

A. LEA Information

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

5,899

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

	Enrollment
Grades K-2	1,422
Grades 3-5	1,323
Grades 6-8	1,220
Grades 9-12	1,528

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

Dawn Young

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

Other

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

Director of Educational Technology

B. Instructional Technology Vision and Goals

1. Please provide the district mission statement.

District: Providing a rich environment for quality learning.

District Technology Mission Statement: The Binghamton City School District's instructional technology plan exists to provide students with tools and skills necessary to exceed the New York State Learning Standards and become contributing members of the global community.

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

We envision a learning environment in which:

- Students engage in cooperative and independent learning with the teacher as the architect and guide, and children as the learning force.
- Students actively solve problems and investigate ideas using higher-level thinking skills.
- Students use a variety of resources and formats including books, manipulatives, software, and the Internet, all with equal ease.
- Students have easy access to many tools, allowing them to become progressively independent in their choice of the appropriate tool.
- Students collaborate and communicate with people from other parts of the world.
- Classrooms will be center-based where students are working in small groups giving teachers more time for goal setting and discussions with students.
- Teachers collaborate with one another, sharing best practices and cooperatively developing lessons, activities, and projects.
- Teachers assess student learning and performance authentically, using creative and collaborative models that reflect lifelong skills and accomplishments.
- Teachers seek professional development opportunities to augment their programs.
- Teachers and administrators work together to facilitate and stimulate student learning and achievement.
- Administrators provide time and support for teachers to plan, develop, and evaluate effective programs and projects.
- Communication and support among all school community members is open and honest and in the best interest of students.

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.

The ultimate goal of this plan is to ensure equal access to and use of instructional technology in all classrooms resulting in improved learning and communication. Instructional implications are critical and the foundation for the following goals:

- 1) Students attain proficiency in the knowledge, skills, and attitudes toward the use of technology to acquire knowledge and communicate with others.
- 2) All staff are provided with high quality professional development to enhance their ability to advance student learning through the use of technology.
- 3) To develop a five year plan for maintaining and acquiring technology that supports teaching, learning and information sharing.

District Committee meets four times per school year to discuss and review current implementation of technology, needs to sustain current initiatives, and consider innovative requests. Our Managed Information Technology Service coordinator provides an annual review of our infrastructure and device needs. Managed Information Technology Service coordinator prioritizes needs based on cost and relative life of devices/structures. Planning for the technology plan considers these factors in alignment with BOE goals.

The process cycles through a review of current plan, analyze/prioritize Findings, Evidence, Impact, and Recommendations, Identify actions plans and strategic initiatives, and finally assess impact of the implementation using data

Members of District Technology Committee:

Tonia Thompson, Assistant Superintendent for Curriculum, Instruction and Accountability

Dawn Young, Director of Educational Technology

Roxie Oberg, Principal, Binghamton High School

Annette Minarcin, Director of Special Services

Margaret McGarry, Director of Fine Arts & World Languages

Beth Sullivan, 2nd Grade teacher, Horace Mann Elementary

Joelle Lange, 6th Grade AIS Teacher, West Middle School

Deborah Sluzar, Library Media Specialist, Binghamton High School

Michele Rozen, Kindergarten Teacher, Wilson Elementary

Bernie Alimonti, PC/LAN Technician, BOCES

Tom Guillon, MITS Coordinator, BOCES

Paul Bobby, Parent

In addition to the stakeholders listed on the Technology Committee, we will also engage the University, area catholic schools, student government representatives, and city officials.

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)
Device Gap (Checked)
Professional Development (Checked)
Staffing (Checked)
Other (Checked)

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

Continuous access for students outside of school to fully utilize technology in support of achievement (Personal Device)

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.

Funding large scale projects that expand student:device ratios, improved speed and reliable wireless access, bridging the gap between home and school, keeping pace with technology developments supporting 21st century learning, and embedding those skills into curricular areas in authentic learning environments.
Teachers need re-designed PD to manage classrooms that employ individualized learning paths targeting gaps in learning and strategically addressing those gaps as well as managing the physical space of technology rich environments to maximize the impact of devices and subscriptions.
Analyzing the device inventory and tagging to specific uses reveals a limited access to devices on a regular and on-going basis.

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)	1 GB	1GB
Internal Network Bandwidth: Connections BETWEEN school buildings (LAN)	10 GB	10 GB
Bandwidth: Connections WITHIN school buildings (LAN)	100Mb	1GB

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

1 GB

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

Level 3 via SCRIC

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

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?**

100

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?**

1 GB

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)	1,542	1,542
Laptops/Virtual Machine (VM)	734	734
Chromebooks	537	537
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	880	880
Totals:	3,693.00	3,693.00

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)?**

24

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.**

Any form of assistive technology that can allow SWD to access the general education curriculum would be beneficial. The access to a variety of apps allows the professionals the opportunity to find the ones that work best for each child.

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	65
Flat Panel Displays	1
Interactive Projectors	0
Interactive Whiteboards	66
Multi-function Printers	2
Projectors	66
Scanners	0
Other Peripherals	0
Totals:	200.00

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)?**

No

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

(No Response)

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	No
Apple iOS 7 or greater	Yes
Chrome OS	Yes
Android	No
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.

Canvas

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

SMART Notebook
 Google Apps for Education
 READ 180
 eDoctrina
 MS Office Suite

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

SIRS
 FactCite
 Pebble Go
 Student Resource Center
 World Book

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)
 Student Schedules (Checked)
 Grade Reporting (Checked)

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

None

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

Emergency Broadcast System (Checked)
 Website (Checked)
 Twitter (Checked)

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

(No Response)

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

Title	Number of Current FTEs
Services from SCRIC	0.00
Data Processing Coor	1.00
Senior Data Entry Clerk	1.00
	2.00

E. Curriculum and Instruction

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

- Align online software to district/school/individual goals supporting literacy, math, and project-based learning
- Complete inventory audit at the building and department level including devices, software, and licenses
- Provide extensive training to 13 Instructional Technology Mentors (teacher-leaders) who then provide mentoring support and turnkey training to teachers district-wide
- Establish an "innovative educator" program to pilot new technologies
- Identify areas for embedding blended learning, flipped classrooms, and individualized instruction
- Review data dashboards for software/licenses where available to determine effectiveness

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 specify.

The Director of Special Services serves on the Technology Committee to ensure decisions include consideration of students with disabilities including wireless access to support assistive technology devices, software purchases.

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.

Students with Disabilities are provided assistive technology that may include iPads, electronic textbooks, Kurzweil, apps and extensions to address a variety of accommodations based on the IEP.

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.**

Specific Topics of Professional Development are constantly responding to developments in the field and research regarding best practices.

Topic	Audience	Method of Delivery
Identify priorities based on DCIP and SCIPs	Director of Educational Technology Instructional Technology Mentors Professional Development Committee	Review PD Survey data Review input from Focus District Review Review feedback provided on ITM sessions (yearly) Identify priorities and share with BT BOCES Model Schools
Stipend 13 Instructional Tech Mentors (\$3500x13=1 FTE)	Director of Educational Technology Building Principals	Post positions and interview
Provide PD to Instructional Tech Mentors in preparation of developing priorities	Director of Educational Technology Model Schools	Work with Model Schools to provide week long PD to mentors
Google Apps for Education Drive, Docs, Slides, Sheets, Classroom, App integration	Model Schools Director of Educational Technology Instructional Technology Mentors	Work with Model Schools and other vendors as needed Small group workshops Webinars Blended Learning
iPads to support individual and blended learning	Model Schools Director of Educational Technology Instructional Technology Mentors	Work with Model Schools and other vendors as needed Small group workshops Webinars Blended Learning
SMARTBoard and integrated software	Model Schools Director of Educational Technology Instructional Technology Mentors	Work with Model Schools and other vendors as needed Small group workshops Webinars Blended Learning
Use of student management systems and school surveillance and safety systems	Managed Data Instructional Technology Mentors Director of Educational Technology Building Administration	Small group workshops held to address specific needs of audience. Reporting and use analysis determines focused topics for small group review
Communicate PD calendar/forecast as start of school year	Instructional Technology Mentors Director of Educational Technology	Share via MyLearningPlan events and email
Annual Performance Appraisal of Instructional Tech Mentors and Goal setting	Instructional Technology Mentors Director of Educational Technology Building Administration	Observe ITM session and provide feedback using the NYS impactful PD rubric Identify Strengths and set goals for areas in need of improvement aligned to district goals

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.**

BINGHAMTON CITY SD

Instructional Technology Plan - Annually - 2015

Professional Development

Status Date: 10/16/2015 00:13 PM

Title	Number of Current FTEs
Dir of Educ. Tech.	1.00
Tech Mentors	1.00
	2.00

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	Network Cabling	1,000,000	One Time	SMART Schools/Capital Projects
2	Interactive Whiteboards	2,400,000	One Time	SMART SCHOOLS/Capital project
3	Tablets	105,000	Annual	BOCES IPA
4	Instructional Software	200,000	Annual	District Funds/BOCES
5	Wi-Fi	170,000	One Time	SMART Schools
Totals:		3,875,000.00		

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

(No Response)

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 Staffing (Checked)
Changes in Funding (Checked)
Catastrophic Event (Checked)
Developments in Technology (Checked)

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

(No Response)

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.**

In an effort to expand support for learning beyond the walls and hours of the school, we are piloting a program to convert older laptops into chromebooks, currently referred to as "chrometops." With the expansion of Google Apps for Education to all students grades 3-12, the district can utilize additional chrometops that were previously recycled as student devices closing the gap for student:device ratio and expanding opportunities for learning, instructional delivery, and student collaboration.

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.**

Local businesses
Public library
Housing development hot spots
City center hot spots

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.**

BINGHAMTON CITY SD

Instructional Technology Plan - Annually - 2015

Instructional Technology Plan Implementation

Status Date: 10/16/2015 00:13 PM

Strategies	Activities	Results Indicators	Key Personnel	Timeline
	Develop a three year plan to phase in Common Sense Education digital citizenship curriculum for grades K-5			Fall 2015-2018
	Create Google Apps for Education Accounts for all Staff and provide opportunities for training			On-going
Identify and communicate grade level expectations for student learning and use of technology	Create a Google Apps for Education Account for all students in grade 3-12			Fall 2015
Identify building-based Google Classrooms to serve as support for watching and learning	Maintain a collaborative document, "Google Whitelist", for apps specific to individualized and/or departmentalized needs	Document Review: Google Educator Certificates Course Syllabi	Director of Educational Technology	On-going
Explore the use of eBooks in educational settings	Pilot a cart of e-readers at elementary, middle, and high school levels with the use of managed accounts through the Library Media Centers	Observable Practice: # of students accessing Google Apps for Education Accounts	Library Media Specialists	Fall 2015 Fall 2016
Identify elements of digital citizenship aligned to Common Core Learning Standards	Pilot Google HangOuts to collaborate	Increased % of assignments completed and turned in utilizing digital means Student Achievement Measure:	Technology Committee Instructional Technology Mentors Director of Pupil Services	Spring 2016
Develop a process to maintain accurate information in the student management system regarding Acceptable Use Policy	Collect signed Acceptable Use policies and develop process to track and flag using the student information system (SchoolTool)	Digital Citizenship curriculum assessments		Fall 2016
	Purchase sites licenses for all elementary buildings for Reading A-Z and Reflex Math			Summer 2015
	Manage, maintain and track teacher and student accounts in Reading A-Z (K-2) and Reflex Math (2-5)			Spring 2016
Data management	Review on-going evaluation data from professional offerings given by Instructional Technology Mentors	Document Review: MyLearningPlan Evaluation results summaries Certified Google Educator certificates Google Whitelist/iPad Apps	Director of Educational Technology Technology Committee Instructional Technology Mentors Library Media Specialists	January/May annually
Support the maintenance of student demographic information	Provide opportunities for staff to become Google Certified	Responsible Use Policy Bring Your Own Device Policy	Managed Information Technology Services (MITS)	Fall 2015, Spring 2016, Fall 2016
Support the maintenance of communication tools	Pursue requirements to	SCRIC annual review		Spring 2016-Spring 2018

acquisition and management systems.	become a digital citizenship certified district through Common Sense Education			
	Continue use of process for requesting and acquiring software and apps for iPADS		On-going	
	Implement a process for requesting and acquiring apps on Google Apps for Education accounts		On-going	
	Develop and implement policies and regulations to support the use of personal devices	Observable Practice: Instruction in digital citizenship K-2 students use of iPads in station setting		Spring 2016
	Continue to use a process for reviewing, acquiring, and requesting infrastructure sufficient or necessary to support instructional and administrative needs.	Student Achievement Measure: Kids A-Z reading level data Reflex Math growth data		On-going
	Collaborate with Managed Data Service to disseminate relevant data sets to building administrators and staff			On-going
	Develop a system of support for district and building administrators and staff to input, extract, and analyze data accurately			On-going

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.**

Evaluation is a continuous ongoing process to determine if we are accomplishing our desired goals. It is a way of examining the implementation of the overall technology plan as well as specific areas of the plan, such as professional development, technical support, and networked resources. The information gathered through the evaluation process will be used to help determine what is working, what should be changed, and help set a path for technology usage into the future. The process will allow us to alter our course and make modifications and improvements that will strengthen the instructional technology plan. The evaluation process for the Binghamton City School District is based on the following process:

- 1 Identify strategic priorities that support the goals of the Board of Education
- 2 Develop performance indicators for each question
- 3 Identify and develop data collection methods and instruments
- 4 Collect the data
- 5 Study the results
- 6 Create an annual report on the results of the evaluation, findings, lessons learned, and directions for future efforts
- 7 Use the evaluation results to update the technology plan

Developing Indicators

After identify the priorities of the plan to be evaluated, the committee's work will turn toward creating performance indicators for each priority. The committee will use the indicators to identify sources for information and identifying data collection methods and instruments.

Information Sources

The technology committee will use a variety of tools and techniques to gather information that is useful for the process. These will include but not be limited to teacher and student surveys, observations, interviews, focus groups, technology tools self-assessment, and reviews of student and teacher work. All data and information collected will be reported out as a group to avoid focusing on individuals. The Binghamton City School District will use a teacher technology survey to help evaluate the effectiveness of instructional technology and its implementation. This survey can be found on the following pages.

The Evaluation Results

The evaluation results will be summarized into an annual report to help the Technology Committee determine how successful the district has been in meeting the goals and objectives set forth in the Instructional Technology Plan. It will help them determine whether to continue as planned, refocus the plan, or modify activities and strategies in the plan. The results should be reported to the Board of Education and school administration.

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://www.binghamtonschools.org/Downloads/7000%20ALL.pdf	2001
Internet Safety/Cyberbullying	02/12/2013	http://www.binghamtonschools.org/Downloads/Section%208000%20ALL%20-%20Students2.pdf	2013
Parents' Bill of Rights for Data Privacy and Security	(No Response)	http://www.binghamtonschools.org/Downloads/BCSD%20PARENTS%20BILL%20OF%20RIGHTS%20FOR%20DATA%20PRIVACY%20AND%20SECURITY.pdf	2014

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

No

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

No

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

The table feature was frustrating to manipulate. Even when creating a table in another application to copy and paste, the rows, columns, and cells are not able to be manipulated after pasting.

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**

(No Response)