AUBURN CITY SD

Instructional Technology Plan - Annually - 2015

A. LEA Information

1. **What is the total student enrollment based on the most recent BEDS Day submission?**

4,431

2. **What is the student enrollment by grade band based on the latest BEDS Day submission?**

	Enrollment
Grades K-2	1,032
Grades 3-5	937
Grades 6-8	907
Grades 9-12	1,238

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

Timothy Moon

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

Chief Information Officer

4a. **If the response to question four was "Other", please provide the title.**

(No Response)

B. Instructional Technology Vision and Goals

1.   **Please provide the district mission statement.**

The Mission of the Auburn Enlarged City School District is to provide equitable educational opportunities and experiences necessary to develop confident life-long learners. Through our programs, we will develop critical, creative thinkers, and caring, respectful, productive, service-oriented individuals, capable of meeting the challenges of the 21st century.

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

Goal:

An establishment of clear goals and realistic strategies for using telecommunications, digital resources and information technology to improve education, library services, and student learning.

Curriculum

– The District will utilize technology to enhance teaching and learning to improve student achievement.

Use of technology to provide data feedback on student progress.

Use of software to supplement instruction: Imagine Learning, SuperKids, Raz-Kids, etc..

Use of technology grade on the report card as a parental communication tool regarding technological progress of the student.

Encourage, train and support teachers in utilizing electronic resources in their instruction for, research (subscription databases: Proquest, Grolier, NOVEL), multimedia (PowerMediaPlus), online resources (C.E.R.F.) and lesson plans (Marco Polo).

Administrative

 – The District will utilize technology to improve efficiency, analysis and productivity in critical support areas.

Train and support administrators in using technology to increase their effectiveness, productivity and data analysis.

Integration of data systems to increase the efficiency of operations and improve productivity.

Expand use of financial enterprise software to include digital storage of documents and electronic form use and routing.

Implement integrated warehouse and inventory management software to improve accountability and control of district assets.

Infrastructure

 – The District will maintain an effective technology infrastructure that supports curricular and administrative needs.

Upgrade BOCES connection to 1000 mbits per second.   Increase the Internet connection from 47 to 100+ mbits.

WAN upgrade from 1 gigabit per second to 10 gigabits per second to each building.

Update security cameras from analog to digital, with appropriate storage of footage.

Projector/TV to display digital content in all classrooms.

Additional wireless infrastructure to support the potential of 1:1 computing on a large scale.

Funding

 – The District will provide adequate resources to support technology integration.

Develop communications materials describing District's technology program and goals for use in soliciting support from public and private sources.

Seek opportunities to collaborate with other districts/BOCES to maximize use of resources.

This includes staffing , equipment acquisitions, and software where applicable.

Professional Development

 – The District will provide ongoing, sustained professional development for all staff to ensure the appropriate and effective use of technology.

Maintain the high school and middle school technology staff developers and add one at the elementary division.

Create a training plan to bring all staff to minimum technology skill level.

Devote Superintendent's Conference Day time to technology training

Expand cooperative efforts between TPT and Curriculum Counsel for staff development in technology integration.

Identify teachers who have not integrated technology in their instruction on a regular basis. Support these teachers with ongoing, intensive, job-embedded professional development for technology integration.

Train and support administrators in identifying effective technology integration in instruction.

Train and support administrators in using technology so they may model its effective use and promote integration.

Provide teachers with a substitute to allow them to receive technology training during regular school hours.

Offer workshops (voluntary), before and after school hours, targeting specific technology and integration skills/strategies.

Encourage and support teachers to attend workshops offered by Cayuga- Onondaga BOCES, Cayuga-Onondaga Teacher Center, and conferences.

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.**

Technology Planning Team (TPT) Members

Timothy Moon- Chief Information Officer
Thomas Bunn- Director of Technology
David Treharne- Assistant Principal
Matthew Drastal- Technology Teacher
George Cosentino-Instructional Integration Specialist
Kathryn Oneil-Instructional Integration Specialist
Kim Dunster- Teacher
Anne Mlod-Library Media Specialist
Michael Trapani-Community Member
Mary Nellenback-Library Media Specialist
Jesse Chehovich-Network Admin.
During the 2013-2014 school year the TPT met monthly to review and update our technology plan. Each one of the goal areas was reviewed in depth, taking into consideration our current technology, staffing, need, and predicted future need in each area. The TPT named several areas of need including replacement of edge switch gear, replacement of head end and core switches, wireless infrastructure, projectors, selection of an LMS, consolidate printing, and the phase out of custom stand alone filemaker databases and movement towards core data tools.

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 (Checked)
Cabling (Checked)
Connectivity (Checked)
Device Gap (Checked)
Professional Development (Checked)

4a. **Please specify if "Other" was selected in question four.**

(No Response)

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

The district has suffered 24.1 million dollar shortfall over the past six years as a result of the Gap Elimination Adjustment. This has significantly impacted the available resources to address our technology needs especially when looking at a substainal infrastructure upgrade. The ability to display digital content and make use of less expensive tablet and/or chromebooks rely on a robust wireless network that could not have previously been built given the monetary constraints. Equipment refresh cycles have had to be delayed causing a backlog of needed equipment replacements and upgrades including the phone system.

C. Technology and Infrastructure Inventory

1. **What is the available network broadband bandwidth? Please express speed in Mb (Megabits) or Gb (Gigabits). ***

	Minimum Capacity (Expressed in Mb or Gb)	Maximum Capacity (Expressed in Mb or Gb)
Network Bandwidth: Incoming connection TO district schools (WAN)	1gb	1gb
Internal Network Bandwidth: Connections BETWEEN school buildings (LAN)	10gb	10gb
Bandwidth: Connections WITHIN school buildings (LAN)	10gb	10gb

2. **What is the total contracted Internet access bandwidth for your district? Please express speed in Mb (Megabits) or Gb (Gigabits).**

70Mb

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

OCM RIC

4. **Which wireless protocols are available in the district? Of these, which are currently in use? Check all that apply.**

	Available/In Use
802.11a	Available (Checked)
802.11b	Available (Checked) In Use (Checked)
802.11g	Available (Checked) In Use (Checked)
802.11n	Available (Checked) In Use (Checked)
802.11ac	(No Response)
802.11ad	(No Response)
802.11af	Available (Checked) In Use (Checked)

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

Yes

5a. **What percentage of your district's instructional space has wireless coverage?**

80

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

Yes

7. **What is the port speed of the switches that are less than five years old in use in the district?**

1000

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

	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)	1,324	1,324
Laptops/Virtual Machine (VM)	350	290
Chromebooks	37	37
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	0	0
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	252	252
Totals:	1963.0	1903.0

9. **Of the 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)?**

   6

10. **From your technology needs assessment, please describe any 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.**

   The addition of a robust wireless infrastructure would allow the district to implement further assistive technology such as iPads and chromebooks for use by special needs students.

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

	Number of devices in use that are less than five years old
Document Cameras	158
Flat Panel Displays	161
Interactive Projectors	4
Interactive Whiteboards	4
Multi-function Printers	137
Projectors	119
Scanners	17
Other Peripherals	0
Totals:	600.0

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

   (No Response)

13. **Does your district have an asset inventory tagging system for district-owned equipment?**
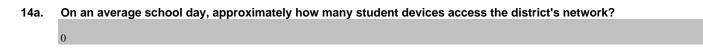
   Yes

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

   Yes

14a. **On an average school day, approximately how many student devices access the district's network?**

0

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

Yes

D. Software and IT Support

1. **What are the operating systems in use in the district?**

	Is this system in use?
Mac OS Version 9 or earlier	No
Mac OS 10 or later	Yes
Windows XP	No
Windows 7.0	Yes
Windows 8.0 or greater	Yes
Apple iOS 7 or greater	Yes
Chrome OS	Yes
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	Yes
Internet Explorer 8	Yes
Internet Explorer 9 or greater	Yes
Mozilla Firefox	Yes
Google Chrome	Yes
Safari (Apple)	Yes
Other	Yes

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.**

The district is currently using Moodle, Right Path, Google Classroom, and Brian Honey. The last three of these implementations are currently in a pilot/testing phase. None of the solutions listed are in wide use throughout the district and are often used based solely on teacher preference and familiarity. As part of the adopted technology plan, we will begin a formal review process to determine which of the LMS to continue with.

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

    Proquest
    Grolier NOVEL
    PowerMediaPlus
    Imagine Learning
    Reading A-Z/RAZ Kids

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

    Pebble Go Animals

    Pebble Go Biographies

    Grolier Encyclopedia

    Encyclopedia Britannica

    Britannica Image Quest

8. **Does the district have a Parent Portal?**

    Yes

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

    Attendance (Checked)
    Homework (Checked)
    Student Schedules (Checked)
    Grade Reporting (Checked)
    Other (Checked)

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

    Discipline referrals and copies of attendance letters.

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

    Website (Checked)
    Twitter (Checked)
    Other (Checked)

    9a. **Please specify if the response to question nine was "Other".**

    SchoolMessenger is used to automate phone call to parents, email notices and newsletters, and surveys.

10. **Please list title and FTE count (as of survey submission date) of all staff whose primary responsibility is technical support.**

Software and IT Support

Title	Number of Current FTEs
Director of Technology	1.00
Network Administrator	1.00
Computer Specialist	1.00
Lan-Tech	2.00
AV-Media Repair	1.00
Library/Computer Clerk	3.00
Chief Information Officer	1.00
	10.0

E. Curriculum and Instruction

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

   The student, instructor, and parental demand and expectation that classrooms have access to digital connectivity and technology are on the rise. These components are key to improving student engagement, increasing student achievement, increasing collaboration, creativity, and preparing the student for future college and career opportunities. Furthermore, the potential for 1:1 implementation of devices to further enhance the educational experience through a variety of media, augmented reality, and collaboration tools make access to the digital environment an integral part of the 21st century classroom and learning experience. Our district currently has a 1:1 pilot at one of our elementary schools and at our alternative high school in an attempt to learn the most effective tools, methods, activities, and software to improve student engagement and learning. It is our desire that these pilot classrooms will serve as models for future classroom deployments throughout the district. These teachers will develop the instructional skills and techniques necessary to become turn-key trainers throughout the district and provide the professional development necessary to ensure proper implementation of a digital rich environment. Use of the Smart School Bond monies will be a key funding source to build the necessary network infrastructure, device management, and collaborative learning communities needed to ensure that a culture of a deep and digitally rich student learning experience is realized.

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

   No

   2a. **If "Yes", please specify.**

   (No Response)

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?**

   No

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

   (No Response)

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.**

    At the Auburn Enlarged City School District, it is understood that good teachers never stop learning. There are always new areas to explore in the practice of teaching. One fresh innovation can make all the difference to both the teacher and student experience. Teachers are our priority because when they succeed, their students succeed. We operate with the motto that the next professional learning opportunity taken could very well be the most important one.

    Technology integration in our classrooms is an ongoing mission for our school district. By providing technology workshops to all faculty and staff on a consistent monthly basis, we are striving to meet the need for continuous education and improvement. Training is designed to meet the needs of educators of all levels of expertise and is differentiated in order to meet the needs of diverse learners. Teachers are fully utilizing technology workshops offered to them by the school district. We have delivered learning sessions involving Google School for Education and its associated applications, School Website Design and Classroom Integration, iLife, Microsoft Office, Promethean Boards, iOS devices and other miscellaneous topics.

    Our Professional Developers provide continuous, ongoing support throughout the year, such as follow-up meetings, modeling, co-teaching of classes, mentoring and opportunities for additional training. During workshops, teachers are provided the opportunity to listen to the ideas of their peers and to exchange and discuss teaching practices, which in turn, helps to improve classroom instruction.

    Working with Professional Developers, teachers cultivate the knowledge and skills necessary to design and implement differentiated instructional and assessment strategies that help to meet diverse student learning needs.

    Additionally, the use of technology strengthens the communication between parents and families. By integrating baseline and summative testing, educators learn how to analyze, collect, and report on several sources of student data throughout the year. Educators are also able to view and analyze results of local and state assessments.

    Professional development that is provided ensures ongoing technology to both teachers and students. This training provides educators an opportunity to apply these technologies to create new learning environments for their students. Educators are able to evaluate the effectiveness of the instruction and monitor student learning. Professional development encourages educators to use available technology to engage students in relevant and innovative ways.

    Professional development offers multiple formats to enhance the learning experience of both educators and teachers and ensures ongoing growth in the quality of the technology experience. We recognize the outstanding benefits that effective technology integration brings to our students, so by providing these workshops, teachers can develop and fine-tune their 21st Century skills.

2. **Please list title and FTE count (as of survey submission date) of all staff whose primary responsibility is technology integration training and support for teachers.**

Title	Number of Current FTEs
Staff Developer	2.00
	2.0

G. Technology Investment Plan

1. **Please list the top five planned technology investments in priority order over the next three years.**

	Anticipated Item or Service	Estimated Cost	Is Cost One-time or Annual	Potential Funding Source (May list more than one source per item.)
1	Wi-Fi	1,300,000	One Time	Maintenance and annual costs can be absorbed with local funds
2	Interactive Whiteboards	1,400,000	One Time	Maintenance and annual costs can be absorbed with local funds
3	Other	200,000	One Time	Maintenance and annual costs can be absorbed with local funds
4	Other	526,117	One Time	Replacement cycle for this equipment will be scheduled as part of annual lease
5	Instructional Software	100,000	Annual	local funding for annual subscription
Totals:		3526117.0		

2. **If "Other" was selected in question one, please specify.**

3) Other, Phone system upgrade and replacement.

4) Other, A potential mix of end points. Including but not limited to; chromebooks, tablets, desktops, laptops, and document cameras.

H. Status of Technology Initiatives and Community Connectivity

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

Changes in Legislation (Checked)

1a.   **Please specify if response to question one was other.**

The public adoption of the Smart Schools Bond Act, has provided an assured excess to the funding necessary to make the infrastructure investments that were part of our Phase 3 tech plan. The ability to comprehensively address our need for additional Wifi access, bandwidth improvements, and need to display digital content in the classroom will ensure that the technological cornerstones of the 21st century classroom are laid. Without this additional funding source, Auburn would likely have had to sought a local referendum to fund these network enhancements.

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

The district plans to increase student and teacher access to technology, in school, at home, and in the community through the improvements to our wireless infrastructure, increase in our mobile devices, and virtual collaborative environments. The current status of our network only permits basic wireless coverage. The bandwidth throughput necessary to support additional classroom devices, testing, or heavy video use can not be currently supported. Our plan calls for the addition of a robust wireless infrastructure including access in outdoor educational spaces open to the community during non-school hours. In addition our plan calls for the purchase of additional devices to increase student and teacher access to technology. Currently our 1:1 initiatives, permit students to take home devices to increase their access to learning materials and content. The selection of a Learning Management System, Office 365, and Google Apps will permit students and teachers to extend the learning opportunities beyond the traditional school day.

3.   **Please check all locations where Wi-Fi service is available to students within the school district geographical boundaries.**

School (Checked)
Home (Checked)
Community (Checked)

3a.   **Please identify categories of available Wi-Fi locations within the community.**

Wifi locations currently exist in the community at our public library and at several local businesses, restaurants, and coffee shops.

I. Instructional Technology Plan Implementation

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

In the first phase of our plan we will be implementing our wireless LAN infrastructure upgrade. The timeline to complete the work will be 3-6 months. The majority of this time will be spent on the planning phase of this project which includes a wireless site survey along. The next major milestone will address the removal of old Ethernet cable and the replacement of CAT 6A. SED will need to be involved with the wiring component of the project. Once the survey and cabling milestones have been completed, the implementation of the wireless controllers and access points can begin. This upgrade will upgrade the District from basic walk-around access to 100% coverage. This will include locations outside of the physical school boarders, including school grounds, bus loops, and other exterior educational spaces. This provides Faculty with the opportunity to create the cohesive experience that will enhance education and extend new learning opportunities by creating new avenues for student and teacher engagement.

The second phase of our plan will center on the installation of newly mounted projectors and interactive whiteboards. The timeline to complete the work will be 3-6 months. Majority of time spent will occur in the planning phase when an initial discovery is completed. The next major milestone will include the mounting/wiring of projector and whiteboards in each classroom. SED will be heavily involved in this phase. During this phase all wiring requirements for projects will be completed, which will eliminate duplication of work during the install. This upgrade will eliminate the projector cart model we currently support, which will also greatly reduce the safety risk. This implementation will drive student learning by integrating strategies like the flipped classroom and will also create other dynamic lessons to drive student learning.

The third phase of our plan involves a VOIP equipment upgrade. The timeline to complete this project is 1-2 months. The majority of time spent on this project will occur in the planning phase to decide which hardware vendors to select to ensure project success. We currently have an outdated Cisco Call Manager solution that is desperate need of upgrade. We will replace all voice routers and Call Manger/Unity hardware to ensure we have reliable telephone coverage within our classroom. We have potential to utilize Telepresence and other VOIP technologies to engage student learning like never before. Students can now connect with others from across the globe as if they were in the same physical space.

The final piece of our plan involves the purchase of device endpoints. The timeline to complete this project phase would be a span of 1-2 months. The majority of the time spent will be in the execution phase as we rollout these devices. This would give us the opportunity rollout a 1:1 initiative to a subset of our student population. Partner the device with all of the other opportunities these funds have given us and I think we have the perfect solution to drive student learning opportunities to the 21st century and beyond.

J.Monitoring and Evaluation

1. **Please describe the proposed strategies that the district will use to evaluate, at least twice a year, the effectiveness of the implementation of the district's instructional technology plan to improve teaching and learning.**

The TPT will meet monthly to review the status of technology related issues. An ongoing review of district technology goals will be part of these meetings. Any adjustments will be recommended through TPT as well as plans for implementation.

Curriculum and Assessment:

Addition of the student technology skills grade to the elementary report card, starting in 2007-8, will supply data about student progress relating to technology skills performance. It will also be used to identify effective lessons that can be replicated and expanded for various grade levels.

The database of lesson plans with integrated technology will contain a field for teachers to supply feedback on each lesson. The feedback will become data within the database. That data will be used by, staff developers to target areas of need, teachers to determine appropriate usage and the TPT to evaluate frequency and level of technology integration.

The district will expand its usage of "Action Research", to evaluate the effects of technology integration on student achievement, to all teachers.

On May 2, 2006, the TPT filled out CoSN's "Accessible Technologies Self-Assessment Tool" This tool allows district leaders to gauge their progress in incorporating assistive and instructional technologies. It provides a framework for discussions that will help leaders across the district as they incorporate technology throughout the instructional process. TPT will use this tool annually. The tool was comprised of the following Self-Assessment Factors ranked (1. Don't Know 2. No Action 3. Early 4. Developing 5. Proficient 6. Optimal). The district's rank is in parenthesis.

Vision: Has your district created a shared vision of technology integration that helps all students to learn?
(
3.29)
Communication and Collaboration: Do district leaders work across district and department divisions to actualize their vision of technology integration that helps all students to learn? (
3.17)
Funding: Does the district have a sustainable process for acquiring and deploying technologies that help all students to learn? (
4.00)
Professional Development and Awareness: Does the district support educators in habitual use of technology to personalize learning for all students. (
3.14)
Infrastructure: Has the district built and maintained a robust system that supports teacher and student access to technologies that improve learning for all students? (4
.
00)
Instruction and Assessment: Does the district employ technology to raise and demonstrate student achievement across student populations? (
3.00)
Infrastructure

Use various network monitoring software to constantly evaluate the network's age, capacity, and utilization to recommend cahnges and updates accordingly.
Receive feedback on network performance from staff developers and end users through the helpdesk, email, and building ITC committees.
Administrative

Use the TPT Administrative sub-committee to evaluate specific technology related issues to identify equipment, software, and training needs.
Use the Auburn Leadership Team (ALT) meetings to discuss, analyze and evaluate technology related issues with district administrators.
Funding

Consistently review information and data from the previous goal areas to evaluate if funding is adequate to support the goals outlined within the technology plan.

The district will continue to use these evaluation tools as well as create new ones to continually assess the progress of the districts technology goals.

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

	Date of Public Forum (If applicable)	URL	Year Policy Adopted
Acceptable Use Policy -- AUP	(No Response)	http://district.auburn.cnyric.org/AECSD_Policy_Manual_2-10-2015.pdf	2003
Internet Safety/Cyberbullying	06/26/2012	http://district.auburn.cnyric.org/AECSD_Policy_Manual_2-10-2015.pdf	2012
Parents' Bill of Rights for Data Privacy and Security	06/12/2012	http://district.auburn.cnyric.org/AECSD_Policy_Manual_2-10-2015.pdf	2014

3.   **Does the district have written procedures in place regarding cybersecurity?**

Yes

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

1a. **If response was "No", please explain.**

(No Response)

2. **Was the guidance document helpful?**

Yes

2a. **If "No", please explain.**

(No Response)

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)

Appendices

1.   **Upload additional documentation to support your submission**