Sharon Springs Central School District

Technology Plan

2015 - 2018

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INTRODUCTION

Sharon Springs Central School District acknowledges that supporting the use of educational technology is an important part of 21st century learning. The purpose of the Instructional Technology Plan is support teaching and learning while determining appropriate needs for investments in technology.

LEA INFORMATION

DEMOGRAPHICS

Sharon Springs Central School District is a rural school district located approximately 45 minutes southwest of Albany with a public school population of approximately 275 students K-12. The district is located in the Western corner of Schoharie County in New York. The district has one school, grades K – 12. The free and reduced lunch rate averages around 58%. The per-capital income of this community is the lowest in Schoharie County. Before our iPad initiative, less than 50% of our students' homes had access to internet, be it through a cable subscription, satellite, or dial up. This created an inequity between our students that came from homes with internet access, and those that did not.

ENROLLMENT

District total as of BEDS Day, October 1, 2014 = 289

GRADE BAND	ENROLLMENT
Grades K – 2	61
Grades 3 – 5	60
Grades 6 – 8	59
Grades 9 – 12	109

TECHNOLOGY CONTACT INFORMATION

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INSTRUCTIONAL TECHNOLOGY VISION & GOALS

MISSION

The Mission of the Sharon Springs Central School, a community oriented district, is to educate all students to become healthy, hardworking, honest and respectable citizens, who will value lifelong learning, and contribute to a global society.

VISION

The Vision of the Sharon Springs Central School is to provide a supportive and creative learning environment, which challenges our students to achieve excellence as a way of life.

BOARD OF EDUCATION GOAL

The goal of the Sharon Springs Central School District's Board of Education is to represent and serve students, district residents, faculty, staff, administrators and district volunteers through policy development, thoughtful planning of academic programming, facilities management and fiscal responsibility to ensure the highest level of achievement and preparation of our student body.

TECHNOLOGY PLAN EXECUTIVE SUMMARY

Sharon Springs Central School District will follow and align with educational technology standards set forth by the International Society for Technology in Education (ISTE). In order to prepare staff with proper training the district will take membership with NERIC's Model Schools organization which will offer free instructional technology planning and professional development to teachers. The integration of technology into instruction is the primary goal of the Technology Plan. The plan provides an overview of the basic operations and concepts; social, ethical and human issues; technology productivity tools; technology communication tools; technology research tools; and technology problem-solving and decision making tools that students need to learn to fully apply technology in school. It corresponds closely to the International Society for Technology in Education standards and New York State Learning Standards.

INFORMATION AND INSTRUCTIONAL TECHNOLOGY GOALS

"Support the use of educational technologies which have been proven effective at driving instructional practices for the promotion of 21st century learning."

- ✓ **Equity:** Promoting equal opportunity and providing meaningful access to learning technology resources for all students, including those who are economically disadvantaged or have special needs. True equity of educational opportunity with regard to technology is achieved by personal, one-to-one, classroom- and home-based access to appropriate computer technology for teachers and students.

- ✓ **Engagement:** Involving students in active learning and thereby improving student achievement by engaging them with technology from their own generation.
- ✓ **Integration with Standards:** True integration requires a program not focused on learning about computers, but a focus on using computer technology as a **tool** to learn problem-solving, critical-thinking, teamwork and communication skills across all content areas.
- ✓ **Professional Development:** Providing effective preparation, professional development, and training programs for teachers and other educators in the use and integration of learning technology tools in curriculum development, instructional methods, and student assessment systems.
- ✓ **Economic Development:** Preparing students for college and jobs in the work place that require high levels of problem-solving, communication, and technological skills that can be achieved, in part, through a K-12 learning technology initiative.
- ✓ **Sustainability:** Providing future fiscal sustainability of technology resources for the district to be able to adapt to future educational needs.
- ✓ **Intensify efforts to go paperless.** Beyond replacing textbooks and novels, the devices will include the district's report card and attendance software for use by staff.

PLANNING PROCESS AND STAKEHOLDERS – TECHNOLOGY COMMITTEE

The primary tool for involving key stakeholders in the development of the Technology Plan and its updates has been the technology committee chaired by the coordinator of educational technology. The group is an open group and all school staff can participate.

The District Technology Committee comprised of the superintendent, building principal, teachers in various grade levels K-12, and district technology staff meet on a monthly basis to discuss and analyze district technology use and needs. All educator stakeholders are invited to participate including special education leadership and educators.

The technology committee invites student council representatives to participate in discussions related to student technology. This is an invite extended at times when topics of student technologies are proposed on the discussion agenda for a meeting.

GAPS IN FOCUS AREAS

- Lack of Devices in conjunction with all learners will have access to tools.
- Support staff will need to be increased with increasing technology devices being added.
- Access Points
- Cabling
- Professional Development

CHALLENGES

- Funding
- Need for Courses specifically in Educational Technology
- Lack of Staffing

TECHNOLOGY AND INFRASTRUCTURE INVENTORY

Summary:

The Sharon Springs Central School District makes large purchases of computing and educational technologies through the local BOCES which provides opportunities for more technology at a reduced cost. Technology is tagged and inventoried with BOCES tagging which is maintained on an annual basis

Every student in grades 7-12 and every Teacher is issued, in a similar manner as a textbook, an **iPad.** Internet access is provided with a wireless Verizon account, filtered by Lightspeed in compliance with CIPA regulations. None of these devices currently use the districts Wi-Fi. Each class grades 4-6 has an iPad cart with 25 units that are on the districts network. Grade K-3 has a shared 25 unit iPad cart which is also on the district wireless network.

Network Broadband Bandwidth	Minimum Capacity (Expressed in Mb or Gb)	Maximum Capacity (Expressed in Mb or Gb)
Network Bandwidth: Incoming connection TO district schools (WAN)	200Mb	200Mb
Internal Network Bandwidth: Connections BETWEEN school buildings (LAN)	1Gb	1Gb
Bandwidth: Connections WITHIN school buildings (LAN)	1Gb	1Gb

What is the total contracted Internet access bandwidth for your district?	**40Mb**
What is the name of the agency or vendor that your district purchases its primary Internet access bandwidth service from?	**NERIC / Time Warner**

WIRELESS CONNECTIONS

WIRELESS PROTOCOLS	Available	In use
802.11a	■	■
802.11b	■	■
802.11g	■	■
802.11n	■	■
802.11ac	□	□

802.11ad	☐	☐
802.11af	☐	☐

WiFi Access

WiFi Points	21 Access Points
WiFi Coverage	90% of Instructional and Administrative
Wireless Controller Usage	No – Future Plans include an upgrade to WiFi
Port speed of the switches that are less than five years old in use in the district	1Gb

EMAIL COMMUNICATIONS

Each student was issued a district provided email address hosted by the district's internal exchange server. Email allowed the students to communicate with teachers regularly outside of the classroom.

COMPUTING DEVICES

Computing Devices used only for instructional purposes	Number of devices in use that are less than five years old	How many of these devices are connected to the LAN?
Desktop Computers / Virtual Machine (VM)	218	218
Laptops / Virtual Machine (VM)	38	35
Tablets less than nine (9) inches with access to an external keyboard	2	2
Tablets nine (9) inches or greater with access to an external keyboard	50	50
Tablets less than nine (9) inches without access to an external keyboard	0	0
Tablets nine inches or greater without access to an external keyboard	268	268

CLASSROOM TECHNOLOGY DEVICES INVENTORY

Classroom Technology Devices for educational use	Number of Elementary Devices	Number of Jr./Sr. High School Devices	District Total
Mimio Teach	10	23	33
Document Camera	3	5	8

ASSISTIVE TECHNOLOGY

Total number of students with disabilities in your district, what percentage of these students are provided with assistive technology as documented on their Individualized Education Programs (IEPs):	100%
Total number of students with disabilities in your district, who are provided with assistive technology as documented on their Individualized Education Programs (IEPs):	100%

Additional assistance or resources that, if provided, would enhance the district's ability to provide improved access to technologies, including assistive technologies, for students with disabilities:

PERIPHERAL DEVICES

Peripheral Devices	Number of devices in use that are less than five years old
Document Cameras	8
Flat Panel Displays	218
Interactive Projectors	0
Interactive Whiteboards	33
Multi-function Printers	4
Printers	23
Scanners	5
Projectors	37
Other Peripherals	1 Mobile Video Conferencing Units
Apple TV	35
Sound Bar and Subwoofer	35

SOFTWARE AND IT SUPPORT

DISTRICT SUPPORTED OPERATING SYSTEMS

- Windows 7.0
- Windows 8.0 or greater
- Apple iOS 8 or greater
- Mac OS 10 or later

DISTRICTSUPPORTED WEB BROWSERS

- Internet Explorer 9 or higher
- Google Chrome
- Safari for iOS 8 or greater

LEARNING MANAGEMENT SYSTEMS

The goal of Sharon Springs Central School is to provide development to successfully leverage a powerful tool to act as:

- · A workflow solution that seamlessly allows all assignments to be created, collected, assessed, and distributed using iPads;
- · Increase communication and collaboration between students and teachers;
- · Increase the availability to a wider range of multimedia tools to create, communicate, and distribute learning;
- · Intuitively and seamlessly integrate Microsoft's, Apple's, & Google's productivity/collaborative tools;
- · Enable more "student-centered" lessons and/or projects; and
- · Ultimately, ensure students are college and career ready.

- Here's a running agenda for our technology meeting that have taken place over the summer: https://docs.google.com/document/d/1h3oA_EFBvvs2UWnFQF5Q1HwgNg2ZVMKKYt7cJHNy4Tc/edit?usp=sharing
- Here are the dates we met to decide on an LMS: https://drive.google.com/file/d/0B9f1J_L6ULwNUkJVel85Y3o1U2s/view?usp=sharing
  - o March 6, 2015 – Outcome: Examine Schoology
  - o April 1, 2015 – Outcome: Examine Canvas
  - o April 8, 2015 – Outcome: Examine ItsLearning
  - o April 29, 2015 - Outcome: Surveys of students, teachers, and administration indicated that Schoology was the best tool for SSCS
- Here are the dates when we collaborated on the tech plan in its Google Docs form: https://docs.google.com/document/d/1-h0HB-vr2ajOj3RawXa_SzHlNs0Exjlbdti-2F9qZQM/edit?usp=sharing
  - o May 11, 2015 – Outcome: Big picture ideas (mission and vision for tech at SSCS)
  - o May 18, 2015 – Outcome: Evaluate and compare our old tech plan to current setup

- o June 15, 2015 – Outcome: Decide on methods to evaluate tech skills and safety of students, teachers, and administration (ISTE standards)
- o June 16, 2015 – Outcome: Inventory

Schoology

The district will be moving to provide Schoology through NERIC for the 2015 – 2016 school year for all K-12 teachers. Schoology will provide an easy synchronization with eSchoolData of student names, courses, and gradebook information which will ease the use of a Learning Management System. Schoology will also be used for non-course related groups that will enable RTI teachers, district committees, and professional development to be shared amongst stakeholders.

DISTRICT SUPPORTED SOFTWARE AND WEB BASED APPLICATIONS

- Microsoft Office 2013
- Office 365
- Webdav
- iWork Suite
- Exchange Email System
- I-Ready
- Type to Learn
- Edutyping
- Easiteach by Poliyvision

STUDENT INFORMATION SYSTEMS

eSchoolData

The Sharon Springs Central School District imported student record keeping into eSchoolData from Administrator's Plus in the beginning of the 2013 – 2014 school year. eSchoolData is a NERIC supported service which includes all data is stored at the Regional Information Center. Student information stored in eSchoolData includes all demographic, enrollment, attendance, discipline, scheduling, and assessment record keeping in alignment of NYSED record and reporting requirements. Moving forward in the 2015 – 2016 school year the district will utilize a next generation system of eSchoolData GURU Boards to work in conjunction with data stored in eSchoolData providing a data dashboard that will provide tools for educational practice. eSchoolData includes access to a parent and student portal for all students K – 12 in the two public buildings within the district. The parent and student portals give access to the following to its stakeholders:

- Attendance
- Assignments
- Grade Reporting
- Student Schedules
- Report Cards (7-12)
- Standards Based Report Cards (K-6)

- Transcripts

Centris Group (IEP Direct, 504 Direct, & RTI Direct)

Special Education records including IEP's and 504's along with RTI records are kept within the Centris Group applications. Centris Group applications are a NERIC supported service which includes all data is stored at the Regional Information Center.

DISTRICT UTILIZED TOOLS FOR PUBLIC COMMUNICATIONS & SOCIAL MEDIA

- District Website
- District Newsletter
- School News Notifier
- Facebook
- Email
- Teacher Websites
- Google Calendar
- Schoology
- Outdoor LED Display

DESCRIPTION OF INFORMATION TECHNOLOGY DEPARTMENT

TITLE	PRIMARY RESPONSIBILITY
Computer Integration Specialist & Chief Information Officer (1 FTE)	• NYSED Reporting • Usage support and guidance of Educational Technology • Technology Professional Development Coordination
Computer Support Specialist (.6 FTE)	• Device support, research, purchasing, and maintenance • Network systems • Technical and End-User support
	End-User Support

CURRICULUM & INSTRUCTION

DIGITAL CONNECTIVITY AND TECHNOLOGY FOR IMPROVED TEACHING AND LEARNING

In the fall of 2015 the district plans to utilize and implement some new tools that will assist in providing 21st century style learning. Tools that the district has decided to implement are Google Apps for Education, Schoology, eSchoolData GURU, and Google Classroom. The district plans to expand the technology toolbox by deploying iPads when affordable to replace current laptop devices.

Sharon Springs Central School will be utilizing Smart Schools Bond funds to expand wireless and networking capabilities district wide.

GENERAL ALIGNMENT WITH ISTE

The district recognizes a need to form committee that supports a digital curriculum for all grade levels. Digital Literacy will be supported through the Library Media Specialist. The district digital literacy coursework aligns with ISTE curriculum.

DIGITAL LITERACY & INTERNET SAFETY

The district recognizes the necessity of instructing internet safety and digital literacy in order to educate students on the dangers lurking online. Students must also be educated in digital literacy to enable the increased need to use technology to communicate in the current state of how people communicate, complete work, and learning tasks on a daily basis. Before the completion of grade eight all students must have been taught internet safety and cyber security. Instruction on internet safety and digital literacy may be lead by regular classroom teachers as an addition to the curriculum developed and delivered by the Library Media Specialist. Resources that the district uses for internet safety are the FBI.gov.

FBI Kids Page: https://www.fbi.gov/fun-games/kids/kids
A Parent's Guide to Internet Safety: https://www.fbi.gov/stats-services/publications/parent-guide/parentsguide.pdf
SafeGov: http://safegov.org/

ACCESS FOR STUDENTS WITH DISABILITIES

Technology needs for students are assessed on an individual basis. Students with disabilities are provided with technologies as required in Individualized Education Plans. Students who may have temporary needs are provided with cost effective solutions that are legal to follow student IEPs. The district does not keep stock of Assistive Technology but will provide purchase after evaluation and upon requirement. Special Education classrooms are equipped with either one or two additional computers to enable student access while working with educators.   All students in grades 7-12 were issued an iPad 3, along with Apple guided training. Internet access was provided with a wireless Verizon account, filtered by Lightspeed in compliance with CIPA regulations.

ACCESS FOR ALL LEARNERS

All students have regular access to the district labs in a number of ways. The media centers in both buildings are equipped with up-to-date hardware. The secondary library media center is open until 5 PM daily which allows full access after school to secondary students. Highlights include the following:

- *All students in grades 7-12 were issued an iPad 3, along with Apple guided training. Internet access was provided with a wireless Verizon account, filtered by Lightspeed in compliance with CIPA regulations.*
- *One open ES labs (26 Workstations in each); Two open secondary labs (24 Workstations); library (15 Workstations)*
- *Every classroom has at least one computer and many have several.*

PROFESSIONAL DEVELOPMENT

Sharon Springs Central School District participates with the Capital Region BOCES Model Schools (http://modelschools.neric.org/). Model Schools provides an opportunity for the district to participate in best practice workshops based on instructional technology integration. District staff are offered professional development through the Model Schools program and have the option to teach a shared course through the Model Schools program at BOCES. This professional development is offered to district staff for free.

The district also offers professional development from teachers within the district advanced in topics and skills of instructional technology.

A range of types of professional development activities will be offered and encouraged to support the attainment of District goals. The following represent current, district-wide initiatives that will be sustained through professional development activities over the next three years:

Training for curriculum development and dissemination (mapping, scope, review of state ELA assessments to find weaknesses etc…) – Initial focus will be on ELA and secondary Math while teachers in other content area individualize their own professional development plan to their specific instructional needs.
NYSUT Effective Teaching Coursework
In-district workshops and Regional BOCES Training
Regional Statewide Rating Training
Professional Conferences and on-line learning opportunities
District Conference Days
Visitations to other schools and colleagues' classrooms and one-to-one support including demonstration lessons and reflection
Collaborative planning for instruction and faculty, grade level, department meetings when appropriate.

Development of Individualized Professional Development Plans-will allow the District to differentiate professional development activities.

Professional development in the area of Educational Technology is overseen by the Coordinator of Educational Technology. This administrator is also the coordinator for model schools professional development as the representative between the district and NERIC.

Identified focus areas of continued professional development needs include:
- Teacher websites
- Google tools
- Mimio technology & Mimio applications
- Flipped/Blended classrooms
- Teacher blogs
- Social networking

TECHNOLOGY INVESTMENT PLAN

Item	Area of Investment	Estimated Cost	One-time or Annual	Potential Funding Source
1	Broadband	$76,625	Annual	Annual Budget
2	Professional Development	$8,200	Annual	Annual Budget
3	iPad Carts – 1 classroom per year	$22,500	Annual	Annual Budget & Bond
4	Desktop Computers	$16,900	Annual	Annual Budget
5	Wi-Fi Expansion	$250,000	One-time	Smart School Bond Funding

Item	Smart Bond Category	Detailed Description of Smart Bond Scope	Smart Bond Allocation Used
1	SBA # 2	Classroom Learning Technology Project, Learning Technology Equipment (iPads)	$ 75,000.00
2	SBA #3b	High Tech Security Features, Keyless Entry, Security Cameras	$ 75,500.00
3	SBA #4b	School Connectivity Project – New Wireless Network	$ 250,000.00
4	SBA #2, SBA #4b	Maker's Room Infrastructure and Equipment	$ 41,250.00
		TOTAL	$ 443,750.00

STATUS OF TECHNOLOGY INITIATIVES AND COMMUNITY

STATUS OF TECHNOLOGY INITIATIVES AND COMMUNITY CONNECTIVITY

Sharon Springs Central School District has made the following developments since the last Instructional Technology Plan:

- Changes in District Enrollment
- Changes in Staffing
- Changes in Funding
- Developments in Technology
- Technology Plan Implemented
- Computer – Based Testing
- Developments in Technology
- Changes in Legislation

Further advancement in instructional technology developments will be made over the next three years because the district will be implementing Google Apps for Education over the summer of 2015. Training and support has been arranged with the local regional information center NERIC.

COMMUNITY CONNECTIVITY

The Management Information Systems director attended a meeting with Time Warner Cable for a discussion on expanding high speed internet services in the community. The district technology staff are taking action to be involved in planning and discussions at Capital Region BOCES & NERIC. The district technology committee will offer more input for forward planning. The community public library provides free open Wi-Fi while many homes in the district do not have Wi-Fi access. While this continues to be a roadblock in the district high speed internet access will continue to be a component of discussions over the next three years in anticipation of making advancements of finding more ways to provide access to students and families off school campus.

INSTRUCTIONAL TECHNOLOGY PLAN IMPLEMENTATION

TIMELINE

Date	Action	Desired Outcome
Summer 2015	Update High School Computer Lab with All in one TouchScreen Computers	Replace outdated computer while and enhancing performance for our Microcomputer and keyboarding courses.
Fall 2015	Update outdated wifi with New Access Points and managed wireless controller	Improve Wireless Coverage and performance.
Summer 2016	Replace outdated elementary Computer Labs Computers (26) Purchase one set of iPad 3rd Grade (25)	Updating outdated equipment while providing ipad access to more students
Summer 2017	Replace outdated Middle School Computer Labs Computers (26) Purchase one set of IPad 2nd Grade (25)	Updating outdated equipment while providing ipad access to more students
Summer 2018	Replace Teacher Laptops (33) Purchase one set of IPad 1st Grade (25)	Updating outdated equipment while providing ipad access to more students

ACCOMPLISHMENTS

- The district has decided to move forward to provide a cost effective means to capture student data and use interactive technology in the classroom. We have selected and continue to purchase Mimio brand interactive whiteboards and student response systems in order to achieve this goal.
- *Virtual field trips conducted with purchased extended Distance Learning units.*

- *Expanded the extended Distance Learning usage with virtual AP grant 2013-2014 school year.*
- *Distance learning classes have been a mainstay of the district through the BOCES distance-learning network for over 15 years.*
- *Mobile learning labs are used throughout the building.*

MONITORING AND EVALUATION

STRATEGIES

Technology staff will meet with district and building leadership to evaluate progress of technology in place and goals moving forward. The Technology committee meets on a bimonthly basis and will use this time once in the Fall, Winter, and Spring to address direction and evaluate progress of technology goals. The technology committee is led as a collaboration by district technology staff and the Superintendent whom oversee the progress of the instructional technology plan.

October 9, 2014 Building Safety Meeting
March 19th 2014 Apple Awareness Day
October 24, 2014 Conference Day
How SSCS Teachers are Leveraging Technology to Increasing Student Engagement
May 15, 2015 Conference Day
8:45 – 10:45 a.m. – Parental Involvement and Technology
11-11:50 a.m. Technology Committee Meeting/Smart Schools Funding

POLICIES

Acceptable Use Policy-AUP
8.31 Acceptable Use Policy:
http://sharonsprings.org/wp-content/uploads/2014/02/8.31-AcceptableUsePolicy.pdf
Year Adopted: 2010

7.19 Internet
http://sharonsprings.org/wp-content/uploads/2015/05/7.19-Internet.pdf
Year Adopted: 2000

19.1 Internet Safety/Content Filtering Policy:
http://sharonsprings.org/wp-content/uploads/2015/05/7.19.1-Internet-Filtering-Policy.pdf
Year Adopted: 2002

7.22 Bullying:
http://sharonsprings.org/wp-content/uploads/2014/02/7.22-Bullying.pdf

Year Adopted: 2004

Parent's Bill of Rights for Data Privacy

Parents' Bill of Rights for Data Privacy and Security:

http://www.p12.nysed.gov/docs/parents-bill-of-rights.pdf
Year Adopted: 2015

Limited English Proficiency
http://sharonsprings.org/wp-content/uploads/2014/02/9.7.9-LimitedEnglishProficiency.pdf

Year Adopted: 1992

CYBERSECURITY PROCEDURES

The district has adopted Acceptable Use, Internet Safety, and Personal Electronic Device policies. Copies are provided on the district website. Codes of conduct include basic summaries of Internet usage guidelines. Every student and each parent are required to annually access the Internet based document or may be provided copies in the event of not having access outside of school. Students and parents of the student are required to sign the agreement in order to utilize district technology. The district follows state regulations on maintaining filters for content. Internet Traffic and Filters are maintained by the systems administrator in coordination with NERIC. Administrative action will be taken for violations of security.

TECHNOLOGY DISPOSAL SECURITY

Hard drives from computers tagged for disposal are destroyed before being recycled.