

Cover Page

EDUCATIONAL TECHNOLOGY PLAN – July 1, 2009-June 30, 2012

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Signature of Superintendent or Director:		Date:5/22/09
Date Submitted to Board of Education:	May 12, 2009	
Date Approved by Board of Education:	May 12, 2009	

For RESC/SDE Use Only:

RESC Regional Reviewer:	Esther Bobowick , CES	Date: 4/14/09
RESC Recommendation for Approval:	<input checked="" type="radio"/> Yes <input type="radio"/> No / Conditional	Date:4/14/09
CSDE Authorization:		Date:

Technology Plan Preparation Check-Off Page

The submitted plan has the following:

- Cover Page
- Technology Plan Preparation Check-Off Page
- LEA Federal Grant Program Compliance Form
- LEA Profile
- Technology Planning Committee
- Vision Statement
- Needs Assessment
- Goal 1
- Goal 2
- Goal 3
- Goal 4
- Goal 5
- Goal 6
- Goal 7
- Technology Funding Sources and Costs
- Children's Internet Protection Act (CIPA) Certification

Signature of Authorized LEA Agent

5/22/09

Date

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LEA Federal Grant Program Compliance Form

Stamford Public Schools
Education Agency (LEA) submitting this plan.

Developing a comprehensive technology plan based on the educational goals of the school system will ensure that the most appropriate technologies are effectively infused into your instructional and/or administrative programs. Thorough planning also ensures that all parties have equitable access and achieve the greatest benefit from routine use of educational technology. The comprehensive technology plan should demonstrate clear targets for technology use, spell out desired goals for learners, create visions for future directions, build "buy-in" from stakeholders, and demonstrate to those who might provide funding that a district or charter holder is ready to act.

School districts, consortia or charter schools (LEAs) who apply for technology funding through any Federal grant program are required to have developed a comprehensive, three-year plan, which outlines how the agency intends to utilize and integrate educational technology.

The applying agency (check all that apply)

is compliant with the provisions of the Children’s Internet Protection Act (CIPA) [20 U.S.C. § 6777]

will be CIPA compliant by this date. _____

has applied for E-Rate Funding for FY 2008.

The LEA’s comprehensive technology plan must be approved by the local board of education.

Date the plan was approved: May 12, 2009

OR

Date the plan is to be submitted for board approval: _____

Certified by:

Signature of Superintendent or Director

5/22/09
Date

Joshua P. Starr, Ed.D
Printed Name of Superintendent or Director

LEA Profile

This information should provide a “snapshot” of your district and help planners and reviewers to understand areas of need. This information will also assist the CSDE to establish priorities in the provision of resources to districts. The CSDE is particularly interested in the capability that each LEA has to access resources that will be placed onto the Connecticut Education Network (CEN). The new questions about technological literacy and professional development are asked as a result of additional federal reporting requirements.

LEA NAME: Stamford Public Schools	
How many Grade 8 students were evaluated for technological literacy, based on your district's standards, during the 2007-08 school year?	0
Based on that evaluation, how many of those students were considered technologically literate?	n.a.
How many hours of technology related professional development were offered to certified educators in 2007-08?	1096.5
How many hours of technology related professional development were offered to administrators in 2007-08?	35
What fraction of your certified staff in Grades K-8 does your district consider technologically literate? (<i>Do not reduce the fraction to lowest terms; the fraction's denominator should reflect the actual number of professional K-8 staff. For example, if out of 120 certified staff, 110 are considered technologically literate-the answer would be 110/120. </i>)	850/1080
What fraction of your certified staff in Grades 9-12 does your district consider technologically literate? (<i>Do not reduce the fraction to lowest term. The fraction's denominator should reflect the actual number of professional 9-12 staff.</i>)	250/408

When filling out the table below, please consider the following conditions:	
<ul style="list-style-type: none"> ▪ the number and percentage of each grade level of students that can have high-speed internet access at the same time; ▪ that students are grouped in clusters of no more than thirty and no less than ten; and ▪ that students remain in their own school. 	
Maximum number of Grade 4 students who could be accommodated under the above conditions.	300
Percentage of Grade 4 students who could be accommodated under the above conditions (number accommodated/total number of Grade 4 students).	26%
Maximum number of Grade 6 students who could be accommodated under the above conditions.	250
Percentage of Grade 6 students who could be accommodated under the above conditions (number accommodated/total number of Grade 6 students).	23%
Maximum number of Grade 8 students who could be accommodated under these conditions.	250
Percentage of Grade 8 students who could be accommodated under the above conditions (number accommodated/total number of Grade 8 students).	24%
Maximum number of Grade 10 students who could be accommodated under the above conditions.	450
Percentage of Grade 10 students who could be accommodated under the above conditions (number accommodated/total number of Grade 10 students).	41%

TECHNOLOGY PLANNING COMMITTEE

Stamford Technology Planning Team:

The following individuals participated in the planning team that worked on the preparation for this plan:

Name	Title	Department/School
Joanna Nicholson	Interim Assistant Superintendent	Curriculum and Instruction
Winnie Hamilton	Assistant Superintendent	Secondary Schools
William Dunn	Chief Financial Officer	BOE Administration
Judy Singer	Director	Research Department
Mara Siladi	Director	Director of Grants and Funded Programs
Paul Gross	Principal	AITE
Mona Hanna	Director of Math and Science	Curriculum and Instruction
Susan Paley	Coordinator	GE College Bound Program
Mike Pensiero	Director	Technology Management Services
Cheryl Poltrack	Curriculum Associate for NCLB	Grants and Funded Programs
Lora Rossomando	President SEA	Stamford Education Association
David Tate	Assistant Principal	Cloonan Middle School
Paula Ward	Curriculum Associate for Technology	Research Department
Kathy Wunder	Principal	Westover Magnet Elementary School
Carley Esformes	Science Teacher	Westhill High School
Betsy Nagurney	Technology Teacher	Scofield Magnet Middle School
Jeanne Lauer	Technology Teacher	AITE
Esther Bobowick	Director, Professional Development	C.E.S.
Donna Case	Educational Technology Consultant	C.E.S.

Additionally, three student focus groups were held to determine the student's perception of the current technology available to them, any issues they were currently experiencing in the use or access to technology, and their ideas on expansion of technology over the next several years.

Beginning in 2008-2009, and for the remainder of 2010-2012, the ongoing Technology Steering Committee will include the following:

Name	Title	Department/School
Joanna Nicholson	Assistant Superintendent	Curriculum and Instruction
Winnie Hamilton	Deputy Superintendent	Deputy Superintendent K-12
William Dunn	Chief Financial Officer	BOE Administration
Mike Pensiero	Director	City of Stamford: Technology Management Services
Jack Chnowski	Network Administrator	City of Stamford: Technology Management Services
Not yet hired		Director of Educational Technology
Judy Singer	Director	Research Department
Paula Ward	Curriculum Associate for Technology	Research Department
Mara Siladi	Director	Director of Grants and Funded Programs
Cheryl Poltrack	Curriculum Associate for NCLB	Grants and Funded Programs
Mona Hanna	Director of Math and Science	Curriculum and Instruction
Mary Jennings	Director of Literacy and Social Studies	Curriculum and Instruction

Lora Rossomando	President SEA	Stamford Education Association
Peter Ruppert	Coordinator	GE Developing Futures Grant
Paul Gross	Principal	AITE
Not yet identified	Principal	Middle School Level
Kathy Wunder	Principal	Westover Magnet Elementary School
Not yet identified	Assistant Principal	High School Level
David Tate	Assistant Principal	Cloonan Middle School
Not yet identified	Assistant Principal	Elementary School Level
Not yet identified	Principal	Middle School level
Carley Esformes	Science Teacher	Westhill High School
Betsy Nagurney	Technology Teacher	Scofield Magnet Middle School
Susan Paley	Math Teacher	Scofield Magnet Middle School
Jeanne Lauer	Technology Teacher	AITE
Not yet identified	2 Community Representatives	2 Community Representatives
Not yet identified	2 Parent Representatives	2 Parent Representatives
Not yet identified	Focus Group- Middle School & High School Students	
Annual Survey	All middle school and high school students	

Role of the Technology Committee:

The Technology Committee was charged during the 2007-08 year for meeting to develop the District's 2009-2011 Technology Plan. Under the direction of the Superintendent of Schools, the Assistant Superintendent for Curriculum and Instruction selected a team of individuals representing all major constituents of the school system, to review the prior plans, literature on effective technology practices currently in use by other districts, the current state of technology in SPS, and make recommendations for the components of the new plan. These committee members included teachers, building and central office administrators, teacher union membership, financial staff members, members of our IT staff, including the director of Technology Services, members of the district research department and advisory staff from our regional RESC. All of these individuals were selected for their knowledge and experience with the Stamford Public Schools, as well as their comfort with technology and understanding of how technology can be successfully used within the schools.

Members met regularly during 2007-08 to develop the key plan components, following an extensive amount of research. This research focused on:

- evaluation of the current technology resources available in each school, including number and age of equipment in schools
- assessment of the current state of professional staff knowledge, comfort and desire for technology-related professional development
- sharing of experiences with the integration of technology in various district schools and within disciplines
- report on the data requirements and existing systems for student data information within the schools
- review of previous District Technology Plans and their outcomes
- survey data on the needs and interest of the professional staff for professional development, and
- review of the current technology available today, and its potential uses within education.

After refining the technology vision for the Stamford Public Schools, the Technology Committee began to develop plans for improving technology access, availability and comfort for both professional staff and students. It quickly became

evident that Stamford needed to deal with missing components in order to move ahead in its plans to improve student use and knowledge of technology. These efforts revolved around four main components:

- Leadership – within district and individual schools, including redefinition of the role of the library media specialist to include educational technology
- Curriculum – Clear expectations for students in all grade levels
- Professional Development – for all professional staff, on both use of technology and integration of technology into curriculum
- Access to Technology Resources – including both traditional access to computers and other technology resources

Development of this plan illuminated many areas where the district is in need of clarification of procedures, development of updated policies and job descriptions, criteria for accountability for staff who are designing curriculum and integrating it into daily instruction, and a comprehensive but simple professional development plan for training all staff tied to student technology literacy. The plan is based upon making the funding of technology a priority, however, the reality of district financial constraints, may make the timeline proposed in this plan impossible, and the deployments described may need to be phased in over several years.

In order to create ownership of the plan by all constituents, the Technology Committee will be maintained as an ongoing District Technology Steering Committee. These meetings will reconvene quarterly beginning September, 2009 and through the life of this plan, to monitor plan implementation, to make any necessary revisions to the plan, to help shape the technology professional development of the district, and to make decisions on deployment and curriculum efforts directed by this plan. Each member of the committee has played, and will continue to play, two roles within the committee-- to ensure that the technology plan fits the needs of their own constituency at the same time that it fits the needs and the resources of the Stamford Public Schools. Ultimately the goal is to provide SPS students with the access to technology and curriculum that enable them to develop the skills and knowledge that they need to be successful in the 21st century.

Evaluation Strategy:

In order to evaluate progress on this plan, the committee will depend upon the following data to determine plan implementation:

- Hiring of appropriate personnel, on a district and school level, in accordance with the plan timeline;
- Reports from EzTraxx, the district professional development system, of the amount, attendance and focus of teacher and administrator professional development;
- Annual surveys of teachers on usage patterns, self-reports of comfort with technology, and professional development desired;
- Reporting by the Technology Management Services Department of the inventory of technology, including computers, interactive whiteboards and other technology resources within the schools;
- Reports by the Research Department upon the development of Data Analysis resources;
- Reports by the Asst. Superintendent of Curriculum & Instruction, or designated staff members, on the progress made on curriculum development and training on student technology expectations and integration of technology within all major curriculum areas, especially math, science and social studies;
- Results of student assessments at 6th and 11th grade levels;
- Review of job description and results of focus groups with media specialists.

Without consistent, measurable, carefully planned improvement in all four components-- leadership, curriculum, professional development, and access to technology-- this plan cannot work. In order to prepare our students, we must have access to the basic resources, in terms of people, professional development time and money, to make this plan a reality. The evaluation must revolve around how well we are doing to meet these goals, and the results must be publically available to all educators, as well as members of the community, who are responsible for school funding.

VISION STATEMENT

Stamford Public Schools' Vision for Technology Use

The vision of the Stamford Public Schools is for all students 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. These students will be able to find information quickly and efficiently, process that information and apply it to solve problems and inform decisions. We recognize that in order to prepare our students to use technology; they must have the opportunity to learn these skills from professional, technology-literate educators in a consistent, age-appropriate curriculum that utilizes modern technology tools. In addition, we need to provide students with technology experiences that demonstrate the integral nature of technology in all areas of modern life.

Equal access to all technology in every school and in every classroom is the first step for our students and staff in building a standards-based, data driven technology rich school culture. They will use technology to communicate information as digital citizens of the 21st century world. Our current gap between resources and goals, both in terms of equipment, facilities and technology-literate staff have made it imperative that we commit as a community to the funding necessary to bridge this gap.

In addition to uses in the classroom, all professional staff members also need to be literate using technology to identifying and meet the needs of each individual learner. Without the ability to analyze and track student performance data, and communicate with other professionals and families using technology tools, our teachers will not be able to meet the increasingly complex needs of our students. While this is not strictly “educational technology” it must be considered in designing the resources and support for all SPS professional staff.

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.

NEEDS ASSESSMENT

I. Curriculum Integration

The curricula of Stamford Public Schools require revision in order to provide all students equitable opportunities to achieve all standards, including technology standards. This effort has begun in several disciplines, but is not yet complete. Additionally:

- District technology standards have not been reviewed recently, and some teachers are unaware of the technology curriculum standards.
- At the elementary schools, direct instruction on technology skills are up to the individual teachers and the media specialist, and vary greatly from school to school. At the middle school level, technology courses were eliminated due to resource re-allocation and the lack of a unified curriculum. Direct instruction is similar to that at elementary schools—based upon individual teacher interest and comfort with technology. At the high school level, rigor of technology classes vary greatly. A large number of technology classes available are teaching Keyboarding, and basic Microsoft Office skills, although there are a number of Networking and Digital Arts classes that also focus on technology.
- Some curricula integrate technology seamlessly; some curricula do not integrate technology adequately. There is an inadequate availability of technology in schools; therefore, there is inadequate access to

technology. At the same time there is inequitable access to technology for some disciplines in secondary schools have limited access to computer labs or other technology equipment.

- With the resources of the GE Developing Futures grant, secondary math and science teachers now have access to interactive whiteboards and LCD projectors in their classrooms to facilitate integration into these disciplines; other subject areas are significantly behind. In elementary schools, access to these technologies is limited to one or two per school, or portable LCD projectors.
- The current procedures for using technology to address student intervention include on-line testing or electronic workbooks. Assistive Technology is available to some students through special education services where included in IEPs, but has not been fully integrated into the school system.
- In some schools, students have access to e-learning (virtual high school) but this is not universally available to all students.
- All schools, through the media centers, provide access to distant people, sites, and ideas via the internet. Recently purchased distance learning equipment presents the opportunity to communicate with students in other locations, either within the district or throughout the world, however this equipment has not yet been fully integrated with the curriculum, and staff has not been adequately trained.
- Teachers integrate technology into their lessons (for both large and small groups) in the following ways (not all teachers/not all ways/not all schools):
 - Teachers post homework on web pages
 - Teachers post grades on web pages
 - Teachers access and provide access to web pages for materials
 - Teachers access web pages of teachers and universities for curriculum ideas
 - Teachers present Power Point or encourage students to present Power Point overviews of a topic
 - Teachers use and invite students to use Digital cameras, video recorders, handheld computing devices, and audio-tapes to enhance and differentiate instruction
 - Teachers and administrators use CTReports, TetraData and the district research web site to access student data to determine curriculum decisions and to differentiate instruction
- Students use technology in the following ways (not all students/not all ways):
 - To research and access data and information
 - To take virtual field trips (limited)
 - To communicate using email with teachers, adult experts, adult mentors, and peers
 - To publish their work
 - To write reports
 - To check their grades or homework

II. Professional Development

In April 2008, the district surveyed all professional staff members about their interest in technology-related professional development. School responses ranged from a low of 16% of staff to a high of 75%--in all 538 staff members, about 38% of the staff members surveyed, responded. Over 80% of the responders considered themselves to be at least an intermediate user of technology, and almost all indicated use of the city email and other district technology-based applications. Teachers reported strong interest and need for professional development in the use of software that is currently available on the network, other district technology resources including data sources, or desire additional software resources.

Currently there is limited on-going professional development available on existing software, outside of the Tech Boot Camp initiative funded through the GE Developing Futures Grant, which provides teachers with access to a laptop if they attend technology training during vacation weeks. While currently there are a number of workshops that are application-based, few teachers appear to take advantage of them, even though they are posted on EzTraxx. Teachers appear to prefer school-based or discipline-specific training at this time, and many are already comfortable with general resources such as Microsoft Office. Teachers report interest in professional development on technology resources that will enable them to:

- Access, record and analyze student performance data electronically
- Find and use virtual field trips related to curricula

- Access distant experts and helping students communicate synchronously (“live”) and asynchronously (any time) with them.
- Use emerging technology such as telephones or iPods for audio clips of native speakers in World Languages or recording of field interviews in science
- Host and accessing on-line interviews on curriculum topics
- Make homework and grades available to students and parents
- Create web pages for their own and student communications
- Access online on-demand professional development to expand their own knowledge or skills
- Discover online resources for lessons, from phonemic awareness lessons to live demonstrations
- Provide computer-based learning opportunities to provide differentiated learning experiences for students
- Provide on-line or Distance Learning courses (similar to Virtual High School) for students in response to student interest, time available or other scheduling needs.

Currently, teachers are using Public folders available on Microsoft Outlook, the district email system, to share best practices and information about teaching resources. Planned are improvements to the website that will allowed for a secured log-in for teachers, which will provide a location for sharing of best practices and resources, along with curriculum.

In some cases, new technology equipment has been installed without adequate resources for professional development to train teachers in their use. This lag between installation and training is discouraging, and better planning for scheduled PD needs to be more closely matched to installation of resources. Changes in attendance recording, access to student performance data through a Dashboard, and other new initiatives in the next three years will severely strain our in-house ability to provide the necessary training and support. Hopefully, through this plan, new resources will be made available on a school-basis to handle the training on these new adoptions.

III. Equitable Use of Technology

In general, due to financial constraints, the technology department has been unable to provide schools with a full complement of computers that meet the quality standards established by the Technology Steering Committee. They have, however, tried to distribute available technology equitably between the schools. The district goal has been a 5-year life for all computers, however this has proved difficult to maintain with current levels of funding. Additionally, the school computer allocation goal established by the Technology Steering Committee was 1 computer for every 4 students, with a lower ratio (3:1) for the two magnet programs with a technology theme. Meeting this goal has also proved difficult due to financial constraints. While improvements have been made over the last few years—frequently technology at one level must decrease in order to fund additional resources in another location. Additionally, record keeping of technology equipment location is limited due to inadequate school-based IT personnel and to the movement of equipment by non-IT staff members.

Technology is available throughout the student day, as well as after-hours for all staff members. Student access to technology such as labs, media centers, etc. is dependent upon the after school funding in each location, and may not be equally available at all schools after or before school hours. Many resources are available after hours through district, school or teacher websites.

Staff Technology Availability:

Administrators	Central Office Staff and building principals have Blackberry's that provide 24 hour access by phone and email. Each administrator has a computer in his or her office with Network/internet access. Administrators have access to CTReports, TetraData, Starbase, IEP direct and Email from home.
Teachers - Pre-school	All teachers at William Pitt Child Readiness Center Pre-K program have an administrative computer to access email and internet. Pre-school teachers at school sites have the same computer access as elementary school teachers All teachers have access to CTReports, TetraData, Starbase, IEP direct and Email from home/
Teachers –Elementary	All teachers have access to at least 2 education-networked computers in their classroom that have internet access, and have access to centrally placed administrative networked computers in the teachers room and other school locations. All teachers have access to CTReports, TetraData, Starbase, IEP direct and Email from home.
Teachers-Middle School	All teachers have access to at least 2 education-networked computers in their classroom that have internet access, and have access to centrally placed administrative networked computers in the teachers room and other school locations. All teachers have access to CTReports, TetraData, Starbase, IEP direct and Email from home.
Teachers-High School	All teachers have access to 1 education-networked computer in their classroom that have internet access, and have access to centrally placed administrative networked department offices. All teachers have access to CTReports, TetraData, Starbase, IEP direct and Email from home.
Non-certified staff	All non-certified staff has access to a computer to access email and internet.

Student Technology Availability:

	Please include information about availability in classrooms, the library-media center and all other areas where students have access. Mention the extent of supervised access before and after school.
Students (pre-school)	Currently pre-school students do <u>not</u> have access to computers at school, except for one classroom that is piloting a literacy program. There are no after-school programs for pre-school students.
Students (elementary)	All Elementary School classrooms in Grades 1-5 have 3 computers that access the network and internet, although many of these computers are sub-standard (more than 5 years old) . Students also have access to computers in the media center and/or labs. Every school has at least one lab; some have two, based primarily on space availability. Many schools also have after-school programs that utilize the media center lab.
Students (middle school)	All Middle School core classrooms have 3 computers that access the network and internet—1 of these computers may be allocated to the teacher, and not available for student use. All Science and Math classes have interactive white boards and LCD projectors All Middle Schools have at least 3 computer labs that can be accessed by teachers with their classes.
Students (high school)	All High School core area classrooms have no access to computers in their classrooms All Science and Math classes have interactive white boards and LCD projectors Multiple labs are available at both comprehensive high schools—the magnet high school

	has a one-to-one laptop initiative in addition to technology rooms, so open labs are not necessary.
Students (with disabilities)	All students with special needs will have those needs met with Assistive technology, where warranted and with equitable access to technology, in all cases. Technology available includes: manual communication boards, augmentative communication devices, computers, adapted classroom seating, power wheelchairs, vision or writing aids, amplification systems, and a variety of appropriate educational software including readers, etc.

IV. Infrastructure and Telecommunication

The Stamford School District wide area network infra-structure, which covers 22 district schools, connects over a leased point-to- point fiber optic cable. Each school in the district has two independent secured networks deployed—one dedicated to curriculum (called the ‘Education’ network) and the other dedicated to administrators and school data users (called the ‘Administrative’ network). Both secured networks connect back to two independent data centers (called host sites). These two host sites are connected to each other via diverse high-speed 2gig optical cable data paths. Both secured networks share access to the state-provided internet access via a dedicated optical fiber link to our ISP. Both networks are filtered for appropriate content. All school sites have a limited number of computers that connect to the administrative network—primarily for building administration, office staff, and guidance and support personnel. Education network computers represent the majority of computers accessed by teachers and students.

The ‘administrative’ network is the host network for all student records applications, district financial information, and district-wide document storage. In addition, the administrative network, coupled with the optical fiber initiative, is supporting a VoIP-based district-wide phone system which will be installed in all school locations by January 2010. This network is available on dedicated machines in secured office locations, and is not accessible through computers that have access to the education network. Many of our student information systems data is currently being migrated to web-based applications, so that data will be accessible from outside of school.

The ‘education’ network has a broad variety of applications that are available to students and teachers for educational purposes, in addition to the basic Microsoft Office suite. This network supports all student classroom and PC lab activity along with web-access in the media center. Each school operates independently, with its own set of network files for access by teachers, staff and students. Each teacher and student is provided with a secure sign-in to the education network.

Each school infrastructure (LAN) is designed with a main distribution point for all data and video(MDF). Each subsequent distribution point thereafter is connected from the MDF to intermediate distribution points (IDF) via Point –to-Point MM fiber. Multi-computer PC Labs are connected to the closest MDF or IDF via Point- to- Point MM Fiber while classrooms are wired via cat 5/6 cabling from the closed MDF or IDF. Each classroom is wired to support 3 computers and one wireless access point. All network switches deployed support a minimum 10/100BT, with more recently installed switches supporting 10/100/1000BT w/ SFP gig fiber uplink. Deployed wireless access points are gradually being expanded to accommodate increasing numbers of laptops, and support 802.11 a/b/g.

Based upon internal reports, our bandwidth is now able to keep up with the demand student, teacher usage, along with new applications put on the infrastructure. E-Rate reimbursement (Stamford district at 53%) has enabled Stamford to optimize its infrastructure by reinvesting & funding the optical fiber initiative along with the VoIP based district-wide phone system.

V. Administrative needs

Use of Technology

Over the past few years, all district staff, both certified and non-certified, have increasingly become more comfortable with using technology for a variety of administrative needs. These include:

Student Information Data for Instructional Decision Making and Reporting -- To a great extent, central office administrators depend upon the Stamford Public Schools research department for access to data, although the comfort with independently accessing data has been increasing. School-based administrators work with their school's data teams, and have staff members who have been specially trained by the Research Department as Tetra Data Power Users to access student information data through CTReports and TetraData, the district data warehouse. Currently plans are underway over the next year to implement a data Dashboard, which will provide teachers, administrators and all instructional staff with access to appropriate timely student performance data in an easier manner. As the district works to develop common assessments

Data on all Staff Professional Development related to administrative applications – Administrators are responsible for entering data and retrieving information on all professional development that they provide for staff members. While many depend upon clerical staff for the direct data entry, familiarity with the Eztraxx program and its capabilities is necessary for the evaluation of certified staff and the planning of professional development

Communication Tools-- All district staff use email along with telephones to regularly communicate within the district, as well as with other constituencies. Central office and Building Principals are all equipped with and use Blackberry's to provide 24-hour access to phone and email. All staff members have access to district email, and communications from the superintendent are emailed to all BOE employees. A weekly electronic *Administrators Weekly* provides school administration with information from the superintendents and central office. Within schools, building daily and weekly announcements delivered via email are used as a regular means of communication, and all schools maintain websites that can be accessed through the internet; many of these websites provide families with information about homework as well as links to a variety of educational websites. The district has a newly designed Website which provides the community and the district with information about the school system and current school news events and superintendent communications.

Student Information – On the Secondary level, student information system reporting is handled electronically through clerical staff. Currently, both middle school and high school pilots are underway for teachers to record student attendance and grades directly from their classrooms, and next year all secondary teachers will be trained to do so. In elementary schools, input to the student information system is totally manual, and done only by clerical staff. Planning for automation and professional development for this are on-hold until a computer-generated report card is developed.

Financial Record Keeping and Purchasing –The financial record keeping for the district is completely automated, and available through the administrative network. This includes both account records and purchasing, and rolls in to the district budgeting process. Additionally, the personnel record keeping is also automated, and is used to feed employee-related data to the professional development system.

Professional Development for Administrators

Professional development is provided to existing administrators whenever new features or applications are introduced; new administrators are trained on a one-on-one basis to ensure expertise in all electronic information and communication tools. Regular classes are held for administrative staff to either refresh skills or learn about additional systems.

Over the last few years, Central Office staff and Building administrators were offered hands-on technology training and given tablet laptops. This training concentrated on building skills with Microsoft Office applications, and specifically Excel. Additionally, building administrators participated in a great deal of training on retrieving student

achievement data through CTReports, Starportal and TetraData, so that they could use this information to direct their school improvement efforts.

PLAN IMPLEMENTATION

Technology Goals and Strategies

Stamford's Goals and Strategies for improvement focus on four basic areas-- leadership, curriculum, professional development, and access to technology—that will provide the students with the technology experiences that they need to be successful. Leadership is one area that is not necessarily included in one of the general goals provided by the state, but will be vital to the success of this initiative. Currently, management of educational technology is the responsibility of the Assistant Superintendent for Curriculum and Instruction, who collaborates with the Director of Technology Management Services of the City of Stamford to plan, purchase and install all district technology equipment.

Goal 1: Improve student academic achievement through the use of technology in elementary and secondary schools.

As a result of this plan, the following expected student outcomes* in three years will be achieved as a result of technology use, and will be used as the basis for developing student assessments as indicated below:

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- 1a. Apply existing knowledge to generate new ideas, products or processes
 - Reference prior knowledge
 - Describe what was learned
 - Make predictions
 - Generate essential and guiding questions
 - Make connections between prior and new knowledge, skills, process and product
- 1b. Create original works as a means of personal or group expression
 - Demonstrate understanding of task and purpose
 - Demonstrate new learning (process)
 - Demonstrate new knowledge (product)
 - Synthesize information to develop original interpretations
- 1c. Use models and simulations to explore complex systems and issues
 - Identify, define, and describe a model(s) or simulation(s)
 - Identify, define, and describe systems or issues
 - Choose an appropriate model or simulation to investigate a problem
- 1d. Identify trends and forecast possibilities
 - Use a tool(s) to organize data in order to solve a problem.
 - Use deductive reasoning skills to identify trends to solve a given task
 - Analyze and interpret data to predict trends

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

* These student expectations are based upon the rubric developed by representatives of the CES districts who worked together to develop minimum expectations for students K-12 in technology literacy, based upon state and national standards. These will be utilized by Stamford as it creates district-wide standards, expectations and assessments.

- 2a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
 - Share work equitably
 - Integrate and merge ideas within a group or team
 - Reflect to identify the benefits and limitations of the collaborative process
 - Identify the processes that lead to collaborative construction of new ideas
 - Identify the most effective medium for collaboration, given project goals
- 2b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
 - Identify various means of delivering information
 - Identify audience
 - Determine the best format to match audience
 - Prepare, practice, and adjust delivery using selected media and simulated audience
 - Deliver presentation effectively
- 2c. Develop cultural understanding and global awareness by engaging with learners of other cultures
 - Use communication tools to connect with learners of different cultures
 - Use knowledge of similarities and differences between cultures to communicate effectively
 - Use social networks to clarify perceptions and share learning and knowledge
- 2d. Contribute to project teams to produce original works or solve problems
 - Identify methodology and roles necessary to complete group task
 - Reflect on individual strengths and weaknesses
 - Adjust objectives, methodologies and roles as needed
 - Reflect upon the processes, changes and experiences that guided the development of final product

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- 3a. Plan strategies to guide inquiry
 - Formulate research question(s) effectively
 - Identify and select appropriate tools necessary to perform inquiry
 - Plan and organize the process for performing inquiry
- 3b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
 - Implement an appropriate research plan
 - Locate relevant information within multiple sources
 - Evaluate relevant information within multiple sources
 - Synthesize information gathered from multiple sources
 - Cite sources and respect copyright law
- 3c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
 - Identify effective tools to complete task
 - Justify the value of a given tool
 - Justify the use of sources
- 3d. Process data and report results
 - Select appropriate medium given the type of data collected
 - Present results in a manner appropriate for audience
 - Use data or results to generate new research questions

4. Critical Thinking, Problem-Solving and Decision-Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:

- 4a. Identify and define authentic problems and significant questions for investigation
 - Use reasoning skills to identify problem and define/develop question(s)
 - Defend, using prior knowledge, why the problem is authentic
 - Revise (expand or narrow) the essential and guiding question(s) to focus on the specific problem
- 4b. Plan and manage activities to develop a solution or complete a project
 - Use reasoning skills and prior knowledge to identify steps which will result in a possible outcome/solution to the problem
 - Follow steps, self assess, and revise as needed

- Manage activities within the specific timeframe
- 4c. Collect and analyze data to identify solutions and/or make informed decisions.
 - Determine meaningful data.
 - Collect meaningful data
 - Manipulate data
 - Apply data to solve problems
- 4d. Use multiple processes and diverse perspectives to explore alternative solutions
 - Describe a variety of problem solving strategies
 - Consider the role of perspective on processes and outcomes
 - Reflect on alternative strategies and how they might have affected the outcome
 - Generate ideas for future exploration

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- 5a. Advocate and practice safe, legal, and responsible use of information and technology
 - Recognize rights and responsibilities of the digital community
 - Practice safe and appropriate behavior
 - Respect ownership of information and technology
 - Follow copyright law and fair use guidelines
 - Create citations (plagiarism)
 - Understands, applies and can describe the ethics applicable in the digital world
- 5b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
 - Utilize current technology in ways that appropriately support learning goals
 - Transfer technology skills to various learning opportunities
 - Contribute to the digital community
 - Participate to improve digital community
 - Embrace new technologies
 - Use technology to collaborate
- 5c. Demonstrate personal responsibility for lifelong learning.
 - Apply technology skills to authentic learning experiences
 - Apply technology skills to non-academic experiences
- 5d. Exhibit leadership for digital citizenship
 - Advocate and practice safe, legal, and responsible use of information and technology
 - Advocate rights and responsibilities of digital community

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems and operations. Students:

- 6a. Understand and use technology systems, i.e. operating system, network, web 2.0, databases
 - Access resources beyond a stand-alone station
 - Navigate and use networks
 - Identify and apply strategies to protect personal information
 - Store and back up data
 - Identify and use peripherals
 - Browse networks to locate and access shared files.
- 6b. Select and use applications effectively and productively
 - Identify and use appropriate applications for the efficient completion of a task.
- 6c. Troubleshoot systems and applications
 - Identify, describe and/or demonstrate the problem
 - Identify appropriate resources to solve the problem
- 6d. Transfer current knowledge to learning of new technologies
 - Transfer skills from one application to another
 - Adapt to changes in technologies

Our overarching goal is to create students who are academically competitive, technology literate, motivated and engaged in the learning process.

Objective	Strategy	Accountability Measure	Timeline
Curriculum/Instruction Related:			
SPS will ensure that all students will have educational opportunities using technology that will help them achieve academic success.	Develop and implement a pilot protocol to be used by all programs that use software or web-based instruction to determine its impact on student learning.	<ul style="list-style-type: none"> The pilot protocol will exist as a document, and will be applied to existing technology applications being utilized for student instruction. 	By June 2010
	The Technology Steering committee will develop a Stamford Teacher Technology Competency Checklist based upon state and national teacher technology standards, to begin the process of establishing teacher professional development for technology skills.	<ul style="list-style-type: none"> Stamford Teacher Technology Checklist will be developed and all teachers will complete. 	By June 2010
	The technology committee will review all currently existing and newly developed curriculum documents to ensure that they include technology components, and make suggestions to the C&I team about the need for increased technology if they are not currently included.	<ul style="list-style-type: none"> Process for curriculum review for technology components will be established. Existing curricular documents will be reviewed and suggestions made for improvement. 	Two per year: By June 2010 By June 2011 By June 2012
	Teachers will have available an intranet in place to enter into the curriculum documents recommendations about internet links	<ul style="list-style-type: none"> Intranet will be available for all teachers, and all schools will have been trained in its use. 	By June 2011
Curriculum Integration though internet research will use a consistent model across the district that is scaffolded for different levels	Committee of Media Specialists and representative teachers from different levels and disciplines will work together to develop internet research skills students will be taught and attribution standards for all disciplines and school levels.	<ul style="list-style-type: none"> Media specialists will have met, designed grade-level appropriate research skills, and developed lessons to teach these skills. School schedules will be redesigned to allow for teaching time for all media specialists for research skills. 	By June 2010 By June 2011
	Program Director for Literacy and Social Studies and District Director for Math and Science will develop, with faculty input, a K-12 research paper template, with grade appropriate expectations, to be used consistently across all schools,	<ul style="list-style-type: none"> Published K-12 research paper template, with grade appropriate expectations, to be used consistently across all schools and on all grade levels 	By June 2011

Objective	Strategy	Accountability Measure	Timeline
	<p>grade levels and content areas</p> <p>Program Director for Literacy and Social Studies and District Director for Math and Science and the District Technology Administrator, with faculty input, will develop K-12 standards and rubrics, with grade appropriate expectations, utilized consistently for all student & teacher digital content including PowerPoint, website, videos, or other presentation means.</p>	<ul style="list-style-type: none"> • Published K-12 standards and rubrics, with grade appropriate expectations, to be utilized consistently for all student & teacher digital content including PowerPoint, website, videos, or other presentation means. 	<p>By June 2011</p>
<p>Curriculum writing and revision in SPS will be guided by an understanding of 21st century learning skills and needs</p>	<p>Develop and use a set of guiding questions to be used when any curriculum is being written or revised, to ensure that technology is effectively integrated into the discipline.</p>	<ul style="list-style-type: none"> • Guiding questions will be written and distributed to all curriculum staff. • Guiding questions will be posted on the curriculum website 	<p>By June 2010</p> <p>By June 2010</p>
	<p>Revise the existing curriculum standards for Educational Technology, including clear performance standards for each grade level. This plan must indicate who will be responsible for the teaching of each competency.</p>	<ul style="list-style-type: none"> • Curriculum standards will be complete and distributed to all teachers. • Training on curriculum standards will be planned for appropriate staff members 	<p>By June 2010</p> <p>By June 2011</p>
	<p>District Technology Administrator with input from Technology Steering Committee will work with the Director of Research to develop district-wide technology benchmark assessments for 6th & 8th grade.</p>	<ul style="list-style-type: none"> • Benchmark Assessments are complete. 	<p>By June 2011</p>
	<p>District-wide technology common assessments will be given to all 6th and 8th graders.</p>	<ul style="list-style-type: none"> • Assessments are administered and results analyzed. 	<p>By June 2011</p>
<p>Distance learning opportunities will be expanded to all middle and high schools</p>	<p>Teachers will receive extensive training, by discipline, in how to use the Distance Learning Equipment, as well as discipline-related resources that can be accessed with the equipment.</p>	<ul style="list-style-type: none"> • Curriculum resources that match standards will be identified. • Trainers will be identified. • Training will occur. 	<p>By June 2010</p>
	<p>Board of Education will evaluate and decide upon policies and procedures for middle school students receiving credit for high school courses taken through distance</p>	<ul style="list-style-type: none"> • Policy will be written by appropriate staff members and distributed to BOE for review • Policy will be voted on and approved by the BOE. 	<p>By June 2010</p>

Objective	Strategy	Accountability Measure	Timeline
	learning.		
	District-wide Policies and procedures for identifying MS students who are eligible for high school coursework via distance learning in various disciplines will be designed and piloted.	<ul style="list-style-type: none"> • Policies and procedures will be written by C & I team with input from Research Dept. and building principals. 	By June 2011
	Scheduling problems will be resolved to provide access for middle school students to high school courses, utilizing Distance Learning Equipment available in each school.	<ul style="list-style-type: none"> • Scheduling will allow for matching times/courses at all high schools to facilitate students taking courses. 	By June 2011
	Feasibility study will be done of across- high school courses using Distance Learning Equipment.	<ul style="list-style-type: none"> • Study will be complete, and decisions made on feasibility for the 2011-12 school year. Recommendations will be reviewed with teachers union, central office administrators, and building principals 	By June 2010
	Budget/Policies/Procedures will be worked out for Virtual High School program, including staffing of classrooms where students are working, cumulative grade level requirements for students taking VHS classes, and teacher-load issues.	<ul style="list-style-type: none"> • Budget/Policies/Procedures will be complete, and decisions made on feasibility for the 2011-12 school year. Recommendations will be reviewed and approved by teachers union, central office administrators, and building principals 	By June 2010
	Site Licenses and Teacher Training will be provided to allow students at all high schools and the Alternative High School to participate in the Virtual High School	<ul style="list-style-type: none"> • Teachers will be trained, and initial courses offered to targeted high school students. 	By June 2011
<ul style="list-style-type: none"> • Staffing related: 			
All students will be provided with direct instruction to meet computer technology competency standards by the end of 8 th grade	In Elementary schools, appropriate staff will be added/reassigned to begin technology instruction in grades 3-5.	<ul style="list-style-type: none"> • Staff will be scheduled to teach technology in grades 3-5 based upon the revised district standards. 	June 2012
	In Middle Schools, appropriate staff will be provided to continue technology instruction in grades 6-8.	<ul style="list-style-type: none"> • Staff will be scheduled to teach technology in grades 6-8 based upon the revised district standards. 	June 2011
	In High School, some teachers currently teaching basic courses in Keyboarding, Microsoft Office, etc. may be reallocated	<ul style="list-style-type: none"> • Staff will be reassigned to appropriate grade levels 	June 2010

Objective	Strategy	Accountability Measure	Timeline
	to middle schools.		
District Technology plans and the District Educational Technology Administrator will direct activities with input from all constituencies in the district.	Hire a District Educational Technology Administrator to coordinate all district technology initiatives.	<ul style="list-style-type: none"> • District Educational Technology Administrator will be hired. 	By June 2010
Students from families with limited resources will be provided with opportunities to access technology resources outside of school hours.	Stamford will continue to fund and expand the Techcycle Program, a community sponsored program which receives donated computer equipment, refreshes it and loads appropriate software, and then donates it to identified families.	<ul style="list-style-type: none"> • Program will continue to distribute computers to incoming 4th grader families without computers at home. 	By June 2010
	Media Centers at all schools will funded to remain open for student use during the after-school program hours. At middle school and elementary school this will mean 1 hour per day, while high school media centers will be funded until 5PM.	<ul style="list-style-type: none"> • All media centers will offer after-school access for students, with appropriate staffing. 	By June 2010
Provide students and parents with information about student achievement directly through school information systems.	High school students will be able to access their own achievement data to help them plan their own learning	<ul style="list-style-type: none"> • Student data access will be provided. 	By June 2011
	All parents will be able to use the internet to access student performance data about their children	<ul style="list-style-type: none"> • Pilot will be complete • Rollout of parent access 	By June 2011 By June 2012

Goal 2: Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.

Objective	Strategy	Accountability Measure	Timeline
All teaching and administrative staff will be proficient with the use of word processing and spreadsheet software, graphic organizing software, and use of the internet for research and communication.	Create building- based training teams of teachers—teacher technology mentors, in a stipend position. These tech mentors will be responsible for running professional development sessions after-school to meet the needs of the building staff, and act as a trouble-shooter on an ongoing basis. They will receive district training and pre-planned presentations to ensure consistent education of all staff members.	<ul style="list-style-type: none"> • Teacher technology mentors are identified and trained to function within all elementary and middle schools. • The teacher technology mentors will cooperatively develop pre-planned training for a variety of applications/resources/etc. for use in training teachers. 	<p>By June 2011</p> <p>By June 2011</p>
	Full-time school technology coordinator/staff developer will be hired for the two district high schools.	<ul style="list-style-type: none"> • Teachers hired and trained. 	By June 2012
	Provide training designed for administrators so that they can model the use of technology for productivity for staff with equipment incentives to encourage participation.	<ul style="list-style-type: none"> • Administrators will take the Self-assessment checklist to identify their own level of technology skills. • Training will be designed in small groups to meet the needs of individual administrators 	By June 2010
	During new teacher orientation provide a brief overview in district expectations for technology literacy.	<ul style="list-style-type: none"> • Teacher orientation is written and delivered to new teachers in September 2009. 	By June 2010
	During their first year, provide a mandatory orientation for new staff in cohorts, by grade levels/disciplines to become trained in technology integration resources and expectations.	<ul style="list-style-type: none"> • Program/PD is designed and PD dates scheduled. • Teachers attend the PD. 	By June 2010
	Update job descriptions of teachers, support staff, etc. to clearly indicate 21 st century teaching and learning expectations, including technology-based expectations.	<ul style="list-style-type: none"> • Job descriptions of all student-contact staff and administrators are reviewed and updated to include technology skills. 	By June 2011
	Additional teaching positions added at elementary and middle school to provide technology education will require training	<ul style="list-style-type: none"> • Teachers will be trained on competency standards and curriculum. • Teachers are provided with 	Elementary Schools by June 2012 ; Middle

Objective	Strategy	Accountability Measure	Timeline
	on the competency standards and performance expectations for technology literacy at their grade level.	curriculum materials to teach appropriate level students.	Schools by June 2011
	<p>Develop a leveled-approach to technology PD and (related teacher assessments) that responds to the current skill set of the teacher:</p> <p>Level I</p> <ul style="list-style-type: none"> • Microsoft Office suite appropriate for content area and grade level • Graphic organizer software appropriate for content area and grade level • Any content application required by course being taught (i.e. Everyday Math software-games & teacher materials for K-5) • Student information software tools, (i.e. attendance, grading) • Communications tools such as district email, public folders, network folders, website resources • Personal tools-Eztraxx <p>Level II</p> <p>All level I applications, plus:</p> <ul style="list-style-type: none"> • Internet based research Strategies • Teacher web pages at all levels and content areas to support student learning and family communication • Teacher grade books <p>Level III</p> <p>All level I & II applications, plus:</p> <ul style="list-style-type: none"> • Teacher selected content specific software/web-based tools that enrich and extend learning for students • Tools that support communication and productivity in the classroom e.g. Google docs, wikis, blogs 	<ul style="list-style-type: none"> • Specific plans for levels of professional development will be completed based upon the data provided through the teacher self-assessment checklist. • Standard professional development presentations will have been developed for school-based PD responding to each Level/need of school faculty. 	<p>By June 2010</p> <p>By June 2010</p>

Objective	Strategy	Accountability Measure	Timeline
	Following skills assessment, teachers will be incented to participate in leveled PD through the awarding of technology equipment and resources for their classrooms.	<ul style="list-style-type: none"> • Skills Assessment will have been administered and results analyzed. • Plan for incentive based technology PD will have completed. 	By June 2011
	Training will occur for all of the teachers on the use of the teacher intranet	<ul style="list-style-type: none"> • Standard training will have been designed. • Training will have occurred. 	By June 2010
All teaching staff will be proficient with technology integration skills as defined in each specific content area.	Curriculum program specialists must define what technology integration skills and concepts will be taught for each discipline, and what student learning will be taught through the integrated technology.	<ul style="list-style-type: none"> • Technology resources for disciplines are identified for each grade level. 	By June 2010
	Tech Boot Camp initiative will be continued, focusing on technology integration. Teachers will receive laptops in return for attending training during vacation periods.	<ul style="list-style-type: none"> • Tech boot camp sessions will be held during Feb. & April vacations, and 2 weeks during summer. • Special tech boot camps focused on specific disciplines will be offered. 	By June 2010
	Interactive Whiteboards will be installed in all core area classrooms in middle and high schools, and teachers will be trained in their use.	<ul style="list-style-type: none"> • Interactive whiteboards will be installed in English/Language Arts, Social Studies & World Language Classrooms & teachers trained. 	LA: By June 2010 SS: By June 2011 WL: By June 2012
	Cohorts of teachers who need technology CEUs for re-certification, and have the same PD interests will be identified and series of classes will be developed to meet their needs based upon their own technology level	<ul style="list-style-type: none"> • Cohorts of teachers at Professional Certification level are identified • Teachers complete the self-administered Technology Skills checklist based upon grade/discipline requirements. • Classes are designed and offered. 	By June 2010 By June 2010 By June 2011
	Provide training for administrators on what to look for when observing teachers integrating technology in their classroom.	<ul style="list-style-type: none"> • Training is designed and delivered to all administrators 	By June 2011
All support staff will be proficient in the technology skills required for their positions.	Survey support staff including paraprofessionals, secretaries, etc. to assess level of proficiency with technology tools necessary for their role.	<ul style="list-style-type: none"> • Survey is designed and administered 	By June 2010

Objective	Strategy	Accountability Measure	Timeline
Role of the media specialist will be clarified, and appropriate training will be provided to ensure all media specialists are prepared to support technology skills development for all students	Job Description for Media Specialists will be revised to clearly delineate their level of accountability for school technology equipment and student and faculty research and information fluency.	<ul style="list-style-type: none"> Media Specialists job description is rewritten to include technology responsibilities. 	By June 2010
	Survey of media specialists and media/computer lab assistants to determine their technology skills and professional development requirements	<ul style="list-style-type: none"> Survey is designed and administered. 	By June 2010
	Training will be provided for media specialists in the areas indicated in the survey, as well as in technology integration strategies	<ul style="list-style-type: none"> Training is designed and given for media specialists on technology integration and grade-appropriate research strategies and other technology responsibilities. 	By June 2011
	Annually, all staff will be surveyed about technology PD and attitudes towards technology along with other survey topics. Results of this survey will be used to plan PD and programs for the following year.	<ul style="list-style-type: none"> Survey will be designed and administered. 	By June 2011
IT Staff will be available to support the software and hardware needs of school personnel	Curriculum and Instruction staff will work with the Director of Teaching Management Services to identify the level of responsibility to be taken by IT staff members in assisting school personnel	<ul style="list-style-type: none"> Responsibilities for IT staff are clearly delineated, and all required people are informed/trained on the role. 	By June 2010

Goal 3: Ensure that K-12 educational institutions have the capacity, infrastructure, staffing and equipment to meet academic and business needs for effective and efficient operations.

The Technology Management Services Department of the City of Stamford will continue to provide information technology services to the Stamford Public Schools. In addition to their role in purchase, installation and maintenance of the equipment, they will continue to work closely with the District Educational Technology Administrator, and as part of the Technology Steering Committee, to plan the further expansion of technology access within the Stamford Public Schools.

Objective	Strategy	Accountability Measure	Timeline
Uniform technology resources will be available in every school in the district, and resources will be equitably be allocated among schools.	Develop models for classrooms/facilities and equipment for every grade level and discipline for every school in the district that will be approved by senior administration and the board.	<ul style="list-style-type: none"> • Plan has been written and reviewed by all appropriate senior administrators. • BOE has approved the plan 	By June 2010
	Review and update hardware replacement plan, with financial commitment for funding, for all district schools and central office that will be approved by senior administration and the board.	<ul style="list-style-type: none"> • Plan has been written and reviewed by all appropriate senior administrators. • BOE has approved the plan 	By June 2010
	Research, develop and implement an automated system for tracking deployment of all technology in schools, to provide an accurate way of reporting annual on hardware.	<ul style="list-style-type: none"> • System is identified and installed. 	By June 2011
	Develop a policy for curriculum-related software selection and installation. This policy must include input from all grade-level and/or discipline teachers.	<ul style="list-style-type: none"> • Policy and procedures exist and are distributed to all appropriate school personnel. 	By June 2010
	Redesign a set of procedures for procuring hardware and software that must be complied with by all school personnel, monitored by district curriculum administrator.	<ul style="list-style-type: none"> • Policy and procedures exist and are distributed to all appropriate school personnel. 	By June 2010
	Identify all large-venue sites (media centers, auditorium, etc) at each school, and evaluate the access to cable TV. Install wherever necessary.	<ul style="list-style-type: none"> • Appropriate projection equipment and Cable TV access is installed. 	By June 2012
Projections of budgetary needs for technology PD, hardware and software will be developed, based upon this plan, with agreed upon redistribution if funding becomes	Three-year capital, operating and grant budget projections have been designed based upon this three year plan. If funds are not available, the Technology	<ul style="list-style-type: none"> • Capital Budget for 2009-10 reflects the expenditures to cover plan expenses. • Operating budget for 2009-10 reflects the plan expenses. 	By June 2010

Objective	Strategy	Accountability Measure	Timeline
unavailable.	Steering Committee will make recommendations to the Superintendent of Schools about how available resources are to be reallocated.	<ul style="list-style-type: none"> • Long range budget planning for 2010-2011 and 2011-2012 reflect the costs indicated in this plan. 	
Staffing within Central Office, School sites and the IT department will be sufficient to support the increased technology use within the district	Create a job description for and hire a District Educational Technology Administrator	<ul style="list-style-type: none"> • Job Description written • Individual hired. 	By June 2010
	Redesign the organizational chart to include the Stamford Educational Technology Administrator, a new key district-wide position that would provide coordination and communication among key decision makers on both municipal and school side.	<ul style="list-style-type: none"> • Organizational chart is designed to include this position, reporting to the Asst. Superintendent of Curriculum and Instruction. 	By June 2010
Ensure that all facilities meet minimum standards of technology infrastructure and provide connectivity to the Connecticut Education Network (CEN).	Assure SIF compliance to allow the Stamford Public Schools to share data among data bases, thereby reducing data entry errors, providing clean state reports, and eliminating the necessity for staff entering data into each data base— enrolling students in multiple data bases, such as transportation, reporting, special education, library system, food services for free and reduced lunch.	<ul style="list-style-type: none"> • All compliance issues have been resolved. • Food Services have upgraded their system • VersaTrans has verified that all changes being made in StarBase are being used in the transportation software • The Library System has been integrated into the data-base 	By June 2011
	Adopt the Follett Destiny Software in all schools	<ul style="list-style-type: none"> • The Follett Destiny System has installed in all schools 	By June 2012

Goal 4: Ensure that K-12 resources are available for all students, regardless of race, ethnicity, income, geographical location or disability, so they can become technologically literate by the end of eighth grade and achieve their academic potential.

Objective	Strategy	Accountability Measure	Timeline
Ensure that students with special needs will have those needs addressed through technology.	Adopt a philosophy and application of universal design such that all students have adequate and equitable access to technology	<ul style="list-style-type: none"> Procedures have been developed; e.g. IEP Direct, to ensure that all students have access to appropriate technology 	By June 2010
	Appropriate policies are designed to insure that all IEP students are evaluated to determine whether available hardware or applications, will improve their instruction, and appropriate staff is designated as responsible for this evaluation.	<ul style="list-style-type: none"> A District Assistive Technology worksheet is available and utilized by the district specialist in Assistive technology, to identify the type of Assistive technology required by each student. 	By June 2010
	To the fullest extent possible, all special education students are mainstreamed in regular education courses, with the same technology experiences as other SPS students.	<ul style="list-style-type: none"> Number of mainstreamed/non mainstreamed students is tracked and reviewed by Senior staff members. 	By June 2010
Ensure that access to technology is equitably available in all SPS schools, and provide additional opportunities for students to access technology after the school day.	Develop a comprehensive inventory system and policies to ensure the equitable distribution and access to technology resources in all schools	<ul style="list-style-type: none"> System is identified and installed. 	By June 2011
	Stamford will continue to fund and expand the Techcycle Program, a community sponsored program which receives donated computer equipment, refreshes it and loads appropriate software, and then donates it to identified families.	<ul style="list-style-type: none"> Program will continue to distribute computers to incoming 4th grader families without computers at home. 	By June 2010
	Media Centers at all schools will funded to remain open for student use during the after-school program hours. At middle school and elementary school this will mean 1 hour per day, while high school media centers will be funded until 5PM.	<ul style="list-style-type: none"> All media centers will offer after-school access for students, with appropriate staffing. 	By June 2010
Create online opportunities for communication between students and professional staff at all SPS schools	Expand the district website to provide a secured area where teachers can communicate to share information and best practices across the curriculum.	<ul style="list-style-type: none"> District website allows for a secured area for teacher information 	By June 2011

Objective	Strategy	Accountability Measure	Timeline
	Programs providing secured student email within schools for high school and middle school students is evaluated and proposal made to C & I team about its potential roll-out and costs.	<ul style="list-style-type: none"> • Proposal made regarding student email. 	By June 2012

Goal 5: Develop a continuous process of evaluation and accountability for the use of educational technology as a teaching and learning tool, a measurement and analysis tool for student achievement, and a fiscal management tool.

<u>Objective</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Provide an ongoing process for continuous monitoring and evaluation of the implementation of this plan to provide opportunities for revision and constituency buy-in.	Develop a monitoring and accountability checklist based upon this plan that will be used by the SPS Technology Steering Committee to evaluate plan status.	<ul style="list-style-type: none"> • Checklist has been developed and is being used regularly by the Technology Steering Committee. 	By June 2010
	Annual meetings of the Technology Writing Committees for each discipline, in accordance with the district's curriculum planning cycle, to review the current technology integrated, and provide direction for revision or additions based upon new technologies.	<ul style="list-style-type: none"> • Teams are meeting regularly to review technology and make recommendations to the committee 	By June 2012
Provide access for students to take on-line tests, when available, to improve timeliness of results.	AITE and another secondary school site will act as pilots for on-line tests utilizing district common assessments.	<ul style="list-style-type: none"> • Pilots are administered 	By June 2011
Continue to explore new expansions/improvements to all administrative applications to improve accuracy and efficient operations.	Continue to utilize and explore administrative applications including human resource data management, time and attendance, CEU and certification management, financial and student data management systems.	<ul style="list-style-type: none"> • Administrative applications have been explored and installed. 	By June 2012
	Roll out online grade entry and report cards through Starbase to all middle and high schools, providing necessary PD for all staff members.	<ul style="list-style-type: none"> • All middle and high schools are entering attendance and grades online. 	By June 2010
	Write specifications for online grade entry for grades K-5 through Starbase, along with an automated report card.	<ul style="list-style-type: none"> • Specifications are complete and report card is designed. 	By June 2010
	Pilot automated grade entry and report card at several elementary schools, providing all staff members at these schools with PD to support this new feature.	<ul style="list-style-type: none"> • Pilot is complete and recommendations made. 	By June 2011
	Roll-out online report card and grade entry for all elementary schools, training all teachers.	<ul style="list-style-type: none"> • Elementary School report cards are completed online 	By June 2012

<u>Objective</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Provide continuing PD to enable teachers and administrators to use data from state, district and classroom tests.	Continue training for TetraData Power users, school data teams, and expand the number of teachers that participate in the CALI training.	<ul style="list-style-type: none"> • Training is held for existing and new Tetra-Data Power users • Teachers and Administrators participate in the CALI training 	By June 2010
	Provide all schools with Scantrons or other similar devices, linked to the computer network, to facilitate grading and analysis of short answer assessments and common assessments.	<ul style="list-style-type: none"> • All schools have devices to grade short answer test questions. 	By June 2010
	Provide access for all teachers to a Dashboard, reflecting continuously updated student achievement data and provide them with training on the use of this data.	<ul style="list-style-type: none"> • Dashboard will be installed and teachers will be trained on its components. 	By June 2010
	Through district PD, train teachers to utilize student achievement data within their Professional Learning Community, along with student work and a variety of protocols.	<ul style="list-style-type: none"> • Training will have occurred for all teachers in all schools 	By June 2010

Goal 6: Develop a schema of current and future financing requirements to support the LEA's Technology Plan.

Objective	Strategy	Accountability Measure	Timeline
Develop a budget that is based upon a technology plan that represents the vision of the SPS for the year 2009-2012 and beyond.	Submit ongoing capital budget requests for technology improvement to support this plan to the Board of Education each year. This request should include new purchases, as well as replacement of obsolete equipment.	<ul style="list-style-type: none"> Capital budget is approved by BOE and City Board of Reps. 	By June 2010 By June 2011 By June 2012
	Include a Furniture Fixtures and Equipment (FF&E) budget for technology in the capital construction budget for all New Construction.	<ul style="list-style-type: none"> FFE budget for new construction is submitted in a timely manner and includes all necessary technology resources.. 	By June 2010 By June 2011 By June 2012
	Dedicate the Program 25 operating budget, including e-rate reimbursements, for technology support and maintenance.	<ul style="list-style-type: none"> BOE and Superintendent agree to commit Program 25 and e-rate reimbursement to technology purchases. 	By June 2010 By June 2011 By June 2012
	Fund extensive professional development for all teachers, providing them with basic technology skills and knowledge of how to integrate technology in the classroom.	<ul style="list-style-type: none"> Operating and competitive grant budgets include sufficient dollars to fund professional development. 	By June 2010 By June 2011 By June 2012
Maintain policies and procedures related to maintenance of hardware, software, infrastructure and security that will allow equitable and reliable access for all staff and students, while allowing the introduction of new technologies as they become available.	Conduct an annual review of existing policies/ procedures as they are related to the maintenance of hardware, software, infrastructure, and security.	<ul style="list-style-type: none"> Review completed annually. 	By June 2010 By June 2011 By June 2012
	Conduct an annual review of technology assets of all schools, monitoring the comparative age of all computers to maintain an equitable five-year life cycle for hardware.	<ul style="list-style-type: none"> Review completed annually. 	By June 2010 By June 2011 By June 2012
	Conduct an annual review of all software purchases to ensure integration with Board of Education and district curriculum goals.	<ul style="list-style-type: none"> Review format is designed, and initial review is completed. 	By June 2010 By June 2011 By June 2012

Objective	Strategy	Accountability Measure	Timeline
	Automation of equipment inventory needs to be researched, selected and implemented,	<ul style="list-style-type: none"> Automated system for tracking hardware deployment is installed and operational. 	By June 2010

Goal 7: Develop a telecommunications services plan that will support both instructional needs and administrative requirements.

Assessment of Needed Telecommunications Services

The Stamford Public School system has recently begun replaced its traditional telephone system with a VoIP/Digital system that was purchased outright, to control costs and provide quality service at all schools and central office. These services include all required telephone lines, and all other currently available services. This effort should be completed by January 2010 by the addition of the last 9 schools to the system

The district uses leased services for fiber optic lines, etc. in order to provide the availability of the latest services without major capital investments. Both technologies and curriculum requirements are evaluated annually on the contract anniversary date, and should changes be required to add additional services, the contract provides for amendments.

Goals and Strategy for Using Telecommunications and Information Technology to improve Education

The existence of a District Technology Administrator and an ongoing Technology Steering Committee will be the two most important initial changes that will impact the existing state of technology education in Stamford. Goal 1 outlines the student-related and curricula related goals and strategies that will impact student achievement. Goal 2 outlines our Goals and Strategies for professional development, and that is also a vital component of this strategy. Without effective professional development, we will not be able to assure consistent experiences for all SPS students.

Additionally, a plan for Security surveillance expansion for all schools, K-12, needs to be completed; roll-out needs to be completed by 2012, to ensure the safety of the schools, and meet the requirements of Stamford’s Emergency Preparedness plan.

Automation of equipment inventory through the network, needs to be researched and implemented as soon as possible in order to accurately track all equipment and plan for replacement and future deployment. Based upon the number of computers and other technology assets deployed in schools, manual tracking has proved inaccurate and does not provide information on an ongoing basis.

All media school media centers in the district need to be connected to the Follett Destiny software, and collections need to be reviewed by curriculum staff for age and breadth of the collection. This needs to be a part of the curriculum review process, so that Media Centers have adequate relevant books to match the curriculum.

Adequate Budget to acquire and support non-discounted elements of the plan (hardware, software, professional development, etc.)

This has proved to be one of the most challenging components necessary for improving access and use of educational technology in Stamford. Without ongoing investment in replacement of outdated equipment, and continuing expansion of the access to technology, Stamford’s teachers and students cannot develop the level of comfort necessary to acquire 21st century skills in the use of technology.

In addition to getting a firm commitment to fund the replacement and new additions of computers through the operating budget, the district will continue to look for grant funding to pay for additional technology assets. Having a District Educational Technology Administrator and an active Technology Steering Committee will ensure that there is a focus on grant funding for technology in the district.

See goal 2 for full details of the Professional Development Plan.

Additionally, in broad terms, using the table below, describe where you are now, where you want to be in three years and how you expect to arrive at that point.

Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<p>Current Status: 2008-09</p> <p>Leadership:</p> <ul style="list-style-type: none"> • The Assistant Superintendent of Curriculum & Instruction has responsibility for Educational Technology in addition to all other curricula areas. There is no one in the district who has management responsibility for Educational Technology, and the City of Stamford Technology Management Services makes many decisions about allocation of resources. • There is no overall planning for future technology integration. • There are few technology teachers within elementary and middle schools aside from those schools that are technology-related magnets. • Building Administrators vary in their level of technology knowledge and interest. • Technology Education: In elementary and middle schools educational technology is left to individual teachers and media specialists. There are no cohesive technology standards that are uniformly taught, although all media specialists have worked on a curriculum together, and have made some progress in internet research skills. • No assessment of technology skills is administered to students. <p>Curriculum Integration:</p> <ul style="list-style-type: none"> • Every curriculum is expected to integrate technology in their grade level standards, but the level of integration varies by discipline. • Teachers do not have online access to the standards and the technology links. • Teachers who discover websites, etc. that are useful in teaching a particular topic do not have anywhere to record them for use by others. <p>Professional Development:</p> <ul style="list-style-type: none"> • Technology professional development is limited, and not responsive to the needs, interests or levels of technology development of individual teachers. All PD tends to be at the initial levels, except for that provided for Tetra-Data Power Users. <p>Equitable Access to Technology:</p> <ul style="list-style-type: none"> • School grade levels vary in their access to computers that meet the district standards. • Teacher's computer-use in classrooms vary based upon the technology resources available and the teacher's own level of comfort and familiarity with technology. 	<p>Not Applicable</p>

Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<ul style="list-style-type: none"> ● Not all students have access to computers at home or during after school hours to complete schoolwork. <p>Administrative Technology:</p> <ul style="list-style-type: none"> ● Not all administrators are equally comfortable with using technology ● Administrators are unaware of the hallmarks of quality teaching with technology ● Administrators are unaware of the technology expectations that are built in to different curriculum standards. <p>Infrastructure and Telecommunications:</p> <ul style="list-style-type: none"> ● All schools are not currently on the new telephone system. ● There are no existing problems with systems capacity due to the work completed over the past several years to improve the ability of the system to respond to load fluctuation. ● There is limited or inadequate security monitoring equipment in all schools. <p>Financial:</p> <ul style="list-style-type: none"> ● Technology purchases and replacement has been cut due to ongoing budget constraints. Subsequently, some schools currently have older equipment that does not meet the district 5-year replacement criteria. ● Some major technology capital expenditures and operating expenses have been funded through the GE Developing Futures Grant, which has a limited grant period, and will not be indefinitely available to fund new technology initiatives. 	

Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<p>● 2009-10</p> <p>Leadership:</p> <ul style="list-style-type: none"> ● Educational Technology Administrator will be hired, reporting to the Asst. Superintendent for Curriculum and Instruction. This person will have line responsibility for media specialists, Unified Arts teachers, and the technology standards and assessments developed for students and teachers. ● Technology Steering Committee will be established as a regular operating, decision-making body of the SPS, under the direction of the Asst. Superintendent for Curriculum & Instruction. <p>Technology Education:</p> <ul style="list-style-type: none"> ● Student technology standards shall be developed for all grade levels, and decisions will be made about who will be responsible for teaching these skills/knowledge/etc. <p>Curriculum Integration</p> <ul style="list-style-type: none"> ● A policy for technology integration and guided questions for use in curriculum writing will be written and distributed for use by all curriculum-writing teams. ● Math & Science curriculum will be reviewed to determine adequacy of technology integration resources. ● A newly-designed policy and protocol will be used to evaluate any technology application being used by students to improve student achievement. The protocol will include standards by which any application should be recommended for district adoption. ● A technology curriculum related to the use of the Internet will be developed for all media specialists. <p>Professional Development:</p> <ul style="list-style-type: none"> ● New teachers will have a full technology training in their initial year in the district ● Leveled approach to technology education will be developed. ● Teachers and Administrators will take the Self-Assessment of Technology Skills ● Training will occur on the teacher intranet and data Dashboard ● All middle school and High school English/Language arts teachers will receive training on the use of the interactive whiteboards 	<ul style="list-style-type: none"> ● District Educational Technology Administrator will be hired. ● Technology Steering committee will meet regularly once a month ● Standards will exist and will be distributed to all professional staff. ● The policy for technology integration will exist, and have been distributed to all C & I staff. ● Math & Science curriculum will have been reviewed by the Technology Steering Committee and recommendations made. ● Policy will exist, and applications current being used will be evaluated based upon it. ● The curriculum documents will be complete. ● Training will be designed and held for all new teachers ● Plan for leveled technology will be designed by the Technology Steering committee. ● Results of the Self-Assessment will be available for all teachers and administrators. ● Training will have occurred. ● Training will have occurred.

<ul style="list-style-type: none"> • All middle and high school teachers will be trained on the use of online grades and attendance <p>Equitable Access to Technology:</p> <ul style="list-style-type: none"> • A policy stating that allocation of computer assets per schools will be based upon a student ratio of 1 currently equipped computer per 4 students (magnet programs with technology theme will have 1:3 ratio) will be written, and approved by superintendent and BOE. • Interactive whiteboards and LCD projectors, with all related equipment, will be installed in all Middle School and High School English/Language arts classrooms. • Every elementary and middle school classroom will have 2 student computers that meet district standards <p>Administrative Technology:</p> <ul style="list-style-type: none"> • Teacher intranet will be developed as part of the district website, to provide teachers with access to curriculum documents and share best practice. • All middle and high schools will record attendance and grades directly into StarPortal to create student reports • Teachers will have a Dashboard with access to all their student information. <p>Infrastructure and Telecommunications:</p> <ul style="list-style-type: none"> • Hardware and software purchase policies for all school-selected hardware and software will be designed and shared with school administrators. <p>Financial:</p> <ul style="list-style-type: none"> • Adequate resources, both capital and operating, will be allocated to provide for the completion of all planned activities. • Additional grant funding will have been identified to fund additional resources for teachers 	<ul style="list-style-type: none"> • Training will have occurred. • Policy will be approved by the BOE and superintendent. • Installation will be complete. • District inventory will demonstrate compliance with policy • Intranet will be available with curriculum resources for all teachers • Attendance and grade reporting will occur online through the StarPortal system. • Dashboard will be available to all teachers and administrators • Principals will be aware of district policies for purchase/request for technology equipment and software. • Adequate funds will be available to fund purchase of equipment and other technology initiatives. • Grant funding will be available to offset operating budget expenses.
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Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<p>2010-11</p> <p>Leadership:</p> <ul style="list-style-type: none"> • Building tech mentors stipend positions will be added to elementary and middle schools. <p>Technology Education:</p> <ul style="list-style-type: none"> • Benchmark Educational Technology Assessments will be developed for 6th & 8th grades • Direct instruction of educational technology curriculum will begin in the middle schools. • High School technology courses will be redesigned to eliminate teaching of basic skills such as keyboarding, non-certification Microsoft Office courses, etc. and additional higher-level courses will be added. • Appropriate staff increases will be included in the 2011-12 operating budget. <p>Curriculum Integration</p> <ul style="list-style-type: none"> • All classrooms will have access to digital media and teachers will be aware of what is available and how it fits with their curriculum, through the intranet. • Literacy & Social Studies curriculum will be reviewed to determine adequacy of technology integration resources. • Automated curriculum system will be integrated with the teacher intranet • All media specialists will have been trained in and effectively using the new internet research curriculum. • District-wide grade-appropriate standards for research papers, PowerPoint's, websites, etc. will have been designed, and shared with all appropriate teachers. • Distance Learning policies and procedures will be in place for middle and high school students • Both comprehensive high schools will begin offering Virtual High School courses to students • Job descriptions of all professional staff will be revised to include technology requirements in the job descriptions. <p>Professional Development</p> <ul style="list-style-type: none"> • All teachers and administrators will have basic computer skills such as email, Microsoft Office Applications, and basic Internet search techniques. • Training in Automated curriculum system will occur. • Middle school and high school social studies teachers will be trained on the interactive whiteboard and appropriate resources. 	<ul style="list-style-type: none"> • Positions will be in place, and individuals trained in their roles. • Assessments will be complete. • Curriculum will be complete, staff allocated and trained, and students scheduled for classes. • High School course schedule will reflect changes, as will the program of studies. Teachers will have been moved to appropriate grade levels to teach redesigned courses. • High School Technology staff developers will be posted for the next year. • Resources will be available and indicated on the intranet. • Recommendations will be made. • Automated curriculum system will be available for curriculum teams and other teachers to share lesson plans, etc. • District-wide grade-level appropriate Standards will be available to all teachers, students and parents and published on school and district websites. • Virtual high school classes will be available • All job descriptions will be revised. • Annual teacher survey will demonstrate comfort with these applications. Administrators will see evidence of teacher use of technology skills during classroom observations. • Training will occur. • Training will occur.

<ul style="list-style-type: none"> • A program of leveled PD with equipment incentives will be offered to all teachers. <p>Equitable Access to Technology</p> <ul style="list-style-type: none"> • Interactive whiteboards and LCD projectors will be installed in all Middle School and High School Social Studies classrooms. • Every elementary and middle school classroom will have 3 student computers that meet district standards • School standards for equipment such as video cameras, digital still cameras, document cameras, interactive whiteboard clickers, science probes, programming calculators, etc. should be established for each school/grade level. <p>Infrastructure and Telecommunications:</p> <ul style="list-style-type: none"> • All classrooms and other appropriate larger venue rooms (auditorium, media center, etc. should have access to cable TV through existing infrastructure • Automated system for tracking IT equipment will be installed <p>Financial:</p> <ul style="list-style-type: none"> • Adequate resources, both capital and operating, will be allocated to provide for the completion of all planned activities. • Additional grant funding will have been identified to fund additional resources for teachers 	<ul style="list-style-type: none"> • Course availability will be posted on Eztraxx and on website. • Equipment will be installed. • Inventory will indicate equipment location. • The superintendent and BOE will approve technology equipment standards based upon recommendations by Technology Steering Committee & C & I team. • Access will be available. • System will generate regular summary reports of equipment deployment. • Adequate funds will be available to fund purchase of equipment and other technology initiatives. • Grant funding will be available to offset operating budget expenses.
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Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<p>2011-12</p> <p>Leadership:</p> <ul style="list-style-type: none"> ● Building full-time technology staff developers will be added to the 2 comprehensive high schools <p>Curriculum</p> <ul style="list-style-type: none"> ● World Language & other curriculum will be reviewed to determine adequacy of technology integration resources. <p>Technology Education:</p> <ul style="list-style-type: none"> ● Sixth and 8th grade students will take the first Benchmark Technology Assessments ● Direct instruction of educational technology curriculum will begin in the elementary schools. <p>Professional Development</p> <ul style="list-style-type: none"> ● Elementary technology teachers will have been trained. ● Foreign language and other core teachers will receive training in interactive whiteboard and applications. ● Elementary teachers who have equipment in their rooms, and other volunteers will have been trained in the use of the equipment and applications. ● Administrators will receive training in the use of portable student information devices. ● Elementary School teachers will be trained in the use of StarPortal for recording grades and attendance <p>Equitable Access to Technology:</p> <ul style="list-style-type: none"> ● By 2012, every core Middle School and High School classroom will have an interactive whiteboard, LCD projector and slate. All classrooms will have access to voting clickers to facilitate instant assessment. ● By 2012, every elementary school should have available at least one interactive whiteboard and LCD projector per grade level, and one in a computer lab or media center. ● By 2012, all core-area teachers will have a computer on their desk. ● Every elementary and middle school classroom will have 4 student computers that meet district standards <p>Administrative Technology:</p> <ul style="list-style-type: none"> ● By 2012, all administrators should have access to a portable device to record walk-through data, evaluations, and access to student data from everywhere in the school. ● Parent and student access to grades will be provided through the StarPortal 	<ul style="list-style-type: none"> ● Personnel will be in place. ● Curriculum will be reviewed and feedback provided to C & I team. ● Technology Benchmark will have been administered and assessments completed. ● Curriculum will be complete, staff assigned and students scheduled for classes. ● Training will have occurred. ● Training will have occurred. ● Training will have occurred. ● Training will have occurred. ● Training will have occurred. ● Equipment will have been installed and be reflected on inventory. ● Equipment will have been installed and be reflected on inventory. ● Equipment will have been installed and be reflected on inventory. ● Equipment will have been installed and be reflected on inventory. ● Equipment will have been deployed, be reflected on inventory. ● Parents and students will be able to access grades and other

<p>program</p> <ul style="list-style-type: none"> ● Follett Destiny software will be installed in all school libraries. ● All elementary school teachers will directly enter grades, attendance into StarPortal for creation of an automated report card <p>Financial:</p> <ul style="list-style-type: none"> ● Adequate resources, both capital and operating, will be allocated to provide for the completion of all planned activities. ● Additional grant funding will have been identified to fund additional resources for teachers 	<p>achievement data through the Internet.</p> <ul style="list-style-type: none"> ● Software will be available. ● Attendance records and report cards will be automatically produced. ● Adequate funds will be available to fund purchase of equipment and other technology initiatives. ● Grant funding will be available to offset operating budget expenses.
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Technology Funding Sources and Costs

Summary of Technology Funding Sources and Costs

Year	Acquired Technologies and Professional Development	Ed Tech Comp/ Title II-D	Ed Tech Formula/ Title II-D	Capital Budget	E-Rate Reimbursement	NCLB/other than Title II-D	Operating Budget	GE Developing Futures Grant	District Total
2009-2010	\$*	0	\$13,165	\$1,300,000.	\$400,000	\$*	\$2,292,404	\$320,568	\$4,326,137
2010-2011	\$*	0	\$13,165	\$1,200,000	\$410,000	\$*	\$2,361,172	\$*	\$3,984,337
2011-2012	\$*	0	\$13,165	\$1,100,000	\$418,000	\$*	2,431,688	\$*	\$3,962,853

* Undetermined amount, subject to approval from grantor

ANNUAL BUDGET SUMMARY

YEAR 2009-2010

- o Describe how your LEA coordinates or aligns the other federal, state, local funds with LEA consolidated plans and/or individual school's School Improvement Plans.

Acquired Technologies and Professional Development	Ed Tech Comp/ Title II-D	Ed Tech Formula/ Title II-D	Capital Budget	E-Rate Reimbursement	NCLB/other than II-D	Operating Budget	GE Developing Futures Grant
Technology Training for New Teachers joining the district						\$5,904	
Leveled PD Sessions to respond to teacher self-assessment		\$7,165	\$10,000			\$4,643	
Training for Math/Science teachers on Interactive Whiteboards							\$3,124
Installation of Interactive Whiteboards in all Middle school and high school Eng/Lang.Arts classrooms			\$351,000				
Interactive Whiteboard Training for secondary Language Arts Teachers						\$7,000	
Dashboard system to provide access to student information personalized for each staff member							\$75,000
Training for Dashboard							\$44,830
Tech Boot Camp Initiative continued for additional 80 teachers							\$160,000
Tech Boot Camp Professional Development Expenses							\$23,384

Administrator Computer Skills training										\$5,000		
Distance Learning Equipment additions											\$5,000	
Distance Learning PD for Math/Science technology integration											\$9,230	
Teacher Intranet capability added to district website				\$5,000								
Automated, networked Short-answer grading machine				\$51,000								
Virtual H.S. Teacher training 4 teachers										\$20,000		
TetraData Power Users Training										\$4,000		
Online Test Capability Pilot				\$3,000						\$22,000		
Online Testing PD										\$2,000		
Techcycle Expenses						\$6,000						
Replacement/Maintenance of Existing Computers as directed by Replacement Policy				\$880,000								
TOTAL	\$0	\$13,165	\$1,300,000	\$0	\$0	\$0	\$70,547	\$320,568				

All initiatives are planned to coordinate District and School Improvement Plans through our annual planning cycle. Technology initiatives are developed to support the curricular initiatives of the district. For example, program improvement plans in the areas of Math and Science provided the impetus for addition of interactive whiteboards to the Math and Science Classroom during the 2008-09. Similarly, with a major literacy improvement effort being a major initiative of the district and schools, the 2009-2010 technology plans call for the addition of Interactive whiteboards in secondary English and Language Arts Classrooms. Increased emphasis on formative assessments has made the consideration of automating the testing process and test reporting process necessary. In this way, the district attempts to have a close alignment between technology improvement and the curriculum and learning goals of the district.

Funding is similarly aligned, with grant budgets being concentrated on covering one time technology expenses and professional development expenses.

ANNUAL BUDGET SUMMARY

YEAR 2010-2011

Acquired Technologies and Professional Development	Ed Tech Comp/ Title II-D	Ed Tech Formula/ Title II-D	Capital Budget	E-Rate Reimbursement	NCLB/other than Title II-D	Operating Budget	GE Developing Futures Grant
Training for Elem. & MS building based Tech Mentors		\$5,904					
Training Program for all district New Teachers						\$4,000	
Training for Teachers that will be teaching new Educational Technology curriculum in Middle School						\$4,000	
Purchase & Installation of automated Curriculum System to be added to district intranet						\$40,000	
Training for Automated Curriculum System						\$5,000	
Annual Expense for Teacher Intranet						\$5,000	
Interactive Whiteboards for MS & HS Social Studies Classrooms			\$345,000			\$6,000	
Training SS teachers on use and integration of whiteboards						\$7,000	
Leveled PD Sessions to respond to teacher self-assessment			\$20,000			\$15,744	
Virtual HS training for 4 classroom teachers						\$20,000	
Tetra Data Power User training		\$1,261				\$2,739	
Annual Techcycle Expense		\$6,000					

Student/Parent Access to student data Equipment & Training									\$45,000	
Pilot-Online Report Card Systems									\$50,000	
Follett Destiny Media Software for 10 schools									\$30,000	
Classroom Cable Access Completed for all Classrooms				\$35,000						
Replacement and Maintenance of all Existing Computers				\$800,000						
TOTAL	\$0	\$13,165	\$1,200,000	\$0	\$0	\$0	\$0	\$234,483	\$0	

ANNUAL BUDGET SUMMARY

YEAR 2011-2012

Acquired Technologies and Professional Development	Ed Tech Comp/ Title II-D	Ed Tech Formula/ Title II-D	Capital Budget	E-Rate Reimbursement	NCLB/other than Title II-D	Operating Budget	GE Developing Futures Grant
Training Program for all district New Teachers		\$1,261				\$2739	
Training for new positions at high schools: Staff developers for Technology Integration		\$4,904					
Annual Expense for Teacher Intranet						\$5,000	
Training for Teachers that will be teaching new Educational Technology curriculum in Elementary School		\$1,000				\$5,000	
Annual Expense for Automated Intranet Curriculum System						\$7,500	
Leveled PD Sessions to respond to teacher self-assessment			\$20,000			\$15,744	
Interactive Whiteboards for Secondary Foreign Language Classrooms			\$210,600				
Training on use and curriculum integration of interactive						\$7,000	

CHILDREN'S INTERNET PROTECTION ACT (CIPA) CERTIFICATION

Schools and libraries that plan on receiving E-Rate discounts on Internet access and/or internal connection services after July 1, 2002, must be in compliance with the CIPA. CIPA compliance means that schools and libraries are filtering their Internet services and have implemented formal Internet safety policies (also frequently known as Acceptable Use Policies). Information on the CIPA requirements is located at http://E-Ratecentral.com/CIPA/cipa_policy_primer.pdf.

I, Joshua P. Starr, Ed.D., certify that one of the following conditions (as indicated below) exists in
Name of Superintendent/Director

Stamford Public Schools

LEA

- My LEA/agency is E-Rate compliant; or
 My LEA/agency is not E-Rate compliant. (Check one additional box below):

X	Every "applicable school*" has complied with the CIPA requirements in subpart 4 of Part D of Title II of the ESEA**.
	Not all "applicable schools*" have yet complied with the requirements in subpart 4 of Part D of Title II of the ESEA**. However, the LEA has received a one-year waiver from the U.S. Secretary of Education under section 2441(b)(2)(C) of the ESEA for those applicable schools not yet in compliance.
	The CIPA requirements in the ESEA do not apply because no funds made available under the program are being used to purchase computers to access the Internet, or to pay for direct costs associated with accessing the Internet, for elementary and secondary schools that do not receive E-Rate services under the Communications Act of 1934, as amended.

*An applicable school is an elementary or secondary school that does *not* receive E-Rate discounts and for which Ed Tech funds are used to purchase computers used to access the Internet, or to pay the direct costs associated with accessing the Internet.

** Codified at 20 U.S.C. § 6777. See also, <http://www.ed.gov/legislation/ESEA02/pg37.html>

 Signature of Superintendent/Director

5/22/09

 Date

APPENDIX A: Technology Plan Review Guide

Technology Plan Review Guide

Reviewer Esther Bobowick LEA Stamford Public Schools

LEA Profile	Y	
Technology Committee	Y	
Needs Assessment	Y	
Goal 1	Y	
Goal 2	Y	
Goal 3	Y	
Goal 4	Y	
Goal 5	Y	
Goal 6	Y	
Goal 7	Y	
Goal 8	Y	
Technology Funding Sources	Y	

Complete?
(Y/N)

additional information required/comments

I Esther Bobowick verify that Stamford Public Schools Name of LEA
 Signature of Reviewer –Esther Bobowick, CES
 has successfully completed all of the requirements as stated in the technology plan template.