STARPOINT CENTRAL SCHOOL DISTRICT

EMPOWERING STUDENTS TO REACH THEIR MAXIMUM POTENTIAL

Starpoint Central School District Technology Plan 2022-2025

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Starpoint Central School District
Mission Statement

The Starpoint Central School District, as an educational representative of the community, believes every student can learn. The school district assures each student will have the opportunity to reach his or her maximum potential by challenging all students to higher levels of achievement. We will provide the environment, encouragement, and instruction to meet this goal while developing the whole child academically, physically, socially, emotionally and culturally.

Introduction

The Starpoint CSD consists of the Towns of Pendleton, Cambria, Lockport, Wheatfield, and Royalton and is located in the Town of Pendleton. The Starpoint CSD services approximately 5,300 families, 2,850 students, grades in K-12. The area covered is 115 square miles. The Starpoint CSD is a component district of Orleans/Niagara BOCES. The district facilities, located at 4363 Mapleton Road, consist of four schools:

Fricano Primary School – Grades K-2
Regan Intermediate School – Grades 3-5
Starpoint Middle School – Grades 6-8
Starpoint High School – Grades 9-12

As the New York State Learning Standards continue to have impact, students will be expected to attain higher levels of academic success. We recognize that student achievement is not the only measure of success. Those leaving our school to take their place in the world will be expected to enter the workforce equipped to solve complex problems, function collaboratively with diverse groups, give back to our society, and be prepared to use future technology in meaningful ways.

Therefore, Starpoint 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 instruction will focus on learning: what do we want our children to know and be able to do? and assessment: how will we know when they are successful? Our plans for the purchase, implementation, and evaluation must reflect our learning goals.

This plan will take our district into the next three years and form a framework by which we will reflect on the learning needs into the next decade. Through yearly monitoring and adjustment, we are confident we will be able to provide the kinds of learning experiences which will help our students live and work in a world that will be dramatically different than the one we know

The District Technology Committee wishes to thank the Board of Education and Dr. Sean Croft, Superintendent of Schools, for their confidence and support. Without their support, this plan would not have been possible.

Vision and Goals

Vision for Technology Use

The Starpoint CSD will create an environment where educators are empowered to enhance student learning-through the ethical use of technology.

District Technology Goals

The Starpoint Technology Committee has developed the Starpoint Technology Goals 2022-2025 for using telecommunications and technology to improve teaching and learning based on the ISTE (International Society of Technology Education) Standards.

The Major District Technology Goals for 2022– 2025

1. Installation and integration of ClearTouch interactive panels in all instructional areas and provide professional development to show effective use.
2. Starpoint's Technology Infrastructure will support the needs of the business and instruction to provide a safe education. This system will allow access to the best resources offered while protecting the data of all students and staff.
3. The District will implement and sustain a 1:1 device plan, which will provide all students access to the educational materials necessary for student success.
4. Upgrade wireless network to provide a regionally supported, robust, and secure network to ensure sufficient, reliable, high-speed connectivity for students and staff.

Curriculum

Curriculum Technology Integration

1. Implement technology for instructional use that supports the teaching and learning process.

2. Identify and use the best practices for technology integration in different curricular areas across the district.

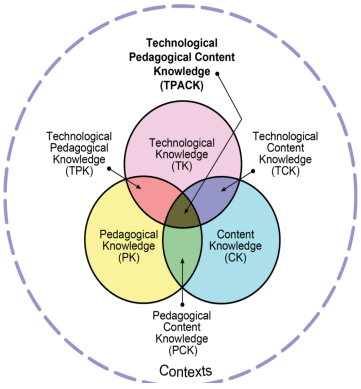
3. Develop and include the NYS Digital Fluency Standards across K-12 subject and grade levels.

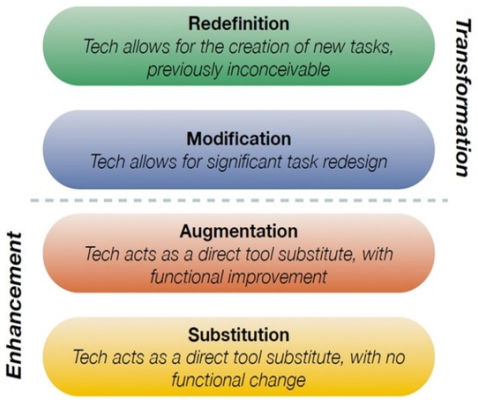
4. Reference and include the ISTE (International Society for Technology Education) Standards for Students across K-12 subject & grade levels.

5. Reference and include the ISTE Standards for Educators & Leaders across all buildings and staff members.

6. Instruct staff through models of technology integration using appropriate Curricula, pedagogical, and instructional methods. Expose staff to models of Technology integration such as TPACK and SAMR applied to Technology Integration. With these in mind (and the research that supports them) instructors can effectively include technology in their classroom lessons with a clear purpose in mind.

    - How to Apply the SAMR Model
    - TPACK Model for Technology Integration





Technology Integration Strategies

1. Promote learning opportunities for staff whenever possible while highlighting the effective use of technology including: faculty meetings, staff development days and CSLO Model Schools days.

2. Provide staff development opportunities through utilizing the in-service talents of our teachers, the technology liaison and the many resources offered through the Spartan Technology office, CSLO Model Schools staff, and the expertise of trainers that support software and hardware available in the district.

3. Increase access for staff to related technology tools, equipment, and software.

4. Create online opportunities for sharing, collaborating, and learning by teachers, administrators, and students.

Student Achievement

The following student examples of represented activities are based on the NYS Computer Science and Digital Fluency Learning Standards and associated ways students can meet these standards:

1. **IMPACTS OF COMPUTING: The impacts of Computing standards promote an understanding of the evolving impact of computing technologies on society through many lenses, including personal, social, cultural, accessibility, legal, economic, and ethical.**
    - Students create physical posters/digital posters that show what information is OK to share and what is not OK to share online.
    - Students identify laws at state and local level that address cybersecurity threats.
    - Students investigate internet crimes to see the impacts on current regulations and future criminal behavior.

2. **COMPUTATIONAL THINKING: This plays an important role in supporting the creation of solutions to problems, both large and small. Algorithms, programs, simulations, and data are essential to all computing systems, empowering people to communicate and collaborate with others around the world. The standards promote the development of foundational skills, knowledge, and experience to solve problems by**

creating solutions that utilize computational thinking concepts and practices.

- Students can use simple coding robots that can help students quickly see their input produce and output.
- Students could compare different activity trackers and how accurately they calculate heart rate based on different sports.
- Students could collect temperature data over a week then use it to create a data table and line graph. They could then use the graph to communicate what the weather was like that week.

3. **NETWORKS SYSTEMS AND DESIGN: The Networks and Systems Design standards aim to prepare students to understand the basic functioning of the computing systems and networks that are used as fundamental tools in our personal and professional lives.**
    - Print/create pictures of different computer devices that students experience every day. Include pictures of things that might have computer components, but students might not realize are computers (e.g., cash register).
    - Students could create a diagram that illustrates the use of remote storage in cloud computing, a school's data server, or distributed media. Students could discuss how local copies of data are synced with data from the remote server.
    - Students could create a diagram that illustrates how a photo they take with their phone gets uploaded to the internet and then synced to their other devices.

4. **CYBERSECURITY: The Cybersecurity standards prepare students to understand why data and computing resources need to be protected, who might access them, and why they might do so whether intentionally malicious or not. It is important that students know how to employ basic safeguards to protect data and computing resources and how to appropriately respond if a breach occurs.**
    - Discuss why passwords are important and what makes a password strong or weak.
    - Students could think about their personal information and devices that need to be protected and discuss how adversaries might use the data or computing resources if accessed.
    - Students explain the similarities between chatting online and real life with strangers.

5. **DIGITAL LITERACY: Digital literacy refers to the ability to leverage computer technology to appropriately access digital information; to create, share, and modify artifacts, and to interact and collaborate with others.**
    - Students use a school-selected online keyboarding program to learn the fundamentals of keyboarding.
    - Students can use email in an appropriate manner to ask a teacher or other school professional a question. They can state when it is appropriate to email someone versus instant message versus phone call.
    - Students create diagrams/infographics that illustrate the myriad sites that might collect data on an individual, the accumulation of which is a digital footprint.

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 for 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, Google Workspace for Education tools, web based programs/software, online plagiarism checkers, and eBooks.
2. **Collaborative Projects** - Primarily conducted via the Google Workspace 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 allows for the creation of interactive lessons that effectively engage students.
4. **Chromebook Carts** - Many of these exist throughout the district (mostly in the K-2 building) and are used as “mobile labs” that break down the walls of the classroom to allow for numbers 1 and 2 above to occur.
5. **1:1 Chromebooks** - All across the district. Every student has access to a Chromebook each day and in grades 3-12 they are able to access this device at home as well.

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. **Video Resources including YouTube, Wirecast, Swank** - Used to bring rich multimedia resources into the classroom to support instruction. Broadcast software systems are used for digital signage across the district and various student run announcement broadcasts in the mornings and throughout the school day.
8. **Home/School Communication** - Staff members utilize various web resources (Google Classroom & Seesaw online sign up programs, etc) to increase home/school communication for both students and their parents/guardians.
9. **Community Training and Support** - District offers opportunities for the community to utilize the school's resources to increase participation. Examples include the Collaboratory Cafe, PTA presence on the school's website, RTI Math and Reading nights, etc.
10. **Video Webinars** - Training and instruction in the correct use of technology in the classroom and recorded instruction are utilized within the district by staff and students. e.g. via Google Hangouts on Air (YouTube Live).
11. **Teacher Training** - Face to face sessions, weekly mini-instructional tech tips, live asynchronous video feeds, remote PD offerings, and help ticket, how-to shared documents, are all used in training teachers in correct instructional technology practices.
12. **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 Maps, 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.starpointcsd.org) is the main communication portal for parents and community members to retrieve various information. Google Sites, Google Classroom, & Seesaw are also used to showcase information from our school, its classrooms & athletic/musical programs.

Parents and students also have access to the use of:

- eSchoolData (eSD) Parent Portal. The eSD Parent Portal allows parents to login and view their children's attendance, schedule, report cards, transcripts, and graded classroom assignments/assessments.
- Collaboratory Cafe - a community accessible after hours technology lab where parents and students of all ages can come to work on school work and learn about the various technologies used in Starpoint CSD.
- The use of email and teacher web pages via Blackboard Web Community Manager are also examples of technologies to further enhance home-school communication.
- The District's website (www.starpointcsd.org) allows parents and community members to retrieve the following information:
    - Calendars and supplies
    - Career opportunities
    - Celebrations of student accomplishments
    - Codes of conduct
    - District's community newsletter
    - Community education
    - Course catalogs
    - Curriculum and Instruction information
    - Directions to athletics and various school events
    - District announcements
    - District forms including contact forms and job opportunities
    - District news items
    - eAlerts and broadcast alerts for time sensitive announcements
    - Facebook, Twitter, and other school/district social media feeds
    - Individual school information
    - Library services
    - Links to NYS information on state report cards and testing
    - Lunch menus and My School Bucks
    - Teacher web pages for classrooms, clubs, sports, etc.
    - Transportation information

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.

Awareness is indicative of state and national standards addressing technology competencies for teachers, administrators and other relevant educators.

Professional development is the central, most important part of any effective technology plan. A good professional development program will help the staff to become more skilled as well as more enthusiastic about the use of technology as a learning tool.

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. An effective program will provide our staff, and ultimately our students, with the expertise they need to realize the district's vision for technology.

The Starpoint Central School District's Comprehensive District Education Plan (CDEP) identifies the initial steps that will be taken to increase the focus, amount, and quality of professional development for the instructional staff. This plan, begins to describe the initiatives for new teachers as well as veteran teachers. As the CDEP is expanded, professional development services for technology will be incorporated. All professional development for the district for technology and beyond can be found in the Starpoint Central School District's Professional Development Plan.

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. Starpoint Central School District participates in Common Set of Learning Objectives (CSLO) and Model Schools Staff Development for Technology through The Western New York Regional Information Center (WNYRIC). Teachers are also encouraged to participate in staff development opportunities offered by the Orleans/Niagara Teacher Center and Erie 1 BOCES.

Through CSLO, the district purchases hardware and software, which have been approved by the WNYRIC Standards Committee and designated as addressing the NYS Learning Standards by the participating districts. In Model Schools, the district participates in 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 full time in-house technology integrator. The technology integrator works collaboratively with the teacher to create lessons that are standards based. Teachers are asked what the students need to learn and how technology can support this learning. Staff development is also provided Through Model Schools(CSLO), opportunities exist for teachers to use technology as a tool for managing and delivering instruction. Feedback from these training sessions is used to construct further staff development activities.

At New Teacher Orientation and in the Mentor Program, new staff members will be introduced to the topics found under the basic skill categories.

Assessment of current staff technology skills and usage

The district's primary goal is to ensure that every teacher has the basic skill set needed to infuse technology into the classroom.

Basic skill (Level 1) set contains the following categories:

- Basic computer operations
- Electronic Communications (eMail)
- File Management (saving/sharing files to the Google Drive/MS Word network drive)
- Word Processing (Google and MS Word)
- Presentation Software (MS PowerPoint and Google Slides)
- Student Management Systems for attendance/grading (eSchool)
- eDoctrina - APPR purposes
- Acceptable use and understanding
- Appropriate use of Internet applications/browsing
- Chromebooks, ThinkPads, Tablets
- Website - basic teacher page
- My Learning Plan - Professional Development Tracking
- Connecting your own personal device to WiFi

The levels below indicate that the district also has a focus on enhancing the teachers' technology skill set.

Intermediate skill (Level 2) set contains the following categories:

- Interactive Whiteboards/Flat Panel Displays
- Document Cameras
- Google Classroom and other appropriate Google Extensions
- Spreadsheets (MS Excel and Google Sheets)
- Google Forms
- Google Sites
- Website - further teacher page development

- eDoctrina - data collection, SLO's
- Web Based Instructional Assistance Tools - Quizlet, Nearpod, Kahoot, Symbaloo, QR code readers, Plickers, Quizzes, Seesaw, Edpuzzle and other related tools
- District Purchased Instructional Tools - Castle Learning, Turnitin.com, Read180, STAR Reading/Math, Think Through Math, AIMSWeb, IXL Learning, Successmaker, APEX Learning, Fast Forward, and other related tools
- Parent Communication Tools - Remind, Blooms, Class Dojo, Seesaw, ThoughtExchange and other related tools
- Social Media Tools - Facebook, Twitter, Instagram and other related tools

Advanced skill (Level 3) set contains the following categories:

- Google Ad ons
- Google Certifications
- Google Expeditions
- Adobe Certifications
- Adobe Sparks
- Photoshop
- We Video
- Use of BYOD in the classroom

Starting in the 2022-2025 school year and every other year after, all staff will be asked to fill out a self evaluation and grade themselves on a scale 1-3 with regard to their skills and usage in the above categories. Results of the self evaluations will be collected and analyzed by the district's Technology Integrator, who will work with the district's Assistant Superintendent of Curriculum, Instruction and Technology to establish future training goals and workshops.

Staff Development Goals

The Assistant Superintendent of Instruction, Assessment and Staff Development will work with the District Technology Integration Specialist to ensure the following goals are met	**District Technology Goals**
Starpoint will ensure ongoing, sustained professional development for teachers, administrators, and school personnel to further the use of technology in the classroom by ● Professional Development Plan ● Staff Development Committee ● Model School/CSLO program through BOCES ● Contractual incentives ● New teacher orientation ● Mentor Teacher Program ● Increase in staff development days ● Periodic refresher courses ● Sharing ideas at faculty meetings ● Grade Level and Department Meetings ● Summer Curriculum	**3**
Instructional technology will help the school provide access to the best teaching practices and curriculum resources for teachers, students, parents. **Teachers** ● Communicate goals and requirements of the classroom ● Provide access to the Internet ● Utilize E-mail ● Access the library via the web ● Utilize eDoctrina, a curriculum assessment database ● Google for Education ● Interactive ClearTouch Panels ● Document Cameras ● Chromebook and Thinkpad carts ● Variety of online subscription services **Students** ● Provide access to the internet, BYOD ● 1:1 Device ● Access the library via the web ● Google for Education ● Google email ● Chromebook and Thinkpad carts ● Variety of online subscription services	**1,2,3,4,5**

Parents ● Provide access to the internet ● Offer workshops on Google for Education ● Access to Parent Portal through eSchool Management System	
Beliefs about learning will be tied to the uses of technology. ● NYS Next Generation Learning Standards (ELA, Math), NYS Science Learning Standards and NYS Social Studies Framework ● ISTE Standards ● Starpoint CSD CDEP Plan	**1,2,3**
Courses, programs, and workshops will be offered to meet the learning needs at all levels. ● Skills for standard applications ● Strategies for integration ● Instructional management	**2,3**
Courses and workshops will be offered. ● During the school day ● Saturdays ● Before and after school ● Summers	**3,4**
Support will be provided to all staff. ● Assistant Superintendent of Curriculum, Instruction and Technology ● District Technology Integration Specialist ● District Technology Employee ● 3 Part-Time BOCES Technology, 1 Director of Technology and 1 Network Manager ● Peer support	**2,3**

Infrastructure, Hardware, Technical Support and Software

The State of the District

Starpoint currently has approximately 3500 computers being used in the district, about 750 of these computers are Windows 10/11 and 3000 are Google ChromeOS based machines while the remaining amount are MAC OSX machines.

File Servers/Network Infrastructure

The district currently has 4 Intel based files servers and 4 Intel based Virtual servers that host multiple Virtual servers that support various functions, including Library Services (Follett Destiny), eSchoolData (Student Management System), Microsoft Active Directory, and Web based Functions. All servers are rack mounted in the main computer center. Each server is protected by a distributed backup system, providing redundancy at multiple locations in district and cloud based locations.. The virtual servers are also protected by a secondary data center located in the high school which store a duplicate copy of our data.

The computer center is also the center of the network and is connected Via Fiber to all of the wiring closets throughout the district. Each closet has 1-2 dedicated 10 Audabit fiber connections back to the main computer center. The district wiring closets contain 1000 Megabit switches which in turn connect all of the workstations in the district.

The district implements a virtualization computer platform to consolidate all servers into more energy efficient configuration that will fully utilize the resources of servers, this enables each server host to support up to 20 virtual servers.

A centralized disk storage system is also in place that provides shared / secure disk storage for all configured virtual servers as well as mirrored copies of data in out secondary data center

Internet Connectivity

The district currently takes part in the WNYRIC Broadband Service. This service provides direct fiber connectivity to the WNYRIC for internet/video services. To comply with the Children's Internet Protection Act (CIPA), the district also participates in the WNYRIC filtering service. ALL workstations in the district are filtered through this service.

Administration

Starpoint Central High School, Middle School, Regan Intermediate School, and Fricano Primary offices all utilize Windows computers to access online services provided by

Erie 1 BOCES. The services that BOCES provide include payroll, staff attendance, accounts payable, student management, student attendance, and student grading.

eSchoolData, the student management system, is used to maintain all student related information. IEPDirect, is used by the special ed. department to maintain student IEP's.

Computer Labs/Media Centers

The district's four schools currently have a total of 10 computer labs. The Starpoint high school contains 7 computer labs. Starpoint middle school contains 1 lab, Regan Intermediate contains 1 lab, and Fricano Primary contains 1 labs. Each lab contains between 25 and 28 computers, 1 teacher station equipped with a multimedia presentation monitor, high speed network laser printer, and access to an Interactive Display Panel.

Classrooms

All classrooms are equipped with a single teacher machine (Windows/MAC) with internet access for grade reporting and period by period attendance. The teacher machines are connected to an Interactive Display Panel. Each classroom also contains a dedicated laser printer.

Auditorium

All auditoriums are equipped with connectivity to the district computer network.

Peripheral Devices

Each building in the district has access to several digital cameras with digital video capabilities, color printer, Doc Cams, Web Cams, Tablets, 3D printers and Large FOrmat Printers for teacher and student use.

Technology Department Staff

Starpoint's technology staff currently consist of one part time Technology Coordinator (3 days per week) provided by a BOCES Senior specialist, one full time Network Manager, full time Technology Integrator, and full time Audio/Visual Coordinator, and 2 full time BOCES technicians.

Staff Development

The technology department offers on site in-services to all district staff, 5 days a week from a full time Technology Integrator. In addition, the district is part of the Erie 1 BOCES Common Set COSER, which allows instruction away from the district.

Technology Infrastructure

The Technology Coordinator maintains an equipment inventory of computers and printers. See Appendix A.

Decisions about technology purchases are made based on the intended use. Our partnership with Erie 1 BOCES Western New York Regional Information Center will help to determine types of hardware and software that best fit our needs. Because of our participation in the Common Set of Learning Objectives (CSLO) service, significant savings can assist our future purchasing/leasing 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
   This part of the process involves close cooperation with Erie 1 BOCES.

Software

We use both Macintosh and PC-based computers for classroom instruction. The standard instructional software applications in use in the Starpoint district are available on both platforms once the user has electronically signed the District-adopted Acceptable Use Policy (AUP). See Appendix B. Our administrative system is all PC-based. Each computer in the district that is connected to the network has access to word processing, spreadsheet, database, presentation, E-mail, Internet, cloud based service, and grading software.

Instructional computer software and Internet services are selected based on their effectiveness in supporting the curriculum and the associated standards. The purchasing process includes a Software Evaluation Form that must be submitted by the teacher(s) requesting the software. See Appendix C. Our administrative and student management applications include Finance Manager and eSchooldata, which are BOCES-provided services. NVision is used for managing the district financial data while eSchooldata, allows us to do scheduling, attendance, grading, and report cards.

Our Future

Starpoint is in the process of implementing a technology capital project for infrastructure that will address data networking needs throughout the district. The components of the data networking implementation include upgraded network switches that support the higher speeds needed to implement many network based security, and end user devices. Part of this implementation includes upgrading the Core network infrastructure in order to support the following:

- Wireless Network Upgrade
- Network Switches Upgrade
- Faculty/Staff Computer replacements
- Classroom Projector/Interactive panel Replacement
- Implementation of 1-1 student devices K-12

Upgrading

In the 2022-2025 school years, Starpoint 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. In 2022, Middle School and High School Teacher Computers were replaced as part of ongoing maintenance, in 2023 all Intermediate and Primary teacher computers were replaced. Teacher printers were also replaced during the summer of 2020. In 2013 Starpoint started implementing Google services in the classroom, part of the implementation including purchases of Chromebooks for Teacher and Student use. These chromebooks were tied to usage from carts purchased over the last 3 years as detailed below:

- 2015 Initial pilot rollout of Chromebooks of 6 carts 25 each.
- 2016 Purchase 200 Chromebooks for Teacher use
- 2016-2017 Phase 1 of Smart Schools Project, 30 carts with a mix of 25 and 30 each.
- 2017-2018 Phase 2 of Smart Schools Project, 30 carts with a mix of 25 and 30 each.

This 2022-2025 technology Plan provides a path to switch to a 100% k-12 1-1 device implementation. The plan will also include the continued support of Chromebook and Google supported devices on the network.

Our updated infrastructure can now support video streaming as well as voice and data. We plan on utilizing online Streaming video services (google, youtube, etc) as well as our own streaming video servers (Safari Montage) as a teaching aid in the classroom. Starpoint also participates in the Orleans Niagara BOCES Virtual Field Trip service, helping to deliver remote instruction and content to classrooms from distant locations. Teachers are also able to access their files from home using a web browser.

The District embarked upon a server virtualization project in 2005, most servers are virtualized, saving the district ongoing cost of power, environment controls and maintenance fees. Starpoint will continue to utilize virtualization technologies throughout this timeline.

As part of ongoing maintenance, and Network migration, our instructional and administrative servers will need to be upgraded. To support This ongoing maintenance, periodic Internal network upgrades may be needed to support these upgraded services.

Starpoint will continue to participate in the WNYRIC Broadband initiative which provides high speed internet connectivity as well as Wide Area Network connectivity for collaborative learning and videoconferencing.

Starpoint will continually monitor users' needs and modify or enhance configurations in conjunction with the yearly budget cycle.

Infrastructure Security and Compliance:

Starpoint is currently participating in the Erie 1 BOCES Cyber Security Service, which provides next generation firewall services and integrated endpoint protection to help ensure identity and data protection in our rapidly expanding network.

Implementation – Hardware/Software Action Plan

Actions/Tasks	Timeline	Person(s) Responsible	Assessment	Success Indicator
Plan Completed and Approved by the Board of Education	N/A	Superintendent Technology Coordinator	Board minutes	District / BOE Approval of Plan
Plan communicated to all stakeholders: Staff, Faculty, Students, Parents, Community	N/A	Superintendent Administrators Technology Committee Teachers	Stakeholder Feedback	100% buy-in from all stakeholders
Monitor and Review Plan	Semi Annually	Superintendent Administrators Technology Committee	Updated plan on file with BOCES / NYSED	Plan endorsement/ approval Letter.
Scheduled workshops for technology-based staff development	Ongoing	Technology Integrator	List of participants, their evaluations, and future needs	
Disassemble all chromebook carts grade 3-12 in preparation for distribution to students in September	7/2022-8/2022	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly
Organize and inventory carts for classrooms K-2	7/2022-8/2022	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly

Train Staff / Faculty on use of the newly purchased technology	8/2022-6/2023	Technology Integrator	Ongoing assessment by Technology Integrator	Competent use of technology in the classroom
Purchase/Install upgrade computers in Grades 6-12 classrooms	7/2022-6/2023	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly
Purchase/Install upgrade computers in Grades K-5 classrooms	7/2023-6/2024	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly
Upgrade student chromebooks by grade as needed (determined by google support expiration date)	7/2022-6/2025	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly
Purchase/Install Network core switches and edge switches located in wire closets	7/2022-9/2022	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly
Purchase and install WLAN access points for every classroom in district	7/2022-6/2023	Technology Integrator	Ongoing assessment by Technology Integrator	Competent use of technology in the classroom
Purchase and install new interactive touch screen panels for each classroom	7/2022-6/2025	Technology Coordinator	Installation Check-Off Sheets completed by installation specialist	Hardware Current and operating correctly

Train Staff / Faculty on use of the newly purchased technology	7/2022-6/2023	Technology Integrator	Ongoing assessment by Technology Integrator	Competent use of technology in the classroom

Classroom	**Computer Lab**	**Library Media Center**	**Office**
- Video broadcast capability - Teacher workstation – networked PC and printer - Interactive Display Panel - Classroom Speaker - Network drops - Wireless Network - Student/TeacherChromebooks - Internet access - Voip Telephone/voice mail - Document Camera - Web Cam	- Network drops - Networked PCs - Interactive Display Panel - Networked laser printer - Video broadcast capability - Internet access - Voip Telephone/voice mail - Wireless Network	- Network drops - networked PCs - Network Printer (Multifunction) - automated card catalog(OPAC) - Internet access - Interlibrary loan and Union Catalog - Online subscriptions (WorldBook,Infobase, Britannica) - Video broadcast capability - Portable Interactive Display Panel	- network computer drops - video broadcast capability - Presentation monitor (Security) - Internet access - Voip Telephone/ voice mail

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 – July 2022

- 3 day (.6 FTE) Technology Coordinator
- 5 day (1 FTE) Network Manager
- 5 day (1 FTE) Technology Integrator
- 10 days (2 FTE) technical support from WNYRIC LAN Support Technicians
- 5 day (1 FTE) Audio/Visual Coordinator.

Recommendations for the level of support to fully sustain the Starpoint Central School District Technology Plan are outlined below:

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- A full- time (1 FTE) Data Protection Officer
- A full- time (1 FTE) Social Media Coordinator
- A full-time (1 FTE) Director of Technology to coordinate the district efforts
- A full-time (1 FTE) Asst Director of Technology (Network Manager)
- 10 days (2 FTE) Technology Integrators for Staff Development
- 10 days (2 FTE) Erie 1 BOCES FTE LAN Support.
- Technology leaders to support teachers and students in each building
- 10 days (2 FTE) Audio/Visual Technical Support.

Maintenance of equipment

Presently, the majority of computer equipment is purchased as part of the Common Set of Learning Objectives CoSer through Erie 1 BOCES. As part of the service, we contract with the Regional Information Center for service and support on our major network equipment such as hubs, routers, and network file servers. Each year we purchase coupons from the WNYRIC as well to cover hardware issues with workstations and printers. In addition to hardware maintenance, it is important to maintain our LAN support contract with Erie 1 BOCES.

Funding

In order to achieve the goals identified in this plan, the following expenditures are critical. Recognizing the need to be fiscally responsible, we propose a method for phasing in purchases based on highest need and in alignment with the capital project.

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 Erie 1 BOCES, which will allow the district to finance their acquisitions through an aidable Installment Purchase Agreement.

Budget

Budget	2022-2023	2023-2024	2024-2025
Salaries & benefits	$200,000.00	$200,000.00	$200,000.00
Hardware and Networking Costs	$1,925,000.00	$75,000.00	$75,000.00
Software License Agreements	$50,000.00	$50,000.00	$50,000.00
Professional Development	$100,000.00	$100,000.00	$100,000.00
Maintenance & Service costs	$30,000.00	$30,000.00	$30,000.00
Internet Connectivity(Broadband)	$22,200.00	$22,200.00	$22,200.00
Total	$2,127,200.00	$277,200.00	$277,200.00

**Includes salaries (after BOCES Aid) of 2 full time BOCES on site Technicians, Network Manager 1.0, Technology Coordinator .6, and Technology Integrator 1.0

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.

Inventory

Hardware Inventory

Hardware Inventory	Computer Labs	Class-rooms	Library or Media Ctr	Admin. Office	Other Location	Planned Future Acquisitions		
						Year 1	Year 2	Year 3
Computers (list by type)	350	534	62	110	12	100	100	80
A. PC (Windows Machines)	350	534	62	110	12	100	100	80
B. Macintosh (OSX)	26	2	---	---	---	---	—	---
Number of computers listed above that are Internet ready	350	534	62	110	12	---	---	---
Number of computers listed above equipped for multimedia	18	230	2	---	---	---	---	---
Peripheral Devices								
A. Printers	12	230	4	70	4	---	----	---
B. Scanners	12	4	4	4	n/a	---	---	---
F. Digital Cameras	---	---	8	---	---	---	---	---
G. TV Monitors	15	100	4	---	---	---	---	---
H. VCRs/Laser Disk Players	18	40	4	---	---	---	---	---
I. Projection Devices	18	210	4	2	---	---	---	---
K. Video Cameras	---	---	8	---	---	---	---	---
Network Equipment								
A. Hubs	---	---	---	---	130	---	---	---
B. Routers	---	---	---	---	1	---	---	---

C. Servers	---	---	---	---	16	1	1	1
Number of rooms wired for internal connections	10	230	4	50	12	---	---	---
Telecommunication Links								
A. Full or fractional T1								
C. Broadband Fiber	---	---	---	---	1	---	---	---

SOFTWARE INVENTORY

Software Inventory	Computer Labs	Class-rooms	Library or Media Ctr	Admin. Office	Other Location	Planned Future Acquisitions		
						Year 1	Year 2	Year 3
Microsoft Office	350	534	62	110	12	Add/update as needed		
Inspiration	350	534	62			Add/update as needed		
Kidspiration	350	534	62			Add/update as needed		
Adobe Photoshop	56	---	---	5	---	Add/update as needed		
AutoCAD	35					Add/update as needed		
Math Blaster	84					Add/update as needed		
Kid Keys	84					Add/update as needed		
Finale	---	8	---	---	---	Add/update as needed		
Destination Success	52	---	---	---	---	Add/update as needed		

Classroom Performance	---	---	---	---	168	Add/update as needed
Read 180	---	30	---	---	---	Add/update as needed
Kurzweil	---	18	---	---	---	Add/update as needed
Dragon Speak	---	18	---	---	---	Add/update as needed
ExamGen	---	60	---	---	---	Add/update as needed
Safari Montage	10	250	---	---	---	Yearly Subscription Renewal
Turnitin.com	18	230	---	---	---	Yearly Subscription Renewal
Adobe Creative Suite	350	---	62	---	---	Add/update as needed
Deep Freeze Enterprise	500	---	---	---	---	Yearly Subscription Renewal

Computer Inventory Purchasing Timeline

Listed below are a summary of our computer purchases and a brief description of their location.

April-15	HP EliteDesk 800		100
April-16	HP EliteDesk 800		100
June-16	Network Switch upgrade		50
June-16	Student 1st Generation Chromebooks		750
June-16	Wireless Network Upgrade		160

June-16	Chromebook Carts		50
June-17	Student 2nd Gen Chromebooks		750
June-17	Chromebook Carts		50
July-18	Dell 740 DL Servers		4
Sept-18	Classroom Printers		250
June-19	Student 3rd Gen Chromebooks		1200
July-19	Admin Desktops		50
June-20	Student 4th Gen Chromebooks		1000
June-22	Student Chromebooks(1-1)		500
June-22	Classroom Computers		100
June-23	Interactive Panels		250
June-22	Wireless Access Points		250
June-23	Classroom Computers		100

Board of Education Policies

SUBJECT: STUDENT USE OF PERSONAL ELECTRONIC DEVICES – BRING YOUR OWN DEVICE (BYOD)

Use of Personal Technology or Electronic Devices

The Board of Education seeks to maintain a safe and secure environment for students and staff. Advances in technology have made it possible to expand the learning environment beyond traditional classroom boundaries. The Starpoint Central School District (Starpoint CSD) grants its students the privilege of using personal electronic devices for academic and personal use within the guidelines as outlined in this policy. Using personal electronic devices during instructional time can enable students to explore new concepts, personalize their learning experience and expand their global learning opportunities. Additionally, the use of personal electronic devices is ubiquitous in today's society and standards for student use during non-instructional time should adapt to this change.

This policy is intended to protect the security and integrity of the District's data and technology infrastructure. Limited exceptions to the policy may occur due to variations in devices and platforms.

This policy defines the use of personal electronic devices and reinforces the standard that all use, regardless of its purpose, must follow the guidelines outlined in the Student Acceptable Use Policy (AUP), the Starpoint CSD Code of Conduct, and the Dignity for All Students Act (DASA).

Personal electronic devices are limited to laptop computers (Microsoft Windows, Apple, and Google Chrome platforms), tablet devices (iOS, Android and Windows platforms), and smartphones (iOS, Android, Blackberry and Windows platforms).

Personal electronic device use by students is permitted during the school day and is expected to be in support of educational activities. The District defines acceptable academic use as activities that directly or indirectly support the instructional practices of our school. District/Building Administrators and teachers will indicate when and if classroom use is acceptable. Students must act responsibly and thoughtfully when using personal electronic devices. Personal electronic devices must remain in silent mode at all times except when being used for instructional purposes and permission has been granted by the teacher.

Consistent with a student's use of the District Computer System (DCS), a student's use of personal electronic devices shall be subject to the general requirements of acceptable student behavior expected under the District's school conduct and discipline policy and the Code of Conduct.

Prohibition During State and Local Assessments

All students are prohibited from bringing personal electronic devices into a classroom or other location where a New York State assessments, Local assessments, or in any situation with the potential for plagiarism or cheating, unless prior permission is granted by the District/Building Administrator or teacher. Test proctors, test monitors and District officials shall have the right to collect prohibited personal electronic devices prior to the start of the test and hold them while the test is being administered, including break periods. Admission to any assessment will be denied to any student who refuses to relinquish a prohibited device.

Students with disabilities may use certain devices if the device is specified in that student's IEP or 504 plan or a student has provided medical documentation that they require the device during testing.

Additional Guidelines

Starpoint CSD recognizes that while carrying personal electronic devices can be a safety measure for staff and students alike, problems arise when the inappropriate use of personal electronic devices interferes with the school's ability to maintain control in the school environment, giving rise to security, as well as, educational concerns.

Inappropriate or unauthorized use of personal electronic devices can undermine the communication system in place per the school district's safety plans, impede evacuation plans if parents or other individuals are summoned to the school by non-designated persons, and potentially restrict the access of community emergency service providers to the site.

As deemed necessary, school safety plans and the District Code of Conduct shall be modified to address the use of and/or restriction of personal electronic devices during designated times or events, particularly by students and visitors to the school.

District Wireless Use Levels

District campuses utilize four wireless levels. Each of these levels defined below are under the direct supervision and authority of the responsible District/Building Administrator, teacher or staff member.

- Level 1 – All personal electronic device use is strictly prohibited (e.g., privacy areas)

- Level 2 – Personal electronic device use is available only through direct request of the appropriate supervising teacher or staff member for each instance (e.g., classroom)

- Level 3 – Personal electronic device use is available based on check-in with the area supervisor (e.g., study hall, library)

- Level 4 – Personal electronic device use is openly available (e.g., HS lobbies)

Additional Information

- Personal electronic devices may not be connected to the network by a network cable plugged into a data outlet. Network access is provided via wireless access only.
- Personal electronic devices may not be used to establish a wireless ad-hoc or peer-to-peer network while connected to the District's network. This includes, but is not limited to, using a personal device as a cabled or wireless hotspot.
- Personal electronic devices are not to be shared or accessed by other students or users.
- Student use of a personal electronic device must not disrupt the learning of others. Sounds must be muted at all times unless explicit permission is granted by a teacher or staff member for each instance.
- The Board of Education expressly prohibits use of any personal electronic device in locker rooms, restrooms, health offices, pool areas, and any other areas where a person would reasonably expect some degree of personal privacy. In these areas, all personal electronic device use is strictly prohibited (i.e., Level 1 areas).
- The District shall not be liable for the loss, damage, misuse, or theft of any personal electronic device brought to school or on a school-sponsored trip or activity. Personal electronic devices that are brought to school or on a school-sponsored trip or activity are the students' and parents' own risk. In the event that a personal electronic device is lost, stolen, or damaged, the District is not responsible for any financial or data loss.
- The District reserves the right to monitor, inspect, examine and/or confiscate a student's personal electronic device and search its contents if there is reasonable suspicion that school and/or District policies or local, state and/or federal laws have been violated. Searches will be limited to circumstances in which there is reasonable suspicion that the search will produce evidence of the suspected misconduct.
- Violations of school or District policies, local, state and/or federal laws while using a personal electronic device on the District's wireless network will result in appropriate disciplinary and/or legal action as specified in the District's Code of Conduct, District policy as well as by local, state and/or federal law.

- District staff cannot attempt to repair, correct, troubleshoot, or be responsible for malfunctioning personal electronic devices or software contained on a personal electronic device.
- Connectivity and technical issues that may arise with the personal electronic device remain the responsibility of the owner of the device.

NOTE: Refer also to Policies #7315 -- Student Acceptable Use Policy
#7550 -- Dignity for All Students
#8271 -- Internet Safety/Internet Content Filtering Policy

Adoption Date 01/09/2017