SPENCERPORT CENTRAL SCHOOL DISTRICT

Smart Schools Investment Plan

Transforming Teaching and Learning for our 21st Century Students

April 26, 2016

October 11, 2016 (revised)

Contents

Appendices

1. Introduction

The Smart Schools Bond Act of 2014 was passed in New York's 2014-15 Enacted Budget and approved by the voters in a statewide referendum held during the 2014 General Election. The Smart Schools Bond Act authorized the issuance of $2 billion of general obligation bonds to finance improved educational technology and infrastructure to improve learning and opportunity for students throughout the State.

The purpose of the Smart Schools Bond Act is to improve learning and opportunity for public and nonpublic school students by funding capital projects to:

1. install high-speed broadband or wireless internet connectivity for schools and communities;
2. acquire learning technology equipment or facilities, including but not limited to interactive whiteboards, computer servers, and desktop, laptop, and tablet computers;
3. construct, enhance, and modernize educational facilities to accommodate pre-kindergarten programs and to provide instructional space to replace classroom trailers; and/or
4. install high-tech security features in school buildings and on school campuses, including but not limited to video surveillance, emergency notification systems, and physical access controls.

All school districts are required to submit a Smart Schools Improvement Plan to demonstrate how Smart Schools Bond Act funds will be used to provide the educational tools and opportunities to students to prepare them for success in the 21st century economy.

Effective plans are to:

- include linkages between the district's long-term educational planning and technology investments;
- provide learning opportunities beyond the classroom through the use of technology; and
- address the educational needs of all students, including students with disabilities, English language learners and those who have not succeeded in traditional classroom settings.

The Spencerport Central School District is eligible for $2,728,821 for approved expenditures aligning to the objectives of the Smart School Bond Act. All plans for the expenditure of funds will be submitted to a state review board for approval. The review board will ensure that the District has articulated:

- that the technology investments are aligned to district's instructional technology plan;
- an adequate technological infrastructure with sufficient connectivity meeting the FCC standard of 100 Mbps per 1,000 students. Achieving this speed standard is a precondition for the purchase of devices;
- a professional development plan providing training to administrators, teachers and staff to employ the purchased technology to enhance instruction;
- technical support capacity demonstrating sufficient support for the technology purchases; and
- a plan for sustainability and ongoing maintenance, replacement, support, internet fees, ongoing professional development and replacement of incidental items.

All Smart Schools Investment Plans are to be vetted with representatives from the school community including parents, civic leaders, community members, teachers, administrators, staff and students.

Initial Smart School Investment Plans are to be reviewed and approved by the District's Board of Education and then posted on the District's website for no less than thirty (30) days. Additionally, a public hearing must be scheduled for the presentation of the District's plan for the use of the Smart School funds. After the public hearing, the Board of Education is to review the modified Smart Schools Investment Plan and consider final approval. Once approved by the Board of Education, the plan is attached to the District's application for Smart Schools Investment Plan funds and is reviewed by the state board. After state approval, the District is authorized to make approved expenditures. After funds are expended, the District will then submit claims to the state for reimbursement.

2. Executive Summary of the District's Plan for Resource Allocation

The purpose of the Smart Schools Bond Act is to improve learning and opportunities for students by funding capital projects to:

1. install high-speed broadband or wireless internet connectivity for schools and communities;
2. acquire learning technology equipment or facilities, including but not limited to interactive whiteboards, computer servers, and desktop, laptop, and tablet computers;
3. construct, enhance, and modernize educational facilities to accommodate pre-kindergarten programs and to provide instructional space to replace classroom trailers; and/or
4. install high-tech security features in school buildings and on school campuses, including but not limited to video surveillance, emergency notification systems, and physical access controls.

After review of the District's needs, the District is proposing its $2,728,821allocation of Smart School funding be distributed between three of the four identified categories. These expenditures include:

Network Connectivity, $66,519

Re-wiring of three technology rooms at Spencerport High School. It is estimated that this capital project will require $66,519 (approximately 2% of the District allocation) at Spencerport High School. This project will increase the broadband connectivity in the three technology rooms. These needs were identified by the District's community based facilities task force in the 2014-15 school year and initially proposed for inclusion in the 2015 Capital Improvement Project.

High-tech Security, $86,078

Additional security cameras will be installed at four schools and transportation department on the existing network to provide greater coverage of the district's buildings and grounds. It is estimated that these capital projects using about 3% of the District's allocation, will require approximately $18,000 at Bernabi Elementary School, $18,000 at Canal View Elementary School, $18,000 at Taylor Elementary School, $24,000 at Cosgrove Middle School and $8,000 at the transportation compound. These needs were identified by the District's community based facilities task force in the 2014-15 school year and initially proposed for inclusion in the 2015 Capital Improvement Project.

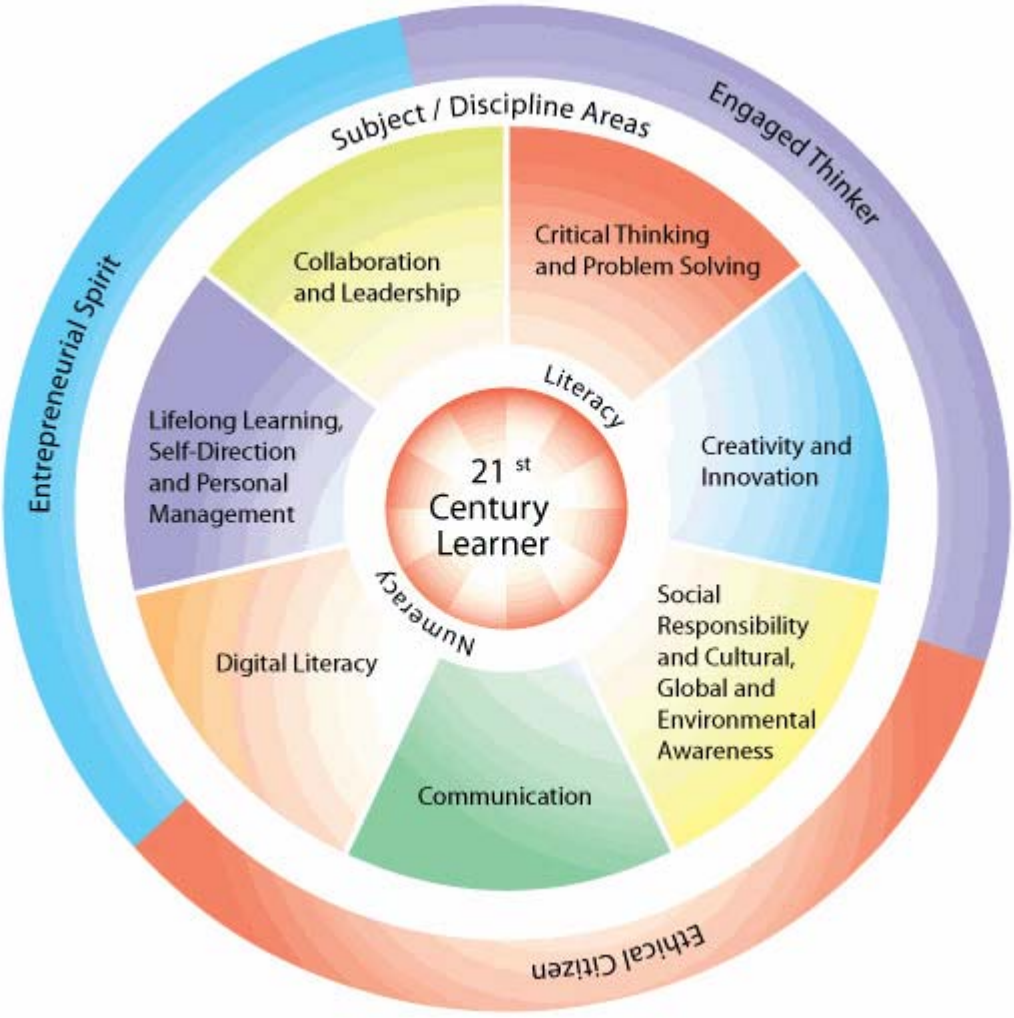
Acquisition of Learning Technology Equipment, $2,576,224

In order to support the transformation of teaching and learning in alignment with the District's instructional objectives, the District will expend $2,576,224 (approximately 95% of the District's allocation) to acquire desktop computers, laptop computers, tablets and other mobile computing devices that will be used by students and staff. Additionally, peripheral devices, including but not limited to interactive displays, that support student learning may be acquired as part of the expenditures for this category.

3. Instructional Objectives

The educational opportunities provided to students must prepare them for success in their futures as citizens of the 21st century. These opportunities not only include instruction aligned to the rich and expanding content of the traditional curricular areas, but also the skills and mindsets that will allow students to apply their knowledge in familiar and unfamiliar contexts.

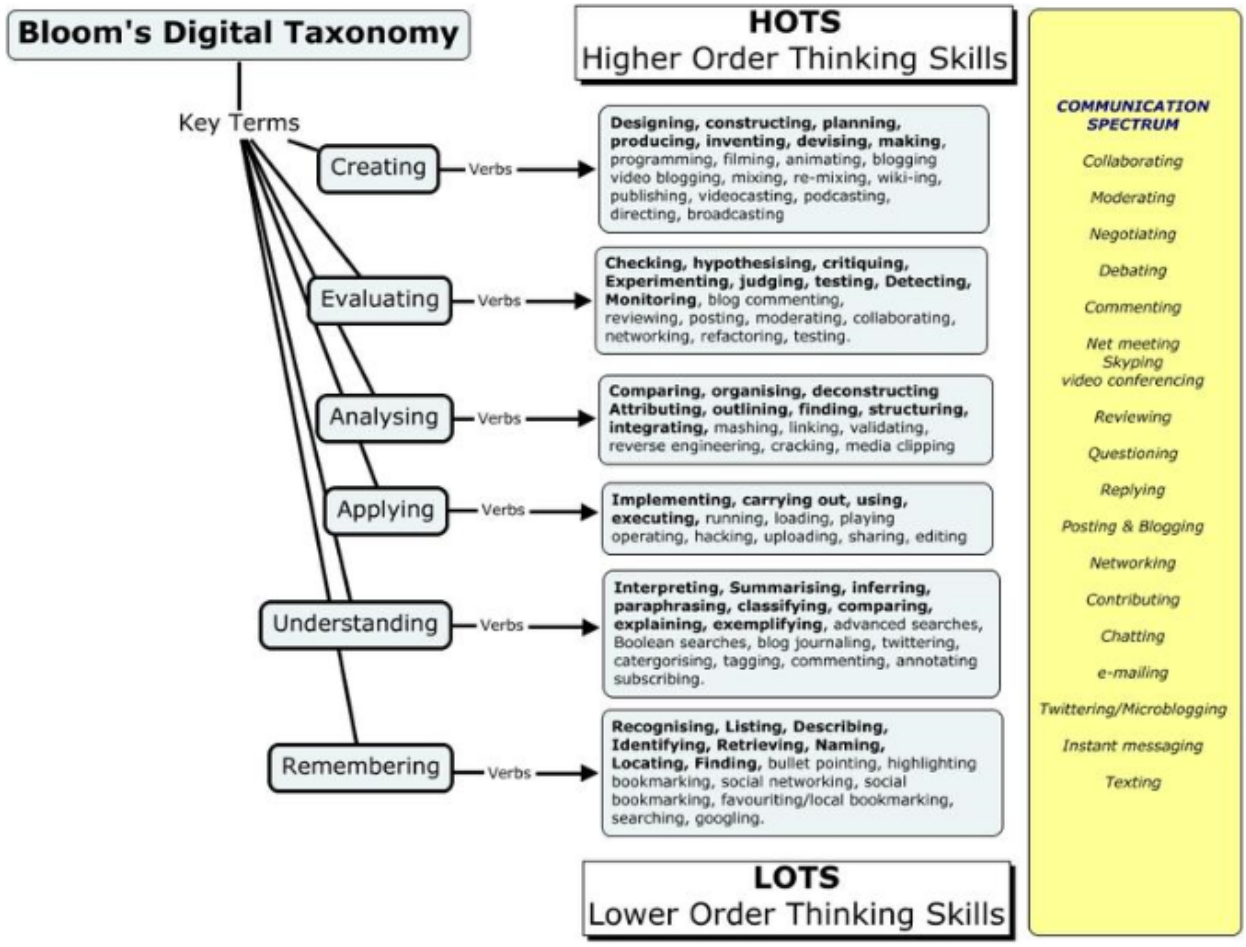
The following is a model of the 21st century learner showing the knowledge, skills and mindsets that many believe will prepare students for their futures.



In this model, you will find the skills that many call the 21st century skills (or "The Four Cs"); collaboration, critical thinking, creativity and communication, along with self-direction, social responsibility and digital literacy.

Specific to digital literacy, Andrew Churches adapted the revised Bloom's taxonomy to identify the types of actions one might exhibit for each of the six increasing levels of cognition along a

communications spectrum. This list is not specific to any discipline, instead it is universal across subjects and curricula.



2014 Technology Summit

In the summer of 2014, a technology summit was held in the District with membership made up of multiple constituencies from the Spencerport learning community. At this summit, a strategic framework for technology integration was created. The framework included the following components:

Vision

Technology integration will empower our learning community to become global citizens today by developing knowledge and competencies to continually contribute and adapt to our tomorrow.

Objectives

Strategic Objective 1: Each learning community member will be empowered to use critical thinking skills to plan and conduct research, manage projects, solve problems, discover, explore and make informed decisions using appropriate digital tools and resources.

Strategic Objective 2: Each learning community member will have access to and consistent interaction with technology to appropriately support teaching and learning.

Strategic Objective 3: Each learning community member will use technology in a safe, appropriate, responsible and ethical manner to enhance teaching and learning.

Strategic Objective 4: Each learning community member will contribute through communication and collaboration with others in their local learning and global communities.

Strategies

Strategy 1: Members of the learning community will continuously provide and participate in appropriate professional development to support the achievement of the strategic objectives and vision. (professional development)

Strategy 2: Members of the learning community will identify, provide and continuously evaluate necessary instructional, physical, financial and human resources to achieve our strategic objectives and vision. (curriculum/resources)

Strategy 3: Members of the learning community will foster a culture of innovation, student driven learning and a safe environment supported by responsive policies that lead to continuous improvement. (culture/policies)

Strategy 4: The learning community will be inspired to embrace and partner in the achievement of our strategic objectives and vision. (partnerships)

The vision and objectives serve as direction for the District as we prepare for the expanded infusion of technology in our schools. Further, the four strategies articulate the actions that members of the learning community need to do in order to support the achievement of the vision and objectives.

National Education Technology Plan

The Department of Education's Office of Educational Technology developed a National Education Technology Plan (NETP) in 2016 entitled *Future Ready Learning: Reimagining the Role of Technology in Education* (http://tech.ed.gov/files/2015/12/NETP16.pdf). This educational policy articulates a vision of equity, active use, and collaborative leadership including a set of institutional goals. These include:

1. All learners will have engaging and empowering learning experiences in both formal and informal settings that prepare them to be active, creative, knowledgeable and ethical participants in our globally connected society.
2. Educators will be supported by technology that connects them to people, data, content, resources, expertise, and learning experiences that can empower and inspire them to provide more effective teaching for all learners.
3. Embed an understanding of technology-enabled education within the roles and responsibilities of education leaders and set local visions for technology in learning.
4. At all levels, our education system will leverage the power of technology to measure what matters and use assessment data to improve learning.
5. All students and educators will have access to a robust and comprehensive infrastructure when and where they need it for learning.

Blended Learning Model, Curriculum and Instructional Practice

The Smart School Investment Plan will allow Spencerport to transform our classrooms and significantly enhance teaching and learning. The district recognizes that we need to find a balance with the use of instructional technology and will utilized the blended learning approach. The definition of blended learning is a formal education program in which a student learns:

(1) at least in part through online learning, with some element of student control over time, place, path, and/or pace;

(2) at least in part in a supervised brick-and-mortar location away from home; and

(3) the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.

The majority of blended-learning programs resemble one of four models: Rotation, Flex, A La Carte, and Enriched Virtual. The Rotation model includes four sub-models: Station Rotation, Lab Rotation, Flipped Classroom, and Individual Rotation.

1. Rotation model — a course or subject in which students rotate on a fixed schedule or at the teacher's discretion between learning modalities, at least one of which is online learning. The students learn mostly on the brick-and-mortar campus, except for any homework assignments.

a. Station Rotation — a course or subject in which students experience the Rotation model within a contained classroom or group of classrooms and rotate through all of the stations.

b. Lab Rotation – a course or subject in which students rotate to a computer lab for the online-learning station.

c. Flipped Classroom – a course or subject in which students participate in online learning off-site in place of traditional homework and then attend the brick-and-mortar school for face-to-face, teacher-guided practice or projects.

d. Individual Rotation – a course or subject in which each student has an individualized playlist and does not necessarily rotate to each available station or modality.

2. Flex model — a course or subject in which online learning is the backbone of student learning, even if it directs students to offline activities at times. Students move on an individually customized, fluid schedule among learning modalities. The teacher of record is on-site, and students learn mostly on the brick-and-mortar campus, except for any homework assignments.

3. A La Carte model — a course that a student takes entirely online to accompany other experiences that the student is having at a brick-and-mortar school or learning center (primarily used for credit recovery).

4. Enriched Virtual model — a course or subject in which students have required face-to-face learning sessions with their teacher of record and then are free to complete their remaining coursework remote from the face-to-face teacher.

In order to provide students an optimal learning experience, we must equip teachers with the necessary skills and confidence to design and implement lessons with 21st Century skills in mind. For the past five years, the district has created 1:1 pilot teams at all three levels (K-5, 6-8, and 9-12) in an effort to learn and grow. Members of these teams receive release time and work collaboratively on items that range from practical application to vision. The district engages in meaningful discussions with these teachers in an effort to seek their insight and feedback in order to offer targeted professional development. These

individuals, along with Enrichment Specialists, Instructional Specialists, and the BOCES Instructional Technology teacher provide support and assistance to their peers through a variety of ways and help shape the district's instructional focus and corresponding programs.

Using the blended learning model, framework from the 2014 technology summit, the goals from the 2016 Education Technology Plan and the International Society for Technology in Education (ISTE) student standards (see Appendix A), the District will focus on providing learning opportunities for students to practice and apply 21st century learning skills. Based on the ISTE Standards for Students, Common Core State Standards and blend learning model, students will utilize the district's technology to develop these skills in an academic setting.

To address equity of access and increase personalized learning, the District's vision is to develop a learning environment for grades 2 through 12 where every student has access to their own computing device (referenced as a 1:1 initiative). Research has shown that 1:1 access for students provides the opportunity to transform instruction. The following analysis details some of the ways 1:1 access provides new opportunities and supports the ISTE Standards for Students.

How Does 1:1 Transform Instruction?	*ISTE Standards for Students*
Allows for accessibility for all students, additional supports such as text to speech features	2d, 3b, 6a, 6c
Allows for all students to be equal producers	1b, 2a, 2d, 3b, 6b, 6c
Allows for individualized instruction	3b, 4a, 4b, 4c, 4d, 6a, 6b, 6c
Gaining authentic audience feedback on projects	1b, 2a, 2b, 2c, 3b, 5a, 5b, 5c
Provides platforms to respond to real-world situations	2d, 3a, 4a, 4b, 4c, 4d, 5a, 5b, 5c, 5d
Publishing multi-media projects to global audience	1a, 1b, 2a, 2b, 2c, 5a, 5b, 5c, 5d, 6a, 6b, 6c
Empowers students to access their progress and set student goals	3b, 3c, 3d, 6b, 6c
Broadens student choice	2a, 3a, 3b, 4a, 4b, 4c, 4d, 6b
Students have control over student choice with accessibility, pace, path, product	2a, 2b, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, 5a, 6a, 6b, 6c
Creates equitable learning experiences for all students	2a, 2b, 2d, 3a, 3b, 3c, 3d, 4a, 4d
Create collaborative technology projects	1a, 1b, 2a, 2b, 2d, 3a, 3c, 3d, 4a, 4b, 4c, 4d, 5a, 5b, 6a, 6b, 6c
Student engagement is raised due to power of choice, ownership, independence, self-direction, and the use of technology to their daily life	2a, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, 5c, 6d
Gives teachers alternative ways to assess student learning	1a, 2d, 3a
Students can access diverse, primary sources found online	2a, 3a, 3b, 3c, 3d, 4c, 4d
Allows for students to be critical consumers of information	2c, 2d, 3a, 3b, 3c, 3d, 4c, 4d, 5a, 6a, 6d
Allows for digital annotating individually and collaboratively	2a, 2b, 3b, 3c, 3d, 5a, 5b, 6c
Allows for online collaboration amongst students from a broader community	2a, 2b, 2c, 2d, 4a, 4b, 4c, 4d, 5a, 5b, 6a, 6b, 6c, 6d
Creating multi-media projects	1a, 1b, 2a, 2b, 2d, 6a, 6b, 6c, 6d
Teaching and learning of digital citizenship expectations to promote responsible use of technology in a guided and monitored environment	2c, 3b, 3c, 3d, 5a, 5b, 5c, 5d, 6b
Immediate feedback and support for students on their learning and progress	2a, 3c, 3d, 6b
Student learning can occur when not working directly with a teacher	2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, 5a, 5b, 6a, 6b, 6c
Acquire data instantly and see progress over time	3b, 3c, 3d, 6b
Adaptive questioning allows for differentiation and enrichment	6a, 6b, 6c

Instruction can bridge multiple learning styles	2b, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d
Students' mathematical diagrams, charts, etc. can be clearly and more accurately displayed	1c, 2d, 3b, 3c, 3d, 6a, 6b, 6c, 6d
Students experience real-life simulations to create a more authentic experience	1c, 3a, 3b, 4a, 4b, 4c, 4d
Allows for student communication with diverse perspectives	2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 4a, 4b, 4c, 4d, 5a, 5b, 5c, 5d, 6d

Educational technologist Eric Sheninger has said "Schools must use a dynamic combination of mindset, behaviors and skills to become places where social media and digital tools are integral and beneficial parts of a rigorous program and where they work symbiotically with active, engaged and applicable learning."

It is our expectation that through the appropriate use of technology as a tool to enhance learning opportunities for students, we will develop through practice our students to be digitally literate consistent with the ISTE Standards, National Education Technology plan and the District's strategic framework for instructional technology. Additionally, by personalizing learning and providing equitable access for students to extend their learning beyond the school day utilizing technology, the District will be able to meet the three expectations established for the Smart School Investment Plan. Finally, the vision and strategic objectives created at the District 2014 Technology Summit are attainable with a shared commitment by all to support the transformation of teaching and learning as outlined in the achievement strategies.

4. Hardware Allocation Plan to Support Instruction

In alignment with our Instructional Objectives, a three-year plan to allocate hardware supporting the transformation of teaching and learning has been developed. There are three plans, one for each level of the District, that have been built to provide access, equity and personalized learning. Each plan was built with the guidance of the District's 21st Century teachers and school administrators.

The goal for hardware allocation at each level is defined as follows:

Elementary School

Grades K and 1: A device ratio of 1 to 2 (one device for every two students) with a mobile cart for Kindergarten and 1st grade with additional devices that can be used to establish a 1 to 1 ratio when needed. The ratio of 1:2 was recommended for the primary grades as early learning and socialization are the priorities.

Grades 2 through 5: A device ratio of 1 to 1. The preferred device is a laptop with interactive display screen. Additionally, one mobile cart with a classroom set of tablets has been proposed for each school.

Middle School

Grades 6 through 8: A device ratio of 1 to 1. The preferred device is a laptop with interactive display screen. Desktop computers will still be provided in the computer labs and technology rooms as the requirements for some of the graphic intensive programs used in the curricula require more resources than found in laptops.

High School

Grades 9 through 12: A device ratio of 1 to 1. The preferred device is a laptop with interactive display screen. Desktop computers will still be provided in the computer labs and technology rooms as the requirements for some of the graphic intensive programs used in the curricula require more resources than found in laptops.

Elementary Schools

A two-year plan (2016-17 and 2017-18) for realizing the allocation goals for the elementary schools has been proposed. The following chart details the proposed model.

K-5 Hardware Allocation Plan

2016-17 and 2017-18

Grades	2016-17	2017-18
K and 1	6 devices per classroom 1 cart per grade level	1:2 1 cart per grade level
2 through 5	5 pilot 1:1 classrooms per school @ BES, MES & TES and 8 pilot 1:1 classrooms at CVES	1:1

In the 2016-17 school year, six devices have been proposed for each Kindergarten and 1st grade classroom. While the allocation goal is 1:2 for the primary grades, it has been proposed to build capacity in 2016-17 before achieving the 1:2 goal in 2017-18. In both years, a cart of devices for each grade level will be available to supplement the classroom allocation so a device for each student can be accessed when needed.

In the 2016-17 school year, twenty-three pilot classrooms will be identified in our four schools (five @ Bernabi, eight at Canal View, five and Munn and five at Taylor) for implementation of the 1:1 ratio. The pilot teachers will be building capacity and strategies to be shared with colleagues in the 2017-18 school year when all classrooms for grades 2 through 5 will have a 1:1 ratio. During the 2016-17 school year, classrooms not part of the pilot will have a minimum of six laptops and access to a mobile cart providing a full classroom set.

Middle School

A two-year plan (2016-17 and 2017-18) for realizing the allocation goals for the middle school has been proposed. The following chart details the proposed model.

Grades 6-8 Hardware Allocation Plan
2016-17 and 2017-18

Grades	2016-17	2017-18
6th	1:1	1:1
7th	Pilot 8 1:1 classrooms, Refresh 6 carts and 2 Technology rooms	1:1
8th		1:1

In the 2016-17 school year, all of the 6th grade classrooms will have a 1:1 ratio. This actualizes the allocation goal for this grade level. At grades 7 and 8, eight pilot 1:1 classrooms will be established. The goals associated with these pilots will be to build capacity and strategies for the infusion of technology in curricula specific classrooms. In the 2017-18 school year, all 7th and 8th grade classrooms will have a 1:1 ratio.

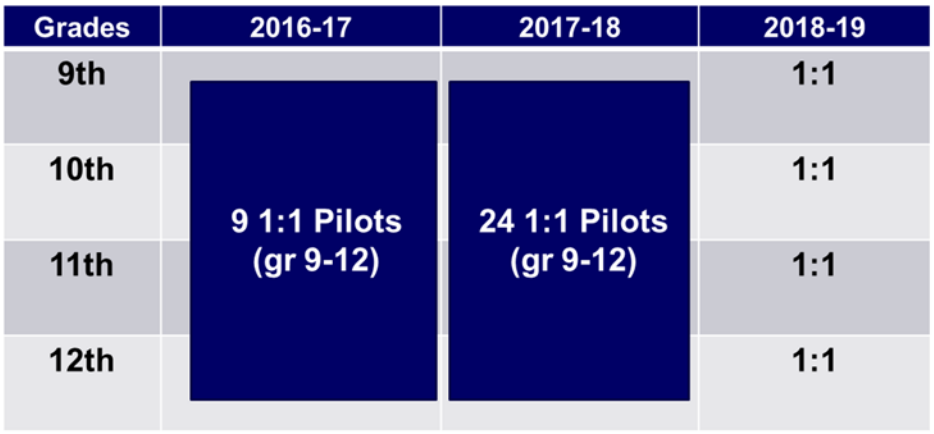
In the 2016-17 school year, the laptops in six mobile carts will be refreshed for sharing in the non-pilot classrooms. These laptops will be re-distributed as part of the 1:1 allocation plan in the 2017-18 school year as carts will no longer be needed. Additionally, the computers in the technology rooms will be refreshed in 2016-17. These desktop computers with greater resources will remain in the technology rooms to support the curriculum.

Prior to full implementation in 2017-18, students may continue to participate in the existing Bring-Your-Own-Device (BYOD) plan. This will be beneficial for students as teachers will begin using a new learning management system in the 2016-17 school year.

High School

A three-year plan (2016-17, 2017-18 and 2018-19) for realizing the allocation goals for the high school has been proposed. The following chart details the proposed model.

Grades 9-12 Hardware Allocation Plan
2016-17, 2017-18 and 2018-19



Presently, the Social Studies department has a 1:1 plan for computer allocation. This was established in recent years to ensure every high school student in every year of high school had a minimum of one class utilizing technology to transform teaching and learning.

In the 2016-17 school year, nine teachers will be selected to pilot a 1:1 initiative in their classroom with their students. These teachers will build capacity and strategies for the infusion of technology with their curriculum. In the 2017-18 school year, an additional fifteen teachers will be selected to pilot a 1:1 initiative in their classroom. These two years of pilots will precede full realization of the 1:1 ratio for all students in all classes in the 2018-19 school year.

During the 2016-17 and 2017-18 school years, the computers will be in the classrooms of the teachers participating in the pilot. In 2018-19, the computers will be provided to the students for use in all of their classes.

Prior to full implementation in 2018-19, students may continue to participate in the existing Bring-Your-Own-Device (BYOD) plan. This will be beneficial for students as teachers will begin using a new learning management system in the 2016-17 school year.

District Summary

The following chart provides a three-year summary of hardware allocation for the District.

Grades	2016-17	2017-18	2018-19
K & 1	6 per classroom	1:2	1:2
2 – 5	23 pilot 1:1 classrooms	1:1	1:1
6	1:1	1:1	1:1
7-8	8 pilot 1:1 classrooms	1:1	1:1
9-12	9 pilot 1:1 classrooms	24 pilot 1:1 classrooms	1:1

Appendix C details the forecasted acquisitions using Smart Schools Investment Plan funding.

The majority of devices needed to actualize this plan will be funded by the Smart Schools initiative, however the current resources of the District will be redeployed to supplement the efforts. Specifically, in 2016-17, new devices will be purchased for all fifty-one pilot 1:1 projects. The computing devices in the K-5 classrooms during the 2015-16 will be redeployed in other non-pilot classrooms in 2016-17 to increase students' access. In 2017-18, when the Middle School becomes 1:1, the computing devices acquired for the carts in 2016-17 will be redistributed to support the 1:1 initiative. Finally, the devices purchased in 2016-17 and 2017-18 to support the High School pilots, will be redistributed to seniors (2016-17 devices) and juniors (2017-18 devices) in 2018-19 when the High School has fully implemented a 1:1 initiative with all students. Once established in 2018-19, the plan will be to align computer replacement to cohorts of students every four years so eventually new computers are purchased at 2nd grade (to be used for 4 years, grades 2-5) and 9th grade (to be used for 4 years, grades 9-12) and a schedule for the middle school similar to the following model:

	2016-17	*2017-18*	*2018-19*	*2019-20*	*2020-21*
6th grade	New	New	Year 3	Year 4	Year 4
7th grade	New (carts)	Year 2	Year 2	Year 4	New
8th grade	New (carts)	Year 2	Year 3	Year 3	New

In the event, the District does not receive approval of its Smart Schools plan from New York State in time to order, receive, inventory and format the hardware detailed for the 2016-17 school year, the District will acquire the hardware utilizing funds from the 2015-16 and 2016-17 budgets in addition to 2016-17 state aid for computer assisted instruction. By doing so, approximately $1.2 million dollars will remain available after the 2018-19 school year to begin funding the device replacement plan.

5. Professional and Technical Supports

Professional Development

Over the past six years, members of the three 21st Century Teams at grades K-5, 6-8 and 9-12 have explored the ever-changing landscape of instructional technology. While the structure of these teams has evolved, the goal has remained constant. 21st Century Team members at all levels continue to strive to foster student achievement by supporting teachers in the implementation of instructional technology.

At the elementary buildings, the 21st Century Team has provided push-in demonstrations of the latest instructional technology. In doing so, the team members planned each quarterly session and arrived at school early to train their fellow teachers. In the 2015-16 school year, these teachers have set their sights on learning more about the various formats of blended learning. Through an out-of-school book study of *Go Blended*! by Liz Arney, and subsequent planning sessions, these teachers hope to gain a greater understanding of the blended learning model. Within the second half of the 2015-16 school year, the team will turnkey this learning to their peers through a series of model classroom presentations. The 21st Century Teachers at the elementary level will model lessons that employ blended learning strategies and invite other teachers to visit their classrooms. Furthermore, there will be follow up planning sessions with members of the 21st Team to implement blended learning strategies viewed within the model classrooms.

At Cosgrove Middle School, ten faculty members have participated on the 21st Century Team. Over the past few years, the team has led the Bring-Your-Own-Device (BYOD) initiative, as well as numerous professional development opportunities for all staff to ensure common experiences for all students. The team has also supported departments and school wide expectations on the use of students' devices. During the 2016-17 school year, we are proposing a 1:1 initiative in 6th grade and in eight 7th and 8th grade classrooms that would begin to incorporate the use of the learning management system, as well the professional development that would be necessary to support this process. Teacher leaders are now taking an active role to pilot this learning management system for their students so that they can support their colleagues with the use of a learning management system. Additionally, the 21st Century Team at Cosgrove has been piloting several innovative practices in their classrooms including Plickers, Kahoot, Verso, QR Codes, Nearpod to name a few.

At Spencerport High School, the Social Studies department has served as our 21st Century Team. Over the last four years there has been a gradual grade level implementation of a 1:1 initiative in the Social Studies department. This has involved subject level teams (Global I, Global II, etc.) receiving class sets of laptops. This effort has also involved extensive release time for teachers to engage in professional development as well as planning time with their colleagues. Teachers have focused on the creation of lessons that use instructional technology that supports students in the acquisition of 21st Century Skills, with a particular emphasis on communication, collaboration, creativity, and critical thinking. This work has also helped to ensure that students engage in predicable and consistent learning experiences using instructional technology. During the 2015-2016 school year, we have achieved full implementation in terms of our Social Studies teachers being able to provide students a 1:1 experience. In addition, at the 12th grade level the Economics class is moving toward a blended learning model. In essence, this experience serves as the capstone for our students in terms of their use of instructional technology. As

we continue to move towards a 1:1 approach at the entire building level, the Social Studies teachers will be able to help in this transition by sharing their experiences and learning with our other teachers.

To ensure the success of our plan to transform teaching and learning, all staff will need professional development to support their efforts to modify their instructional strategies using technology as a tool to support learning.

The following is a framework for the supports that are being provided and will need to be provided as we begin our deep infusion of technology into our classrooms.

2015-2016

Develop a plan for ongoing professional development to support the implementation of instructional technology

Elementary:

- Current 21st Century Technology Team Members participate in monthly professional development
- Wave One teachers (teachers with pilot classrooms in 2016-17) receive professional development in the final days of June

Middle School:

- Targeted professional development delivered to support Wave One teachers
- Training on Learning Management System during June 2016

High School:

- Targeted professional development to support Wave One teachers
- Training on Learning Management System during June 2016

2016-2017

Wave One teachers receive continued professional development to begin in August

District-wide

- All teachers will receive professional development on the October Superintendent's Conference Day from Eric Sheninger.

Elementary:

- Attend Monthly meetings facilitated by 21st Century Team Members, Enrichment Specialists, Media Specialist, and Instructional Mentors (meetings will take place within the contractual day, i.e., 8:15-8:45 a.m. for Elementary)
- Attend Four one-hour after-school sessions with online components:
- Management- Device and Classroom
- Troubleshooting-Device, Internet, Back- Up plans
- Blended Learning
- Non-Negotiables- Blend learning in one content area per trimester

Middle School:

- Targeted professional development to support Wave One and Wave Two (all teachers who were not 1:1 pilots in 2016-17) teachers

High School:

- Targeted professional development to support Wave One and Wave Two (all teachers who will initiate a pilot 1:1 classroom in 2017-18) teachers
- Wave Two teachers will receive professional development in the final days of June.

2017-18

- Wave One teachers and Wave Two teachers receive continued differentiated professional development
- Wave One teachers begin to turnkey their learning
- Wave Three teachers at the High School (teachers who were not been part of the pilot projects in the 2016-17 and 2017-18 school years) receive professional development in the final days of June

2018-2019

- All newly hired teachers receive professional development in August
- All teachers receive continued differentiated professional development
- Wave One and Wave Two teachers turnkey their learning

Technical Support

In order to provide timely technical support for the increased number of computing devices in classrooms, it will require that the Technology Department's support team increases their capacity over the next three years. This increase in capacity will be primarily focused on increasing staff that will be available in the schools to support teachers and students with district owned hardware. It is envisioned that the District will need to increase staffing by a minimum of one employee per school year to provide level one tech support. Additionally, the Technology Department's ability to remotely address the needs of the users has increased significantly in recent years. Additional steps to increase the ability to remotely diagnose and repair software concerns will be explored and implemented.

To assess the growth needs of the District's technology operations and infrastructure, an audit of the District's assets and practices will be conducted in the 2015-16 school year. Included in this audit will be an assessment of the District's wireless access points to ensure all classrooms have the capacity to concurrently access the District's network.

While a plan to grow the department's human resources and remote technical support capacities will be essential, a commitment must also be made to provide professional development to all members of the department's staff to ensure their knowledge base and skills continue to grow as needs of the District expand.

As instructional staff and students become more reliant on technology to support learning, it will be critical that technical support is provided as quickly as possible when difficulties occur in the classroom. Because some issues will be beyond level one support, it is also highly recommended that the District has an adequate supply of back-up devices that can be provided to individuals when it is necessary to send a device for more in-depth analysis or repair.

Finally, as a benchmark for the District to assess its growth in the next three school years, the State Education Department's 2015 Technology Plan for the District is included as Appendix B of this document. In addition to quantifying resources, it provides a top-level assessment of practices and policies.

6. Sustainability

The District's transformation of teaching and learning through the integration of technology utilizing its $2,728,821 of Smart School Investment Plan funds is exciting and realizes a vision that would be difficult to achieve through normal budgetary expenditures. While the Smart School funds are essential for the efforts that have been forecasted, it is critically important that the District develop the financial capacity to not only be able to replace the devices acquired with the Smart Schools funds at the end of the customary lifecycle, but also plan for future enhancements.

Annually, the District receives state aid for hardware based on a per-pupil allocation. The amount of funding per child has been unchanged and the difference year-to-year can be attributed to forecasted student population. The District has developed its budget over the last decade to also include funding for technology devices for students and staff but also infrastructure. A five-year replacement plan was developed that provided for a systematic updating and/or enhancement of the District technology assets. Initially, this funding was approximately $500,000 per school year. To increase the effectiveness of these investments while reducing the net expense, the majority of equipment was acquired through BOCES which resulted in BOCES aid in the following school year.

As we look to the future, there will be more devices to replace and the customary lifecycle of a portable computing device should be no longer than four years. In order to prepare for the financial commitment to sustain the initiatives funded under the Smart Schools Investment Plan, the District needs to incrementally build its budget for hardware replacement by approximately $125,000 per fiscal year through the 2018-19 school year. If achievable, this will allow the District to operationalize its technology initiative with expenditures including but not limited to replacing individual computing devices for students and staff, replacing interactive displays, updating peripherals, and continuing to maintain the District's network and servers.

The needs for financial sustainability of the District's technology initiative in future years are easier to forecast than the financial conditions associated with the District's annual budget. It will be critical that every effort is made by the Board of Education and District leadership team to build the financial resources of the District to operationalize the strategic initiatives that will be made available through this extraordinary one-time funding opportunity provided by New York State.

2016

ISTE STANDARDS
FOR STUDENTS

The 2016 ISTE Standards for Students emphasize the skills and qualities we want for students, enabling them to engage and thrive in a connected, digital world. The standards are designed for use by educators across the curriculum, with every age student, with a goal of cultivating these skills throughout a student's academic career. Both students and teachers will be responsible for achieving foundational technology skills to fully apply the standards. The reward, however, will be educators who skillfully mentor and inspire students to amplify learning with technology and challenge them to be agents of their own learning.

1. Empowered Learner

Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:

a. articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.
b. build networks and customize their learning environments in ways that support the learning process.
c. use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
d. understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen

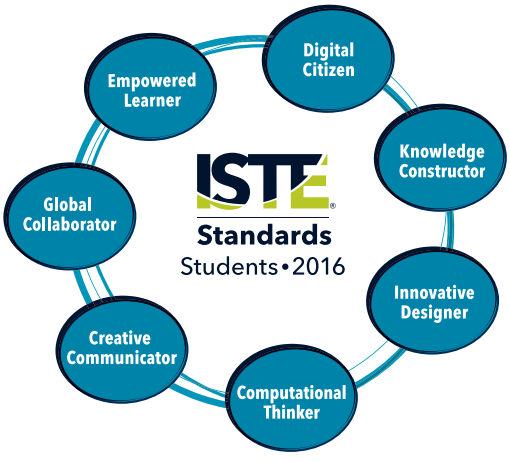
Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. Students:

a. cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
b. engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
c. demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
d. manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

3. Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:

a. plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
b. evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
c. curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
d. build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.



4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
c. develop, test and refine prototypes as part of a cyclical design process.
d. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

5. Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. Students:

a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
b. collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.
c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.
d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. Students:

a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
b. create original works or responsibly repurpose or remix digital resources into new creations.
c. communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
d. publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Students:

a. use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
b. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
c. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
d. explore local and global issues and use collaborative technologies to work with others to investigate solutions.

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SPENCERPORT CSD

Instructional Technology Plan - Annually - 2016

LEA Information

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A. LEA Information

1. **2014-2015 Student Enrollment**

	Total Enrollment	Pre-K Enrollment	K-2 Enrollment	3-5 Enrollment	6-8 Enrollment	9-12 Enrollment	Ungraded Enrollment
Student Enrollment	3,678	0	765	772	856	1,244	41

2. **What is the name of the district administrator entering the technology plan survey data?**

Michael T Rehbaum entered the information-- Not hit submit

3. **What is the title of the district administrator entering the technology plan survey data?**

Director of Technology

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B. Instructional Technology Vision and Goals

1. Please provide the district mission statement.

Our mission is to educate and inspire each student to love learning, pursue excellence and use knowledge, skills and attitudes to contribute respectfully and confidently to an ever-changing global community.

2. Please provide the executive summary of the instructional technology plan, including vision and goals.

Vision Statement	Technology integration will empower our learning community to become global citizens today by developing knowledge and competencies to continually contribute and adapt to our tomorrow.
Strategic Objective 1	(Analyzing/Problem Solving) Each learning community member will be empowered to use critical thinking skills to plan and conduct research, manage projects, solve problems, discover, explore and make informed decisions using appropriate digital tools and resources.
Strategic Objective 2	(Access) Each learning community member will have access to and consistent interaction with technology to appropriately support teaching and learning.
Strategic Objective 3	(Responsible Use) Each learning community member will use technology in a safe, appropriate, responsible and ethical manner to enhance teaching and learning.
Strategic Objective 4	(Collaboration) Each learning community member will contribute through communication and collaboration with others in their local learning and global communities.
Strategy 1	(Professional development) Members of the learning community will continuously provide and participate in appropriate professional development to support the achievement of the strategic objectives and vision.
Strategy 2	(Curriculum/Resources) Members of the learning community will identify, provide and continuously evaluate necessary instructional, physical, financial and human resources to achieve our strategic objectives and vision.
Strategy 3	(Culture/Policies) Members of the learning community will foster a culture of innovation, student driven learning and a safe environment supported by responsive policies that lead to continuous improvement.
Strategy 4	(Partnership) The learning community will be inspired to embrace and partner in the achievement of our strategic objectives and vision.

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3. Please summarize the planning process used to develop the instructional technology plan. Please include the stakeholder groups participating and outcomes of the instructional technology plan development meetings.

Spencerport's technology plan was written by the district's Assistant Superintendent, Assistant Superintendent of Instruction, and Director of Technology with the assistance of various teachers and the district's Technology Advisory Committee. Once the draft of the technology plan was written a technology summit was held in the summer of 2014 that included district citizens, parents, teachers, and administrators. The technology summit built upon the work of the district's existing Technology Advisory Committee and work with multiple constituencies including the district's Administrative Council, Board of Education, Library Media Specialists, Curriculum and Staff Development Council and Technology Operations. Updates to the technology plan are conducted annually. The next review will be in October of 2016 with the district's Technology Advisory Committee with another full technology summit being held in the summer of 2017 to look at proposed changes to the plan.

4. Please provide the source(s) of any gap between the current level of technology and the district's stated vision and goals.

- ☐ Access Points
- ☐ Cabling
- ☐ Connectivity
- ☑ Device Gap
- ☐ Network
- ☑ Professional Development
- ☑ Staffing
- ☐ Other
- ☐ No Gap Present

5. Based upon your answer to question four, what are the top three reasons causing the gap? If you chose "No Gap Present" in question four, please enter N/A.

An increase in devices is required to further improve our instructional goals surrounding technology.
Professional development needs additional funding to enable us to get the most out of the systems, software and equipment that we have or are planning on purchasing.
The current rise in the number of devices and their increased usage will require additional instructional and operational positions.

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C. Technology and Infrastructure Inventory

1. Please identify the capacity of the telecommunications line coming into the district network hub. The district's Regional Information Center can provide the district with this information if needed.

- ☐ Greater than 10 Gbps
- ☐ 10 Gbps
- ☐ 1 Gbps - < 10 Gbps
- ☑ 100 Mbps - < 1Gbps
- ☐ 50 Mbps - < 100 Mbps
- ☐ 10 Mbps - < 50 Mbps
- ☐ Less than 10 Mbps

2. What is the total contracted Internet bandwidth access for the district? Choose one.

- ☐ Greater than 10 Gbps
- ☐ 10 Gbps
- ☑ 1 Gbps - < 10 Gbps
- ☐ 100 Mbps - < 1 Gbps
- ☐ 50 Mbps - < 100 Mbps
- ☐ 10 Mbps - < 50 Mbps
- ☐ Less than 10 Mbps

3. What is the name of the agency or vendor from which the district purchases its primary Internet access bandwidth service?

Monroe 1 BOCES

4. Please identify the capacity of the telecommunications line coming into the district's school building(s) from the district hub or district data center. The district's Regional Information Center can provide this information if needed

	Speed in Gpbs or Mpbs
Minimum Capacity	☐ Greater than 10 Gbps ☐ 10 Gbps ☑ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps
Maximum Capacity	☐ Greater than 10 Gbps ☑ 10 Gbps ☐ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps

5. Please identify the minimum and maximum circuit speeds at which the classrooms in the district are connected to the school building wiring/network closet.

	Please provide the speed at which classrooms are connected to building wiring/network closet.
Minimum Circuit Speed Within a School Building	☐ Greater than 10 Gbps ☐ 10 Gbps ☐ 1 Gbps - < 10Gbps ☑ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps
Maximum Circuit Speed Within a School Building	☐ Greater than 10 Gbps ☐ 10 Gbps ☑ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps

6. **What are the minimum and the maximum port speeds of the switches that are less than five years old in use in the district?**

	Port speed of switches	Mbps or Gbps
Minimum Capacity of Switches	1	☐ Mbps ☑ Gbps
Maximum Capacity of Switches	10	☐ Mbps ☑ Gbps

7. **What percentage of the district's wireless protocols are less than 802.11g?**

0

8. **Do you have wireless access points in use in the district?**

☑ Yes
☐ No

8a. **What percentage of your district's instructional space has wireless coverage?**

99

9. **Does the district use a wireless controller?**

Yes

10. **How many computing devices less than five years old are in use in the district?**

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	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)	1,269	1,269
Laptops/Virtual Machine (VM)	3,532	3,532
Chromebooks	4	4
Tablets less than nine (9) inches with access to an external keyboard	0	0
Tablets nine (9) inches or greater with access to an external keyboard	91	91
Tablets less than nine (9) inches without access to an external keyboard	0	0
Tablets nine (9) inches or greater without access to an external keyboard	0	0
Totals:	**4,896**	**4,896**

11. What percentage of students with disabilities in the school district, as of the submission date of this technology plan, have assistive technology documented on their Individual Education Plan (IEP)?

18

12. Please describe any additional assistance or resources that, if provided, would enhance the district's ability to improve access to technologies for students with disabilities.

E-readers, electronic text books, up to date state contracts and additional funding and support to BOCES assisstive technology would all be extremely helpful.

13. How many peripheral devices are in use in the district?

	Number of devices in use
Document Cameras	165
Flat Panel Displays	10
Interactive Projectors	0
Interactive Whiteboards	282
Multi-function Printers	42
Projectors	267
Scanners	5
Other Peripherals	0
Totals:	**771**

14. If a number was provided for "Other Peripherals" please specify the peripheral device(s) and quantities for each.

(No Response)

15. Does your district have an asset inventory tagging system for district-owned equipment?

Yes

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16. Does the district allow students to Bring Your Own Device (BYOD)?

Yes

16a. On an average school day, approximately how many student devices access the district's network?

800

17. Has the school district provided for the loan of instructional computer hardware to students legally attending nonpublic schools pursuant to Education Law, section 754?

Not Applicable

18. What barriers may prevent the district from testing 100% of its grade 3-8 students and NYSAA students on computers by the year 2020?

- ☑ Insufficient number of devices meeting testing requirements
- ☐ Lack of reliable Internet service
- ☐ Insufficient broadband access
- ☑ Inadequate staffing levels
- ☑ Insufficient testing spaces
- ☐ District does not foresee any barriers
- ☐ Other

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D. Software and IT Support

1. What are the operating system(s) in use in the district?

	Is this system in use?
Mac OS Version 9 or earlier	No
Mac OS 10 or later	No
Windows XP	No
Windows 7.0	Yes
Windows 8.0 or greater	Yes
Apple iOS 7 or greater	Yes
Chrome OS	No
Android	Yes
Other	No

2. Please provide the name of the operating system if the response to question one included "Other."

(No Response)

3. What are the web browsers, both available and supported, for use in the district?

	Web Browsers available and supported for use
Internet Explorer 7	No
Internet Explorer 8	No
Internet Explorer 9 or greater	Yes
Mozilla Firefox	Yes
Google Chrome	Yes
Safari (Apple)	Yes
Other	No

4. Please provide the name of the web browser if the response to question three included "Other."

(No Response)

5. Please provide the name of the Learning Management System (LMS) most commonly used in the district. A Learning Management System (LMS) is a software application for the administration, documentation, tracking, reporting, and delivery of online and blended learning courses.

Schoology.

6. Please provide the names of the five most commonly used software programs that support classroom instruction in the district.

PowerPoint
Wixie
iReady
Schoology
IXL Math

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7. Please provide the names of the five most frequently used research databases if applicable.

World Book Kids
World Book Student
PebbleGo
Gale
ProQuest

8. Does the district have a Parent Portal?

Yes

8a. Check all that apply to the Parent Portal if the response to question eight is "Yes."

- ☑ Attendance
- ☐ Homework
- ☐ Student Schedules
- ☑ Grade Reporting
- ☐ Transcripts
- ☐ Other

8b. If 'Other' was selected in question eight (a), please specify the other feature(s).

(No Response)

9. What additional technology-based strategies and tools, besides the Parent Portal, are used to increase parent involvement?

- ☑ Learning Management System
- ☑ Emergency Broadcast System
- ☑ Website
- ☑ Facebook
- ☑ Twitter
- ☐ Other

10. Please list title and Full Time Equivalent (FTE) count (as of survey submission date) of all staff whose primary responsibility is providing technical support. Does not include instructional technology integration FTE time.

Title	Number of Current FTEs
Director of Technology	1.00
Senior Network Technician	2.00
Network Technician	2.00
Help Desk Manager	1.00
Intranet Coordinator	1.00
Coordinator Student Info	1.00
Data Management	2.00
Systems Analysis	1.00
Data Analysis	2.00
Computer App Special	4.00
Micro Maintenance Tech	1.00
	18.00

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E. Curriculum and Instruction

1. What are the district's plans to use digital connectivity and technology to improve teaching and learning?

The district hosted a Technology Summit in July 2014 that involved a variety of relevant stakeholders. This was a powerful event and the outcome involved creation of the following strategic objectives that will impact technology integration:

These strategic objectives will guide the district's work in the coming years in order to improve teaching and learning in a meaningful manner. 21st Century technology teams have been created at all three levels in Spencerport and their work involves research, exploration, modeling, and providing professional development to their colleagues. In addition, these teams help identify rigorous exit outcomes for students using technology in grades 2, 5, 8, and 12. The exit standards are reviewed on an annual basis and serve to guide instruction based on the learning experiences that students enjoy. The 21st Century teachers are deemed to be our experts and they pilot technology programs that help shape the district's curriculum and instructional approach.

The district is currently implementing a new Learning Management System (LMS). During the 2015-2016 school year several LMS's were tested and the district, with the aid of the 21st Century teachers and teacher volunteers, choose Schoology. Schoology is being used as the central component for the district's 1:1 initiative. This initiative will see all students grades 2-12 have daily access to their own device within three years. Grades K and 1 will be based around a 2:1 ratio of students to devices.

2. Does the district's instructional technology plan address the needs of students with disabilities to ensure equitable access to instruction, materials, and assessments?

Yes

2a. If "Yes", please provide detail.

As required in our distirct techonlogy plan we provide the following to Special Education Classes

- Devices as required by IEPs.
- 3 Tablet computing devices per 12:1:1 class.
- 4 computing devices per K-5 special education classroom.
- 1 cart of 15 for the middle school 15:1 classes.
- 1 cart of 15 for the high school 15:1 classes.
- 2 mini-carts of five machines each for middle school inclusion classes.
- 2 mini-carts of five machines each for high school inclusion classes.

3. Does the district's instructional technology plan address the provision of assistive technology specifically for students with disabilities to ensure access to and participation in the general curriculum?

Yes

3a. If "Yes", please provide detail.

As required in our district technology plan Spencerport Central School District works with Monroe 2 Orleans BOCES Assistive Technology department to insure that all students have equal access to participate in the general curriculum.

4. Does the district's instructional technology plan address the needs of English Language Learners to ensure equitable access to instruction, materials, and assessments?

☑ Yes
☐ No

4a. Please provide details. If the district plans to apply for Smart School Bond Act funds for Classroom Learning Technology, the answer to this question must be aligned with the district's Smart Schools Investment Plan (SSIP).

We provide keyboards in the student's primary language so that they can utilize Google Translate and other applications. Teachers are trained on the use of technology to help students in learning English. Technology Operations staff is trained in how to set up Windows 10 in the students primary language so they can natively work within the operating system.

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F. Professional Development

1. Please provide a summary of professional development offered to teachers and staff, for the time period covered by this plan, to support technology to enhance teaching and learning. Please include topics, audience, and method of delivery within your summary.

One of the strongest elements that sets Spencerport apart from other school districts is the professional development that we provide to staff. Prior to receiving tenure, teachers and administrators must complete five core classes that all involve technology to some degree. In addition, the district boasts an array of professional development offerings that teachers are encouraged to take. Staff development occurs during and after the school day and throughout the summer. Teachers have the opportunity to submit classes to develop and teach and this is based on the feedback that the district receives from their colleagues. In addition, teachers are financially incentivized to enroll in professional development throughout the summer and this has had a profound impact on their instruction. The district employs an instructional technology teacher and four enrichment specialists and their primary duties involve support teachers with technology in order to enhance teaching and learning. Furthermore, the 21st Century technology teams previously discussed play a pivotal role in providing professional development in a targeted manner.
Summer courses during June, July and August of 2016 focused on preparing staff to utilize the new Schoology LMS and other technology related topics.

2. Please list title and Full Time Equivalent (FTE) count (as of survey submission date) of all staff whose primary responsibility is delivering technology integration training and support for teachers. Does not include technical support.

Title	Number of Current FTEs
Technology Specialist	1.00
Lab Teaching Asst	2.00
Enrichment Spec	4.00
	7.00

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G. Technology Investment Plan

1. **Please list the top five planned instructional technology investments in priority order over the next three years. Infrastructure is considered an instructional technology investment.**

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	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both?	Funding Sources May choose more than one source
1	Laptops	600,000	One Time	☑ BOCES Co-Ser Purchase ☑ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☑ Smart Schools Bond Act ☐ Other
2.	Professional Development	80,000	Annual	☐ BOCES Co-Ser Purchase ☑ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
3.	Interactive Displays/Projectors/Whiteboards	117,000	Both	☑ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
4.	Instructional Software	225,000	Annual	☑ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
5.	Wi-Fi	150,000	One Time	☑ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
Totals:	**0**	**1,172,000**	**0**	**0**

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2. If "Other" was selected in question one, for items purchased or for a funding source, please specify.

(No Response)

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H. Status of Technology Initiatives and Community Connectivity

1. Please check any developments, since your last instructional technology plan, that affect the current status of the technology initiatives.

- ☐ Changes in District Enrollment
- ☑ Changes in Staffing
- ☑ Changes in Funding
- ☑ Technology Plan Implementation
- ☑ Computer-based Testing
- ☐ Catastrophic Event
- ☑ Developments in Technology
- ☐ Changes in Legislation
- ☐ Other
- ☐ None

2. In this section, please describe how the district plans to increase student and teacher access to technology, at home and in the community.

Continued implementation of cloud based computing. Growth due to investment in a Learning Managment System (LMS). Growth due to BYOD and district deployed instructional devices with take home agreements. Growth due to take home 1:1 in 6th grade.

3. Please check all locations where Internet service is available to students within the school district's geographical boundaries.

- ☑ Home
- ☑ Community
- ☐ None

3a. Please identify categories of available Internet locations within the community.

Coffee Shops
Fast food restaurants
Restaurants
Library

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I. Instructional Technology Plan Implementation

1. Please provide the timeline and major milestones for the implementation of the technology plan as well as the action plan to integrate technology into curriculum and instruction to improve student learning.

2016-2017- Grades K-1 2:1 plus a cart per grade level. Grades 2-5 classroom based 1:1 for 24 Classrooms. 6th Grade Take Home 1:1. 7-12th grade 17 classroom based 1:1 classrooms.

2017-2018 Grades K-1 2:1 plus a cart per grade level. Grades 2-5 classroom based 1:1 for all Classrooms. 6th-8th Grade Take Home 1:1. 24 classroom pilots for grades 9-12.

2018-2019 Grades K-1 2:1 plus a cart per grade level. Grades 2-5 classroom based 1:1 for all Classrooms. 6th-12th Grade Take Home 1:1.

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J.Monitoring and Evaluation

1. Please describe the proposed strategies that the district will use to evaluate, at least twice a year, whether the district's instructional technology plan is 1) meeting the vision and goals as outlined in the plan and 2) making a positive impact on teaching and learning in the district.

Quarterly Meetings of the district's Technology Advisory Committee to analyze the progress of the instructional technology plan.
Yearly external technology audits.

2. Please fill in all information for the policies listed below.

	URL	Year Policy Adopted
Acceptable Use Policy -- AUP	www.spencerportschools.org	2016
Internet Safety/Cyberbullying*	www.spencerportschools.org	2015
Parents' Bill of Rights for Data Privacy and Security	www.spencerportschools.org	2014

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K. Survey Feedback

Thank you for submitting your district's instructional technology plan (ITP) survey via the online collection tool. We appreciate the time and effort you have spent completing the ITP survey. Please answer the following questions to assist us in making ongoing improvements to the online survey tool.

1. Was the survey clear and easy to use

Yes

2. Was the guidance document helpful?

Yes

3. What question(s) would you like to add to the survey? Why?

(No Response)

4. What question(s) would you omit from the survey? Why?

(No Response)

5. Other comments.

(No Response)

Page Last Modified: 08/23/2016

Appendices

1. Upload additional documentation to support your submission

(No Response)

Appendix C

(revised October 11, 2016)

Forecasted Acquisitions Using S.S.I.P. Funds

Student Devices

School Year	Description	Quantity	Estimated Unit Price	Extension
2017-18	Laptop computer	1,324	$600	$794,400
2018-19	Laptop computer	700	$600	$420,000
2019-20[1]				
2020-21	Laptop computer	1,126	$600	$675,600
2021-22	Laptop computer	1,144	$600	$686,400
TOTAL				**$2,576,400**[2]

[1] No acquisitions will be needed; all laptops used by students will be less than 4 years old

[2] Total S.S.I.P. funds available for student devices is $2,576,224