



Stamford Public Schools Technology Plan 2015-2018

Date Submitted: 6/5/15

Teaching & Learning Committee Approved: 6/9/15

Board of Education Approved: 6/22/15

COMMITTEE

The District Technology Planning Committee was formed to represent all stakeholders. Development of the educational technology plan and implementation of the plan should enable parents, educators, students and community members to benefit from the investment in technology and all should have representation on the committee. The Technology Committee is charged with monitoring the current technology plan on an ongoing basis as well as developing each new 3-year Technology Plan. The committee is comprised of teachers, administrators, teacher union representation, IT staff, parents, students, and community members. The committee is designed to represent a cross-section of the Stamford Public school system with individuals that are interested in serving in an advisory capacity to the strategic direction of the use of technology in our schools.

Member	Title	Constituency Represented
Christina Hefele	Chief Information Officer	District
Paul Gross	Retired Principal AITE	Facilitator
Mike Pensiero	IT Director, City of Stamford	City
Judy Singer	Director of Research	District
Paula Ward	Curriculum Associate, Technology	District
Frank Rodriguez	Principal, K.T. Murphy	Elementary Administration
Hubert Gordon	Principal, Northeast Elementary	Elementary Administration
Larry Keller	Assistant Principal, A.I.T.E.	Secondary Administration
Patricia Colonnese	Teacher, Elementary	Elementary Teacher
Debbie Gerber	District Library Media Specialist	Elementary Teacher
Liz Hirtenstein	Teacher, Elementary	Elementary Teacher
Jim Forde	Teacher, Middle School	Secondary Teacher
Karen Fico	Teacher, Special Education	Special Education
Stephanie O'Shea	Parent	Parent
Andy Sklover	Parent/Stamford Achieves	Parent/Community
Julia Wade	Board of Education Representative	Board of Education
Mark Raub	Student, High School	Student
Peter Leberdev	Student, High School	Student

To develop this 3-year plan the committee met monthly from January to May each time focusing its efforts on one of the sections of the technology plan. As components of the plan were drafted and revised, input was solicited via Administrator meetings, Technology PD Leader meetings, and High School Call to Action Committee meetings. Data was shared throughout the process with each of these groups to help develop the plan recommendations. The committee is scheduled to continue to meet at least three times per year for the duration of this plan to monitor our progress and adapt the plan as necessary.

PLAN EVALUATION

The Technology Plan and Program will continue to be evaluated in the following ways:

1. The Information Technology Department will maintain a record to ensure that technology is installed in each building as planned. Reporting by the Technology Management Services (TMS) Department will manage the inventory of technology, including computers, interactive whiteboards and other technology resources within the schools;
2. The district will prepare yearly surveys for teachers, parents, and students to complete and provide feedback about the effectiveness of the technology and its impact on learning. Surveys will be developed by the Technology Steering Committee and administered on-line.
3. A Technology Visitation Protocol will be developed and used by Administrators to document how technology is being used to augment instruction during the school day.
4. Although it would be impossible to identify a direct cause and effect, data will be collected from standardized assessments and district assessments to look for patterns of improved student growth in groups that will participate in technology pilot programs
5. Parent and student participation and feedback will be solicited each year by using surveys, focus groups, and informal discussions in order to help measure the effectiveness of technology used in the schools.

6. Reports from Protraxx, the district professional development system, of the amount, attendance, and effectiveness of technology PD for teachers and administrators.

The expectation is that there will be continued growth in the use of technology by teachers and students, an increase in student motivation for learning, broader engagement of students in lessons, and a higher quality of cognitive demand during instruction. A focus of data collection and technology program evaluation will be focused on evaluating the increased cognitive demand by getting more technology in the students' hands and measuring opportunities for learner-centered instruction.

A. MISSION STATEMENT

The mission of the Stamford Public Schools is to “prepare each and every student for higher education and success in the 21st century”. In order to accomplish this, all students need to have equitable access to rigorous, standards based education, enhanced in all ways currently and potentially possible through the meaningful use of technology. We believe that infusing technology into classroom instruction will create students who are academically competitive, technology literate, motivated and engaged in the learning process and prepared to succeed in the 21st century.

B. VISION

Our objectives are to ensure that students have the skills necessary for the 21st century and use technology both inside and outside the classroom for learning. To support this work we are aligning our work with the 4 Cs of 21st century skills which include: Collaboration, Communication, Creativity, and Critical Thinking. It is our belief that all technology needs must be aligned with and support the teaching and learning needs of the district.

Our schools will demonstrate a commitment to applying technology to foster academic learning for students and assist all learners in developing key elements of information literacy within a student-centered environment. As a Pre K-12 system, we are committed to developing goal oriented lifelong learners, and critical and creative thinkers who use technology in a responsible and ethical way to facilitate and enhance their learning. Our schools should be the training ground for using technology responsibly, the place where digital citizenship instruction is embedded across disciplines at every grade level.

We will use technology to:

- attain the highest levels of student achievement and success
- cultivate higher-level thinking and problem solving
- interact with others in and beyond the school community
- provide meaningful real world applications
- promote innovation and creativity
- support learning of all students including general education, special education and English language learners

Equal access to technology in every school and in every classroom is the first step for our students and staff in building a student-centered program which fosters collaboration, communication, creativity, and critical thinking. We must ensure that access to technology is not only equitable throughout our schools, but we are providing equal opportunities to technology for students outside the classroom.

In addition to instructional technology, all professional staff members need to be technology literate in order to identify and meet the needs of each individual learner, analyze and track student performance data, collaborate professionally, and model ethical and responsible use of technology.

The use of technology pervades all roles in a learning community. The Stamford Public Schools recognizes the need to include support staff responsibilities in all technology decisions and training. School leaders must also be expected to model the use of technology in administrative productivity, as well as be capable in its use in supervising and evaluating instructional staff.

TEACHING AND LEARNING

The success of our implementation of the district technology plan will be dependent on the alignment and prioritization of our technology goals with our teaching and learning goals. We believe that technology should be a support to the teaching and learning process. Our district goals are clearly aligned and supported by the State Educational Technology Plan goals as well as the National Technology Standards published by the International Society of Technology Education (ISTE). The ISTE standards for students can be found in Appendix C.

As a result, all technology initiatives should support one or more of these goals:

- 1.1** Support personalized learning to assist in meeting individual student needs and improving the achievement gap
- 1.2** Develop learning opportunities for students that support the 4 C's of 21st century learning: Collaboration, Communication, Creativity, and Critical Thinking
- 1.3** Increase engagement of students with the use of technology in the classroom at the point of instruction
- 1.4** Improve opportunities for high school students that increase graduation rates including: credit recovery, blended learning, and distance learning programs
- 1.5** Increase opportunities for choice, challenge, and differentiation in the curriculum
- 1.6** Provide anytime and anywhere learning by offering challenging content, feedback from formative assessment, and individualized instruction via digital learning opportunities
- 2.1** Provide real-time access to summative, interim, and formative assessment data to all teachers so that data can be used to inform instruction and customize learning for students
- 2.2** Ensure that each and every student performs to the best of his/her ability on the online assessments by providing access to technology so that each student can test at the optimal time of day for the optimal amount of time
- 3.1** Provide professional development on improving teacher practice to incorporate learner-centered instruction in each and every classroom
- 3.2** Create technology rich lessons using digital media with a focus on CT Core Standards (CCS) learning outcomes
- 3.3** Assist teachers in transforming classrooms into interactive learning hubs where students are engaged in challenging and authentic work in and out of the classroom

- 3.4** Increase opportunities for parent engagement in the learning process
- 3.5** Improve communication with all stakeholders including parents, students, staff, and community members
- 3.6** Promote student use of common ethical standards in their use of digital media tools
- 4.1** Ensure that students have equitable access to a rigorous curriculum and current technology both during school and after-school hours
- 4.2** Continue timely replacement cycle of hardware and software applications
- 4.3** Continue to increase infrastructure and bandwidth to support learning
- 5.1** Improve efficiencies of current back-end systems to reduce costs to the district

A. CURRICULUM INTEGRATION

The committee recognizes two modalities of curriculum integration with technology 1) curricula that have technology skills and methods deeply embedded within it and 2) a technology curriculum that is promoted independent of any traditional academic disciplines. Both are necessary to support each other and promote overall academic growth. This year work has begun with the Social Studies curriculum committee to create a model for embedding technology touch points into the curriculum. It is anticipated that this effort will continue as other curricula are updated throughout the district.

B. PROFESSIONAL DEVELOPMENT

A variety of technology professional development has been offered in the Stamford Public Schools over the last three years. Training has been delivered via workshops, 1:1 coaching via the Technology PD Leaders, podcasts, and online learning. Some staff members have attended webinars presented by state and national organizations that enhance their professional skills. Extensive training has been delivered over the last two years around PowerSchool, PowerTeacher Gradebook, PowerScheduler, and Smarter Balanced test administration. However, the efforts have been inconsistent in reaching all staff members at all schools in implementing technology effectively into the curriculum. Some of the PD opportunities offered throughout the district include:

- Effective use of the Promethean Board
- Use of a document camera to support instruction
- Use of 3-D Printers and Developing a Maker Space
- Twitter as an effective communication tool for administrators
- PowerTeacher Gradebook
- Smarter Balanced test administration
- Preparation of students for Smarter Balanced Assessments
- Use of blogs/wikis to collaborate and support student learning
- InfoSnap online registration system for support staff
- Effective use of the iPad as a classroom tool
- Dreambox Math to support differentiated Math instruction
- Read 180/System 44 implementation with intervention students

C. EQUITABLE USE OF TECHNOLOGY

In December of 2014 an analysis was performed to measure the true ratio of students to devices at each of our schools. Data were collected from the City Technology Management Services inventory database and the SPS grants office to look at each of the different types of devices available at each of the schools. The Stamford Public Schools has traditionally calculated the student:device ratio based on the ratio of desktop computers against the school population number. This new method allowed us to look at all devices that were available for student use, as well as only include the numbers for devices that are actually available to students and teachers for teaching use during the school day. During this analysis it was noted that although the two comprehensive high schools each had 10 computer labs, access to department laptop carts, and computers in the Library Media Center that only about 50% of this technology was available for teachers to use with students during their classroom instruction. Many of the computer labs serve as full-time classrooms and logistically moving a shared laptop cart to different floors and buildings during the changing of classes makes this an ineffective strategy. Appendix B outlines the current technology and ratios at each of our buildings throughout the district.

It is expected that as part of the 2015-2018 technology plan, the district will also look at ways to minimize the digital divide for students who do not have access to technology at home. Currently the tech cycle program provides refurbished computers to families of elementary students who do not have a computer. Our goal is to look at other programs and methods of providing access to technology hardware and access to the Internet to students in all grades outside of traditional school hours.

D. INFRASTRUCTURE AND TELECOMMUNICATIONS

Working with our school infrastructure provider (DBO) the district's high schools and elementary schools Wide Area Network (WAN) infrastructure was upgraded to 10 GB. New 802.11AC wireless access points were deployed to all high schools and middle schools. This new standard can accommodate more devices and boost speed. Additional access points were added in the elementary schools in an effort to accommodate wireless devices as well as Smarter Balanced testing from within the classroom. The district now has one access point per classroom which can now accommodate a

minimum of 25 wireless devices. Currently, the district is implementing the State recommended iBoss internet filter to eliminate safe search issues from within Google and Bing searches. The Avaya phones gateways was also recently upgraded.

E. ADMINISTRATIVE NEEDS

A variety of tools have been put in place over the last few years to allow administrators and staff to access data quickly, easily and efficiently. PowerSchool was put in place as the Student Information System in 2013. In November 2014 the Parent Portal was opened to allow parents access to students' grades and attendance at the middle and high school levels. PowerSchool is the central repository for all student data including grades, courses, attendance, and conduct. Protraxx is the district professional development system that was upgraded to also support the teacher evaluation process in the district. SchoolNet was implemented to provide a repository for assessment data and to help analyze student achievement, student progress, and student demographic data. At this point, additional work is needed to fully realize the benefits of the SchoolNet product as a data dashboard that can be used by all. Administrators also use HTE-Financial ERP, IEP Direct, Ceridian, AppliTrack, Subfinder, Kronos, Versatrans, and a variety of other systems for record keeping and access to data for staff and students. The district also uses an application by InfoSnap called School Choice to manage the magnet school lottery process. In the Spring 2015, the district implemented the first phase of InfoSnap's Online Registration Application to more effectively help manage the registration process. There are also a variety of home grown databases and systems that house additional student and staff data. Over the next few years, we will be looking to migrate some of these systems into a more central repository.

NEEDS ASSESSMENT

In order to create a shared vision in the district with regard to the use of technology in instruction, a variety of sources of information were used to identify areas of strength and opportunities for growth of the Stamford Public Schools technology program. This information was obtained from the following sources of information:

- Discussion and feedback from the District Technology Committee representing various stakeholders
- Analysis of current hardware inventory at each school, level, and throughout the district by Principals, Technology Committee, District Administration and Building Technology PD Leaders
- Discussion and feedback with the High School Call to Action Committee
- Discussion and feedback with High School Administrator Teams
- Data collected from various reports including: High School Call to Action Report, NEASC report at Stamford High School, and the GE Audit
- Report on status of 2012-2015 Technology Plan – Appendix A
- District device inventory - Appendix B
- International Society Technology Education (ISTE)Standards – Appendix C
- Teacher Survey
- Student Survey

A. STRENGTHS:

- Development of the Technology PD Leader positions in each of the schools to support teachers in their use of technology.
- Improved wireless coverage and access reliability throughout all schools in the district.
- Successful implementation of Smarter Balanced Assessments throughout the district.
- Timely response and support of City Technology Management Services (TMS) to address issues in the buildings.
- Rollout of tools to support parent communication and engagement including: Parent Portal, ParentLink Messaging, Attendance Calls, and InfoSnap online registration process.
- Rollout of additional tools to support data collection and management including SchoolNet, PowerScheduler and PowerTeacher.

B. OPPORTUNITIES FOR GROWTH:

- Distribution of technology at each level (elementary, middle, high schools) in an equitable manner.
- Develop and maintain a consistent student:device ratio at each school based on the population size.
- Increased opportunities for use of technology embedded into instruction.
- Increased Professional Development opportunities for all teachers, staff, and educators on the use of technology to support instruction.
- Improved teacher practice to support learner-centered instructional strategies with the use of technology around the 4 C's of 21st Century Learning.
- Focus on embedding technology touch points into the curriculum.
- Improved data management systems and processes to more efficiently run the business operations of the Stamford Public Schools.
- Development of additional processes and policies that align with Best Practices for managing student data.
- Development and updates of policies to support student participation in online learning opportunities.

GOAL 1: ENGAGING AND EMPOWERING LEARNING EXPERIENCES

National Educational Tech Plan	State Educational Tech Plan
<p>1.0 Learning: Engage and Empower</p> <p><i>All learners will have engaging and empowering learning experiences both in and out of school that prepare them to be active, creative, knowledgeable and ethical participants in our globally networked society.</i></p>	<p>Goal 1: Engaging and Empowering Learning Experiences</p> <p><i>All learners will have engaging and empowering learning experiences both inside and outside of school that prepare them to be active, creative, knowledgeable and ethical participants in our globally networked society.</i></p>
<p>What will your district do over the life of this local Educational Tech Plan to ensure that learning experiences are empowering, engaging and supported by digital tools?</p>	

Action Plan for Goal Area 1

SPS Teaching/ Learning Goal (pg. 7, 8)	Task	Responsible Party	Target Date	Success Indicator
1.1 1.2 1.3 1.5 1.6	<p>Implement Pilot Program at SHS and WHS to address equity access to technology and effective use of technology in the classroom at the high school level.</p> <ul style="list-style-type: none"> • Purchase and implement 150 mobile devices for Pilot Program at Stamford High School • Purchase and implement 150 mobile devices for Pilot Program at Westhill High School • Provide each 9th grade teacher at Westhill and Stamford High Schools with a mobile device as part of pilot program. • Pilot Cloud-Based Collaboration/Productivity Software (Google Apps, Office 365) with WHS and SHS pilot group • Pilot Learning Management System (Edmodo, Schoology, Google Classroom) • Pilot Digital Textbooks 	CIO, Pilot Program Teachers, HS Admin Representative, City TMS, HS Library Media Specialist	Year 1	Data Collected from: <ul style="list-style-type: none"> • Pre/Post Pilot Surveys • Observation walk-through data • Assessment of student work • Student assessment data

1.1 1.5 1.6	Pilot Chromebooks as an assistive technology (AT) tool with the AT consultant	CIO, Assistive Technology (AT) Coordinator, AT Consultant	Year 1	Observation walk-through data
3.5	Rollout of Student Portal for secondary students	CIO, Research Dept, Technology PD Leaders	Year 1, 2	Portal Live 2016 – HS Portal Live 2017 - MS
1.1 1.2 1.3	Increase and upgrade the amount of technology available for use in the ARTS program	CIO, City IT Director, Director of Special Services	Year 2	Inventory Count
1.4	Exploration of credit recovery/online learning opportunities	CIO, Assistant Superintendent Secondary, Director School Improvement, HS Administrators	Year 2	Pre/Post data credit recovery data
1.1 1.2 1.3 1.5 1.6	Full rollout of 1:1 device program for freshman class at Westhill and Stamford High School. Develop cost/benefit analysis to determine best rollout plan (district purchased devices vs. Bring Your Own Device (BYOD)	CIO, Assistant Superintendent Secondary, Director School Improvement, HS Administrators, Pilot Program Teachers	Year 2	Teacher Survey Student Survey Observation walk-through data
1.2 3.2 3.3	Implementation of online collaboration tools (i.e., Google Apps/Office 365)	CIO, Technology PD Leaders, Library Media Specialists	Year 2	Teacher Survey Student Survey Observation walk-through data
1.1 1.2 3.2 3.3	Explore software tools to support Universal Design for Learning (UDL). As part of an ongoing effort to provide technology that supports UDL and the individualized needs of students both in regular education and special education, we are looking to provide software across the district for use with all classes and students. Some examples include universal apps and browser extensions	CIO, Special Education Teachers, SRBI Teachers	Year 3	Inventory of Software designated as UDL
1.1 1.5 1.6	Evaluate feasibility based on pilot feedback on using Chromebooks and extensions as an Assistive Technology tool in place of laptops.	CIO, Assistive Technology Coordinator, AT Consultant	Year 3	Observation walk-through data

1.2 1.5	Develop curriculum template to be used by curriculum committees to clearly define technology integration points within the curriculum	CIO, Curriculum Leaders, Curriculum Committees	Year 3	Approved curriculum template
1.1 1.3 3.2 3.3	Based on pilot results in Year 1 evaluate feasibility of 1:1 program at middle school. Develop a cost/benefit analysis of implementing 1:1 programs with district purchased devices and BYOD.	CIO, City IT Director, Building Administrators	Year 3	Cost/benefit analysis document

GOAL 2: ASSESSMENT

National Educational Tech Plan	State Educational Tech Plan
<p>2.0 Assessment: Measure What Matters</p> <p><i>At all levels, our education system will leverage the power of technology to measure what matters and use assessment data for continuous improvement.</i></p>	<p>Goal 2: Assessment</p> <p><i>At all levels, our education system will leverage the power of technology to measure what matters and use assessment data for continuous improvement.</i></p>
<p>What will your district do over the life of this local Educational Tech Plan to ensure that technology is used for assessment?</p>	

Action Plan for Goal Area 2

SPS Teaching/Learning Goal (pg. 7, 8)	Task	Responsible Party	Target Date	Success Indicator
2.1	Develop Data Dashboard/Portal for all assessment data for use by all teachers/administrators	CIO, Research Department, Data Curriculum Associate, Assistant Superintendents	Year 1, 2	Deployment of SchoolNet to all Teachers/Admins
2.1	Deployment of iPads to K-3 teachers to support new MClass reading assessment program	CIO, Technology Management Services	Year 1	Rollout of 275 iPads in Fall 2015
2.1	Develop district formative assessments in SchoolNet to be taken online by students	CIO, Directors School Improvement, Curriculum Associates	Year 2	District Formative Assessment delivered online
2.2	Purchase and implement more devices to allow for testing of all students in optimal testing conditions	CIO, City TMS, Research Department	Year 3	Students:Assessment Device Ratio
2.2	Phase-out of iPads for testing	CIO, Building Principals	Year 3	No iPads used for testing by 2017

GOAL 3: CONNECTED TEACHING AND LEARNING

National Educational Tech Plan	State Educational Tech Plan
<p>3.0 Teaching: Prepare and Connect</p> <p><i>Professional educators will be supported individually, and in teams, by technology that connects them to data, content, resources, expertise and learning experiences that enable and inspire more effective teaching for all learners.</i></p>	<p>Goal 3: Connected Teaching and Learning</p> <p><i>Professional educators will be supported individually, and in teams, by technology that connects them to data, content, resources, expertise and learning experiences that can empower and inspire them to provide more effective teaching for all learners.</i></p>
<p>What will your district do over the life of this local Educational Tech Plan to ensure that educators are prepared to teach 21st Century learners and are connected to technology resources that support teaching and learning?</p>	

Action Plan for Goal Area 3

SPS Teaching/ Learning Goal (pg. 7, 8)	Task	Responsible Party	Target Date	Success Indicator
3.1 3.2 1.1 1.2	Identify one teacher from each core area at WHS and SHS (Math, Science, English, and Social Studies) to participate in pilot program on digital learning	Building Administrators	Year 1	Begin work by Fall 2015
3.1 3.2 3.3	Provide extensive year-long PD program for 9 th grade teachers in pilot program to focus on utilizing mobile devices to support instruction, utilization of digital content, effective use of learning management systems, and tools for online collaboration.	CIO, Director School Improvement Secondary, Pilot Teachers	Year 1	Completion of 30 hours PD by Pilot Teacher Group by June 2016
1.1 1.2 1.3 1.5 1.6 3.3	Library Media Specialists at HS level will participate in National Conference on Digital Learning to support HS pilot programs. They will then provide two workshops at the high school level to share what they learned.	CIO, Director School Improvement Secondary, HS Library Media Specialists	Year 1	Attendance at National Conference in November 2015
3.1 3.3	Develop a district wide Technology PD catalogue with workshops offered after school throughout the district on a variety of topics. Over 20 after-school workshops will be offered throughout the district and made available on a variety of topics for all teachers.	CIO, Technology PD Leaders, Technology Curriculum Associate	Year 1, 2, 3	Published PD Catalogue Summer 15, 16, 17

3.1 3.3	Two early Release Days will be devoted to building level technology integration professional development	CIO, Technology PD Leaders, Technology Curriculum Associate	Year 1, 2, 3	PD workshops delivered
3.3	Develop system to align professional development videos and content with educator evaluation plans	CIO, Research Dept, HR	Year 2	Teacher PD Module linked to ProTraxx
3.6	Develop district guide for promoting digital literacy and digital citizenship in the classroom	CIO, Library Media Specialists	Year 2	Digital Citizenship guide
1.1 3.1 3.3	Provide workshops targeted for administrators to expand their knowledge on effective use of instructional technology.	CIO, Technology PD Leaders	Year 2	Published PD Catalogue Summer 15, 16, 17
1.1 3.1 3.3	Implement PD channel/website to support districtwide PD initiatives	CIO, Technology PD Leaders, HR	Year 3	Website Available 2017-2018
1.1 3.1 3.3	Provide a districtwide PD program using the Ed Camp model	CIO, Technology PD Leaders	Year 3	EdCamp Held
1.1 1.2 1.3 1.5 1.6 3.3	Provide professional development for Library Media Specialist at elementary and middle school levels to begin investigating "21 st Century School Libraries and Learning Commons"	CIO, Library Media Specialists	Year 2, 3	District Learning Commons Plan by May 2018

GOAL 4: INFRASTRUCTURE FOR TEACHING AND LEARNING

National Educational Tech Plan	State Educational Tech Plan
<p>4.0 Infrastructure: Access and Enable</p> <p><i>All students and educators will have access to a comprehensive infrastructure for learning, when and where they need it.</i></p>	<p>Goal 4: Infrastructure for Teaching and Learning</p> <p><i>All students and educators will have access to a comprehensive infrastructure for learning, when and where they need it.</i></p>
<p><i>What will your district do over the life of this local Educational Tech Plan to ensure that all students and educators will have access to a comprehensive infrastructure for teaching and learning?</i></p>	

Action Plan for Goal Area 4

SPS Teaching/ Learning Goal (pg. 7, 8)	Task	Responsible Party	Target Date	Success Indicator
4.1	Continue timely replacement cycle of hardware and software applications. Replacement of aging equipment more than 5 years old	City TMS, CIO	Ongoing	Annual Inventory report with count of devices >5 years
4.1	Continue to increase infrastructure and bandwidth to support increasing demands of student and staff access within the school buildings	City TMS	Ongoing	Network Utilization Reports
4.3	Monitor and replace wireless access points as needed	City TMS	Ongoing	Wireless Utilization Reports
4.1	Purchase more mobile devices for Northeast and Rippowam to increase student:device ratio to be consistent with other elementary/middle schools in the district	City TMS, CIO	Year 1	Student:Device ratio from inventory
4.1	Add additional computer lab at schools as space allows with lowest ratios to support testing needs	City TMS, CIO	Year 1	Student:Device ratio from inventory
4.1 4.2	Create a Technology Sustainability Plan: Determine replacement and funding plan for all technology outlined in sustainability plan (desktops, laptops, ipads, mobile devices, promethean boards, document cameras, etc...). Consider room configurations, furniture, technology limitations, etc.	CIO, Director of Technology TMS	Year 1	Approved Sustainability Plan
5.1	Migrate to PowerSchool extension framework	CIO, Research Department	Year 1	New framework for custom fields in PowerSchool

4.1 1.6	Develop a plan to assist students with the availability and access to technology during after-school hours	CIO, Technology Committee	Year 3	Hardware Inventory for target populations
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GOAL 5: PRODUCTIVITY AND EFFICIENCY

National Educational Tech Plan	State Educational Tech Plan
<p>5.0 Productivity: Redesign and Transform</p> <p><i>At all levels, our education system will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money and staff.</i></p>	<p>Goal 5: Productivity and Efficiency</p> <p><i>At all levels, our education system will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money and staff.</i></p>
<p>What will your district do over the life of this local Educational Tech Plan to maintain or redesign processes and structures to take advantage of the power of technology to improve learning outcomes while maintaining efficiency?</p>	

Action Plan for Goal Area 5

SPS Teaching/ Learning Goal (pg. 7, 8)	Task	Responsible Party	Target Date	Success Indicator
1.2 1.3 1.4 1.6 4.1	Update and Revision of Policies: HS Student Email, Web 2.0 and 3.0 tools, Parent Permission Forms, Revisions of Acceptable Use Policy (AUP)	CIO, Technology Committee, Technology PD Leaders	Year 1	Approved BoE policies
3.4	Rollout of elementary school report cards on PowerSchool and elementary Parent Portal	CIO, Research Department	Year 1	Report Cards printed via PowerSchool
5.1	Improve iPad management process and rollout of Mobile Device Management (MDM) tools for schools	CIO	Year 1, 2	MDM Rollout Complete
3.4 5.1	Rollout phase two of Online Registration process	CIO, Office of Family Engagement, Technology Curriculum Associate	Year 1, 2	Increase number of online registrations Year 1 to Year 2
5.1	Develop Staff Data System Plan	CIO, Director of HR	Year 1, 2, 3	Data Plan
5.1	Cleanup of PowerSchool Data and Processes	CIO, Research Department, Assistant Superintendents, Director Support Services	Year 1, 2, 3	Documentation of Current Processes

5.1	Develop management process for mental health data	CIO, Director of Special Services, Other Staff	Year 1, 2, 3	Deployment of system
5.1	Integrate IEP and 504 Direct Data with PowerSchool	CIO, Special Ed Curriculum Associate, Direct of Special Ed, Data Monitoring Curriculum Associate, Research Dept	Year 1	Reduction of staff hours to complete summer rollover
5.1	Develop a district Software Inventory for all educational technology programs used in each building. Renegotiate school contracts to district contracts (where appropriate) to reduce costs	CIO, Library Media Specialists	Year 2	Decrease in software licensing costs for existing products

FUNDING IMPLICATIONS

The Stamford Public Schools is committed to fiscal responsibility in order to maximize its investments in technology. We will continue to use a financial review process based on the Total Cost of Ownership model to ensure that all costs associated with technology are planned for and captured. This process includes the acquisition, maintenance, and support of technology, as well as any additional personnel needs, training, and professional development and will generally fall into the following categories:

- Software and Web Resources
- Hardware
- Infrastructure
- Maintenance
- Support
- Personnel
- Telecommunications
- Management Information Systems
- Supplies

All of the recommendations of the Technology Plan for 2015-2018 require financial consideration and detailed budgeting. The estimated costs are presented by year and are listed with the potential funding source. This 3-year plan is consistent with the level of funding provided via grants, operating budget, and the city capital budget in previous years. The budget estimates outlined here are for planning purposes only. The actual budgeted amount each year will be determined based on the budgeting process. Each year an addendum will be added with the actual approved budget amounts. The implementation of the goals outlined in this plan is dependent on adequate funding and will be revised accordingly based on availability of funds from all relevant sources.

The costs listed below are based on current technology pricing and are designed to be estimates only.

Year 1 Proposed Budget: 2015-2016

Site	Item	Proposed Funding Source	Total Cost
WHS/SHS	Chromebooks for Pilot	Alliance Grant/State Tech Grant	\$420,000
High Schools	Digital Resources/Software - Pilot	Alliance Grant/Priority School District Grant	\$40,000
WHS/SHS	PD/Curriculum Work for Pilot Program	Priority School District Grant	\$35,000
High Schools	Library Media Specialist PD	Priority School District Grant	\$12,500
Arts	Replacement of Devices	State Tech Grant/Capital	\$30,000
Rippowam	Additional Devices	Capital	\$36,000
Northeast	Additional Devices	Capital	\$50,000
Elementary	Mobile Device Mgmt Software - Pilot	Alliance Grant	\$20,000
PreK	iPads for PreK	Alliance Grant	\$32,000
Elementary	iPad replacements for elementary MClass deployment	Alliance Grant	\$120,000
District	Replacement computers >5 years old	Capital	\$414,000
District	Technology Professional Development district wide	Priority School District Grant	\$9,000
District	Infrastructure Upgrades	Capital	\$250,000
District	Data management system improvements/Mental Health	Operating Budget	\$75,000
Total Year 1			\$1,543,500

Year 2 Anticipated Budget: 2016-2017

Site	Item	Proposed Funding Source	*Total Cost
WHS/SHS	Full 1:1 Implementation 9 th Grade	Alliance Grant/Capital	\$420,000
High Schools	Digital Resources/Software	Operating/Alliance Grant	\$200,000
High Schools	2 FTE – Designated Techs to support HS	Operating	\$150,000
Elementary/Middle	Chromebook Pilot – Phase out of iPads for Testing	State Tech Grant/Alliance Grant	\$100,000
District	Funds to support access to devices after school hours	Grant/Capital	\$100,000
District	Software Consolidation	Operating	\$60,000
District	Technology Professional Development	Priority School District Grant	\$65,000
District	Replacement of Technology based on Sustainability Plan	Capital	\$650,000
District	Infrastructure Upgrades	Capital	\$400,000
District	Wireless Upgrades	Capital	\$260,000
District	Data management system support Mental Health	Operating Budget	\$100,000
Total Year 2			\$2,505,000

*The costs provided are based on current technology pricing and are designed to be estimates only.

Year 3 Anticipated Budget: 2017-2018

Site	Item	Proposed Funding Source	*Total Cost
WHS/SHS	Full 1:1 Implementation 10 th Grade	Alliance Grant/Capital	\$420,000
High Schools	Digital Resources/Software	Operating/Alliance Grant	\$200,000
High Schools	2 FTE – Designated Techs to support HS	Operating	\$150,000
Elementary/Middle	Mobile Devices to replace iPads used for testing	State Tech Grant/Alliance Grant	\$100,000
District	Software Consolidation	Operating	\$70,000
District	Technology Professional Development	Priority School District Grant	\$70,000
District	Replacement of Technology based on Sustainability Plan	Capital	\$650,000
District	Infrastructure Upgrades	Capital	\$400,000
District	Wireless Upgrades	Capital	\$360,000
District	Technology Curriculum Writing Support	Priority School District Grant	\$15,000
District	Implementation Year 1 of Library Commons model in Media Centers	Alliance Grant	\$100,000
Total Year 3			\$2,535,000

*The costs provided are based on current technology pricing and are designed to be estimates only.

Estimated Funding Allocations by Source

In order to properly fund the initiatives outlined in this 3-year plan, funding is needed from multiple sources including: Alliance Grant, Priority School District Grant, State Technology Grant, eRate Grant, SPS Operating Budget, and City Capital Budget. Based on the yearly estimates it is expected that annually the following funds will be available by each funding source. If the funds are not available from each of the proposed funding sources, this plan will be adjusted accordingly.

Funding Source	Estimates Year 1	Estimates Year 2	Estimates Year 3
Alliance Grant/Other Grants	\$307,000	\$420,000	\$420,000
Priority School District Grant	\$56,500	\$65,000	\$85,000
Tech Grant	\$355,000	Unknown	Unknown
Capital Budget	*\$750,000	\$1,510,000	\$1,610,000
Operating Budget	\$75,000	\$410,000	\$420,000
Total	\$1,543,500	\$2,405,000	\$2,535,000

*The original capital request was 1,500,000 for 2015-2016. The actual number for Year 1 reflects the approved capital amount which was reduced to \$750,000.

The capital budget for BoE technology was funded at 2,000,000 for the 2014-2015 school year. The estimated expenditures to support this technology plan are designed to be consistent with funding in previous years.

APPENDIX A: REVIEW OF 2012-2015 TECHNOLOGY PLAN

OVERVIEW

The purpose of the Educational Technology Plan as defined in the 2012-2015 technology plan was to ensure that (1) the educational goals of the school system are met using the most appropriate technologies; and (2) all parties have equitable access to and achieve the greatest benefit from the routine use of educational technology. Prior to the 2014-2015 school year districts who applied for technology funding through E-Rate were required to develop a comprehensive technology plan every 3 years. As of the 2014-2015 school year this is no longer a requirement; however, the CSDE is still considering requiring district to submit a plan to the state.

The 2012-2015 Technology Plan was designed to take a practical approach to bolstering student achievement by first fortifying the District's infrastructure, then migrating educational content to the web, and finally, focusing on deeply embedding technology skills in the curriculum and all organizational processes.

Significant progress was made over the last few years to improve the network infrastructure, increase wireless capacity throughout the schools, provide equitable access to technology in the buildings, deploy over 3,000 iPad/tablet devices, and pilot the administration of the SBAC field test.

PLAN STATUS

Below you will find a matrix which outlines the goals in the 2012-2015 Technology Plan, an indication of the current status, as well as the alignment of each of the goals with the Alliance District Grant, School Improvement Plans, Call to Action Plan, and district goals. This analysis will help us better understand where to focus our efforts and priorities during the final year of the 2012-2015 technology plan.

Tech Plan Item	SIP	ADIP	HS Call to Action	District Goals
<u>Complete</u>				
Wireless Access Point Upgrades in Buildings	X		X	X
Network Switch Replacement				
SBAC Pilot Testing	X	X		
Naviance to Support Student Success Plans			X	

Tech Plan Item	SIP	ADIP	HS Call to Action	District Goals
<u>In Process</u>				
District Report Cards available for parents and students to view		X		X
Online Electronic System for managing district assessments	X	X	X	X
50% of curriculum distributed digitally				
Parent Portal Implementation		X		X
Teacher Gradebooks via Power School	X	X		X
Elementary 2 mobile learning centers per building	X			
Data Analysis Professional Development	X	X	X	X
Replace traditional tools with digital equivalents				
Technology Professional Development (iPads, curriculum tools etc...)			X	X
Pilot on 1:1				
SBAC Testing	X	X		X

<u>Not Started</u>				
Software Inventory – Centralized Managed Process				
K-8 Technology Curriculum – Grade Specific Technology Skills				
Online Learning/Deployment Learning Management System				
Cohesive PD Plan	X			
Technology Leaders Building Based	X			X
PD Website/Channel				
Ethical Use of Technology Document				
High School – 9 th Grade BYOD Pilot				
Middle School – 1:1 with BYOD and mobile learning centers				
Technology Partnership Model – intensive study/collaborative PD/coaching				
Data/System Design Review	X	X	X	
Consolidate procurement with other districts				

RECOMMENDATIONS 2014-2015

After review of the alignment of goals with the various district/school improvement plans, district goals, and High School Call to Action plan, it is recommended that the district focus its efforts for the 2014-2015 school year on technology initiatives that are most aligned with the priorities outlined in these plans.

The overall areas of focus will be with technology goals that are specifically tied to data management/improvement, parent engagement/communication, and professional development. Currently, these areas seem to be the topics that have the greatest priority to the Stamford Public School System.

The chart below outlines these goals and outlines what is needed to accomplish this goal this school year. It also provides information on what is expected

GOAL	STATUS	NEEDS	OUTCOME
Data Management: Data/System Design Review	Data System Design Overview Created; Current Prioritizing Systems	Input from Finance, City IT, Research and HR Departments	System Architecture Diagram for Student and Staff Data; Data Management Strategy Plan
Data Management: Online Electronic System for managing district assessments	School Net already purchased; focus needs to be on further implementation to be inclusive all assessment data and design of a strategy document.	Pearson Consulting; Pearson PD	School Net Implementation/Rollout Plan
Data Management: Data Analysis Professional Development	Once tool is implemented, admins/teachers will need ongoing support and training	Time for Admin/Teacher PD	School Net Implementation/Rollout Plan
Professional Development: Technology Leaders Building Based	TPDLs interviewing is taking place. TPDLs to be selected week of 11/10. Stipend position for existing teacher - Budgeted already.		TPDL - Positions Filled November 2015
Professional Development: Cohesive PD Plan	Each TPDL will write and submit a technology PD plan for their building. Focus for many schools will be using the iPads effectively in the curriculum.	Fill Technology Professional Development Leader Positions (TPDL)	School Technology PD Plans - December 2014

GOAL	STATUS	NEEDS	OUTCOME
Professional Development: Technology Professional Development (iPads, curriculum tools etc...)	Once TPDL position is filled in each building; 2 PD sessions per month will take place at each school.	Fill Technology Professional Development Leader Positions (TPDL)	TPDL Monthly PD Reports
Parent Engagement/Communication: District Report Cards available for parents and students to view	Project Plan Developed and work has well underway. Launch Q2 Middle/High School.	Communication Strategy/Plan - in Development	Portal Open -11/20/14
Parent Engagement/Communication: Parent Portal Implementation	Project Plan Developed and work has begun. Launch Q2 Middle/High School Only.	Ongoing Communication to Staff, Community, Parents, SEA, Administrators on status of project.	Portal Open – 11/20/14
Parent Engagement/Communication: Teacher Gradebooks via Power School – In Process Middle School/High School	Middle/High School Teachers trained in Gradebook; all Teachers are using it for Q1.		Portal Open - 1//20/14

2015-2018 TECHNOLOGY PLAN

It should be noted that all remaining items will be reviewed again as we develop the next 3-year technology plan. Below is a list of recommendations as we begin the development of the 2015-2018 technology plan:

- Committee will be comprised of 6-8 Teachers of varying technical ability
- Committee composition will have more teachers than administrators
- Committee membership will include teachers, administrators, parent, students, and community representation.
- Technology goals will be aligned with Alliance District Improvement Plans, School Improvement Plans, District Goals, and High School Call to Action, so that all priorities are consistent
- All technology goals will be focused and developed as teaching and learning goals.
- Our district technology plan will include funding implications so that all stakeholders understand the cost to the district to implement the goals defined in the plan.
- Annual review and modifications to the plan will be addressed via an Addendum of the plan.

APPENDIX B: TECH INVENTORY DATA
AS OF NOVEMBER 2014

All Inventory Account by School (IT Records) as of November 2014

School Name	# Students	# Staff	Desktops	Total #ipads	Netbooks	Laptops	Chrombook	Totals	Desktops5 yr/older
Davenport Ridge	630	86	186	237	27	0	0	450	38
Hart Elementary	643	81	195	141	28	0	0	364	35
Toquam School	704	90	182	242	52	0	0	476	77
K.T. Murphy	559	75	157	212	5	0	0	374	36
Newfield School	649	89	190	173	28	0	0	391	43
Northeast School	694	96	210	122	2	0	0	334	43
Rogers School	800	92	329	132	264	141	0	866	245
Roxbury School	621	103	201	143	204	0	0	548	50
Springdale School	676	86	177	142	4	0	0	323	31
J.A. Stark Elementary	594	81	231	172	2	0	0	405	49
Stillmeadow School	672	106	210	163	27	0	0	400	32
Westover School	720	96	220	150	5	0	0	375	21
Cloonan	611	90	198	92	1	56	30	377	31
Dolan School	537	77	278	94	1	30	0	403	4
Turn of River School	611	85	200	102	1	30	0	333	17
Scofieldtown Magnet	672	75	267	152	61	30	0	510	3
Rippowam Middle	747	91	275	122	1	30	0	428	5
AITE .	690	78	162	32	0	0	0	194	0
Stamford High School	1797	223	641	192	8	62	0	903	11
Westhill High School	2079	233	676	250	42	30	0	998	6
Totals			5185	3065	763	409	30	9452	777

Labs & Cart Counts by School as of November 2014

School	No. of Open Student Labs	Media Center with lab	No. of	No. of iPads - General Ed	Laptop carts
			iPad Carts		
Davenport		1	7	190	1
Hart	2		5	136	
Murphy		1	6	180	
Newfield		2	6	170	
Northeast		1	4	120	
Rogers Elementary		3	4	120	
Roxbury		1	5	140	
Springdale	1	1	5	130	
Stark	1	1	6	170	
Stillmeadow		1	5	140	1
Toquam	1		6	190	2
Westover		1	5	150	
Cloonan	2	1	3	90	2
Dolan	3	1	3	90	
Rippowam	4	1	3	90	
Scofield	5	1	5	140	
Turn of River	2	1	3	90	1
SHS	5	1	6	180	
WHS	5	1	8	230	
AITE	5		1	30	
			101	2986	

Student Device & Ratio Information by School as of November 2014

School	# Students	# Students Tested	Current Simul. Users	Approx Stud:Tech Ratio
Davenport	630	275	240	3:1
Hart	643	291	186	3:1
Murphy	559	230	205	3:1
Newfield	649	307	220	3:1
Northeast	694	344	145	5:1
Rogers Ele	535	267	195	4:1
Roxbury	621	281	165	4:1
Springdale	676	319	180	4:1
Stark	594	277	195	3:1
Stillmeadow	672	303	190	4:1
Toquam	704	321	265	3:1
Westover	720	323	175	4:1
Cloonan	611	611	220	3:1
Dolan	537	537	190	3:1
Rippowam	747	747	215	4:1
Rogers MS	265	265	265	1:1
Scofield	672	672	240	3:1
Turn of River	611	611	195	3:1
SHS	1797	455	305	7:1
WHS	2079	466	355	7:1
AITE	690	175	845	1:1

APPENDIX C: ISTE STANDARDS