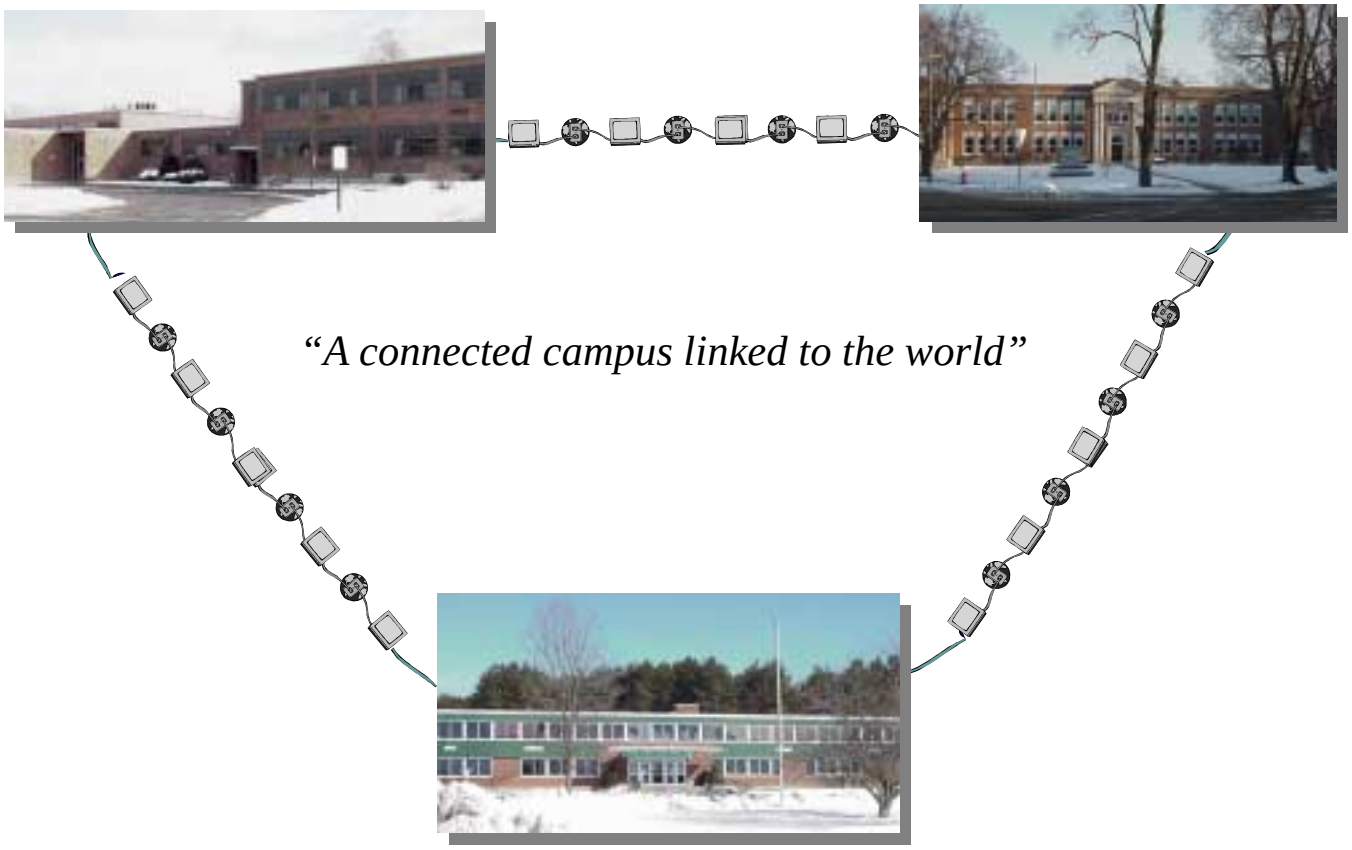
Greenwich Central School
Greenwich, New York



"A connected campus linked to the world"

District Technology Plan
2004-2007

Vision and Strategy for Student Outcomes

Worksheet A-1

as of *5/19/2004*

Background	Students need to learn about technology, and they can often learn better using technology. As we nurture their development into lifelong learners, the learning outcomes we define and work toward must therefore include (1) the development of technological knowledge and skills as well as (2) the interdisciplinary use of technology in all areas of study. Students need to learn how to operate computer hardware, software, and peripherals. They also can learn using technology as they create, express, capture, record, experience, explore, communicate, collaborate, manage, and organize. This section considers the technology-related learning outcomes which this technology plan is designed to help produce.
Present State & Trends	*The NYS Standards provide a framework for student outcomes. Technology Benchmarks for K-12 were reviewed/revised in June, 2003. Detailed Grade Level/Departmental Technology Plans were created in Spring, 2003 and will be reviewed/evaluated annually.*
Preferred Future	*Integrating technology in setting curriculum goals and objectives at the grade/subject level will enable all students to graduate with significant proficiencies to function as an integral part of the community.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Revise Technology Benchmarks 7-12* *Revise Technology Benchmarks K-6* *Review/revise Individual Tech Plans*	*Sept 2004* *Sept 2005* *Annually*

Vision and Strategy for Staff Development

Worksheet B-1

as of *5/19/2004*

Background	Faculty and staff can often teach, learn, and manage better by integrating technology as they work to produce improved learning outcomes among the students they serve. It is a critical yet difficult challenge to provide staff development opportunities that accommodate the broad range of staff learning styles, teaching styles, and technological skill and comfort. Districts must balance the limited supply of time and resources against the demand to "cast a wide net" of learning opportunities and incentives. This section describes the staff development strategy and specific opportunities and incentives that will be provided to develop basic staff proficiency and to encourage & support integration of technology into teaching and learning.
Present State & Trends	*Staff development is provided to all members of the GCS community via our full-time Technology Integration Specialist, the IT department, tech-savvy staff members as well as training opportunities outside the district (e.g, Models Schools). Most teachers demonstrate average to above-average computer skills. A growing number of staff members routinely integrate technology into their teaching.*
Preferred Future	*Individualized and collective staff development opportunities continue so that technology skills and knowledge increase among all staff to a level of proficiency. Individuals within each building will become "experts" who will share their knowledge with others thereby creating an ever-growing population of "go to" people.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Create training component for Grade level/dept.tech plans* *All teachers (K-12) will integrate technology into the curriculum when and where it is appropriate.*	*Annually* *Sept 2005*

Vision and Strategy for Workstation Access

Worksheet C-1

as of *5/19/2004*

Background	Computer workstations come in a variety of forms, including desktop computers, portable computers (a.k.a. "laptops" or "notebooks"), network computers, hand-held computers, and other specialized computers. This section contains the district's "baseline" plan for providing students and staff with access to workstations. (If the access levels specified do not meet the needs of your department, office, or classroom, be sure to provide inputs to the technology committee regarding your preferences & unique needs.) Additionally, this section contains workstation specifications and inventory, and also addresses planning for obsolescence.
Present State & Trends	*In the Primary building there are 3-5 workstations in each classroom plus a teacher presentation workstation. In the Middle Grade building most classrooms have 2 student workstations plus a presentation/teacher workstation and there is a 29-workstation lab. Junior/Senior High classrooms have either a teacher workstation or a teacher presentation station. Some classrooms have student workstations.The Business lab has 24 workstations, the Media Center - 24 workstations, CAD lab - 20 workstations and the HS lab - 18 workstations.*
Preferred Future	*Presentation workstations in all classrooms where needed.* *Increased access to notebooks, tablets, hand-helds.* *Mobile, wireless labs.* *Smaller, more energy-efficient workstations.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Identify needs and procure appropriate equipment* *Mobile, wireless lab (7-12)* *Mobile, wireless lab (K-6)*	*Ongoing* *June, 2005* *June, 2007*

Worksheet C-1a

as of 5/19/2004

Inventory
September 2003

450 Computer Workstations
8 District Servers
8 Laptops
25 Network Switches
2 Wireless Access Points
1 Network Firewall
2 Data tape backup appliances
8 Battery backup power supplies
8 Scanners
10 Digital Still Cameras
2 Mini-DV movies cameras
125 Printers
8 Digital Copiers
6 LCD Projectors

Vision and Strategy for Peripheral Access

Worksheet D-1

as of *5/19/2004*

Background	Computer peripherals are devices which operate physically external to a computer to enable it to interface with users in various ways. Some enable users to provide inputs to the computer (keyboard, mouse, microphone, camera, etc.) while others enable the computer to deliver outputs to the user (speakers, printers, projectors, etc.) As networks enable remote connections between computers and peripherals, classrooms can be connected (carefully) to a world of scientific and exploratory sensors, cameras, etc. Using adaptive devices (vision, hearing, speech, touch, etc.) special needs learners can more equitably access computers. This section describes district needs for access to computer peripherals.
Present State & Trends	*All classrooms, labs & offices have B/W printers and access to color printers. Other peripherals include TV/VCR, DVD players, scanners, digital cameras, mini-DV cameras, web cams, multi-function color copier/printers, digital microscope and scientific probes, LCD projectors, multi-media carts,and robotic equipment.*
Preferred Future	*Convenient access to peripherals to meet teachers' curricular needs. Access to projection devices to enable use of technologies in group settings.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Identify needs and procure necessary equipment*	*Ongoing*

Vision and Strategy for Software and Data Access

as of *5/19/2004*

Background	An ever-increasing number of software programs are available for use by students and staff. When wisely integrated into teaching and learning, many of these programs can become valuable educational tools. Similarly, there is also an increasing amount of electronic data that is or can be available. Students, staff, parents, and community members can benefit from appropriate access to district information such as student records, schedules, homework, and library resources. With so many options, it is important to balance individuals' unique needs against broader needs for standardization, security, privacy, and low costs. This section describes how access to software and data will be managed.
Present State & Trends	*A broad variety of software packages are available to workstations via the network.*
Preferred Future	*Standardized software and data will be conveniently available to staff, students, parents, and community in an appropriate and secure manner.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Identify software needs*	*Ongoing*
	Lunch-line automation	*Sept 2004*
	Explore/test methods of providing home-access.	*Sept 2004*
	Begin home data access	*Jan 2005*

Vision and Strategy for Connectivity

Worksheet F-1

as of *5/19/2004*

Background	Workstation capabilities can be greatly enhanced by connecting them to local and wide area networks, on-line services, distance learning networks, and the Internet. This section describes preferred access to connectivity along with specifications for associated network wiring, hardware, and software.
Present State & Trends	*Network/internet access available in all district classrooms. Access times are occasionally slow due to network congestion.*
Preferred Future	*Increased bandwidth on the LAN and to the Internet.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Maintain LAN/WAN hardware for optimal performance* *Increase connectivity to the Internet* *Provide appropriate staff development on network usage*	*Ongoing* *Jan 2006* *Ongoing*

Vision and Strategy for Policy

Worksheet G-1

as of *5/19/2004*

Background	Technology requires a unique set of policies & formal procedures to ensure that it is properly purchased & maintained, equitably accessible, appropriately safeguarded, and responsibly used. Of course, policy is only effective where it is understood and implemented. This section reviews the content and effectiveness of existing policies & formal procedures and assesses the need for modifications and additions.
Present State & Trends	*Computer Network for Education/Computer Usage Policy and the Consent to Publish Student Information on the Internet Policy are in place. Formal procedures for the selection & purchase of instructional hardware and software are in place.*
Preferred Future	*Technology acquisition, access, use and disposition policies are broadly understood and implemented.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Insure active membership in Technology Committee* *Reconvene Technology Committee*	*Ongoing* *Jan 2004 and ongoing*

Vision and Strategy for Support

Background	Technology is largely ineffective without an adequate and properly trained support staff. Technology responsibilities that must be handled include planning, designing, purchasing, installing, maintaining, troubleshooting, training, grant writing, assessment, and more. This section charts how these responsibilities are assigned presently and identifies changes that will be made.
Present State & Trends	*Technology Coordinators* *Network Analyst* *Network Coordinator* *Technology Integration Specialist* *Computer Lab Aide* *Technology Committee*
Preferred Future	*Maintain our professional team of full-time personnel to support our staff development, technical, and network administration needs.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Professional development opportunities*	*Ongoing*

Vision and Strategy for Communication and Cooperation

Worksheet I-1

as of 5/19/2004

Background	As in most endeavors, communication and cooperation are critical to the successful integration of technology into teaching and learning. All stakeholders, including faculty, staff, students, parents, boards of education, and other community members must be kept reasonably well informed about plans, opportunities, and developments. Meanwhile, collaborative opportunities often exist with other schools, agencies, corporations, etc. These can help leverage technology investments and provide additional funding and/or support. This section describes present and planned communications and cooperative efforts related to technology and this plan.
Present State & Trends	*Technology Committee involvement has decreased since the completion of our building project. Community Technology Workshops have increased awareness among taxpayers. Daily bulletins are 100% online each day.Teacher-created web pages have increased dramatically. Email service has been reliable. The end of NHEEEP has resulted in less interaction with other districts.Regular attendance at many WSWHE BOCES school support meetings.*
Preferred Future	*Staff, students, parents and community members will understand, support and participate in our Technology Plan. Encourage and foster digital means of communication and sharing of data throughout the district and community.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Create a Technology News section of the district's newsletter.*	*Jan 2004*
	Continue Community Technology Workshops.	*Jan 2004*
	Host Model School training opportunities.	*Jan 2005*
	K-6 lunch count ordered digitally	*June 2005*
	Attendance taken and tracked digitally	*June 2005*
	District common use forms available digitally	*June 2007*

Vision and Strategy for Funding

Worksheet J-1

as of *5/19/2004*

Background	To enable technology to effectively improve teaching and learning, adequate resources must be allocated on a regular basis. Funds are needed for capital costs such as hardware & software acquisition & installation. However, industry standards estimate that these up-front costs represent only 30% of the life-cycle cost of technology. Substantial funds are also needed to cover operating costs such as ongoing training, upkeep, support, consumables, upgrades, connectivity fees, etc. While recognizing the inherent uncertainties of forecasting technology costs, this section projects technology-related costs by year and identifies appropriate funding sources. It will be kept as accurate as possible through periodic updates.
Present State & Trends	*Funding via district commitment: Title I, Tittle IID, BOCES aide and State aide. Additional funding through grants and awards.*
Preferred Future	*Increased support through grant-writing and local budgetary commitment.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Continued vision of the Business Office for funding support* *Explore grant possibilities*	*Ongoing* *June 2005 and ongoing*

Worksheet J-1a

as of 5/19/2004

Estimated Annual Operational Costs

Personnel:	$124,006
Staff development:	$2,900
Hardware Upkeep & Upgrades:	$17,814
Software Additions & Upgrades:	$23,728
Consumable Materials:	$14,789
Connectivity Fees:	$47,238
Computers BOCES Lease:	$77,055
TOTAL:	$307,530

Vision and Strategy for Implementation

as of *5/19/2004*

Background	Monitoring progress improves the likelihood of successful implementation of a plan. This is often accomplished by a technology committee composed of a representative cross-section of district personnel. Because of the plethora of technical issues and details, implementation of a technology plan requires an organized yet flexible approach. This section contains implementation tracking tools such as a multi-year timeline, a quarterly calendar of tasks & events, a schedule of technology committee meeting focus areas & agendas, and a key objectives report card.
Present State & Trends	*District Technology Committee formed and meets infrequently.* *The district is actively implementing the Technology Plan.*
Preferred Future	*The Technology Committee is a cohesive group that meets regularly with a clear understanding of its role, purpose and expectations.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

	Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
	*Insure active membership in Technology Committee* *Re-convene Tech Committee*	*Ongoing* *Feb 2004 and as needed*

Vision and Strategy for Assessment

Worksheet L-1

as of *5/19/2004*

Background	This technology plan is successful if it helps the district accomplish its mission. Unfortunately, measuring progress towards the mission and correlating it with some or all of the specific actions in this plan is difficult at best. However, attempting to assess such progress is the key to learning and growth, and result-oriented feedback is the primary requisite for making technology planning a process. A variety of methods can be used to assess knowledge and performance outcomes, such as monitoring specific results within standardized tests, building a portfolio of authentic works, tracking trends in periodic surveys, and so on. This section contains evidence of results in terms of staff and student outcomes.
Present State & Trends	*The District Technology Overview states specific goals for each grade level K-12. It was developed via a collaborative effort between our district Technology Committee and staff members.The Overview is posted on our web site http://www.greenwichcsd.org/integration/benchmarks/ and is being used by all teaching staff.*
Preferred Future	*The district will have an acceptable method of quantifying the effectiveness of the district Technology Plan's achieving the district's mission.*
Strategy for Change	*Each Grade Level/Departmental Technology Plan will be reviewed and revised annually to insure that goals are met or revised as necessary.*

Key Objective *(specific, achievable, scheduled, and delegated)*	**Target Date:**
Revise Technology Benchmarks 7-12	*Sept 2004*
Create assessment tool to insure success of Individual Technology Plans	*June 2005*
Create/implement self-assessment vehicle for staff tech usage K-12	*June 2006*
Compile/analyze self-assessment results	*Jan 2007*