

STOUGHTON PUBLIC SCHOOLS TECHNOLOGY PLAN 2012-2015

I. MISSION

The mission of Stoughton Public School's Technology Program is to provide technology systems and support that meet the needs of students, teachers, and administrators, and support our district mission to challenge individuals to reach their potential in an educational environment that promotes excellence.

A. Goals

The primary goals of the technology plan are to support the goals of the district strategic plan:

- To expand the curriculum to meet the changing needs of students.
- To attain the highest level of achievement for all students.
- To upgrade and/or replace existing school facilities.
- To expand and continue integrating technology throughout the community
- To enhance school, community, and intergovernmental relations

B. Team

The technology planning team consists of the district leadership team.

C. Budget

The district budget contains line items that provide funding for hardware and software acquisition, staffing, professional development, support, and contracted services. The district uses E-Rate funds to fund a portion of the school telecommunications and Internet access costs. The non-E-Rate portion of these expenses is funded from the operating budget. Title IID grant funds are used to provide support to teachers in integrating technology in their classrooms and to maintain school/district web sites.

The district technology budget increased in FY2012 for the first time in several years. The current FY2012 district budget for technology, excluding staffing, is \$400,695. The majority of this amount is used for contract renewals (student system support, anti-virus software, etc), supplies, and repair parts. There are also funds available for upgrading existing hardware, or for the purchase of new hardware/software.

D. Evaluation

The building technology liaisons, building principals, and instructional technology specialists have informally evaluated the effectiveness of technology. Technology is evaluated as a part of the strategic planning process and also as a part of the district and school improvement planning process.

II. TECHNOLOGY INTEGRATION

A. Teacher and Student Use of Technology

Essentially 100% of teachers use technology everyday to communicate via email. All buildings use an email based "day book" to inform staff members of daily activities within the building. All district job postings are posted to an email folder. All buildings require the use of computers to enter student grades and student attendance. All teachers have access to MCAS score data via TestWiz, which is hosted by TestWiz.

Informal surveys have indicated that at least 85% of teachers use some form of technology with their students weekly. This informal survey will become part of the survey instrument described in an earlier section.

Students in Grades K through 8 attend computer skills classes that are aligned to the Massachusetts technology standards. These classes ensure that virtually all students show proficiency in the recommended technology standards.

The district has a CIPA compliant Acceptable Use Policy (AUP), which is posted on the district web site, <http://www.stoughtonschools.org/Stoughton/Documents/aup.pdf>. Students and staff are all required to sign the district AUP.

Students in the high school and middle school are issued accounts on the district collaborative communication system, which allows students easy access to class information and documents from any location with Internet access.

The high school program of studies includes a Technology Career Pathway with a number of targeted technology courses designed to prepare students for careers in technology related fields.

The district currently has interactive whiteboard systems installed in every classroom from K through 12. Virtually all professional development includes a technology integration component.

B. Staffing

The district has a full-time district technology administrator who also serves as the network administrator, web master, email administrator, and application support specialist. In addition, the district has 2 full-time computer technicians and 1 FTE instructional technology specialist. The district has one person assigned to data management and assessment.

Current district staffing compared to the minimum DESE recommended staffing is shown in the table below:

Function	DESE Minimum Recommendation	SPS Staffing	Difference
Technology Director	1	0.2	0.8
Network Administrator	1	0.5	0.5
Data Manager	1.0	1.0	-
Technician	6.0	2.0	4.0
Instructional Technology Specialist	3.0	1.0	2.0

The district is significantly understaffed when district staffing levels are compared to DESE minimum staffing recommendations.

III. TECHNOLOGY PROFESSIONAL DEVELOPMENT

A. Participation

Over the past five years, 85% of the staff has had the opportunity to participate in 45 hours of professional development.

B. Models

The district conducts teacher-to-teacher workshops, instructional technology specialist led workshops, and one-on-one classroom modeling. In addition, software vendors provide direct teacher training on the use of specific curriculum related software applications. These activities are on-going. They are scheduled during professional development days, early release days, summer vacation, and after-school.

C. Planning

The district professional development committee plans professional development activities for the school district. Included in this plan are core courses, which are college credit courses. One of the core courses is Instructional Technology. Extensive detail regarding the professional development plan can be found in the [district annual report](#), which is published on the district web site.

IV. ACCESSIBILITY OF TECHNOLOGY

A. Students per Computer

The district has a ratio of approximately 2.78 students per Internet connected instructional computer. This ratio exceeds the DESE recommendation of 5 students per computer. The district has maintained a replacement cycle of approximately 6 years, although replacement computers are often re-furbished rather than new computers.

The district uses wireless netbooks in specific curriculum areas. The district currently uses wireless netbook carts in the high school and middle school science departments. Wireless netbooks are also used in high school Chemistry and Physics laboratory classes. In addition, the two larger elementary schools have wireless laptop carts to supplement the wired computer labs.

B. Technical Support

The district makes a commitment to provide timely technical support. All support requests are routed through the helpdesk ticketing system, which allows easy monitoring of support activities. The district technology director serves as the network administrator. In addition, there are 2 full-time computer technicians, or about one technician per 650 computers. The high school has a credit “helpdesk” course available as a student elective. Students electing this course provide support to high school computer users under the direction of the helpdesk technicians. We also maintain a helpdesk web site, <http://helpdesk.stoughtonschools.org>, with self-support information for district technology users. As noted in the Staffing section above, the district does not meet the minimum DESE recommendations for technology support staffing.

V. INFRASTRUCTURE

A. Internet Access

The district provides redundant high speed Internet access to every workspace within every district building. The district networks are 10/100/1000, layer 3 switched networks with redundant fiber optic backbones.

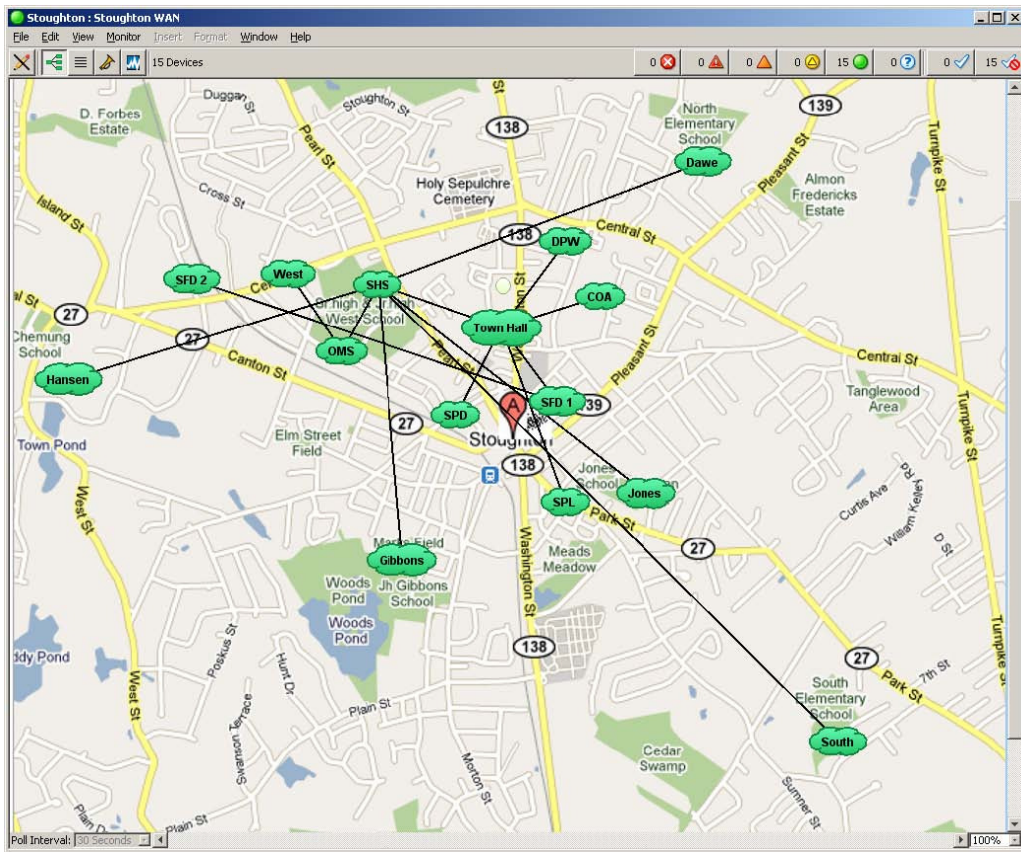
The high school and middle school share a 50MB FIOS Internet connection, which is connected to the WAN using redundant firewalls in a high availability configuration. The primary connection is backed up by a 30MB cable connection. Failure of the primary connection causes an automatic failover to the backup.

Each of the elementary buildings receives primary Internet access via a local 30MB cable connection. Failure of the primary Internet connection causes an automatic failover to the WAN.

B. Networking (LAN/WAN)

The district provides a 10/100/1000, layer 3 switched networks with fiber backbones in each building. The buildings are connected via a 1 GB Wide Area Network (WAN) consisting of district owned fiber and district owned routing equipment. All buildings have access to file services, email, web publishing, student management, VOIP phone systems, and related network services.

The WAN network topology is shown in the image below. All district and Town buildings are connected to the WAN.



Building-wide 802.11 G/N wireless access is installed in each of the school buildings.

C. E-Learning Environment

Currently, the district does not deliver entire courses using technology. Many teachers maintain teacher web sites and use these sites as an integral part of their classroom activities.

The high school and middle school provide internal email accounts to all students. Many teachers create workspaces for their classes within the internal email system, providing easy student access to class materials, homework assignments, and related class resources.

The high school also offers students the opportunity to take course via the Plato on-line learning system. The number of licensed seats has recently been expanded and are being used for credit recovery, summer school, and our evening alternative diploma program.

VI. ACCESS TO INTERNET OUTSIDE THE SCHOOL DAY

A. Up to Date Web Site

The district maintains an up to date web site, <http://www.stoughtonschools.org/> that includes information for the entire school community. Several buildings principals maintain blogs to provide communication with the school community. In addition, the district maintains an up-to-date video bulletin board on our educational cable television channel, which is also used to communicate with the school community.

B. Community Groups

The district works with the town library, which is essentially the only location in the town offering student access to the Internet outside the school day. We provide technical support to the library. In this capacity, we have expanded the number of public access computers available within the library. We recently added public wireless Internet access to the library and also added 16 netbooks in a cart that are designated for student use. These facilities are used extensively by students.

C. List of Sites

The district maintains a list, consisting of the town library, on the district web site of locations in the town that offer student access to the Internet after school hours.