 a district-wide technology committee comprised of representatives from each of the district's schools, central administration, and students, authored a Technology Plan that articulated four primary tenets around which, all technology initiatives would revolve. Those tenets were identified as:

- Administrative Efficiency
- Teacher Productivity
- Student Acquisition of Skills
- Communication

CURRENT STATE

Over the years, SPS has attempted to make these core tenets of its technology philosophy drive both technological integration and fiscal purchases.

In the nine years since their inception, much in terms of progress has been made to address these tenets. Much of the original plan has been adapted to meet the ever changing needs of the district as we move forward with technological integration. The district established and maintains a state of the art network facilitating district-wide connectivity and communication through both a LAN and WAN. The district Exchange server facilitates communication among administrators and file servers at every building facilitate communication between teachers and students as well as providing a platform for shared lesson plans, technology integration, student grades, academic information and software applications. Redundant firewalls protect students on the Internet in accordance with CIPA. Acquisition of district-wide email for all staff has made electronic communication throughout the district the norm. Daily announcements, important school and district

information is now disseminated electronically addressing both the administrative efficiency and teacher productivity tenets.

Beginning in 1999, repeated requests to initiate a district technology department and establish a district vision for the direction of technology have gone unheeded. Presently, there is little in the way of consistency throughout the district. While many teachers provide exemplary opportunities for integration, there is currently no mechanism for sharing those efforts with colleagues except through word of mouth. Some buildings have part time staff that possess significant technological acumen while others do not. With the advent of a new superintendent and assistant superintendent, a renewed sense of hope and expectation regarding technology has been engendered.

As mentioned earlier, technology integration is fragmented however some of the strategies currently employed include use of Smart Board technology to improve writing skills at the all levels. At the elementary level especially, integration of technology using this medium is employed in varying degrees through a measured, thoughtful manner that has produced noteworthy improvements in student skill acquisition as reflected in both MCAS reading and writing scores. Additionally, a more pervasive use of appropriate math web sites has yielded some significant growth in understanding specific mathematical concepts in all elementary grades.

Professional development is another area that needs revision. Currently at the elementary level, teachers enjoy seven early release days that focus on a plethora of pedagogical areas, including but not limited to technology and its appropriate integration. Neither the middle nor high schools currently offer professional development release days for their staff. Our new Superintendent has directed administration to ensure that this current practice is amended to reflect the elementary model. Teachers throughout the district are offered a variety of technology courses that run after school or during the summer. These include learning about new operating systems, Smart Board technology, web page design, multimedia applications, Internet integration, research skills, & Microsoft Office application proficiency. At the upper level, teachers at the middle school work on GradeQuick applications, Smart Board technology, expository writing, operating systems, iMovie, iDVD and other multimedia technologies.

DESIRED STATE

Over the next five years, the district hopes that its approach to technology and its integration within the curricula will look significantly different than it has in the past. A measured, shared vision for technology integration currently represents Swampscott's greatest challenge.

Paramount among SPS technological goals is the establishment of a technology department. Currently, one of the elementary principals also serves as the Instructional Technology Director. Unfortunately, this administrator is responsible for most of the IT issues throughout the district. This includes computer repairs, ordering of technology equipment, submitting DOE reports, Medicaid reimbursements, budgetary reconciliation for all the system's building technology accounts & creating the technology budget. Teachers at various levels throughout the district who possess some degree of technological ability are utilized in a disorganized manner in some buildings while others have no personnel to address ongoing issues. Recently the district employed a network technician who completes repairs around the district on pc platforms and keeps the district's network infrastructure running efficiently, but there is little other coordination in the district due to a lack of a department. If Swampscott Schools are to move forward technologically, we must endeavor to meet this challenge.

Additionally, the systemic implementation of technological integration into existing curricula and teaching strategies must be a priority for the district. While many staff regularly employ technology integration into daily practice, the district needs to continue to reach out to all staff to ensure they have ample professional development opportunities to improve their technological acumen and the necessary hardware to meet the ever changing needs of our students. Additionally, administrators and evaluators must incorporate teacher technological integration into their existing evaluation process.

After the establishment of a district-wide technology department, providing increased professional development opportunities for all staff is the next priority.

Swampscott is currently constructing a new high school that is scheduled to open in September of 2007. The building promises to be a turn key operation, incorporating the newest proven opportunities for technological integration. A major goal for the district is to ensure that all its staff, but especially its secondary members, have ample practice to incorporate far more technological integration into their teaching.

Swampscott now has a new administration that is open to change and willing to entertain the concept of a district vision for technology. This includes creating a technology department and the hiring of an IT coordinator. This endeavor will enable the district to focus both on the bureaucratic needs as well as addressing the unique instructional needs of each level and building.

At the elementary level, teachers have been integrating technology into curricula areas for years to varying degrees. Beginning in the third grade, students take a formalized course in keyboarding. This 'class' is repeated in both the fourth and fifth grades so by the time students enter our middle school they are adequate typists and can use technology effectively for most of their written work. Students in kindergarten and first grade create class wide presentations using Kid Pix software. In the third grade students complete a basic PowerPoint presentation on an animal of their choice. In the fourth and fifth grades, students employ PowerPoint presentations to both synthesize and extrapolate their understanding of states, national monuments, and Native American tribes. Across the district teachers are seeing a dramatic improvement due in part, to this integration strategy. Incorporating a variety of mathematical web sites into our math curriculum is facilitating skill acquisition.

At the middle school level, the age of our facility has necessitated some alternative strategies for integration. Portable labs are employed for expository writing. Use of portable LCD/Smart Board presentation systems have enabled teachers to address writing deficiencies and facilitate a greater engagement from students.

One district goal that requires additional attention is the continued use implementation of Smart Board technology throughout the district. Through the use of Town grant Smartboards are being purchased and placed in each of the districts buildings. At the high school level we have incorporated Smartboards with our traveling LCD / computer stations. These stations are hoped to be utilized throughout the building in all departments. Teachers have been provided with initial training and opportunities to practice with the hardware and software. Additional training is scheduled for this winter and spring through the use of a DOE grant, "Enhancing Education through Technology." The district is now beginning to see more sophisticated teacher and student usage. At the elementary level, Smartboards are now in all computer labs and utilized regularly especially with use in the writing process and mathematics instruction. At the middle school Smartboard technology is utilized extensively both in classrooms and in labs. We are especially excited by the innovative use in the science domain. In the next two years, the district hopes to train all staff fully on the use and permutations of Smart Board integration.

PROPOSED 2006-2006 TECHNOLOGY BUDGET

1	INSTRUCT TECHNOLOGY BUDGET	2007
2	INSTRUCTIONAL TECH. K-12	\$15,000.00
3	INSTRUCTIONAL TECH. - CLARKE	\$5,750.00
4	INSTRUCTIONAL TECH. - HADLEY	\$6,775.00
5	INSTRUCTIONAL TECH. - MACHON	\$4,375.00
6	INSTRUCTIONAL TECH. - STANLEY	\$8,050.00
7	INSTRUCTIONAL TECH - SMS	\$14,225.00
8	INSTRUCTIONAL TECH -SHS	\$20,450.00
9	TECH MAINTENANCE - CLARKE	\$10,000.00
10	TECH MAINTENANCE - HADLEY	\$15,000.00
11	TECH MAINTENANCE - MACHON	\$8,000.00
12	TECH MAINTENANCE - STANLEY	\$12,000.00
13	TECH MAINTENANCE - MIDDLE	\$30,000.00
14	TECH MAINTENANCE - HIGH SCHL	\$40,000.00
15	TECH MAINTENANCE - ADMIN	\$10,000.00
16	TECH MAINTENANCE - SPED	
	TOTAL	199,625.00
	Town Tech Article	\$125,000.00