



Stamford Public Schools

District Technology Plan

May 2002

*“The use of technology in education
. . . must be at the core
of the educational experience,
not at the periphery.”*

e-Learning

*“Putting a World-Class Education at the Fingertips of All Children”
U.S. Department of Education*

Stamford Public Schools

District Technology Plan

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Introduction

The student population in the Stamford Public School district includes a wide range of students with diverse backgrounds with respect to race, ethnicity, language, and socio-economic backgrounds. We have an enrollment of approximately 14,800 students, with approximately one-third of our students coming from non-English homes. Over 55 different languages are spoken among our student population.

Stamford employs about 1,300 teachers and almost 300 educational assistants. Volunteers regularly give their time and services to broaden the academic and life experiences of our students, both during and after school at locations throughout the community. More than fifty corporate and community partnerships expose students to many enriching resources including the Connecticut Grand Opera, the Stamford Center for the Arts, the Stamford Symphony Orchestra, and the Silvermine Artists Guild. There is extensive corporate support for professional development.

Mission of Stamford Public Schools

The mission of the Stamford Public Schools, in partnership with the home and community, is to educate all students to become responsible, productive citizens in our continuously changing world. The richness of our diversity, the broad array of our educational programs, our safe environment, and the quality of our staff serve to promote the academic, artistic, emotional, physical and social development of our students.

Technology Opportunities in Stamford Public Schools

All Stamford students have hands-on computer experience from kindergarten through high school. Each school has computer labs, automated media-centers, and/or classroom computer networks. Each of the district's 19 schools has Internet access. Our goal is to have students become adept and discerning users of existing and emerging technologies as they continue to develop their technological skills.

The Academy of Information Technology provides students in grades 9-12 the opportunity to pursue their technology interests in-depth. AIT's program leads to industry-recognized credentials, such as the A+ certificate, Database Administrator certificate and the Cisco Certified Networking Associate certificate. Applications Technology, including web design, is also stressed. Students and faculty at the AIT sustain active relationships with members of business and industry through its outstanding internship program. In addition, the nationally recognized AIT serves as a beta test site for the district.

Scofield Magnet Middle School emphasizes math, science, and technology. The school is committed to implementing the principles of the Carnegie Foundation Report and the Coalition of Essential Schools.

Rationale – Why is educational technology an integral component of our instructional program?

It is essential to include educational technology in our schools in order to:

- Promote student achievement by providing opportunities for *all* students
- Prepare students for the workforce by providing them with the foundation to develop 21st century skills.

Promote student achievement by providing opportunities for all students.

Studies indicate that the effective use of technology, not only provides equitable learning situations, but can also help to improve student achievement. This applies to all students, including those with special needs, gifted students, students with limited English proficiency, as well as the average student. In “e-Learning,” the U.S. Department of Education’s Office of Educational Technology reports:

The latest research and evaluation studies demonstrate that school improvement programs that employ technology for teaching and learning yield positive results for students and teachers. . . . The adoption of new and emerging technologies by schools and classrooms offers even more reason to be hopeful. With sufficient access and support, teachers will be better able to help their students comprehend difficult-to-understand concepts and engage in learning, provide their students with access to information and resources, and better meet their students’ individual needs. . . . If we take advantage of the opportunities presented to us, technology will enhance learning and improve student achievement for all students.

*U.S. Department of Education, Office of Educational Technology
e-Learning “Putting a World-Class Education at the Fingertips of All Children.”
December 2000*

When technology is used in schools, students experience enhanced self-esteem and demonstrate greater enthusiasm for school, in general. “Technology’s Impact” refers to a report on the effectiveness of technology in schools. The report states that

. . . students in technology-rich environments experienced positive effects on achievement in all major subject areas, preschool through higher education, for both regular and special needs students. Most students . . . who tended to require more structure – were better able to pace themselves when technology was used. Student attitudes toward learning and the students’ own self-concepts improved consistently when computers were used for instruction. ‘The use of technology as a learning tool can make a measurable difference in student achievement, attitudes, and interactions with teachers and other students.’

Other benefits include: improvements in attendance and dropout rates. Students report feeling more challenged, more engaged, and more independent. . . .students have assumed more responsibility for their assignments and produce higher-quality work.

*“Technology’s Impact” by Richard J. Coley
Electronic School © September 1997
National School Boards Association*

Prepare students for the workforce by providing them with the foundation to develop 21st century skills.

The enGauge 21st-Century Skills are described in detail by the North Central Regional Educational Laboratory and include: Digital Age Literacy Skills, Inventive Thinking, Effective Communication, and High Productivity.

The ability to find information quickly and efficiently, to manipulate that information and apply it to solve problems and inform decisions will be a primary asset in tomorrow’s workforce. To meet the demands of our global economy and a dramatically different society, there must be corresponding adaptations in our educational environments to develop 21st century skills. Educational technology provides educators with valuable tools to teach, develop and reinforce 21st century skills by dramatically altering the options for inquiry, analysis, and expression.

It is imperative that students acquire these skills in order to prepare for, compete in, and eventually succeed in the digital age and the global economy.

Assessment

The City of Stamford IT Department and the District Technology Department will meet periodically with building technology teams and Media Specialists to assess the progress of the implementation and successes of this plan and continuously make recommendations to revise the plan as necessary. Continuous feedback from IT field personnel and managers, educators and administrators will be solicited in an effort to constantly assess and improve the status of technology in our schools.

Section I – District Goals

I – Hardware, Infrastructure & Maintenance

Goal #1

To improve communication between the Information Technology Department and the schools

Action Plan

The IT Department will establish procedures to ensure effective communication between the IT Department and the individual school buildings regarding technology emergencies, status of repairs, and server upgrades and installations.

Goal #2

To provide quick and efficient responses to HELP DESK requests

Action Plan

The City of Stamford Information Technology Department will develop a plan to improve response time to HELP DESK requests.

Goal #3

To upgrade to Microsoft Professional Office 2000 (and all its components) systemwide

Action Plan

The City of Stamford Information Technology Department will oversee the systemwide upgrade to Microsoft Professional Office 2000.

Goal #4

To ensure that every 4th grade student has a computer with Internet access at home

Action Plan

A consortium of local corporations, community agencies, representatives from Stamford Public Schools, and the City of Stamford Information Technology Department will be formed to accept and distribute donated computers and provide technology support and applications training.

Goal #5

To develop school web pages for all nineteen schools and link individual school web pages to Stamford Public Schools Home Page

Action Plan

School web pages will be developed to meet the criteria set forth by the Board of Education Office of Public Affairs and the Office for Curriculum and Instruction. The City of Stamford Information Technology Department will provide the technical expertise for the creation of the individual school web pages and will link all school web pages to the Stamford Public Schools official web site. A “webmaster” will be identified at each building to coordinate development and maintenance of the school’s web site.

II – Curriculum & Software

Goal #1

To continually review, recommend, and integrate appropriate, curriculum-related software that will help increase student achievement

Action Plan

The software evaluation and recommendation procedure will be revised by Summer 2002.

Goal #2

To explore emerging technologies that support the academic goals of the Connecticut Mastery Tests and the Connecticut Academic Performance Tests

Action Plan

Selected teachers and students will pilot and review both server- and web-based integrated learning systems (ILSs) and application service providers (ASPs) which support and enhance instruction. During the 2001-2002 school year, pilot programs will be implemented at selected elementary, middle, and high schools. Other pilot programs may also be considered and implemented throughout the current school year.

Goal #3

To implement the newly released *Connecticut Computer Technology Competency Standards for Students*

Action Plan

Teachers will receive a copy of the *Connecticut Computer Technology Competency Standards for Students* and will use this document as a guide to teach computer skills and to integrate technology into the district curriculum.

Goal #4

To create a District Software Review Committee consisting of grade level appropriate professional staff, Central Office staff, and building administrators

Action Plan

Upon adoption of this document, the Educational Technology Curriculum Administrator will contact appropriate individuals and form a committee.

III – Professional Development

Goal #1

To continually provide teachers with meaningful technology-related professional development to help improve student achievement

Action Plan

During the 2001-2002 school year, teachers will complete the checklist of the *Connecticut Teacher Technology Competencies Performance Indicators* to self-assess their technology skills. Professional development activities will be designed to address the indicated needs as a result of the *Performance Indicators* survey.

Goal #2

To incorporate the newly released *Connecticut Teacher Technology Competencies* into all technology-related professional development

Action Plan

Methods of delivering quality professional development will include, but not be limited to, the following: employing district teachers with mastery level technology skills to serve as technology trainers to their peers; offering two on-line technology-training options; hiring professional consultants; utilizing technology resources and institutions of higher education, such as Cooperative Educational Services, Four-Town Technology Partnership, *Connecticut Teacher Technology Competencies – Course of Studies*, Norwalk Community College, and the University of Connecticut at Stamford; encouraging attendance at nationally accredited technology conventions.

IV – Resources/Funding

Goal #1

To provide adequate resources and funding in order to:

- develop, maintain, and support an infrastructure that effectively delivers curriculum to students
- preview, pilot, evaluate, and purchase curriculum-related software to improve student learning
- provide high-quality professional development which encourages teachers to infuse technology into instruction
- hire sufficient personnel to maintain computer/network systems and provide integrated technology-related instruction

Action Plan

The district will continue to provide and solicit resources and funding to maintain and support our current high-quality technology program and for future technology development within the school system through the following sources: school district technology budget(s) and outside sources such as, corporate sponsorships and contributions, City allocations, state and federal grants, community resources, and professional partnerships.

Section II – Hardware, Infrastructure & Maintenance

Mission Statement

The mission of the Hardware, Infrastructure, & Maintenance Committee was multifaceted; the committee had to:

1. Determine the level of technology currently being implemented in the schools
2. Set appropriate technology standards for our schools
3. Establish standards and goals for hardware, operating systems, infrastructure, etc.
4. Revise tech-support practices, procedures and performance standards
5. Appropriate support funding commensurate with current and planned technology standards
6. Work closely with the City IT Department to establish standard administrative technology support
7. Revise cost projections of implementing and maintaining the entire technology program on an annual basis

Overview

The Hardware, Infrastructure, & Maintenance Committee first met in November 1995 to assess new information and discuss recommendations. The Committee was composed of parents, technology professionals, school personnel, and central office staff. The Committee met as a group, and individuals completed assignments and conducted essential research. Some activities included:

- Researched and created school-specific inventory of what hardware and networks are currently in our system
- Researched and developed recommended technology levels (number of computers per class, number of media labs per school, etc.)
- Investigated using single- and dual-platforms
- Explored network and cabling options and made recommendations
- Examined existing bid process, offered expert technical support, and suggested improved procedures
- Examined existing tech-support levels and proposed needed, realistic levels for the future
- Developed a model and cost analysis of the technology implementation plan

Historical Data

The City of Stamford Information Technology Department assumed responsibility for the management of the technology implementation for Stamford Public Schools in July 1999. At that time, the American Appraisal Association conducted a fixed asset inventory of the technology available in our schools. Of the 5,370 computers deployed throughout the school system, 70% are Pentium PCs, 15% are Macintosh computers, and the remaining 15% are obsolete, having 486 or less microprocessors.

The 1999 District Technology Implementation Plan provided specifications for electrical power, student workstations, data connectivity (LAN & WAN), and video capability. According to the plan, student technology learning environments were designated as the Media Center, Computer Labs, and Classroom computers.

Current Status of Computers in our Schools

As of September 2001, progress regarding computers in our schools is as follows:*

- All 19 media centers have been automated with circulation and cataloging functions as well as research and Internet access capabilities.
- All 12 elementary schools have at least one fully operational computer lab; six elementary schools have two labs.
- All five middle schools have the recommended minimum of two computer labs; three middle schools have three labs.
- Both high schools have at least seven computer labs, including specialized content-area labs.
- The Academy of Information Technology has seven specialized content-area labs.
- All elementary schools have networked computers in Grades 4 and 5; six elementary schools currently have networked computers in Grade 3.
- With the exception of two buildings, all have sufficient electrical and fiber optic infrastructure either completed or in progress.
- A pilot program has been developed and implemented for qualified high school students to train as technology interns to assist with the technology needs of the schools.

**For a visual representation, please refer to the status charts at the end of this Section.*

Conclusions and General Recommendations

The Hardware, Infrastructure, & Maintenance Committee draws the following conclusions and makes the following recommendations:

- Technology must be implemented to support curriculum, the administration and management of student data, accommodate each students' needs, and enhance every students' educational experience.
- Technology implementation decisions must be curriculum-based, rather than hardware-based.
- Current levels of technology are adequate; however, it is understood that technology is changing constantly and swiftly. Therefore, it is the district's responsibility to maintain, improve, and upgrade the technology in our schools as efficiently and prudently as possible.
- We must explore nontraditional ways – both organizationally as well as financially – to find and utilize resources to effectively implement the technology program.

- The partnership between the Stamford Public Schools and the City's IT Department gives the responsibility of implementing and supporting the District Technology Plan as it pertains to hardware, infrastructure, and maintenance to the City's IT Department. This plan has enabled the district to concentrate on appropriate selection of instructional curriculum software, methods of delivery of instruction, and continual professional development.

Specific Hardware, Infrastructure, and Design Recommendations

*Recommendation: Hardware Platforms – Desktop Equipment as of April 2002
(subject to change without notice)*

Following are the hardware benchmarks (minimum standards) that we are recommending to the Superintendent and to the Board of Education:

PC-BASED SYSTEMS

- Intel-based CPU
- Windows 2000 operating system
- 128 MB RAM
- 2 GB storage
- 15" flat panel monitor
- CD/DVD-ROM
- Multimedia system (curriculum required)
- Network card

TERMINAL SERVER ENVIRONMENT*

- Thin client CE device
- 15" flat panel monitor
- Terminal Server CAL

**Requires attachment to existing server farm at the AIT.*

The Microsoft Operating System (currently 2000) and the Microsoft Office Suite (currently 2000) are considered standard on PCs. By adopting this platform as our standard, we ensure that all new computers will be as functional as possible at the present time, and as adaptive as possible in the future, given the fact that technology is constantly changing. Operating within the parameters of the industry standard also means that communication between schools, parent-teacher groups, corporate sponsors, community agencies, and professional organizations will be able to communicate and plan together effectively.

*Recommendation: Hardware Platforms – Server Equipment as of April 2002
(subject to change without notice)*

SERVERS

- Dell 6400 for large enterprise multi-applications at current City standards
- Dell 2550 for medium department use at current City standards
- Dell 1650 for light utility use at current City standards

All with:

- RAID 5 or compatible configuration
- Redundant power supply
- Gigabyte connection to network backbone
- Tape or network back-up systems
- Virus checking and security software

Recommendations: Network Topology Architecture and Wiring

- 10/100/1000 Base-T Ethernet Cat 5E (enhanced) UTP cable to desktop
- 4 data drops per classroom: 1 mobile cart, 1 8-port 10/100 switch, 1 IP phone (future) and 1 wireless appliance (future)
- Fiber optic 62.5/125u cable for all backbone runs
- Standardize all network operating systems to Novell 5 and Windows 2000
- Cisco routers and switches at LAN/WAN junctions (current City standards)
- Aironet 2.4 Ghz 11 mbps wireless access point (deployed as needed)

Recommendation: Internet Filtering

To comply with Federal requirements, Stamford Public Schools in conjunction with the City IT Department will subscribe to a content filtering system through our Internet Service Provider (ISP). This filtering device will allow all K-12 traffic from the network to the Internet to be filtered for content appropriateness. The solution allows age-appropriate filtering. Age groups can be created and further modified at the building and/or classroom level. The filtering system is updated daily and detailed reports can be obtained upon request. (For more information on filtering, please see Appendix B, "Acceptable Use of the Internet Policy," **Monitoring**).

Recommendation: Generic Configuration

These recommendations present planning and budgeting guidelines and targets. Due to unique opportunities or requirements these guidelines may be modified or implemented in a different order than presented. The Hardware, Infrastructure, & Maintenance Committee recommends that computers be made available to students in the following priority order:

1. The Media Center
2. Computer Labs
3. Classroom Computers

The networking capabilities will allow all curriculum computers to have access to common resources.

The following technology levels are similar to the technology that has been implemented in other cities, and is accepted as appropriate to support curriculum needs:

THE MEDIA CENTER (all functionality)

- 1 computer per 100 students
- 1 color networked printer, 1 volume B&W networked printer
- Presentation projectors as applicable

COMPUTER LABS (all/limited functionality)

- 1 lab per 300 students
- 25 student workstations per lab with 1 teacher station, 1 color networked printer, and presentation projector

CLASSROOM COMPUTERS (may be stand-alone or multi-functional)

- 3 student computers and 1 networked printer per academic classroom

Other Recent Technology Recommendations

MOBILE LABS

After extensive testing at The Academy of Information Technology, the district has started to deploy mobile computer laboratories on a cart. This concept is a secure cabinet on wheels with two wireless access points connecting laptops to the cart, a laser printer, and 25 laptop computers, complete with a 2-battery life cycle. This portability provides the educational institution the ability to create a computer laboratory in virtually any educational environment within minutes. It also affords the flexibility for the instructor to group the students physically for project-based learning activities.

BOUTIQUE LABS

In more recent focus groups with professional educational staff, the technology review committee determined a need for “Boutique Labs” – small computer laboratories consisting of 12 workstations or less with a specific educational purpose. An example would be the new music lab consisting of 12 computers connected to MIDI musical keyboards.

As of Spring 2002:

1. All Media Centers meet the generic configuration recommendation.
2. Most computer labs have been upgraded to meet the new curriculum technology standards. The remaining labs have been scheduled for upgrades as we continue to issue classroom PCs.
3. A major focus has been to increase classroom technology. This area requires major considerations of electrical power as well as data and video cabling. Over the past 2 years, the City has developed a multi-year district-wide plan to deploy classroom computers by grade level for K-8 classrooms. The plan will also address classroom computer needs in the high schools according to subject-specific curriculum demands.
4. Each high school English department and selected middle and elementary schools have mobile computer labs. The success of the program during the 2001-2002 school year will help to determine future deployment of this type of technology.
5. Currently, the Academy of Information Technology and Westhill High School have Boutique Labs. This concept will continue to evolve according to future curricula requirements.

Acceptance of Donations

Stamford Public Schools will be willing to accept technology donations that:

- can meet curriculum requirements in any of the various areas
- may need minimum upgrade to meet requirements (maximum \$200 upgrade)
- these requirements to be assessed by City technology staff at school pricing

Training of Designated Technology Support Staff

Upon the introduction of new systems, support issues will be included in the planning process. Technology support staff will provide training in first level maintenance practices to the designated tech support staff. Major technology installation may require vendor-supported integration.

Support and Maintenance

The City Technology Director and the District Department Head of Technology will continue to work collaboratively to develop an on-going maintenance support program for all schools in the district. As the network concept is more fully implemented, the designated building technology staff member may be trained to manage the day-to-day operations of the network. Managing student profiles and managing jobs and print queues will be performed locally.

Here are specific recommendations for support:

- Each school should have at least 1 full-time tech-support person on site. It may be preferable to have staff members who are not certified teachers so that their functions are not split between teaching and technology support.
- Centralize all PC technology-related purchases to facilitate district inventory and maintenance. Recording an annual inventory is a required minimum.
- Develop a district-wide hardware allocation plan to ensure equitable distribution of resources among all the schools.
- Develop and implement a software integration standards testing process to ensure compatibility with extensive hardware and software base (please refer to *Section III – Curriculum & Software*)

Tech Support Service Goals

Technical support service requirements will be evaluated by the schools and City during the current year, and will be codified subsequent to that time. The priorities are, as they currently exist at the City, where operating requirements determine priority of service. Immediate attention will be applied to operational problems. Those areas for which remediation can be accomplished will be scheduled and held to a target date. Additional resources will be applied in emergencies as resources and funding apply.

Projects will be planned, scheduled, and managed by the City's technology staff and the District's Department Head of Technology. The City's Facilities Department will support the district's efforts whenever possible, but the City and district technology staff may outsource as appropriate and timely.

Annual Funding Requirements

Annual funding requirements will be determined by the district's capital and operating budgetary process, the City's current technology program implementation, grants, entitlements, and other sources of funding or direct equipment/services donations.

LEVELS OF TECHNOLOGY IMPLEMENTATION BY SCHOOL BUILDING

Elementary Schools – 2001-2002

Davenport			Hart			KT Murphy			Newfield			Northeast			Rogers			Roxbury			Springdale			Stark			Stillmeadow			Toquam			Westover												
Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			→ Phase V						
Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers									
K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	K	1	2	
Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			→ Phase IV						
3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	
Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops									
Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	Lab #1	Lab #2	→ Phase III							
Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric									
Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center			Media Center						
Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			→ Phase II			
Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs						
Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			→ Phase I			

LEGEND

Completed	In Progress	Planned
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LEVELS OF TECHNOLOGY IMPLEMENTATION BY SCHOOL BUILDING

Middle Schools – 2001-2002

Cloonan			Dolan			Turn of River			Rippowam			Scofield			
Video Drops			Video Drops			Video Drops			Video Drops			Video Drops			→ Phase V
Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			Classroom Computers			→ Phase IV
6	7	8	6	7	8	6	7	8	6	7	8	6	7	8	
Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			→ Phase III
Lab #1	Lab #2	Lab #3	Lab #1	Lab #2	Lab #3	Lab #1	Lab #2	Lab #3	Lab #1	Lab #2	Lab #3	Lab #1	Lab #2	Lab #3	
Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			Data/Electric Power Drops			→ Phase II
Media Center			Media Center			Media Center			Media Center			Media Center			
Data/Electric			Data/Electric			Data/Electric			Data/Electric			Data/Electric			→ Phase I
Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			Stand-Alone PCs			
Building Power Source			Building Power Source			Building Power Source			Building Power Source			Building Power Source			

LEGEND		
Completed	In Progress	Planned

LEVELS OF TECHNOLOGY IMPLEMENTATION BY SCHOOL BUILDING

High Schools – 2001-2002

Academy of Information Technology (AIT)				Stamford High School				Westhill High School				
Video Drops				Video Drops				Video Drops				→ Phase V
Classroom Computers				Classroom Computers				Classroom Computers				
English	Science	Math	Social Studies	English	Science	Math	Social Studies	English	Science	Math	Social Studies	→ Phase IV
Foreign Language	Art	Music	Health	Foreign Language	Art	Music	Health	Foreign Language	Art	Music	Health	
Data/Electric Power Drops				Data/Electric Power Drops				Data/Electric Power Drops				
Lab # 1 Business 1	Lab # 2 Business 2	Lab # 3 Business 3		Lab # 1 Business 1	Lab # 2 Business 2	Lab # 3 Business 3		Lab # 1 Business 1	Lab # 2 Business 2	Lab # 3 Business 3		
Lab # 4 Business 4	Lab # 5 Math/Science 1	Lab # 6 Math/Science 2		Lab # 4 Business 4	Lab # 5 Math/Science 1	Lab # 6 Math/Science 2		Lab # 4 Business 4	Lab # 5 Math/Science 1	Lab # 6 Math/Science 2		
Lab # 7 Cisco	Lab # 8 Graphics	Lab # 9 CAD		Lab # 7 Cisco	Lab # 8 Graphics	Lab # 9 CAD		Lab # 7 Cisco	Lab # 8 Graphics	Lab # 9 CAD		→ Phase III
Lab # 10 English	Lab # 11 PC Repair	Lab # 12 Tech Ed		Lab # 10 English	Lab # 11 PC Repair	Lab # 12 Tech Ed		Lab # 10 English	Lab # 11 PC Repair	Lab # 12 Tech Ed		
Data/Electric Power Drops				Data/Electric Power Drops				Data/Electric Power Drops				
Media Center				Media Center				Media Center				→ Phase II
Data/Electric				Data/Electric				Data/Electric				
Stand-Alone PCs				Stand-Alone PCs				Stand-Alone PCs				→ Phase I
Building Power Source				Building Power Source				Building Power Source				

LEGEND		
Completed	In Progress	Planned

Procedure for Ordering Technology Hardware

All technology hardware purchases for Stamford Public Schools must be approved by the City Information Technology Department. Quotes can be obtained from the City IT Department.

Anyone wishing to order technology hardware needs to:

1. Get a price quote from the City IT Department.
2. Complete a “Request to Purchase/Install Hardware” Form.
(please see form on next page)
3. Send form and copy of price quote to the City IT Department for approval. If approved, the IT Department will enter the requisition into the H.T.E. accounting system and notify the requester that the requisition needs to be approved. If not approved, the IT Department will return form with recommendations for approval.
4. When hardware arrives at site, requester should notify the HelpDesk (Ext. #4936) to initiate a service request in order to install the hardware.

Request to Purchase/Install Hardware

ACCOUNT TO BE CHARGED _____ DATE _____

INSTALL AT _____ CONTACT _____

LOCATION #1 _____

ROOM # _____

LOCATION #2 _____

ROOM # _____

LOCATION #3 _____

ROOM # _____

Equipment Installation Building Check-Off

1. Dedicated electrical outlet has been identified.
2. Cable connection to the network has been identified.
3. Adequate area to hold equipment has been made available.
4. Desk/table has been made available.

Sign-off date _____

Applicant _____

Principal _____

Equipment Installation Technology Department Check-Off

1. Electrical needs
2. Network connection
3. Equipment area
4. Furniture

Sign-off date _____

IT Manager _____

HARDWARE HAS ARRIVED AND IS READY FOR INSTALLATION.

Principal's Signature _____ Date _____

Section III – Curriculum & Software

Overview

The challenge facing America's schools is the empowerment of all children to function effectively in their future, a future marked increasingly with change, information growth, and evolving technologies. Technology is a powerful tool with enormous potential for paving high-speed highways from outdated educational systems to systems capable of providing learning opportunities for all, to better serve the needs of 21st century work, communications, learning, and life.

Curriculum integration with the use of technology involves the infusion of technology as a tool to enhance the learning in a content area or multidisciplinary setting. Technology enables students to learn in ways not previously possible. Effective integration of technology is achieved when students synthesize information and present it professionally. The technology should become an integral part of how the classroom functions – as accessible as all other classroom tools.

Although many teachers are moving along the continuum from being personal users of technology to finding ways to effectively use technology with students, many have not moved far enough in engaging their students. It is through both continued staff development and the integration of technology into curriculum that the Stamford Public Schools can meet the specific curriculum outcomes while addressing district, state, and national curriculum and technology standards.

Technology Standards for Students

The technology foundation standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators within the Profiles for Technology Literate Students to the standards. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills. In addition, teachers will use the *Computer Technology Competency Standards for Students*, adopted by the Connecticut State Department of Education in June 2001, to plan their instruction for Pre-Kindergarten through Grade 12 students. These can be found at:

<http://www.state.ct.us/sde/dsi/technology/admincorner.htm>
Student Computer Technology Competency Standards

Please note: The District's Software and Internet Subscription Chart can be found in Appendix B. This chart is continually being updated as new curriculum-related software is previewed and recommended by our educators, reviewed and approved by our District Software Review Committee, and installed on the district-wide network by our technology specialists.

Reprinted with permission from National Educational Technology Standards for Students – Connecting Curriculum and Technology, published by the International Society for Technology in Education (ISTE) NETS Project.

1. Basic Operation and Concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems
- Students are proficient in the use of technology

2. Social, Ethical, and Human Issues

- Students understand the ethical, cultural, and societal issues related to technology
- Students practice responsible use of technology systems, information, and software*
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity

3. Technology Productivity Tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works

4. Technology Communications Tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences

5. Technology Research Tools

- Students use technology to locate, evaluate, and collect information from a variety of sources
- Students use technology tools to process data and report results
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks

6. Technology Problem-Solving and Decision-Making Tools

- Students use technology resources for solving problems and making informed decisions
- Students employ technology in the development of strategies for solving problems in the real world

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**Please refer to the Stamford Public Schools Policy on Computer Software on the following page.*

Computer Software Policy

STUDENTS – #5132
PERSONNEL – #4033

COMPUTER SOFTWARE

The Stamford Public Schools use computer software for instructional and other purposes. Such software is usually licensed from a vendor and copyrighted by the vendor. Although license agreements vary widely, they usually prohibit copying the software except for back-up purposes, and limit the use of the software to one machine at a time.

Copying or using software other than as permitted in the license agreement not only is a breach of contract, but also violates United States copyright laws, constitutes criminal theft of property, and is unethical.

No one within the Stamford Public Schools, staff or students, shall violate copyright laws or license agreements. If doubt exists, written approval must be secured from the Superintendent or designee acting with the advice of legal counsel.

Policy Adopted:
May 6, 1986

STAMFORD PUBLIC SCHOOLS
Stamford, Connecticut

Readopted:
June 27, 2000

Software Selection and Preview Procedure

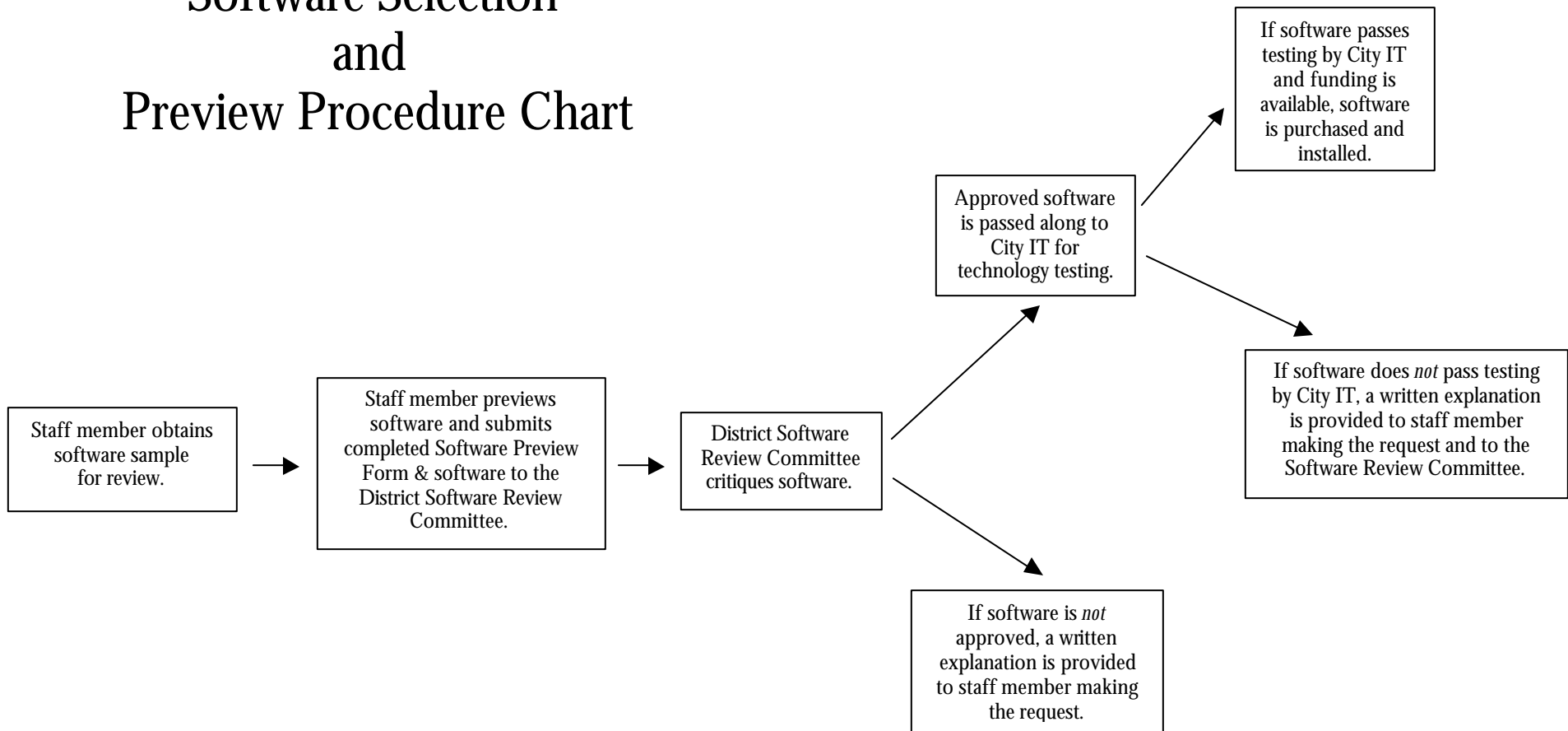
Software Implementation

Any staff member wishing to investigate software for the purposes of increasing student achievement and enhancing curriculum through technology integration should follow the following procedure.

1. Staff member will secure (or enlist the assistance of the Educational Technology Department to obtain) an evaluation or demonstration copy of the desired software.
2. Staff member will preview the software and complete a Software Preview Form (please see attached).
3. Staff member will submit the Software Preview Form along with the software itself to the District Software Review Committee in order to ensure that district curriculum goals are apparent and that the software is appropriate.
4. If approved by the District Software Review Committee, the software will be forwarded to the City Information Technology Department for technological compatibility. If the Software Review Committee does not approve the software, the staff member making the request will be notified, in writing, as to why the software was not approved.
5. Once tested and approved by the City IT Department, pending funding, license(s) will be purchased and the software will be installed. If the software does not pass the technology testing performed by the City IT Department, the staff member making the request and the Software Review Committee will be notified, in writing, as to why the software was not approved.

Please note: Only networkable software will be considered for purchase, unless there are extenuating circumstances (such as specific assistive/adaptive technologies needed for special needs students using a stand-alone computer or a laptop).

Software Selection and Preview Procedure Chart



Software Selection and Preview Guide

Name _____ Date _____

Teaching Assignment _____ School _____

The following information pertains to the software to be previewed:

Name of software _____

Publisher _____ Approximate Cost _____

Content Area _____ Grade Level _____

Software should meet the following criteria before being considered for purchase. Software should:

- | | |
|--|--|
| <input type="checkbox"/> Be age appropriate | <input type="checkbox"/> Engage students |
| <input type="checkbox"/> Be user-friendly | <input type="checkbox"/> Correspond to students' instructional levels |
| <input type="checkbox"/> Have clear, concise instructions | <input type="checkbox"/> Have quality animation, colors, sounds, and graphics |
| <input type="checkbox"/> Allow students to work fairly independently | <input type="checkbox"/> Operate consistently |
| <input type="checkbox"/> Involve active learning for the student | <input type="checkbox"/> Have limitless potential |
| <input type="checkbox"/> Have comprehensive documentation | <input type="checkbox"/> Be politically correct |
| <input type="checkbox"/> Contain open-ended and flexible activities | <input type="checkbox"/> Consider diverse families and cultures |
| <input type="checkbox"/> Use appropriate vocabulary | <input type="checkbox"/> Portray gender and role equity gender and role equity |

Can this software save students' work? Yes No

Can students' work be sent to a printer? Yes No

Software delivers instruction through the following methods: (check all that apply)

- Discovery/Inquiry Drill and Practice Simulation
 Other (please specify) _____

Please provide specific examples of how this software aligns with district curriculum objectives.

How will this software be utilized for curriculum integration? Please provide specific examples of activities/strategies to be used with students.

Signature of Applicant _____ Date _____

Signature of Software Review Committee Member _____ Date _____

Signature of IT Administrator _____ Date _____

Section IV – Technology for Administrative Support

Mission Statement

The mission of the Research & Development, as it pertains to technology, is to maintain “state-of-the-art” technology to support the administrative functions of the Stamford Public Schools.

Overview

In the 1998-99 school year, the Stamford Public Schools in conjunction with the City of Stamford’s Technology Management Services set up a Microsoft NT administrative network separate from the Novell curriculum network already in place in the schools. This administrative network was set up apart from the curriculum network to help ensure security of administrative functions.

The first applications on the administrative network were HTE for purchasing and inventory and STARBASE the student demographic database. HTE had been in use by the schools for several years using a dial up connection. By creating the new network, schools were able to use HTE with increased reliability and speed.

STARBASE replaced a student database on an old mainframe computer. On the mainframe, access was limited to one or two school staff in the main office of each school. With STARBASE on the NT network, we have been able to increase accessibility to include Principals, Assistant Principals, Program Improvement Planners (PIPs), Department Heads, Guidance Counselors, and Nurses. Currently, STARBASE is available to approximately 250 users.

STARBASE is the lifeline of information about students in the Stamford Public Schools. STARBASE is used to enroll/withdraw students, store a multitude of demographic data, track attendance, manage student enrollment in courses and specialized programs, and generate progress reports, report cards, and transcripts. Because of the wide variety of data contained in STARBASE, the system is used regularly and consistently to generate reports to meet the needs of the schools, central administration, and state and federal reporting requirements. At the school and district level, reporting has become quicker, easier, more accurate, more comprehensive, and accessible to a far larger user group.

In addition to STARBASE and HTE, the administrative network provides schools access to these other applications:

▪ Peoplesoft	Human Resource software package
▪ Roundup	Special Education software package for State reporting and preparation of Individual Education Plans (IEPs) for all special Education students
▪ RecTrac	School facilities management software package
▪ Kronos	Time and attendance management system software package
▪ CEU ExTraxx	Management of teacher and administrator enrollment to courses offering mandated Continuing Education Units (CEUs)
▪ Outlook	Email and scheduling software package
▪ BOE Facility Work Orders Database	Facilities work order software package
▪ Student Test Results	Reporting of district wide test results for individual students and student groups
▪ DRA Data Entry system	Developmental Reading Assessment (DRA) entry and reporting software

At the central office, access is also available to the following software packages:

▪ Versatrans	Student transportation (bus routing) system software
▪ Magnet School Lottery	Magnet school application and selection software

Current Status of Technology for Administrative Support

As of January 2002, the current status of the administrative network is as follows:

- All schools have at least two computers in the main office connected to the network. Additionally, access to the administrative network is available to the Principals, Assistant Principals, Program Improvement Planners (PIPs), Guidance Counselors, Department Heads, and the School Nurses.
- All schools are connected to the Government Center by partial T1 lines; six channels for the high schools, four channels for the middle schools and four channels for the elementary schools. The Hillandale Pre-School Program and the Adult Education Center are also connected to the network.
- Because of the ever-increasing number of users, the number of applications and the demands of the newer software, the speed of the network has been an issue, especially at the high schools.
- Training is provided to administrative, clerical and health-related staff members in the following applications:
 - ♦ Starbase
 - ♦ HTE
 - ♦ Peoplesoft
 - ♦ Roundup
 - ♦ RecTrack
 - ♦ Kronos
 - ♦ CEU EzTraxx
 - ♦ Outlook (Including E-Mail and Scheduling)

- BOE Facility Work Order Database
- Student Test Results
 - CMT Database (district-wide test results)
 - ScoreView (State CMT's /Holistic Writing)
 - LaserFiche (Spring DRP and Math Student Answer Documents)
- Microsoft Office Applications
 - Word
 - Excel
 - PowerPoint
 - Access

Goals and Recommendations

1. To provide all schools with an automated student information system that incorporates key demographic information on students.
 - To maintain and upgrade STARBASE as appropriate.
 - To link other relevant student databases directly to STARBASE.
 - To maintain “snapshots” of STARBASE data on key dates for state and federal reporting.
2. To increase access to STARBASE to teachers to enable them to directly enter grades and attendance.
3. To extend the current test reporting system to incorporate all district-wide test results using web based technology.
4. To increase the bandwidth for all schools to speed up the operation of all applications with priority at the high school and middle school levels.
5. To create an intranet for use by central staff and the schools to improve communication and share information.
 - a. Bulletin boards on the intranet will be created for teachers to share effective teaching strategies.
 - b. District-wide calendars on the intranet will allow planning of events across and between schools.
 - c. Authorized school staff will be able to view and analyze CMT, CAPT and other test scores.
6. To increase communication with parents allowing them to check homework assignments, attendance, or grades through the Internet or telephone.
7. To provide on-going training and support to the Data Integrity Managers responsible for the oversight of timely and accurate entry of student information, most especially on STARBASE.
8. To provide on-going training and support to administrative and clerical personnel in all administrative applications.

9. To maintain and upgrade administrative applications and hardware to respond to the changing needs of the school district and provide training as appropriate.
10. To improve communication between IT, Human Resources and personnel responsible for technology training.
 - To proactively provide newly hired and transfer staff with the technological resources to do their job effectively.
 - To increase network security with timely information on employee status.
 - To increase communication and cooperation between key application support personnel and the IT department.

Section V – Professional Development

“Technology by itself is not the answer, of course. The answer is great teachers who are able not only to use technology but to rethink and adapt traditional curricula to its possibilities . . . Corporations, philanthropists, and government must, therefore invest in massive training to prepare teachers for tomorrow’s classroom . . .”
— Bill Gates

Mission Statement

The mission of the Technology Professional Development Committee is to establish an on-going plan to train all staff in the Stamford Public School System to be proficient in the use of technology.

Overview

The implementation of technology integration in the Stamford Public School System will occur as a result of appropriate training for faculty and all staff members. Technology training will be an on-going process throughout the school year. Staff development is critical to the successful integration of technology into the curriculum. A plan designed to infuse technology into all schools must include an extensive and well-planned staff development component. *Curriculum must drive software selection, which, in turn must drive staff development.*

Our current staff development strategies are predicated on the following:

- Teachers will use technology in their teaching and administrative activities.
- Educators and staff will invest the time and energy necessary to become proficient with instructional technology.
- As new network software becomes available, teachers will receive a manual and appropriate training prior to using it in the classroom.
- Tech Coaches will provide training and support for their colleagues.
- Technology training for teachers must include models for assessing student progress and knowledge.
- Staff development will be offered throughout the year and during school hours when possible, with minimal disruption to teachers’ primary responsibility of classroom instruction.
- Teachers will assume a leadership role in adopting new technologies and integrating them into the classroom.
- Teachers will become proficient in using various components of technology.
- Social, legal, ethical issues.

The Professional Development Model

Full-Time Technology Facilitator/Department Head

In the ideal Professional Development Model, each elementary and middle school building would have a full-time technology facilitator. Additionally, each high school would have a department head of Instructional Technology. The facilitator/department head will:

- Model lessons and assist with curriculum integration
- Train school staff in the use of the school's technology
- Facilitate the achievement of student performance standards
- Be a member of the school technology team
- Develop and present workshops for parents, professional staff, and the school community
- Troubleshoot and resolve technology problems
- Participate in an annual review of his or her school's technology plan

Technology Training Lab

A technology training lab, where intensive training for teachers, staff, and Stamford citizens can attend classes, will be in use throughout the year. There will also be a standard training schedule that moves at a more deliberate pace for people who do not have high-tech skills, but wish to continue to improve their technology skills.

Incentives

The Professional Development Committee recommended that incentives be offered to purchase computers for our school personnel through payroll deductions. In this arrangement, both the staff and the school district benefit from the improved access to technology. The purchases could be repaid over a two-year period, with no cost to the district.

Electronic Communication

We will establish and encourage electronic communication for all staff members and instruct them in the use of resources, such as electronic mail, web board discussions, and the Internet. Staff members will be encouraged to use these resources for communicating internally; i.e., within the school buildings and throughout the district.

State-Mandated Technology Training for Educators

Competencies for Technology Proficiency

Since 1999, the Connecticut State Department of Education established a requirement which states that elementary and middle school teachers holding a Professional Educator's Certificate must take a minimum of 15 hours of training in the use of computers in the classroom during each 5-year period in order to renew their certification. In addition, this past summer, the CSDE, in Public Law #01-173, adds teachers with secondary academic endorsements to the group of teachers who must include in their Continuing Education Units (CEUs) at least 15 hours of training in the use of computer in the classroom. Public Law #01-173 excepts from this requirement: teachers with elementary, middle, and secondary academic endorsements who can demonstrate technology competency, in a manner determined by their Board of Education, based on state standards. Our office has been working with the Stamford Education Association and the City of Stamford's IT Department in developing objective exemption criteria for this statute.

In June of 2001, the Alliance of Regional Educational Service Centers collaborated with the Connecticut State Department of Education and developed the Connecticut Teacher Technology Competencies and its corresponding self-assessment tool. The competencies establish proficiency levels and describe specific skills that teachers are expected to acquire and master. The self-assessment tool, known as Performance Indicators, will allow teachers to evaluate their technology skills and design their own professional development plan. The Alliance also designed a Course of Studies, which consists of training modules that support the Connecticut Teacher Technology Competencies. The Course of Studies can help teachers become proficient in the competencies.

On a related topic, the State released its Administrator Technology Standards in January 2002. “It is hoped that the development of these standards will assist districts with the challenge of promoting technological literacy among their educational leaders.” The Teacher Competencies, Performance Indicators, Course of Studies, and Administrator Technology Standards can be found at the Connecticut State Department of Education Web site at the following address:

<http://www.state.ct.us/sde/dsi/technology/admincorner.htm>

Teacher Technology Competencies
Teacher Technology Performance Indicators
Technology Course of Studies
Administrator Technology Standards

It is important that all educators achieve and demonstrate proficiency in each competency level to effectively instruct students in the 21st century classroom.

District Support for Educators

In an effort to assist our teachers in acquiring mastery and infusing technology into their teaching, we provide in-service workshops in technology training conducted by our own master teachers, consultants, and professional instructors. We also encourage participation in professional conferences and memberships to professional organizations.

Our district maintains professional partnerships with neighboring institutions of higher education, such as Norwalk Community College and the University of Connecticut. Other partnerships include: Four-Town Technology Friends Partnership (comprised of Greenwich, New Canaan, Norwalk, and Stamford administrators and educators), Southwestern Area Commerce and Industry Association of Connecticut (SACIA), Stamford Chamber of Commerce, and the Stamford Public Education Foundation. We support on-going relationships with local corporations, such as GE Capital, Hyperion, and Pitney Bowes, Inc. Our local Regional Educational Service Center, Cooperative Educational Services, provides us with superior consulting services, exceptional train-the-trainer models, and specialized technology training, including the Technology Integration Professional Partners (TIPP) program.

It is our responsibility and commitment as a district to provide Stamford educators with many and varied opportunities to become technologically proficient in order to help their students experience success by reaching his or her maximum potential.

Appendix A – Internet & Website Information

Acceptable Use of the Internet Policy

Acceptable Use of the Internet Agreement

Sample Letter to Parents

Web Site Policy

Sample Letter Granting Permission to Publish Student Work

Policy References for Staff

Acceptable Use of the Internet Policy

STUDENTS – #5132-R

ACCEPTABLE USE OF THE INTERNET AND OTHER ELECTRONIC COMMUNICATION SYSTEMS FOR STUDENTS

Computers and networks provide access to resources as well as the ability to communicate with other users worldwide. Such open access is a privilege and requires that individual users act responsibly. Users must respect the rights of other users; respect the integrity of the system and related physical resources; and observe all relevant laws, regulations and contractual obligations.

Use of computers by students and access by students to computer networks and to the Internet are services made available only to further the educational mission of the Stamford Public Schools. In order to be granted these access privileges and to retain them, students must abide by the guidelines set forth in the Board's "Acceptable Use of the Internet and Other Electronic Communications Systems for Students" policy and these regulations at all times when they use the Stamford Public Schools systems.

These computer systems are expensive to purchase, install and maintain. As the property of the district these computer systems must be carefully handled and their integrity preserved for the benefit of all. Therefore, *access to the computer systems is a privilege, and not a right.*

Students under the age of 18 may use electronic information retrieval systems in supervised settings and only with the written permission of a parent or guardian through a duly executed "Acceptable Use Agreement."

Stamford students may use the district's electronic information retrieval systems provided they:

- Abide by the Acceptable Use Policy
- Sign an "Acceptable Internet Use Agreement"
- Obtain the signature of a parent/guardian (for students under the age of 18)

Any parent or student inquiry regarding any decision relative to Stamford's Acceptable Use Policy and/or these administrative regulations should be directed to the District Internet Administrator.

Information Networks:

The Stamford Public Schools' network connects all of the schools and offices. This makes sharing of information and communicating with all schools and offices possible. This network supports activities that have educational value for administration, instruction and learning by teachers and students.

The Internet is a collection of many worldwide networks that support the open exchange of information. The Internet provides immediate access to information anywhere in the world. Users can view or print articles, documents and pictures that can be used in the instructional process.

Student Behavior:

Students are expected to use all computer equipment, both hardware and software and network access to pursue intellectual activities, to seek resources, to access libraries and for other types of learning activities. Students must explore this new "space" to discover what is available there. They will learn new things and can share their newfound knowledge with classmates, teachers, parents and global learning partners. For the safety of all involved, caution must be exercised when communicating with people anywhere.

Because the Stamford Public Schools' network is used as part of a school activity, the policy on student behavior applies to network activity. Therefore, the Acceptable Use Policy is an extension of the district's

Policy on Student Behavior. These rules apply to vandalism of computer equipment, unauthorized access to information, computer piracy, hacking, and tampering with hardware and software.

Conduct including, but not limited to, the following, is prohibited with respect to use of these computer systems.

- Sending any form of harassing, threatening, or intimidating message, at any time, to any person (such communications may also be a crime, pursuant to Public Act 95-143, and other laws);
- Gaining or seeking to gain unauthorized access to computer systems;
- Damaging computers, computer files, computer systems or computer networks;
- Using another person's password under any circumstances;
- Trespassing in or tampering with any other person's folders, work or files;
- Sending any message that breaches the district's confidentiality requirements, or the confidentiality of students;
- Sending any copyrighted material over the system.

In addition, as noted above, if a particular behavior or activity is generally prohibited by law or by Board policy or school rules or regulations, it must not occur in the use of these computer systems.

Improper behavior may result in disciplinary penalties, including but not limited to, loss of computer privileges, suspension, and/or expulsion.

Copying Software:

With few exceptions, software on the Stamford Public Schools' computers and network are licensed for use on the Stamford Public Schools' computers only. Copying software from a computer or network is prohibited unless specifically authorized in writing by an appropriate authority. *In addition to disciplinary penalties imposed by the Stamford Public Schools, illegal copying of software is subject to civil damages and criminal penalties, including fines and imprisonment.*

Moral and Ethical Issues:

The Stamford Public Schools wants to provide a stimulating educational environment in which students, teachers, and parents can grow as a learning community. While the Stamford Public Schools wants this valuable educational tool used, the use of inappropriate information on the Internet will not be condoned. Some materials exist which are inappropriate to the instructional setting, and reasonable measures will be taken to prevent them from being accessed. Users must clearly understand that access to such material in any form is strictly forbidden.

The network is designed to achieve and support instructional goals and is not intended to be used for financial gain. Any information that does not support classroom learning should be avoided. Although the actual percentage of unacceptable materials is small, it can cause concern for students and parents if a student accesses those materials while doing legitimate research. If a student has a question or concern regarding any materials found, students should apprise the teacher or computer lab supervisor.

Electronic Libraries:

Materials on the Internet can be considered part of a vast digital library. Electronic database and information search tools to access the Internet are becoming part of school media centers and libraries. Many public libraries also offer some type of Internet access as part of their services.

Guidelines for access to information have already been established in the *Library Bill of Rights* of 1980. These principles can be applied to the Internet as well. This document states that "attempts to restrict access to library materials violate the basic tenets of the *Library Bill of Rights*;" however, school librarians are required to devise collections that are "consistent with the philosophy, goals and objectives of the school district." This

means that students have the right to information, but the school has the right to restrict any information that does not apply to the approved curriculum.

Using Resources:

Information networks have limited capacities. The more users there are on the network, the more congested the network becomes, and access to information takes longer. The following guidelines will ease congestion:

- Do not tie up the network with idle activities.
- Do not play games with others on the network or on the Internet.
- Do not download huge files unless directed to do so by a teacher.
- Download only information that is needed.
- Use access time efficiently.

Virtual Field Trips:

The information networks offer many opportunities for “virtual field trips” to distant locations. The Stamford Public Schools considers all connections to remote locations as “virtual field trips.” Rules that apply to student conduct on field trips apply to “virtual electronic field trips” as well. It is important that students realize that they represent their school and their school district when they use information networks, and are expected to be on their best behavior.

Monitoring:

It is expected that students will comply with the district standards and will act in a responsible and legal manner at all times, in accordance with district standards, state and federal laws.

It is important that students and parents understand that the district, *as the owner of the computer systems, intends to monitor and review* the use of these computer systems in an effort to ensure that users engage only in appropriate uses. The district will monitor and review in a limited fashion, as needed to maximize utilization of the computer systems for educational purposes.

As part of monitoring and reviewing, the district will retain the capacity to bypass any individual password of a student or other user. *The system’s security aspects, such as personal passwords and message delete function for E-mail, can be bypassed for these purposes.* The district’s ability to monitor and review is not restricted or neutralized by these devices. The monitor and review process also includes oversight of Internet site access and of document downloading and printing.

Therefore, all users must be aware that *they should not have any reasonable expectation of personal privacy in the use of these computer systems.*

In addition, the Stamford Public Schools accept the requirements of the Children’s Internet Protection Act (CIPA).^{*} Accordingly, each district computer with Internet access shall have a filtering device that blocks entry to visual depictions that are obscene, pornographic or harmful or inappropriate for students, as defined by CIPA and as determined by the Superintendent or his/her designee. The Superintendent or his/her designee shall make arrangements to enforce the use of such filtering devices. Administrators or other authorized personnel may disable the filtering device for legitimate pedagogical research or for any lawful purpose, provided such person obtains prior approval from the Superintendent or his/her designee.

Filtering should be viewed as only one of a number of techniques used to manage students’ access to the Internet and to encourage acceptable usage. Filtering should not be viewed as a foolproof approach to preventing access to material considered inappropriate or harmful to minors. Filtering should be used in conjunction with:

- Educating students concerning the dangers of inappropriate material on the Internet;
- Using recognized Internet gateways as a searching tool and/or homepage for students, in order to facilitate access to appropriate material;
- Using the district's "Acceptable Use" agreement;
- Using behavior management practices for which Internet access privileges can be earned or lost; and
- Appropriate supervision, both in person and/or electronically.

The placement of filters on district computers is viewed as an exercise of the Board's ability to determine educational suitability of material used in the schools.

**For more detailed information on the Children's Internet Protection Act, please visit the American Library Association website and click on the CIPA link:*

<http://www.ala.org/cipa/>.

Reporting of Misuse:

Anyone who is aware of problems with, or misuse of these computer systems, should report this to his or her teacher or principal immediately. Most importantly, the Board and the Administration urge *any* student who receives *any* harassing, threatening, intimidating or other improper message through the computer system to report this immediately. It is the Board's policy that no student should be required to tolerate such treatment, regardless of the identity of the sender of the message. *Please report these events!*

Regulation Adopted:
June 27, 2000

STAMFORD PUBLIC SCHOOLS
Stamford, Connecticut

Regulation Revised:
May 28, 2002

Acceptable Use of the Internet Agreement

STUDENT AGREEMENT

I understand and agree to the terms of the Stamford Public Schools Acceptable Use of the Internet Policy. I understand that any violation of these terms may result in the loss of Internet access privileges through the Stamford Public Schools' network, the imposition of disciplinary measures and legal action. I also agree to report any known or suspected misuse of the network or the Internet to the system administrator or teacher. Misuse may exist in many forms and shall include, but not be limited to, any messages sent or received that are obscene, racist, defamatory, illegal, or otherwise in violation of school district policy.

All of the rules of conduct described in the Stamford Public Schools Acceptable Use Policy apply when I am using the Stamford Public Schools' network access to the Internet.

Student

Date

PARENT OR GUARDIAN AGREEMENT

As the parent or guardian of the above-named student, I have read the Stamford Public Schools Acceptable Use Policy and understand that access to and utilization of the Stamford Public Schools' network for Internet access is designed for educational purposes. I understand that it is impossible for the Stamford Public Schools to restrict access to all controversial materials, and I will not hold the school district responsible for material acquired from the Internet. I also agree to report any known or suspected misuse of the network or the Internet to the school district system administrator. Misuse may exist in many forms and shall include, but not be limited to, messages sent or received that are obscene, racist, defamatory, illegal, or otherwise in violation of school district policy.

I accept full responsibility for supervision of my child when my child's use of a computer or access to the Internet is not in a school setting or on school property.

I hereby give permission for my child to use the Stamford Public Schools' network to access the Internet and to be issued a Stamford Public Schools account.

Parent or Guardian

Date

Sample Letter to Parents

Dear Parent:

As a Stamford Public School student, your child qualifies to receive a telecommunications account in order to communicate with other schools, organizations, and students around the world. *Your permission is required to activate this account.*

The Stamford Public Schools strongly believes in the educational value of electronic information retrieval services and recognizes their potential to support curriculum and student learning by facilitating resource sharing, innovation, and communication. This educational opportunity also demands personal responsibility.

It is therefore important that you and your child read the Acceptable Use of the Internet Policy (AUP) and discuss it. This policy has already been reviewed in depth with your child by a staff member at his/her school. When your child is given an account to use on the computer, it is extremely important that the AUP and its regulations be followed. Failure to follow them will result in the loss of the privilege to use the Stamford Public Schools' network to access the Internet and could lead to disciplinary action. Please stress to your child the importance of using only his/her own account and the importance of not sharing it with other students.

Although the Board of Education has established an AUP, please be aware that there may be unacceptable or controversial material or communications that your child can access. We cannot control materials available through other computer systems.

After you have read and discussed the AUP, its regulations and responsibilities with your child, and if you agree to allow your child to have an account to access the Internet, **please have your child verbalize to you his/her agreement to abide by the Acceptable Use of the Internet Policy and sign the Acceptable Use of the Internet Agreement in your presence, followed by your signature of agreement.** Then have your child return the "Agreement" to his/her classroom teacher.

If you have any questions, please give me a call.

Sincerely,

Principal

Web Site Policy

INSTRUCTION – #6160

COMPUTERS: WEB SITES/PAGES

The Board of Education allows the district and the schools within the district to create and maintain world wide web sites for educational purposes. Web sites are avenues for educating, providing information, communicating and expressing creativity. district and individual school web sites shall be used to share information about school curriculum and instruction, school-authorized activities, and other information relating to our schools and our mission. Web sites shall also provide instructional resources for staff and students.

Materials displayed on web sites are published on the Internet. Therefore, the content should be professional quality and consistent with the education mission of the school system. Web sites created and maintained under the authority of the Stamford Public Schools shall adhere to ethical and professional standards applicable to information and technology as determined by the Board, acting through its Administration. The Board retains the right to control all content of any web site subject to this policy for legitimate pedagogical reasons. Pages shall reflect an understanding that both internal and external audiences will be viewing the information.

Therefore, any pages or links representing the school district shall follow guidelines and responsibilities pertaining to content standards, student records, copyright, and technical standards that are contained in the administrative regulations that accompany this policy. Publishing privileges are provided to students and staff through the web producer authorized by the Public Affairs Officer.

Regulation Adopted:
July 22, 1999

STAMFORD PUBLIC SCHOOLS
Stamford, Connecticut

COMPUTERS: WEB SITES/PAGES**Subject Matter**

All subject matter on the school district web pages and their links must relate to curriculum and instruction, school-authorized activities, or information about the district or its mission. Staff or student work may be published only as it relates to class projects, courses, or other school-related activity. Students, staff, or other individuals may not use the district's web pages to provide access to their personal pages on other servers or online services.

Quality and Pre-Approval

All work must be free of any spelling or grammatical errors. Documents may not contain objectionable material or point directly to objectionable material. Prior to submission to the Public Affairs Officer, all building level material must have pre-approval of the appropriate building principal. All district level material must have pre-approval of the appropriate district administrator, for example, Director of Curriculum for curriculum materials. Determination regarding whether material is objectionable shall be made on a case by case basis by either the appropriate building principal for building level materials or by the appropriate district coordinator for district level materials.

Privacy and Student Safety Issues

- Documents shall not include any personally identifiable information regarding students, other than information that has been designated "directory information" by the Board through its Student Records policy (policy #5115), unless prior written consent has been obtained from the parent or guardian or eligible student (18 or older). Published e-mail addresses shall be restricted to those of staff members.
- Student photographs are defined as directory information and may be published on district web site(s), unless student's parent or guardian or eligible student him/herself has objected in writing in accordance with policy #5115 to the use of the student's photograph(s) in a school publication.
- Student work shall not be published without prior written consent of the student and his/her parent or guardian, and a member of the central staff administration.

Technical Standards

Each school web page shall contain a disclaimer statement similar to the following: "We have made every reasonable attempt to ensure that our web pages are educationally sound and do not contain links to any questionable material or anything that can be determined in violation of the Acceptable Use Policy." All pages should adhere to the following:

- Conventional length is three standard screens in length unless content is suitable for longer.
- Links to commercial sites are prohibited.
- E-mail links are for professional use only.
- All copyright laws must be adhered to. Authors and sources should always be cited.
- Pages should be submitted on a Windows formatted disk, and in one folder, and also in hard copy, with the signed Pre-Approval Form included.
- The folder should be entitled: schoolinitials.html (i.e., shs.html)
- The folder for school content pages should be entitled: schoolinitials.content.html
- The folder for school graphics should be entitled: schoolinitialsgraphics.html

Links

The district's web sites contain links to other sites on the web. The inclusion of such links is governed by the following criteria:

1. Links may be provided to libraries and other municipal web sites for the City of Stamford.
2. Links may be provided to other public educational institutions' sites.
3. Links may be provided to state and federal agencies' sites.
4. Links will not be provided to commercial sites or private individuals.

The Board of Education maintains the sole discretion to select sites for inclusion on the district's web sites, and to remove such links from the district's web sites.

The Board of Education recognizes that linked sites may lead individuals to materials that do not further the educational mission of the Stamford Public Schools, and may not be appropriate for all users. While particular sites will be reviewed at the time of inclusion to determine the appropriateness of such inclusion, it is impossible for the Board to monitor and/or control the content of such linked sites. Accordingly, the Board takes no responsibility for materials posted on the other sites, even if such materials could be accessed through a link with the Stamford Public Schools' web sites.

Copyright Issues

The Internet has grown into a world wide computer network with many different types of users with many different purposes for their presence. Copyright issues are often brushed aside or completely ignored. As an educational institution, we should be aware of the necessity of conforming to all laws, regardless of how they may be perceived on the Internet. The guidelines stated herein are for our own protection and for teaching by example those principles we wish to instill within our students.

Regulation Adopted:
June 22, 1999

STAMFORD PUBLIC SCHOOLS
Stamford, Connecticut

Regulation Revised:
May 28, 2002

Sample Letter Granting Permission to Publish Student Work

STAMFORD PUBLIC SCHOOLS
P.O. BOX 9310
888 WASHINGTON BLVD.
STAMFORD, CT 06904
(School Website Address: _____)
(District Website Address: www.stamford.k12.ct.us)

School _____
Teacher's Name _____
Grade _____ Room Number _____

Name of Principal

Dear Sir/Madam:

I give permission to publish the following types of schoolwork of my son/daughter's work on the school/district website:

_____ Visual

_____ Artwork

_____ Written work

_____ Personal photograph(s)

Other _____

Student's Name (please print) Signature of Student Date

Parent/Guardian (please print) Signature of Parent/Guardian Date

Central Staff Administrator (please print) Signature of Central Staff Administrator Date

This agreement shall be valid for one calendar year.

Policy References for Staff

For information regarding Computer Software, Internet Use, and Copyright pertaining to staff, please refer to the following policies in the Stamford Public Schools “Policies and Regulations” Manual.

COMPUTER SOFTWARE – POLICY #4033 & #5132

Policy Adopted:
May 6, 1986
Policy Readopted:
July 24, 2001

ACCEPTABLE USE OF THE INTERNET AND OTHER ELECTRONIC SYSTEMS – POLICY #4033.1 & #4033.1-R

Policy Adopted:
March 23, 1999

Policy Readopted:
July 24, 2001

Policy Amended:
September 25, 2001
November 27, 2001

COPYRIGHT – POLICY #4034

Policy Adopted:
May 6, 1986
Policy Amended:
July 24, 2001

Stamford Public Schools
STAMFORD, CT

Appendix B

Server-Based Software & Internet Subscriptions

Server-Based Software & Internet Subscriptions

Content/Subject Area	Elementary School K-2	Elementary School 3-5	Middle School 6-8	High School 9-12
Browser	Internet Explorer			
Foreign Language			Rosetta Stone	Rosetta Stone
Graphic Design			Adobe Photoshop	Adobe Photoshop
Keyboarding Programs	Reader Rabbit Read, Write and Type	Type to Learn	Mavis Beacon Typing	MicroType MultiMedia
Language Arts/Reading	A to Zap!			
	DRP → BookLink			
	Earobics -- Steps 1 & 2			
	Houghton-Mifflin Reading -- Great Start (Grades 2-6)			
	Reader Rabbit Reading Series			
	SuperPhonics (Grades K-4) (planned for future)			
Mathematics		Houghton-Mifflin Math Central	Math Blaster 2	Geometer's Sketchpad
		Math Blaster	Math Blaster -- Pre-Algebra	Mathematica
		Math Keys (Grades 3-6)		
	Millie's Math House (Grades 1-3)			

Server-Based Software & Internet Subscriptions

Content/Subject Area	Elementary School K-2	Elementary School 3-5	Middle School 6-8	High School 9-12
Media & Research	Connecticut Digital Library			
	Encarta Africana 2000			
	Encarta Deluxe 2000			
	Follett Library Automation System v. 5.0			
Media & Research	Grolier On-Line "Deluxe" Encyclopedia Americana, Grolier Multimedia Encyclopedia, The New Book of Knowledge, Nueva Enciclopedia Cumbre en Línea, The New Book of Popular Science			
Media & Research	Nelinet -- Interlibrary Loan System			
	ProQuest Professional Education Collection			
	elibrary		bigchalk library	Gale Group
				Newsbank, Inc.
				ProQuest Platinum
Microsoft Office Suite	Word, Excel, PowerPoint, Access & Publisher			
Multimedia Software	HyperStudio		HyperStudio	
Organizational and Visual Learning	Inspiration			
	Kidspiration (planned for future)			

Server-Based Software & Internet Subscriptions

Content/Subject Area	Elementary School K-2	Elementary School 3-5	Middle School 6-8	High School 9-12
Science	Magic School Bus Series: Rainforest		Physical Sciences	Interactive Physics (planned for future)
		Harcourt Science		
Social Studies/History	TimeLiner			
Specialized Software			Career Futures	Career Futures
				Choices & eChoices Choices Road Map
				Peach Tree Accounting
				Cisco Curriculum
				Qbasic/VisualBasic
				C plus plus
Web Page Design			DreamWeaver	DreamWeaver
Professional Software	Adobe Photoshop			
	DreamWeaver			
	Adobe Acrobat & Lectora Publishing (planned for future)			

Resources

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