

# **GCS Information Technology Department**

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Presentation to  
The Board of Education  
08-08-2011





# Technology Overview

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## Support Overview

- 520 desktop workstations
- 260 laptops
- 15 file servers
- 50 LCD projectors
- 28 Interactive whiteboards
- All classrooms wired for network, many wireless
- Fiber connections to all buildings
- 4 MB fiber connection to Mid Hudson Cable
- Variety of software applications

## Technology Committee

- 12 members - met six times last year
- Current Technology Plan approved 6/2010, updated 5/2011

# Technology Plan 2010-11

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- Upgraded all network switches district wide for a more robust infrastructure
- Installed access points in about ½ of Elementary School classrooms.
- Conducted Google Docs pilot with select groups
- Upgraded our Library automation software in both media centers
- Installed eleven Promethean interactive whiteboards with document cameras in Elementary School
- Provided laptops to all teaching staff with interactive whiteboards
- Replaced old phone system – added phones in all classrooms
- Implemented electronic Report Cards in the Elementary School
- Provided district email accounts to all high school students

# NYS Comptroller's Office Network Security Audit

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- The Office of the State Comptroller (OSC) has created the Applied Technology Unit (ATU) to “assist” with school district audits. (Training auditors, perform IT audits, provide districts with advance information)
- I attended a seminar given by Randy Rose of the ATU sponsored by the NYS School Boards Association – “Safeguarding your School’s Information Technology”
- Discussed key areas of recent technology audits
- How we are responding

Security vs. Usability

Risk = threat (agent) & vulnerability (weakness)

NYSTEC



GREENVILLE  
CENTRAL SCHOOL DISTRICT

# Information Technology Assessment

YOUR INDEPENDENT TECHNOLOGY ADVISOR

BRINGING CLARITY TO COMPLEX TECHNOLOGY PROJECTS

# Study Objective

The logo for NYSTEC (New York State Technical Education Council) is displayed in a white box with a blue border. The background of the slide features a blue and black abstract graphic with a grid pattern and a glowing effect.

## **Objective**

Independently assess Greenville's "As-Is" information technology to identify commendations and recommendations related to:

- District Technology Plan, Fiscal Years 2010-2013
- Wide Area Network Architecture
- Local Area Network Architecture
- Server and Application Environment
- Future Initiatives

# Scope

The logo for NYSTEC, featuring the letters "NYSTEC" in a bold, blue, sans-serif font. The text is contained within a white rectangular box with a blue border. The background of the logo area is a blue and white grid pattern with a wavy, liquid-like effect.

## **Scope**

- Review of readily-available plans, system documentation, site surveys and network utilization reports
- Interview Greenville stakeholders for technical needs and requirements
- Limited Scope : Total 80 hour effort
- August 26<sup>th</sup> target completion date

# Status Update

The logo for NYSTEC, featuring the letters "NYSTEC" in a bold, blue, sans-serif font. The letters are contained within a white rectangular box with a blue border. The background of the slide features a blue, abstract, wavy pattern that resembles a digital or network interface.

## Tasks Completed

- District site survey performed
- Multiple interviews with GCSD CIO
- Multiple documentation requests fulfilled
- NYSTEC attended an IT Steering Committee meeting
- NYSTEC met with several teachers and students during the site survey and IT Steering Committee Meeting

## Ongoing Tasks

- NYSTEC is currently meeting with NERIC, Questar BOCES, and Mid-Hudson Cable to identify additional opportunities for the district.

# Sample Findings & Recommendations

The logo for NYSTEC, featuring the letters 'NYSTEC' in a bold, blue, sans-serif font inside a white rectangular box with a blue border. The background of the slide features a blue and white grid pattern with a glowing blue light effect.

- **Wide Area Network**

*Key Finding: The Greenville Internet connection provided by Mid-Hudson Cable is no longer adequate to support the needs of the district.*

***Recommendation:** Plan to upgrade the Internet connection bandwidth in the most cost effective way to support the District's needs for the next 3 – 5 years. In addition, the internet connection should support cloud based solutions.*

Note: Greenville and NYSTEC are working with NERIC, Mid-Hudson Cable and Questar to find the best upgrade path for the district. A recommendation will be made in the final report.

# Sample Findings & Recommendations

The logo for NYSTEC, featuring the word "NYSTEC" in a bold, blue, sans-serif font inside a white rectangular box with a blue border. The background of the slide features a blue and black abstract graphic with light streaks and a grid pattern.

- **Local Area Network (LAN)**

***Finding:** The LAN has extra capacity to handle existing and future applications. Access switches connect back to the Core/Distribution switch at 2Gbps.*

***Recommendation:** As the District continues to rely on the LAN for critical applications such as Phone system (Voice Over Internet Protocol-VoIP), it is recommended that District considers a redundant core switch to provide high availability at the Core and Distribution Layers.*

# Sample Findings & Recommendations

The logo for NYSTEC, featuring the letters "NYSTEC" in a bold, blue, sans-serif font inside a white rectangular box with a blue border. The background of the slide features a blue, abstract, wavy pattern.

- **Security**

***Finding:** Greenville recognizes the importance of disaster recovery and business continuity planning. The current disaster recovery plan primarily focuses on technology only. Although this is important, it is just one key piece of an overall disaster recovery strategy.*

***Recommendation:***

- *Contract with an independent third-party who specializes in disaster recovery planning to develop a comprehensive disaster recovery and business continuity plan.*
- *Establish a security committee charged with periodically updating, reviewing and testing the disaster recovery plan. The committee, at a minimum, should be comprised of the District Superintendent, Business Official, and Technology Director.*

# Sample Findings & Recommendations

**NYSTEC**

- **District Technology Plan**

*Finding: Detailed action plans support the Technology Plan Goals but goals are not tied to a particular District Educational Strategy.*

*Recommendation: Articulate how the Technology Goals and Action plans support the Districts' Educational Strategies*



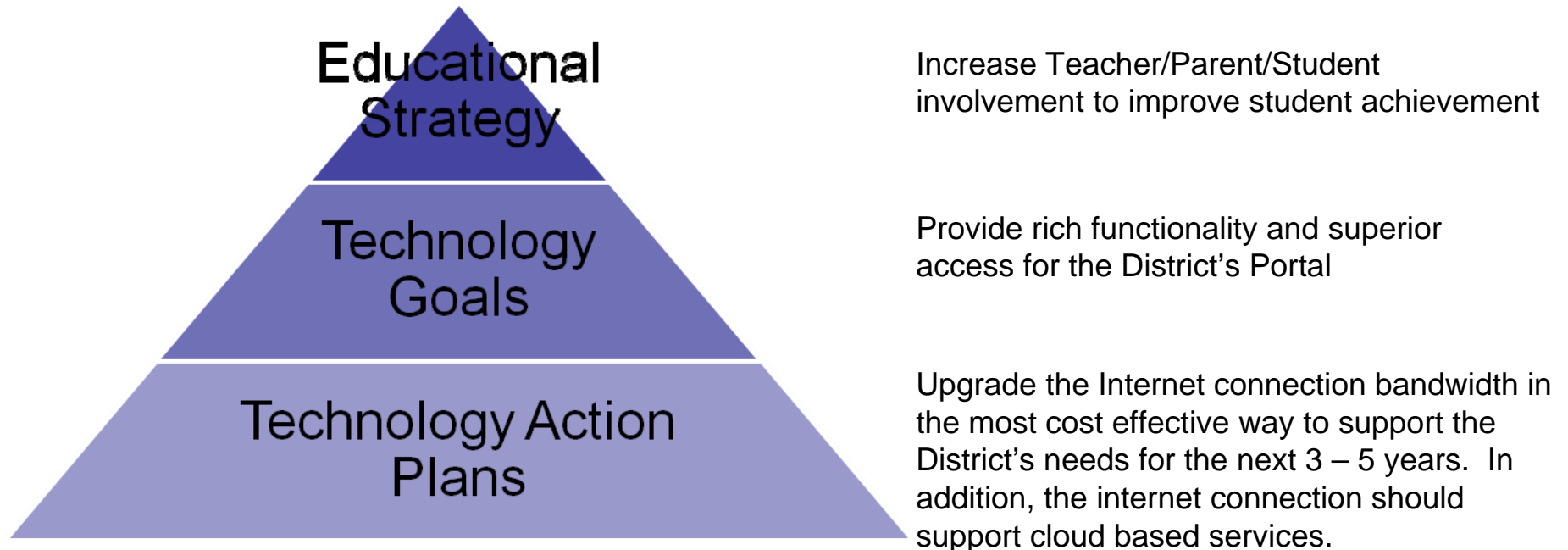
# Sample Findings & Recommendations

NYSTEC

- **District Technology Plan**

*Finding: Detailed action plans support the Technology Plan Goals but goals are not tied to a particular District Educational Strategy.*

*Recommendation: Articulate how the Technology Goals and Action plans support the Districts' Educational Strategies*



*Preliminary Draft Recommendations - For Discussion Purposes Only*

# Cloud Computing – next step

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- Google Apps Pilot (exploration phase)
  - Promotes collaboration through document sharing
  - Online set of tools for student and faculty
- NERIC Connect (exploration phase)
  - Promotes collaboration like Google Apps
  - Three categories (Admin, Virtual Classroom, Data)
  - Includes online version of Office suite for all students and faculty
  - Admin – paperless office
  - Virtual Classroom – shared docs, wikis, blogs, discussion boards
  - Data - Integration with Schooltool & NERIC test data repository

# Technology Plan 2011-12

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- Finish installing wireless access point in Elementary School
- Replace all classroom desktops in the Elementary School with wireless laptops.
- Install new multimedia equipment in Elementary Auditorium in conjunction with capital project that is underway.
- Upgrade productivity software (Office) district wide
- Continue our move to cloud computing applications

# GCS Information Technology

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Questions  
&  
Answers

**GREENVILLE CENTRAL SCHOOL DISTRICT**

Technology Plan

*Fiscal Years 2010 - 2013*

GREENVILLE CENTRAL SCHOOL DISTRICT  
Technology Plan  
Fiscal Years 2010 – 2013

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GREENVILLE CENTRAL SCHOOL DISTRICT  
Technology Plan  
Fiscal Years 2010 – 2013

**Mission Statement**

The mission of the Greenville Central School District, with vital community partners, is to present the world with a gift of well educated graduates who will forge ahead as confident thinkers, empowered learners and compassionate, responsible leaders by insuring superior instruction with total support for excellence and vision.

**Technology Committee**

As part of K-12 district planning, the Director of Technology has facilitated the formation of a Technology committee for the purpose of creating and maintaining a K-12 technology plan, facilitating communication regarding technology within GCS learning community, and acting as an advising committee to both the Quality Education Committee and District Planning Committee. The committee members will be selected annually. Meeting will be held quarterly with additional meetings scheduled as necessary.

Current Technology Committee Members:

Director of Technology:	Scott Gardiner
Faculty - Elem Technology:	Pam Hollinde
Faculty – MS / HS Technology:	Linda Esposito
Faculty Member - ES:	Margaret Robertson
Faculty Member - ES:	Barbra Drasby
Faculty Member - ES:	Vikki Hawkins
Faculty Member - MS:	Kathryn McAneny
QEC Member:	Jose Roselli
Cabinet Member:	Michael Laster
BOE Member:	Lawrence Tompkins
Parent Member:	Edward Cox
Parent Member:	Richard Gage

GREENVILLE CENTRAL SCHOOL DISTRICT  
Technology Plan  
Fiscal Years 2010 – 2013

**Technology Overview – Infrastructure**

The Greenville Central School District maintains a hardware infrastructure to support both the learning community and the district business office. Our district is housed on one campus with four separate buildings. A fiber backbone is at the heart of our network and connects all buildings. The server room in the high school serves as a hub for these fiber connections. All classrooms and office spaces are wired for network connectivity. High speed network switching gear by Enterasys© provides port access to these classrooms and office spaces district-wide.

Internet access is provided district-wide to all workstations to support both administrative and instructional needs. Internet service is provided via a direct connect fiber link from Mid-Hudson cable, our Internet service provider (ISP). GCSD has currently purchased a bandwidth capacity of 4.0 Mbps from Mid-Hudson. All students and staff are provided access to the Internet through a firewall and Internet proxy appliance. The firewall protects our network from unwanted and possible harmful intrusions from the outside Internet. The Internet proxy appliance protects students and faculty from inappropriate Internet sites via a content filtering system. This filtering system is updated every night by our filtering vendor to provide up to date filtering and logging of Internet content for all users. GCSD has been in compliance with the CIPA (Child Internet Protection Act) since its inception in early 2001.

Ten dedicated file servers provide application support for administrative and instructional needs. Each server is equipped with RAID 5 storage architecture for data redundancy in the event of a hardware failure. Two tape backup systems provide the means to restore files in the event of a disaster or accidental deletion of data. Tape backups are stored both on-site and off-site in compliance with our disaster recovery plan.

Providing resources for the integration of technology into classroom instruction is a fundamental goal of our district's information technology (IT) department. To this end, classroom computers and multimedia technologies exist to support instruction in each discipline. We currently support over 500 desktop workstations in three schools, and various offices. The Scott M. Ellis Elementary School averages 4-5 classroom computers per classroom. The Greenville Middle School averages 4-5 classroom computers per classroom. The Greenville High School averages 2-3 classroom computers per classroom. In addition, the district technology department supports two media centers with 25 computers, and 3 computers labs with 75 computers, and five mobile computer labs with 110 laptops. The IT department has also been installing and supporting other instructional technologies such as interactive whiteboards and multimedia projection systems in many classrooms to further enhance instruction. To date there are

approximately 30 interactive whiteboards and 50 LCD projection systems in classrooms throughout the district.

Several major applications exist to support information management for the school community. SchoolTool© by Mindex, Inc. has been utilized since the 2008 school year for student information management, including processes for attendance, discipline, scheduling, and grade reporting. This application continues to enhance communication between faculty and staff and between home and school. The process of curriculum mapping was instituted during the 2007 – 2008 school year with the purpose to coordinate and align K – 12 instruction throughout the district. Atlas© by Rubicon software is the application we utilize to support the curriculum mapping process. QueCentre© continues to be our facility management application for the scheduling of events and maintenance needs across the district. Access to the building use calendar utilizing this application is made available through our district website. Other major software applications that the IT Department manages and supports include: NutriKids point of sale system for food service, Follett library system, Transfinder and PetroVend for transportation, and SNAP Health Center for nurse's medical documentation. Managing these software applications provides faculty, staff, students, and parents with the necessary tools to promote student achievement in our district.

Integrating technology into our instruction has been and continues to be a high priority of the Greenville Central School District. The constantly changing nature of technology requires a periodic review of our implementation of this goal. To that end, we look to the future with the following technology goals.

### **Technology Goals**

1. Provide students with access to a variety of resources that will enable them to develop 21<sup>st</sup> century learning skills for their future study and employment.
2. Provide support to all faculty and administration to assist them in meeting technology competency standards that will ensure their ability to increase student achievement of the New York State learning standards.
3. Engage parents and the community through the development of electronic communications mechanisms.
4. Develop and maintain an equitable and sustainable financial plan for technology investments.
5. Ensure that teachers, administrators, students, and families have equitable access to high-speed connectivity, up-to-date hardware and software.

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation - Goal 1: Provide students with access to a variety of resources that will enable them to develop 21<sup>st</sup> century learning skills for their future study and employment.**

<b>Tactic 1</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Infrastructure</b>	1. Provide an additional mobile lab cart for MS/HS.	Director of Technology	Lab cart in use	May 2010 <i>Completed 3/1/2010</i>	Ongoing by IT Department	Tech Budget	Director of Technology
	2. Provide two mobile lab carts for Scott M. Ellis Elementary.	Director of Technology	Lab cart in use	May 2010 <i>Completed 3/1/2010</i>	Ongoing by IT Department	Tech Budget	Director of Technology
	3. Upgrade existing computer workstations in Scott M. Ellis Elementary.	Director of Technology	Workstations purchased and installed.	Sept 2011	N/A	Tech Budget	Director of Technology
	4. Upgrade all existing network switches district-wide.	Director of Technology  Stieglitz Snyder Architecture	Network switches purchased, installed, and operational.	Sept 2010 <i>Completed 4/25/2011</i>	Vendor training of IT Staff	Capital Project Tech Budget	Director of Technology
	5. Continue to add additional wireless access points to expand our wireless network.	Director of Technology	Wireless access points purchased and installed	Jan 2011 <i>Completed 4/25/2011</i>	N/A	Tech Budget	Director of Technology

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 1: Provide students with access to a variety of resources that will enable them to develop 21<sup>st</sup> century learning skills for their future study and employment.**

<b>Tactic 2</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Software</b>	1. Implement Google Apps for education.			March 2010 <i>Completed 3/1/2010</i>			
	a. Setup educational account with Google.	Director of Technology	Account setup		N/A	N/A	Director of Technology
	b. Contact other schools using Google Apps for possible site visits.	Technology Committee	Sites visited	April 2010 <i>Completed 5/1/2010</i>	N/A	N/A	Director of Technology
	c. Pilot Apps with a small group of faculty and students or other groups.	Director of Technology HS Faculty	Google Apps being used by pilot group(s)	May 2010 <i>Completed 9/1/2010</i>	In house	N/A	Director of Technology
	d. Rollout Apps to entire high school.	Director of Technology HS Faculty	Google Apps being used by high school faculty and students	Nov 2010	Outside trainer NERIC	PPC	Director of Technology HS Principal
	2. Achieve software license compliancy district-wide.						
a. Conduct software inventory of all workstations.	QEC	Inventory completed	April 2010 <i>Completed 6/30/2010</i>	N/A	N/A	Director of Cur and Comm.	
b. Delete software no longer used from workstations	Director of Technology	Non used software deleted from all workstations	Jun 2011	N/A	N/A	Director of Technology	

	c. Compile non-compliance report.	Director of Technology	Report completed	July 2010	N/A	N/A	Director of Technology
	d. Develop purchasing plan for non-compliant software	Director of Technology	Plan completed	Oct 2010	N/A	N/A	Director of Technology
	e. Purchase licenses	Director of Technology	Licenses purchased	Jul 2011	N/A	Tech Budget	Director of Technology
	3. Investigate updating library automation software.	Director of Technology ES/HS Media Specialists	Recommendation made to Technology Committee	Jan 2011 <b>Completed 3/10/2011</b>	N/A	N/A	Director of Technology

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 1: Provide students with access to a variety of resources that will enable them to develop 21<sup>st</sup> century learning skills for their future study and employment.**

<b>Tactic 3</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Multimedia</b>	1. Install interactive (Promethean) whiteboards in Scott M. Ellis classrooms.	Director of Technology	Equipment installed and in use.	Jun 2010 <i>Completed 9/1/2010</i>	Vendor training.	Tech Budget	Director of Technology
	2. Install portable document camera(s) in Scott M. Ellis	Director of Technology	Camera(s) installed and in use.	Jul 2010 <i>Completed 12/1/2010</i>	In house	Tech Budget	Director of Technology
	3. Re-work Scott M. Ellis computer lab / media center to accommodate interactive whiteboard and laptops	Director of Technology	Laptops and interactive whiteboard in use in space occupied by the computer lab.	Sept 2010 <i>Completed 9/1/2010</i>	In house	Tech Budget	Director of Technology

<b>Tactic 4</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Distance Learning</b>	1. Continue research into various distance learning options that would benefit our district.	Technology Committee	Research completed and compiled.	Mar 2011	N/A	N/A	Technology Committee
	2. Develop pilot plan for distance learning.	Technology Committee	Pilot plan completed.	Jun 2011	N/A	N/A	Technology Committee

BOE Approved 06-28-2010 (updated 05-09-2011)

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation - Goal 2: Provide support to all faculty and administration to assist them in meeting technology competency standards that will ensure their ability to increase student achievement of the New York State learning standards.**

<b>Tactic 1</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Professional development</b>	1. Provide support for teacher technology proficiency						
	a. Review technology needs assessment survey.	Technology Committee	Survey reviewed	Jun 2010 <i>Completed 6/30/2010</i>	N/A	N/A	Technology Committee
	b. Conduct teacher technology proficiency assessment based on NYS standards.	Director of Technology	Assessment conducted	Sept 2010	N/A	N/A	Director of Technology
	c. Make recommendation to Professional Practices Committee regarding Technology professional development.	Technology Committee	Recommendations made to PPC	Dec 2010	N/A	N/A	Technology Committee
	d. Technology professional development selected and implemented	Technology Committee PPC	Faculty provided with training recommended by the Tech Committee	Jun 2011	Various	PPC	PPC
2. Provide faculty with training support for required software applications (SchoolTool, QueCentre, etc.)	Director of Technology	Trainings made available at various times (conf. days, in-service, etc.)	Ongoing	Ongoing by IT Department NERIC	N/A	Director of Technology	

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 2: Provide support to all faculty and administration to assist them in meeting technology competency standards that will ensure their ability to increase student achievement of the New York State learning standards.**

<b>Tactic 2</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Faculty resources</b>	1. Continue to develop a Technology support section of the district website (FAQs, Tutorials, links, etc.) to support faculty and staff.	Director of Technology	New support pages added and being used	Sept 2011	N/A	N/A	Director of Technology
	2. Provide additional laptops for faculty to check out for curriculum work.	Director of Technology	Laptops made available in faculty pool	Sept 2010 <i>Completed 9/1/2010</i>	N/A	Tech Budget	Director of Technology
	3. Provide laptops for Interactive whiteboard users to develop curriculum off site.	Director of Technology	Laptops made available to interactive whiteboard users	Sept 2010 <i>Completed 9/1/2010</i>	N/A	Tech Budget	Director of Technology

<b>Tactic 3</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Mentors</b>	1. Work with the PPC to develop a “technology mentor” program to provide additional support to faculty and staff.	Technology Committee	Program in place and mentors selected	Nov 2010	N/A	Unknown	Technology Committee

BOE Approved 06-28-2010 (updated 05-09-2011)

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation - Goal 3: Engage parents and the community through the development of electronic communications mechanisms.**

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 1</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Website</b>	Continue to implement plan to provide teachers with a unified method of maintaining web pages.						
	a. Purchase web authoring software and install on workstations.	Director of Technology	Software purchased and installed	Aug 2010	N/A	Tech Budget	Director of Technology
	b. Training on software provided to faculty	Director of Technology PPC	Training completed	March 2011	Vendor training	PPC	Director of Technology
	c. Unified templates provided to faculty for their web pages	Director of Communication Questar	Teacher web pages re-designed with new templates	June 2011	Questar	Communications	Director of Communications

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 3: Engage parents and the community through the development of electronic communications mechanisms.**

<b>Tactic 2</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Telephone/ voice mail</b>	1. Replace current phone and voice mail systems.	Technology Committee  Director of Technology  Supervisor of Buildings and Grounds  Stieglitz Snyder Architecture	New system installed and used by all district personnel	Sept 2010 <i>Completed 9/1/2010</i>	Initial training provided by vendor.  Additional ongoing training in house	General Budget capital project	Director of Technology  Supervisor of Buildings & Grounds

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 3: Engage parents and the community through the development of electronic communications mechanisms.**

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 3</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Student Management System</b>	Continue to provide enhancements and rollout new features of the SchoolTool student management system.						
	1. Implement Elementary Report Cards	ES Faculty ES Principal Director of Technology	Electronic report cards being utilized	Sept 2010 <b>Completed 9/1/2010</b>	NERIC class Ongoing support	Tech Budget	Director of Technology
	2. Implement Teacher entered Discipline in MS/HS.	MS Faculty HS Faculty	Discipline being entered by teachers using SchoolTool.	Sept 2010 <b>Completed 9/1/2010</b>	In house Ongoing	N/A	Director of Technology
	3. Implement integration between SchoolTool and ClearTrack.	Director of Technology Director of PPS	Cleartrack database updated from SchoolTool	June 2010	N/A	N/A	Director of Technology
	4. Implement integration between SchoolTool and NutriKids (Lunch POS).	NERIC Director of Technology Food Service Supervisor	NutriKids database updated from SchoolTool	July 2010 <b>Completed 9/1/2010</b>	N/A	N/A	Director of Technology

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 3: Engage parents and the community through the development of electronic communications mechanisms.**

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 3</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Student Management System</b>	5. Implement integration between SchoolTool and Follett (library system).	NERIC Director of Technology Media Specialists	Follett database updated from SchoolTool	Sept 2010 <b>Completed 3/10/2011</b>	N/A	N/A	Director of Technology
	6. Implement integration between SchoolTool and Transfinder.	NERIC Director of Technology Transportation Supervisor	Transfinder database updated from SchoolTool	Nov 2010	N/A	N/A	Director of Technology
	7. Develop and implement a plan to communicate Parent Portal use to parents in the community.	Director of Technology Principals Director of Communication	Plan in place and parents informed.	Aug 2010 <b>Completed 9/1/2010</b>	N/A	N/A	Director of Technology

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation - Goal 4: Develop and maintain an equitable and sustainable financial plan for technology investments.**

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 1</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Five-year budget</b>	1. Increase personnel to support technology demands/needs.	Technology Committee	Proposal to Supt	Nov 2009	N/A	Tech Budget	Director of Technology
			BOE approval	March 2010	N/A	Tech Budget	
	2. Develop plan for 2010-11 technology lease purchase through Questar. Plan to include workstations for Ellis and district network switch upgrades.	Director of Technology	Quotes received, orders placed through Questar	May 2010 <i>Completed 1/1/2011</i>	N/A	Tech Budget	Director of Technology

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 2</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Long- range equipment plan</b>	1. Add LCD projector / multimedia purchases to long-range equipment plan.	Technology Committee Administrators Director of Technology	Classroom multimedia added to long range equipment plan.	Nov 2011	N/A	N/A	Technology Committee

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation – Goal 4: Develop and maintain an equitable and sustainable financial plan for technology investments.**

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 3</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Procedure</b>	1. Develop a software purchasing procedure to be implemented district-wide.	Technology Committee  Director of Technology	Plan completed and distributed to faculty and administrators	Dec 2011	N/A	N/A	Director of Technology

**GREENVILLE CENTRAL SCHOOL DISTRICT  
2010-2013**

**Implementation - Goal 5: Ensure that teachers, administrators, students, and families have equitable access to high-speed connectivity, up-to-date hardware and software.**

<i>What</i>	<i>How</i>	<i>Who</i>	<i>Measure</i>	<i>Timeline</i>	<i>Support</i>		<i>Responsibility</i>
<b>Tactic 1</b>	<b>Major Tasks and Activities</b>	<b>Participants</b>	<b>Evidence of Completion</b>	<b>Due Date</b>	<b>Professional Development</b>	<b>Funding</b>	<b>Who ensures completion</b>
<b>Infrastructure</b>	1. Provide wireless access and laptops to give unstructured computer access for MS/HS students in common areas.	Director of Technology	Laptops in use Wireless access available.	Sept 2010 <b>Completed 9/1/2010</b>	N/A	Tech Budget	Director of Technology
	2. Continue to expand and provide wireless internet access for the community.	Director of Technology	Wireless access available	Sept 2010 <b>Completed 4/25/2011</b>			

GREENVILLE CENTRAL SCHOOL DISTRICT  
Technology Plan  
Fiscal Years 2010 – 2013

**Professional Development**

Embedded in the technology plan are multiple opportunities to increase staff members' technology literacy, awareness, and confidence. These opportunities include but are not limited to, in-service course offerings, vendor trainings, one-to-one tutorials, and ongoing training by the IT department. Faculty will receive trainings to develop their own web page to facilitate parent-teacher communication. A technology section on the district's website will continue to be available to faculty with support information such as: frequently asked questions, tutorials, and links to other technology applications. A proficiency assessment will be conducted in conjunction with Quality Education Committee, Instructional Administrators, and Technology Committee to determine further professional development opportunities.

These professional development opportunities will ensure that each professional is well qualified to integrate technology effectively into curricula and instruction and assist students in achieving the New York State learning standards.

**Evaluation**

This technology plan is a changing document and in order to assess its success, it will be reviewed and updated at least annually. The technology committee will meet on a regular basis throughout each year to evaluate the plan and ensure that our technology initiatives are appropriately implemented. This group will assess our technology program and determine if the goals have been met. The committee will also ensure that the goals outlined in this plan remain in alignment with the organizational goals and beliefs of the Greenville Central School District.

GREENVILLE CENTRAL SCHOOL DISTRICT  
Technology Plan  
Fiscal Years 2010 – 2013

**Technology Inventory**

Updated 03-04-2010

Scott M. Ellis Elementary – Enrollment: 540	
Desktop Workstations	215
Laptops	44
Interactive Whiteboards	9
LCD Projectors	11
Laser Printers	8
Deskjet Printers	55
Presentation Computer Monitors	37

Middle School – Enrollment: 300	
Desktop Workstations	115
Laptops	42
Interactive Whiteboards	10
LCD Projectors	14
Laser Printers	13
Deskjet Printers	17
Presentation Computer Monitors	4

High School – Enrollment: 415	
Desktop Workstations	180
Laptops	60
Interactive Whiteboards	8
LCD Projectors	23
Laser Printers	28
Deskjet Printers	20
Presentation Computer Monitors	11

District Office / Transportation	
Desktop Workstations	11
Laptops	7
Interactive Whiteboards	0
LCD Projectors	0
Laser Printers	6
Deskjet Printers	2
Presentation Computer Monitors	0

## 2010-2011 Proposed Budget / 5 Year Plan

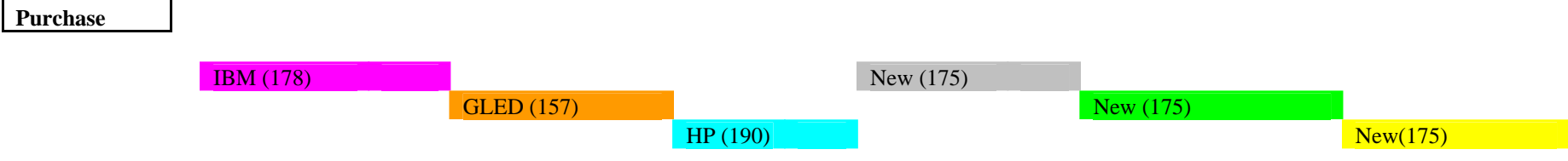
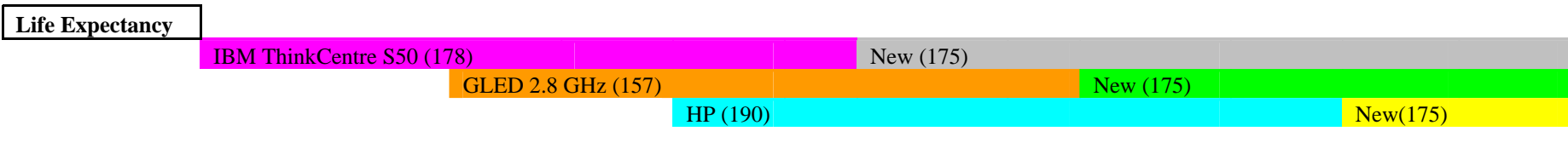
Budget Line	Current	Proposed	2011-2012	2012-2013	2014-2015	2015-2016
	2009-2010	2010-2011				
<b>Library Automation</b> (Follet maintenance)	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
<b>Support</b> Tech Interns Conferences / Training Outside Contracting - fiber, network, etc.	4,000.00	4,000.00 (\$19,000 if the requested IT position is not funded)	4,000.00	4,000.00	4,000.00	4,000.00
<b>Supplies</b> Ink, Toner, Disks, CDRs	15,450.00	17,767.50	18,300.53	18,849.54	19,415.03	19,997.48
<b>Computer Hardware (State Aided)</b>	23,377.00	23,377.00	23,377.00	23,377.00	23,377.00	23,377.00
	B/W laser printers	B/W laser printers	B/W laser printers	B/W laser printers	B/W laser printers	B/W laser printers
	LCD Projectors	LCD Projectors	LCD Projectors	LCD Projectors	LCD Projectors	LCD Projectors
	Laptop upgrades	Digital Cameras				
	Digital Cameras	Misc Hardware				
<b>Hardware Lease/Purchase</b> Server Lease Purchase	80,000.00	80,000.00 (180 desktops, mobile lab cart)	80,000.00	80,000.00	80,000.00	80,000.00
<b>Repair</b>	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
<b>Software (State Aided)</b>	21,520.00	22,000.00	22,000.00	22,000.00	22,000.00	22,000.00
	Web Filter Renewal	Web-Filter				
	Office upgrades	Anti-Virus				
	Anti-Virus	Client software upgrades				
	Educational Software	Compliance upgrades				
<b>Communications</b> Internet Service	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Totals	165,847.00	168,644.50	169,177.53	169,726.54	170,292.03	170,874.48

# Long-Range Equipment Plan

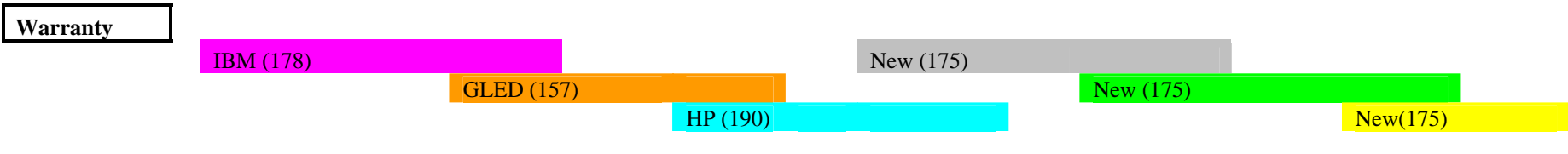
updated 03-04-2010

## Workstation Purchases

Year 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015



Totals	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Totals	178	178	335	335	525	525	522	522	540	540	525	525

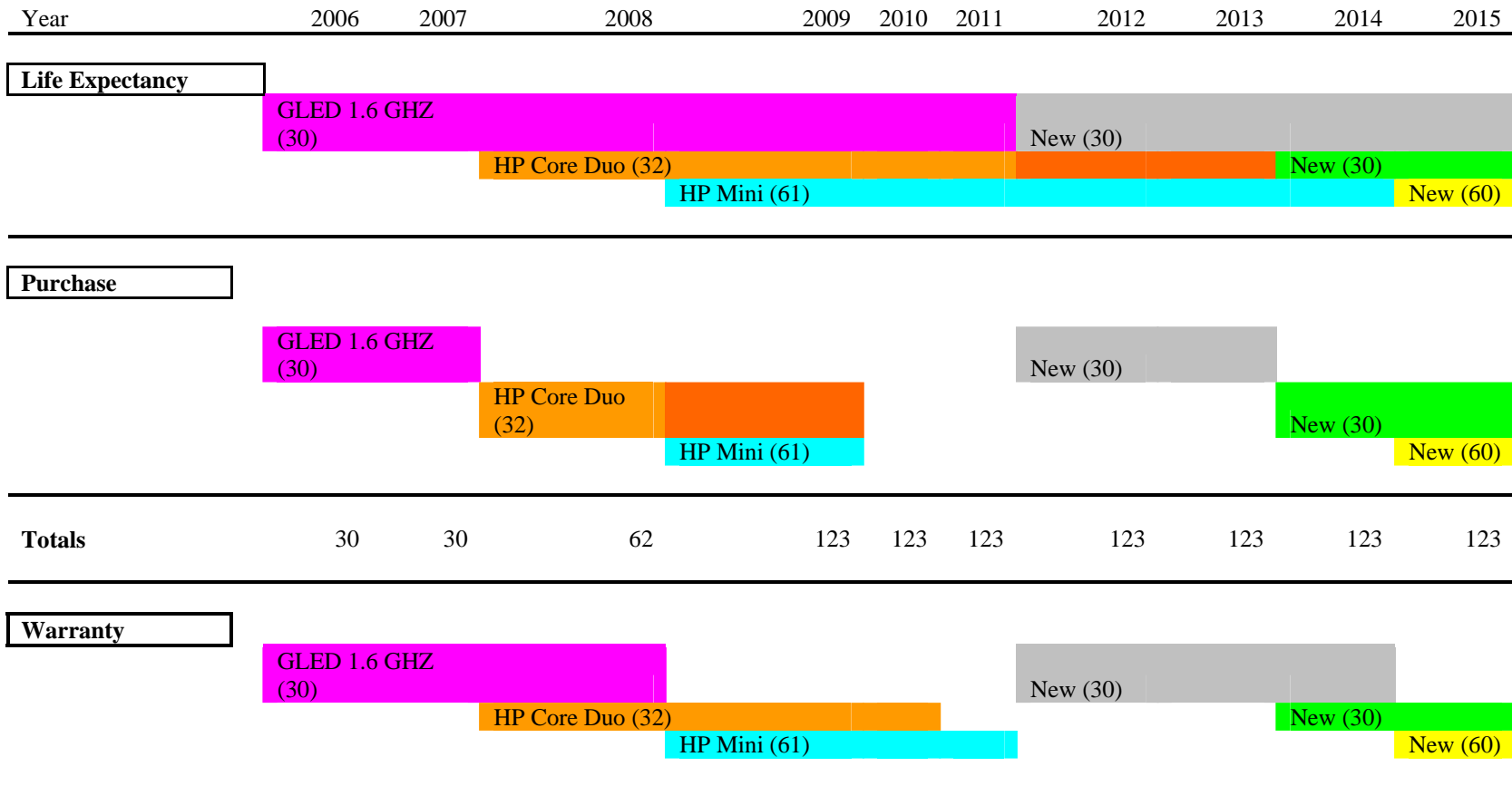


To maintain a 6 year replacement plan with our current level of computer availability we need to purchase 175 computers every 2 years.

# Long-Range Equipment Plan

## Laptop Purchases

updated 04-09-2010



To maintain a 6 year replacement plan with our current level of computer availability we need to purchase 60 laptops every 2 years.

## Potential Audit Areas

		Compliant	Actions / Comments
<b>Wireless Security</b>			
	Using WPA2-AES encryption	Yes	
	Access point placement considered	Yes	APs locations consider both students and community access
	SSID identification considered	Yes	GCSD-PUBLIC needs to identify us as a school for Public users
	Identification of Rogue wireless Aps	Yes	Our current wireless solution detects Rogues access points
<b>Firewall Configuration</b>			
	Proper ACLs to permit/deny access	Yes	
	Logging enabled	Yes	
	Banners for identification	No	Will address this by the end of the summer
	NTP time server setup for accuracy	Yes	
<b>Policies</b>			
	Acceptable Use policy	Yes	
	Password policy	No	Verbal, but not written
	Remote access policy	No	No policy (SchoolTool, email, etc.)
<b>Online Banking</b>			
	Dedicated Banking Workstation	No	Planned installation this summer
<b>Network Accounts</b>			
	Review account at least every 6 months	Yes	
	Delete / Disable old staff accounts	Yes	
	Separate admin vs. normal account for IT staff	Yes	
	Account policies	Yes	
<b>Network Software</b>			
	Operating system current release	No	Will estimate cost to upgrade and will schedule
	Operating systems patched to current level	Yes	

## Potential Audit Areas

		Compliant	Actions / Comments
<b>Internet Content</b>			
	Content filter in place with active policies	Yes	
	Logging of all Internet activity	Yes	
<b>Anti-Virus / Anti-Spyware</b>			
	Definitions updated daily	Yes	
	Centrally managed	Yes	
	Email filter	Yes	
<b>Physical Access</b>			
	Dedicated server room	Yes	
	Locked, controlled access	Yes	
	Environmentally protected	Yes	
	Malicious devices detection	Yes	
<b>Backup Plan</b>			
	Approved backup plan	Yes	
	Tested	Yes	
	Secure	Yes	
<b>Security Plan</b>			
	Approved security plan	No	Plan to have one written and implemented by end of year
<b>Disaster Recovery Plan</b>			
	Approved disaster recovery plan	Yes	
<b>Fraud, Waste, Abuse</b>			
	Online banking controls	Yes	
	Accountability w/financial systems	Yes	
	Inappropriate use controls	Yes	
	Routine Technology Audits	No	We will start doing them this year