Groton Central School District

Technology Plan 2022-2025

400 Peru Road Groton, NY 13073
Phone: (607) 898-5301
www.grotoncs.org

Table of Contents

Introductory Materials

Committee Members

Margo Martin, Superintendent of Schools

Robert Herman, Network Specialist

Kent Maslin, Elementary Building Principal/Director of Technology

Brian Kavagnah, K-12 District Administrator

Allison Peet, Tech Integration/ Tech Learning Grant Admn.

Leon Brockway, BOE member

Sam Rose, BOE member

Michael Holl, Teacher

Groton Central School District
Mission & Vision Statement

The mission of Groton Central School District is to empower all students to reach their fullest potential and thrive in a diverse, ever-changing world. We believe the integration of technology is a powerful way to meet our vision to ignite the passion for learning and inspire unique pathways to success, as it enables us to differentiate our approach to learning to meet the needs of each student in the district.

Introduction

The Groton Central School District is located in Central New York State and is situated in northern Tompkins County and parts of Cortland and Cayuga counties. The school district serves 2,400 Village of Groton residents plus another 2,800 living in the surrounding area. Groton is a rural community with many farms, rolling hills and lakes. This setting combined with the closeness of Ithaca with Cornell University and Ithaca College, Tompkins Community college in Dryden, SUNY Cortland and Wells College in Aurora, creates a unique blend of students with rural and suburban backgrounds. Syracuse is a short and easy drive to the North. The Finger Lakes Region of New York State is only a short drive away. Our school buildings consist of Groton Elementary School which is a Pre-Kindergarten thru Grade 5 building. The Groton Junior-Senior High School is a Grade 6-12 building. Groton Central Schools holds firmly to traditional academic standards and maintains a wide range of programs and services to meet the differing interests and abilities of its students.

At Groton Central School District students are our first priority, and we believe all students can learn to their maximum potential and develop those skills necessary to be successful. Our goal is to be one of the most effective K-12 school districts in the state, highly regarded for its individualized approach to learning, emphasis on academic experiences that reach far beyond its brick walls, and contributions in improving the community in which it serves. Therefore, Groton CSD has undertaken a dramatic change in how it addresses the learning needs of all students through its planning for and use of technology. The approach to instructional practice will focus on students doing the ¨heavy lifting¨ by being pushed to their individual potential. Instruction will be driven by the response to these two questions: ¨How have the students responded to our instruction?¨ and ¨How do we know?¨

This plan will take our district into the next three years and form a framework by which we will reflect on the learning needs of our district.

Vision and Goals

Vision for Technology Use

The Groton CSD technology vision statement is to deliver high-quality, technology supported teaching that empowers each student to learn through meaningful, hands-on projects, promoting personalization through technology integration, and advanced technology curriculum. We believe that the integration of technology will improve principal and teacher capacity to deliver high-quality, technology-based learning experiences and environments that allow student learning through authentic, project-based learning and data driven instruction that allows for personalization. At the Groton Elementary, this means that students will have embedded exposure to and use of technology within their daily instruction. Additionally, every week students will use video to express goals, build a Google Sites portfolio, and close feedback loops with their parents on their academic progress. As these application skills grow, students will be learning how to control and influence the behavior of software across a variety of applications. At the Jr-Sr High building, students and teachers will use technology to gain exposure and access to information that enriches the learning environment. They will utilize technology to foster a more student-centered and personalized learning experience. They will develop critical thinking skills working with and developing technology that helps solve real world problems, while developing the 21st Century technology skills necessary to be productive citizens. Finally, students will have opportunity to develop skills in a technology field through the district's mandated technology courses in grades 6-8, as well as elective course options for students in

grades 9-12 (i.e. STEAM Computer Science, Digital Media, Building Trades, Computer Applications, Business Math, etc.).

District Technology Strategic Objectives

The Groton Technology Committee has developed the Groton Technology Objectives for using telecommunications and technology to improve teaching and learning based on the New York State K12 Computer Science and Digital Fluency Learning Standards that were adopted by the Board of Regents in December 2020. The district's technology planning process involves a circular model: Data Collection, Establish District and Building Priorities, Study or Pilot Possible Solutions, Monitor Priorities, Evaluate, and then continue collecting data. The stakeholder groups are the administrative leadership team, technology committee, STEAM facilitators, and teachers. Through ongoing technology committee meetings, key focus areas include: curriculum development and delivery, administrative technology, district infrastructure and security, and improving communication with the community.

The District Technology Plan builds on the use of cloud-based platforms to offer students ubiquitous access to assignments, linked software, and learning materials. This is an aspect of our previous plan that was overlooked. We are installing a process for evaluating new software options intended to supplement classroom instruction by moving toward refinement of chosen software and codifying student experiences involving technology across grade levels. Instructional staff will provide feedback about the engagement capacity, use and performance metrics, and connection to the in-class curriculum to aid in the refinement process. The plan will continue to address goals around building capacity within teachers to integrate technology within their classrooms in a way that is impactful on student academic performance.

Major District Technology Objectives for 2022 – 2025

The District surveyed parents around the use of technology and teachers for their assessment of preparedness to implement the computer science standards. Both of these surveys are incorporated into the action plans. In addition, the technology committee has established the following objectives for 2022-2025:

- Technology Professional Development
- Basic intro to Groton curriculum delivery (Google classroom, etc.) and management systems for students
- Basics in business computer use (Microsoft Word, Powerpoint, Excel, keyboarding, etc.)
- Address difficulty with centralization and streamlining processes and technology solutions in education

- Continue to leverage/promote STEAM initiatives and curriculum offerings
- Build out a robust set of activity/tasks to satisfy NYS K-12 Computer Science and Digital Fluency Learning Standards (via a separate sub-roadmap).

In order to meet these objectives, the following will be incorporated at a building level, as deemed appropriate for specific grade levels:

1. Staff will utilize technology to deliver instruction, enhance communication, and promote positive collaboration, while providing students with the necessary tools to become lifelong learners.
2. Provide opportunities for the community to engage in technological experiences in a school setting as well as enhancing the ability to communicate outside of school.
3. The Technology Infrastructure will support the integration of devices necessary for enhanced student learning, school security, and communication resources. This system should also be able to accommodate new and emerging technologies, mitigate security threats and grow with the educational and administrative needs of the district.
4. Provide professional development to ensure quality instruction using computational thinking.
5. Broaden participation in computer science experiences through multiple projects.
6. Integrate computational thinking skills in core curriculum in grades K-12.
7. Develop competencies in students to use 21st century tools to solve problems, create new work products, organize information, access the web, apply the NYS K-12 Computer Science and Digital Fluency Learning Standards, and push their potential output to a new and higher level.

Curriculum

Curriculum Technology Integration

A primary goal in the area of curriculum is to teach digital fluency K-12 to support the seamless integration of technology for teaching and learning. This aligns with the NYSED goal to develop a strategic vision and goals to support student achievement and engagement through the seamless integration of technology into teaching and learning. The following are activities the district will undergo to meet this goal:

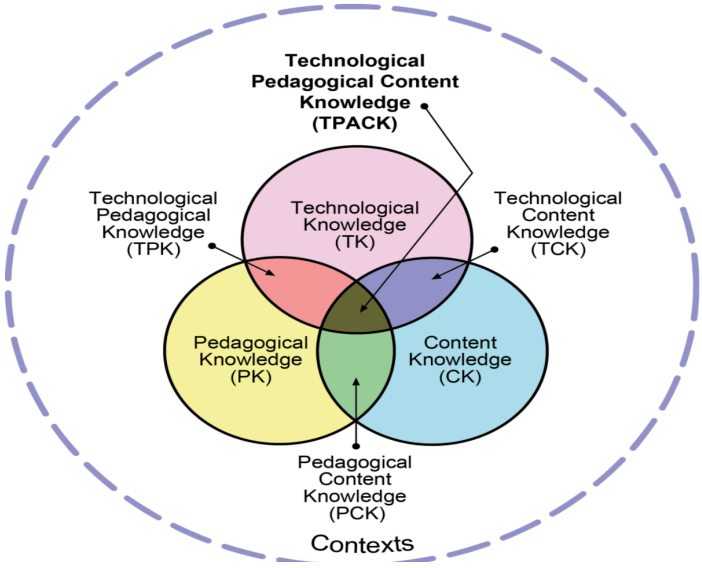
1. Teachers in all curricular areas will be using the NYS K12 Computer Science and Digital Fluency Standards to evaluate and identify where in each curriculum technology will impact teaching and learning.

2. Establish a baseline technology curriculum that all students will be exposed to (i.e. Microsoft office suite, keyboarding skills, Google suite, etc.) as appropriate for each grade level/department.
3. Results of the evaluation will be used to build a Technology PD offering slate that incorporates opportunities for each teacher to address their desires and weaknesses.
4. Effectiveness of implementation and the frequency of implementation will be used to measure the quality of the PD offered.

The following metrics will be used to determine progress toward the goal: ability of students to perform on projects/assignments that measure computational thinking, as appropriate by grade level, word processing fluency of students, number of students enrolled in coding and computer science classes at grades 7-12, and completed checklist of student digital literacy skills to assess for proficiency, as determined appropriate by grade level.

Technology Integration Strategies

1. Promote learning opportunities for staff whenever possible while highlighting the effective use of technology including faculty meetings and staff development days.
2. Instruct staff through models of technology integration using appropriate curricula, pedagogical, and instructional methods. Expose staff to models of technology integration along with the use of Bloom's Digital Taxonomy applied to Technology Integration.
3. Increase staff access to related technology tools, equipment, and software.
4. Connect technology integration goals to support the district's data analysis and student management systems.



Technology Delivery

Various technologies exist within the district to allow for delivery of instruction and participation in 21st Century Learning. When these technologies are combined with correct research based instructional strategies, which accommodate various learning styles, the results can be exciting and powerful in the lives of students. Some of these methods of delivery include:

1. **Online Research** - This includes the use of library databases, G Suite for Education tools, online plagiarism checkers, and eBooks.
2. **Collaborative Projects** - Primarily conducted via the G Suite for Education web tools that include Docs, Slides, and Sheets but can include other web based tools.
3. **Interactive Displays** - Interactive displays and the associated software (SmartBoards and Smart TVs with Chromeboxes) allow for the creation of interactive lessons that effectively engage students. All classrooms have TVs- some are 65" Smartboards and some are 65" or 75" displays. Most have a Chromebox attached with a wireless keyboard and mouse. All new TV setups purchased after fall of 2021 are mounted on a moveable cart.
4. **1:1 Chromebook Initiative** - Students in grades 1-12 benefit from the district's 1:1 initiative of Chromebooks within their classrooms. Students in grades 1-5 are assigned a Chromebook for use during the school day that is returned to the charging cart at the end of each day. Students in grades 6-12 are assigned a Chromebook for the school year and are responsible for it. They are allowed to take the Chromebook home. The district is committed to replacing ⅕ of our Chromebook devices every summer so no student is left to use a device that is over five years old.
5. **Tablets** - Primarily in the UPK and Kindergarten classroom, iPads are used to support centers-based learning to reinforce math and early literacy.
6. **21st CST Skills Classrooms** - Students use current technology available to them in a meaningful, purposeful, and safe manner while working both independently and within a group of peers. Instruction includes digital citizenship, internet searches, multimedia presentations, citing information, evaluating sources, collection of data, and more.
7. **Home/School Communication** - Staff members utilize various web resources (Google Classroom, ClassDojo, Remind) to increase home/school communication for both students and their parents/guardians. The technology committee has a goal of standardization of communication to assist families in staying abreast of student academic progress. In addition, the committee has a three year goal of achieving better community communication through the use of mobile technologies.

8. **Teacher Training** - The District has a .4 FTE Technology Integration specialist/ Learning Technology grant administrator available to work with teachers in small groups or 1 on 1 to learn new strategies for effectively integrating technology within their instruction. In addition, teachers have access to PD offerings through the regional TST-BOCES and the Teacher´s Center in correct instructional technology practices.
9. **Virtual Field Trips** - Utilizing web based programs, students are afforded the opportunity to travel the globe while never leaving the classroom. Some examples are Google Earth, Google Expeditions, etc.

Parental Communications and Community Relations

The technology plan is disseminated to the community first as a presentation to the Board of Education, then posted on the District's website. The District's website www.grotoncs.org is the main communication portal for parents and community members to retrieve various information and was updated to a new platform in September of 2022.

Parents and students also have access to the use of:

- SchoolTool Parent Portal. The Parent Portal allows parents to login and view their children's attendance, schedule, report cards, transcripts, and graded classroom assignments/assessments.
- The use of email and teacher web pages via Google Classroom are also examples of technologies to further enhance home-school communication.
- The District's website (www.grotoncs.org) allows parents and community members to retrieve the following information:
    - Calendars and supplies
    - District information (forms, news items)
    - School events (Athletic & other extracurricular information)
    - Department information (Food Service, Transportation, & Buildings and grounds)
    - Celebrations of student accomplishments
    - Curriculum and Instruction information
    - Facebook, and other school/district social media feeds
    - Individual school information
    - Links to NYS information on state report cards and testing

Professional Development

Professional development strategies are in place to ensure that all staff and administrators are made aware of how to use available technologies to improve student learning. Professional development is an ongoing process. It must offer meaningful activities that apply to realistic teaching and learning situations. Our professional development for technology must allow teachers choices and varied entry points, taking into consideration their knowledge and skills.

The district staff will have the opportunity to enhance their skill level by participating in a variety of ongoing activities. These opportunities will be available through in-house staff development as well as from outside organizations. Groton Central School District participates in School Improvement Services and Model Schools Staff Development for Technology through The Central New York Regional Information Center (CNYRIC). Teachers are also encouraged to participate in staff development opportunities offered by the Groton/Lansing Teacher Center and the TST-BOCES.

In Model Schools, the district has the opportunity to provide staff development activities designed to help teachers integrate technology in the curriculum through developing learning experiences, based on New York State Standards, performance indicators, and core curriculum. In-district staff development is ongoing through a .4FTE learning technology grant director shared with a neighboring district and funded through the 2021-2024 Learning Technology Grant. The director will identify the new digital fluency standards for computer science, and work collaboratively with teachers at every level and department to ascertain where the district has gaps in meeting digital fluency standards by grade level. Through committee work, the district will identify key areas for student development in technology, and Building Leadership will then be responsible for the development and implementation of digital fluency standards to meet the identifed priority skills.

Technology Professional Development Goals

The Superintendent of Schools will work with the District Leadership Team on the following goal:

Develop and implement a plan to build the capacity of teachers to integrate the NYS Computer Science and Digital Fluency standards. This aligns with NYSED's goal to "provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies." In order to meet this goal, the technology committee recognizes the need to complete the following activities as they relate to faculty and staff capacity:

1. Develop a Groton course on curriculum delivery usage (how to navigate various curriculum tools).

2. Establish a Centralized Classroom Technology Stack that is rolled out to all new faculty members with appropriate supports in place for immediate implementation within their classrooms.
3. Build a digital library of resources that faculty can refer to as it relates to basic classroom technology tools (i.e. Google Classroom Suite, SchoolTool, etc.).
4. Ensure ongoing, sustained professional development for teachers, administrators, and school personnel to further the use of technology in the classroom by:

- Model School/School Improvement Services program through regional BOCES
- Staff development days
- Periodic refresher courses
- Sharing ideas at faculty meetings
- Summer Curriculum Development

Infrastructure, Hardware, Technical Support, and Software

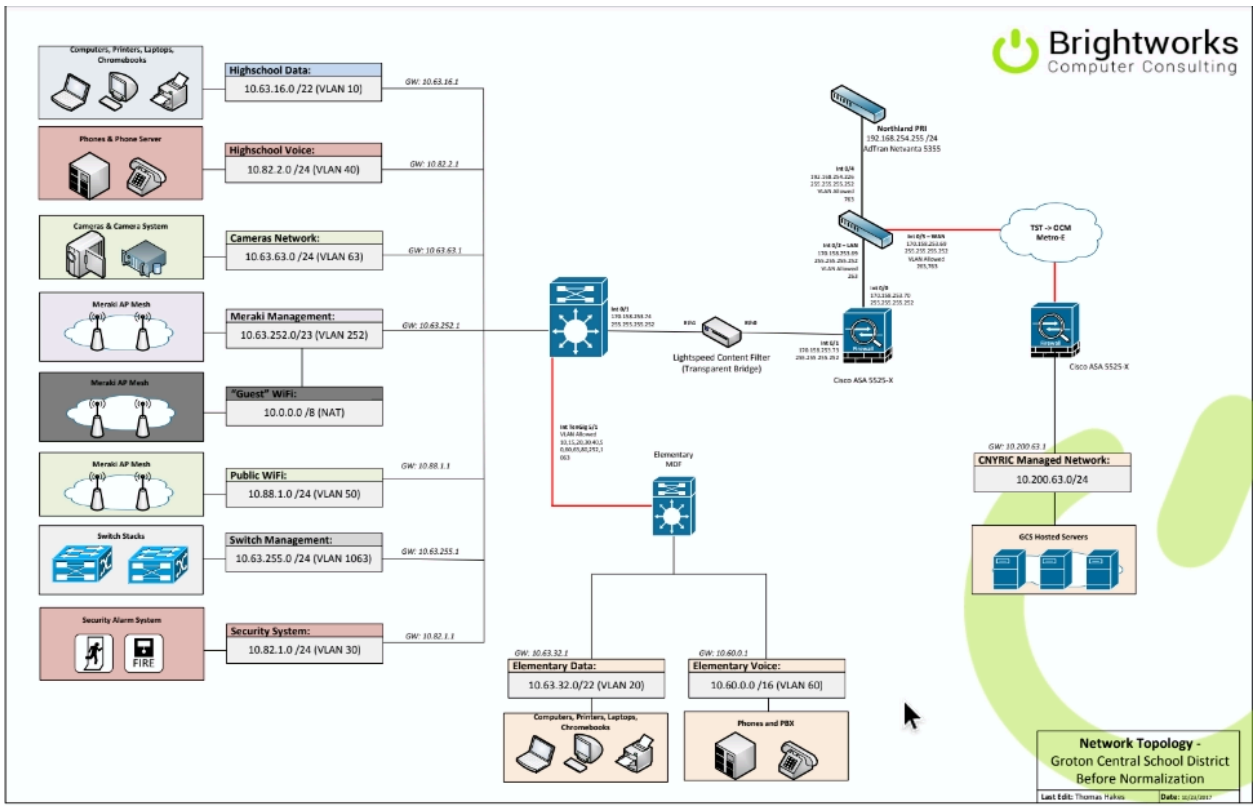
As a part of the 2022-2025 Technology Plan, and in recognition of the importance of the infrastructure "backbone" to support the academic goals of the learning spaces, **the district has a goal to sustain and improve the existing secure and robust network.** This is in alignment with the NYSED goal of "designing, implementing, and sustaining a robust, secure network to ensure sufficient, reliable high-speed connectivity for learners, educators, and leaders."

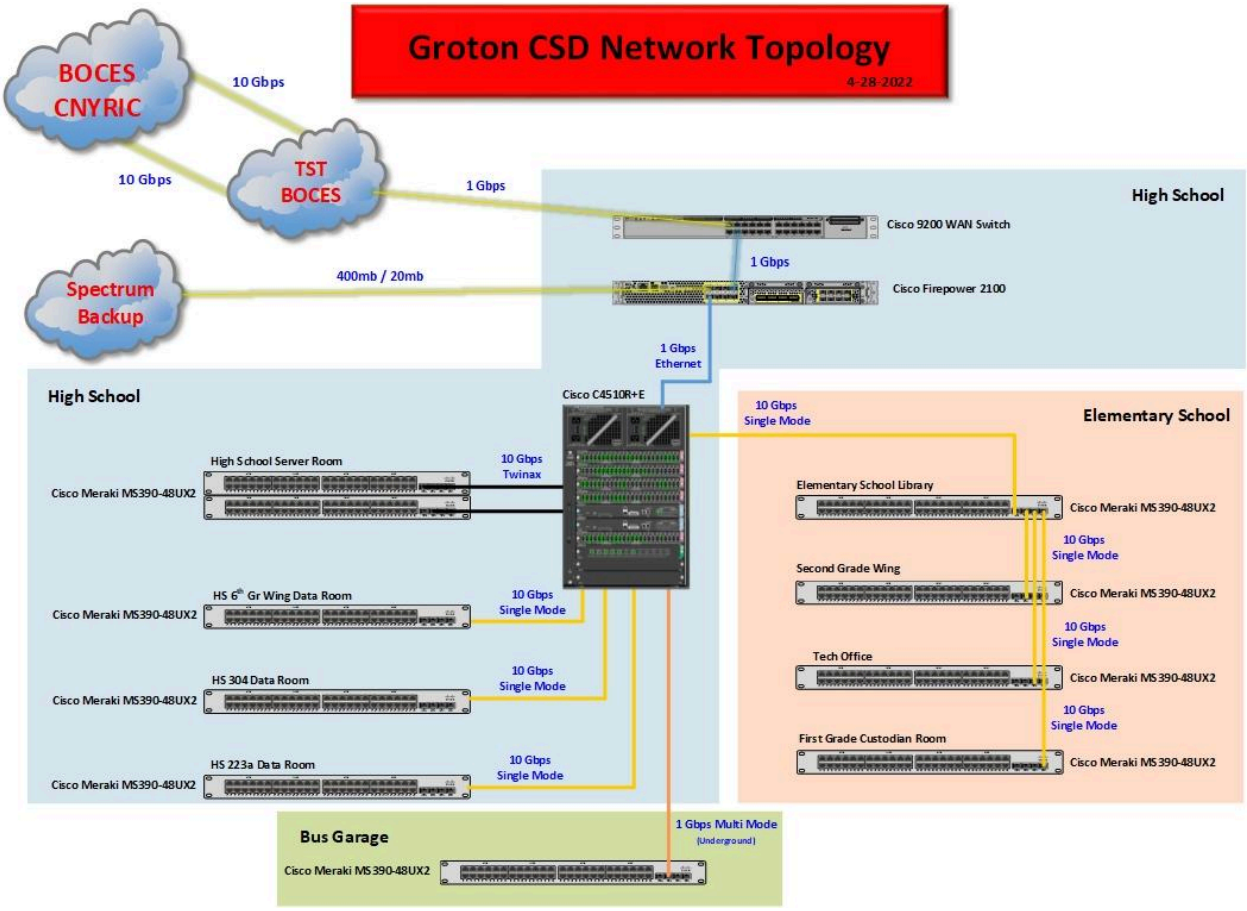
The District will use data related to improvements made to infrastructure over the course of the year, as measured using the CNYRIC NIST survey tool. The Technology Committee will meet on a bi-weekly basis and infrastructure needs will be addressed as the district has the finances to support necessary upgrades. The District will look at the financial commitment for technology on an annual basis as part of its budget development and make adjustments to this spending as necessary and can be afforded in order to ensure we have a robust infrastructure within the buildings. As technology is constantly emerging, this is a long-term goal that can be measured for its success through the speed of connectivity and ability of users to access devices and applications within the classrooms.

The State of the District

Groton CSD currently has Google Chrome OS based machines for students and most faculty. There are a small number of faculty that use Windows laptops for use with Smartboards to run related software. These laptops are over seven years old and are being replaced with teacher-grade Chromebooks as needed. The district has purchased 70 laptops for students in STEAM-based programs at the high school. In addition, the district uses Windows desktops for office staff, all that are equipped with Windows 10 and Office 2016. Some have Adobe Creative Cloud Suite.

File Servers/Network Infrastructure





Internet Connectivity

Network & Wired Ethernet Infrastructure

The district purchased two new servers in November 2019 to move several applications in-house from CNYRIC. This system has in production Google and Active Directory user management systems, multi OS imaging server, a tech department asset management database, the district's HVAC database and management server, a ticket management system, and an electronic sign management system. In addition to these databases and web servers services we are adding radius servers along with network monitoring systems. These servers grant the district the flexibility to test and onboard new systems as needs present themselves. Other aspects of the district's network and wired ethernet infrastructure include the following, which includes a status report on potential upgrades planned over the course of the 2022-2025 plan:

- Five telecom rooms that will have the wallmount rack replaced with a deeper unit to support new switches in the summer of 2022.
- The existing Cisco 2960s switches reached "end of support" in November 2020. Groton CSD is in the process of upgrading all 14 Cisco 2960s switches to Meraki MS-390-48UX2 switches by the end of summer 2022.

- The Meraki MS390 switches provide multigigabit data rate to support devices at either 2.5gbps or 5.0gbps. All existing wired ethernet devices will still be supported at 1.0gbps.
- All new fiber optic cabling installed to all switches will support a 10gb backbone. All new switches will have a 10gb uplink to the network core switch. As of October 2022 CNYRIC will establish a project to replace the core switch presently supported by Cisco (Cisco Catalyst C4510).
- Internet connection will continue to be supplied by CNYRIC at 1 gb since that link has never been saturated as of spring 2022.
- The District will maintain a backup internet connection through Spectrum should the CNYRIC connection fail.
- The district is protected by a Next Generation firewall.
- The district will continue to install new CAT6 ethernet cable as needed.

Wireless Infrastructure

- All wireless access points ("APs") in Jr-Sr High will either be wifi 5 (802.11ac) or wifi 6 (802.11ax) as of the end of summer 2022.
- APs in the elementary school will be wifi 5, with upgrades to wifi 6 on a rolling basis over the next two years. (As of May of 2022, there are twenty wifi 6 APs in the building.)
- The District has a goal of transitioning wifi in both buildings over to wifi 6 by the fall of 2023.

Security Cameras

The District has leveraged NYS Safe Schools Act funding to upgrade and install new security cameras over the last three years. We will continue to use this annual grant of $35,000 to cover hallways, common areas, parking and other areas as needed. There are no cameras in classrooms. As of spring 2022, there are 77 cameras installed between the bus garage, elementary school and junior-senior high school buildings. Most have been replaced with higher resolution devices in 2020 and 2021. There will be an additional 5-10 new camera locations added annually through the summer of 2023 and/or until we have reached the limit of 30 days retention on all video with our existing storage servers (NVR).

Printing

Groton CSD maintains a fleet of around 25 large copy machines and tabletop multifunction printing units under two contracts with Eastern Print Management (Xerox). Each machine can scan to email, copy and print in color. Most of the larger units have the ability to staple and 3-hole punch. Due to supplies expense, we restrict students from printing color unless requested by a teacher for a project. One of the two printing unit contracts expires in December 2022, when the district will negotiate with our existing vendor for replacements and put out an RFP for competitive bids. The second contract does not expire until 2025.

In an effort to limit the wear and tear on the in-house printing units, the district has a printing service contract with TST-BOCES. Faculty and staff are strongly encouraged to send large print jobs to BOCES as it is a more cost-effective means for completing voluminous copy jobs.

Technology Department Staff

Groton's technology staff currently consists of one part time Technology Director (.1FTE), one full time Network Manager, 1 full time LAN Support technician, and a shared Technology Learning Grant Administrator (.4FTE). In addition, the department is made up of 2-5 student interns from year to year. The network administrator and system administrator share all staff, faculty and student support in the elementary, Jr-Sr high, and bus garage. These two positions are also responsible for maintaining full inventory of all district-owned technology assets, purchasing decisions, and maintaining network security.

The Technology staff maintains an equipment inventory of computers and printers.

Decisions about technology purchases are made based on the intended use. The district's partnership with Central New York Regional Information Center will help to determine types of hardware and software that best fit our needs.

The general process for technology-related purchases is defined below.

1. Define the need

   What will the technology be used for in the school? What learning activities will it support? What standards will it help students master? What management tasks will it be used for?

2. Identify the software

   What software is available that will support the intended learning activity or management task? What are the system requirements for the software? Is it compatible with existing software and hardware? Is a multi-user license or network version available? Will training and technical support be available from the manufacturer? Is it cost effective?

3. Identify the hardware

   What hardware is required to run the selected software? Is the hardware compatible with the District's network? What are the technical, maintenance, and service issues associated with the hardware? Is it cost effective? Can it be upgraded? Will it run other software already in place?

4. Purchase

Software

Instructional computer software and Internet services are selected based on their effectiveness in supporting the curriculum and the associated standards. Our administrative and student management applications include WinCap and SchoolTool, which are BOCES-provided services. WinCap is used for managing the district financial data while SchoolTool allows us to do scheduling, attendance, grading, and report cards.

Learning Management System

The District uses Google Workspace for Education. This includes Google Classroom, email, Docs/Sheets/Slides and, to a lesser extent, Meet, YouTube and Jamboard.

Student Management System

The District continues to use SchoolTool for student management, including attendance, grades, scheduling, report cards, etc. Students and parents can use their own logins to view their own data. In addition, this interface collects data that is then submitted through Level 0 and Level 1 for state reporting purposes.

- All students have access to the Google Workspace environment as detailed under the LMS above.
- Students in the STEAM program have access to Windows laptops to use Adobe Creative Cloud Suite that includes Photoshop, Illustrator, Premier and other titles such as Davinci video editor, Visual Studio, and WeVideo.
- Individual classes have specific software assigned to them, such as Music Notation for the music department and Flocabulary for ELA.

Upgrading

In the 2022-2025 school years, Groton will continue to keep refreshing the current technology in place. Regular replacement schedules have been implemented in order to keep the hardware current with the ever increasing software needs. By the fall of 2019, the District initiated a 1:1 device plan. District copiers were also replaced during the summer of 2017. In 2016, Groton started implementing Google services in the classroom, part of the implementation including purchases of Chromebooks for teacher and student use, and by 2021 the Google Classroom platform was adopted as the official learning platform for the district.

This 2022-2025 technology plan continues the replacement schedule as outlined in the implementation schedule timeline. The plan will also include the continued support of Chromebooks and Google supported devices on the network.

The District embarked upon a server virtualization project in 2017 by moving to Infrastructure as a Service model through the Central New York Regional Information Center (CNYRIC). Most servers are virtualized, saving the district ongoing cost of power, environment controls and maintenance fees. The district is developing protocols for addressing issues that are identified through the network analysis, which

may include submitting a technology infrastructure project through the New York State Smart Bond Initiative. Groton CSD will continue to utilize virtualization technologies throughout this timeline.

As part of ongoing maintenance, and network migration, our instructional and administrative servers will need periodic internal network upgrades.

Groton CSD will continue to participate in the CNYRIC broadband initiative which provides high speed internet connectivity for collaborative learning and videoconferencing. In addition, the district has implemented an internet redundancy framework through an annual contract with Verizon. Groton CSD will continually monitor users' needs and modify or enhance configurations in conjunction with the yearly budget cycle.

Infrastructure Security and Compliance

Groton CSD is currently participating in the CNYRIC Infrastructure as a Service (IaaS), which provides next generation firewall services and integrated endpoint protection to help ensure identity and data protection in our rapidly expanding network. The district is also following the NIST checklist for network security protocol and compliance regulations/recommendations.

Ed-Law 2-d

In early 2020, The New York State Department of Education adopted Educational Law Section 2-d ("EdLaw 2-d") focused on the privacy and security of student and staff personally identifiable information (PII). The law provides "guidance to educational agencies and their third-party contractors on ways to strengthen data privacy and security to protect student data and annual professional performance review data."

In order to strengthen data security and privacy, the New York State Education Department (NYSED), now requires the following of all educational agencies:

- Appoint a Data Protection Officer with appropriate knowledge, training, and experience to oversee data security and privacy. Groton's Data Protection Officer is the Director of Technology.
- Develop and implement a Data Security and Privacy Policy.
- Conduct security training for educational agency employees.
- Publish a Parent's Bill of Rights and include it in every contract with a third-party contractor that receives PII.
- Mandate that all third-party contractors submit a Data Security and Privacy Plan for each contract to demonstrate how they will protect PII.
- Adopt the NIST Cybersecurity Framework as the standard for data privacy and security and meet the requirements to ensure they are adequately protecting PII.

The Groton Central School District works in partnership with regional and state level agencies and BOCES to ensure software used by students is in compliance with the privacy and security regulations of the law in order to protect the PII of students and staff. In order to assist the IT department in ensuring the district's compliance with the law, the District requires teachers to vet all potential software through their building leader in order to assess its compliance with Ed Law 2-d and afford the IT department an opportunity to secure a Third Party Agreement to include a Data Security and Privacy Plan prior to installing the software for student use. In addition, the District IT department works with some of the state BOCES for obtaining said agreements on behalf of school districts across the state. This has allowed the district to secure agreements with larger vendors including Google and SchoolTool. This work will continue throughout the next three years with a goal of having all Third Party Agreements for existing software secured by spring of 2025.

Implementation – Hardware/Software Action Plan

Actions/Tasks	Timeline	Person(s) Responsible	Assessment	Success Indicator
Technology Plan Reviewed and Approved by the Board of Education	N/A	Superintendent Director of Technology	Board minutes	District / BOE Approval of Plan
Monitor and Review Plan	Semi Annually	Superintendent Administrators Technology Committee	Updated plan on file with BOCES / NYSED	Plan endorsement/ approval letter
Schedule workshops for technology-based staff development	Ongoing	Technology Integrator Building Leadership	List of participants, their evaluations, and future needs	
Train Staff / Faculty on use of Technology and various software platforms	Ongoing	Building Leadership Technology Integrator	Ongoing assessment by Building Leadership	Competent use of technology in the classroom
Assess network infrastructure for security, delivery of services.	Ongoing	Network Specialist LAN Tech	NIST framework checklist	Assessment of safe, robust network service to classrooms

		Director of Tcehnology Superintendent		without interruption

Technical Support

The number of technology support staff should keep pace with the size of the network, resources, and users. Increasing the technology support staff is an extremely important component to the success of the district's technology plan. If good technological support is not provided, then staff, and ultimately students, will not use the technology.

Current staffing as of June 2022

- .1 Technology Director
- 1 FTE Network Manager
- .4 FTE Technology Integration Specialist/Learning Tceh Grant Administrator
- 1 FTE LAN Technician
- 2-5 part-time student interns

Maintenance of equipment

Groton CSD began an equipment maintenance program for all technology in the summer of 2018. All chromebooks are updated, cleaned and sanitized every summer. Chromebook carts are wiped down and organized with correct power adapters.
A Microsoft Access inventory database has been created for all available technology items and is updated on an ongoing basis. These items include Windows laptops/desktops, tablets, Chromebooks, Chromeboxes, displays, printers, projectors and document cameras.

Funding

Below is a summary of our forecasted technology purchases for the next three years. The majority of our purchases over the next three years will be made through state contracts and/or OCM BOCES, which will allow the district to make the most efficient use of financial resources. The district may also opt to make use of Smart Bond funding for larger infrastructure projects and/or replacement of existing hardware and devices. In addition, the district makes use of various grant funding streams to offset some of the overall costs (i.e. Title IV for student interns, Title I School Improvement, ESSER, and Cares Act grant funds for PD, etc.).

Budget

Budget	2022-2023	2023-2024	2024-2025
Salaries & benefits (includes IT interns)	$260,000	$267,800	$275,834
Hardware/End User Computing Devices	$95,000.00	$95,000	$95,000
Network and Infrastructure	$325,000 (includes Ross Field Upgrades)	$250,000	$250,000
Software License Agreements*	$80,000.00	$80,000	$80,000
Professional Development	$10,000.00	$10,000.00	$10,000.00
Maintenance & Service costs	$90,000.00	$95,000.00	$100,000.00
Internet Connectivity(Broadband)	$14,000.00	$14,000	$14,000
Total	$874,000	$811,800	$824,834

* Includes funds from SmartSchools grant and/or other grants

The above technology related budget and timelines reflect the on-going technology efforts or continued cost of software or equipment upgrades, which are presented to the superintendent as part of the yearly budget process.

APPENDIX 1: Road Map

Objective	*Owner**	*Focus Area*	*Completion Date*
Tech Committee Maturity	BOE Members	Community & Communication	Winter 2022
Establish Baseline Curriculum (Critical skills as it relates to technology)	Building Leadership	Curriculum	Fall 2023
Implement CS and Digital Fluency Learning Standards	Building Leadership	Curriculum	Fall 2024
Centralized Classroom Technology Stack	Building Leadership	Curriculum Delivery	Winter 2023
Centralized Admn. Technology Stack	Supt.	Administrative Technology	Spring 2024
Significant Compliance with Ed-Law 2-d & NIST Framework (Cybersecurity & Curriculum)	IT Dept.	Infrastructure & Security Curriculum Delivery	Winter 2024
Establish Course on Curriculum Delivery Useage (navigation of curriculum tools including a K-5 Skills map)	Supt. (Tech Grant Coord.)	Curriculum Curriculum Delivery	Spring 2025
Achieve Better Technology Communication through Mobile Devices	Supt.	Community & Communication	Spring 2025

***Owner** - Responsible for facilitating the work and providing updates to the subcommittee, including any roadblocks