

Instructional Technology Plan - Annually - 2016

LEA Information

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	1,655	51	340	342	361	558	3

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

Jonathan Nicoletti

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

Assistant Superintendent

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Instructional Technology Vision and Goals

B. Instructional Technology Vision and Goals

1. Please provide the district mission statement.

The mission of the Waterloo Central School District is to provide a safe environment and educational programs that will provide opportunities for all members of the community to obtain a well rounded education so they can be productive and successful in their personal and professional lives.

The Technology Committee is responsible for the vision, communication, integration and operational procedures related to district technology. Its primary purpose is to promote the use of technology to support teaching, enhance student learning and to increase the efficiency of district operations.

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

This district's Long Range Plan for Technology addresses many of the issues associated with the way technology has and will continue to change the way we work and play. The success of our complex, diverse, and technology rich mobile society will depend substantially on our students' abilities to acquire the skills and knowledge necessary for high technology work and to be informed citizens.

Vision: To create an engaging learning environment in all classrooms that integrates the International Society for Technology in Education (ISTE) standards in all instructional programs.

Goals:

- Develop and maintain a long term technology implementation plan
- Oversee the acquisition, implementation, maintenance, and upgrading of technology
- Set standards for technology usage
- Support the implementation of technology into instruction
- Maintain awareness of technology advances, and enhance the skills/knowledge of technology leaders and their peers.
- Maintain open lines of communication by keeping staff informed of committee work, listening to staff needs, and obtaining staff feedback
- Identify and provide for technology professional development

The Technology Assessment section of this Plan shows that the District has expended considerable money to provide students and staff with a technology rich environment. Goals ensure existing technology is current and up-to-date and investment in new and emerging technology.

Students need skills and knowledge of technology to perform in their future endeavors. The existence of the physical components of technology is not enough. The faculty and staff need to be skilled in the use and care of equipment, use of applications, and integration of technology skills into their curricula. For this, our district offers staff development in these areas as determined by a needs survey.

The Waterloo Central School Technology Skills K – 12 document presents the skills students gain throughout their years at Waterloo. The skills are aligned with the *National Educational Technology Standards*. This document also provides integration practices and computer applications used.

Our district applies district funds to provide the technology. Through seeking and acquiring grants, we are able to further fund new and emerging technology and skills development and staff development.

Sixth through twelfth grade students/parents/guardians are required to read and sign the District's "Acceptable Use Policy" (provided in this plan as an appendix). The signed AUP must be on file before a student will be allowed to log-in on a district computer. Students in the elementary grades (primary and intermediate) use computers and the Internet with supervision.

Given the certainty of continued technological change, and the clear potential of new technologies to improve learning, our students must continue to move forward in an expeditious and effective manner. Only through deep commitment and combined effort on the part of teachers, administrators, Board of Education, students, parents and community will the goals be attained.

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Instructional Technology Vision and Goals

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.**

Planning Process

The District Technology Committee meets on a monthly basis to discuss the implementation of the District Technology Plan. In addition, the Committee is responsible for updating/revising the plan. Meeting outcomes are aligned with discussion items and the vision, mission and goals of the District Technology Plan.

The planning process for updating/revising the plan is as follows:

- Committee members are encouraged to regularly discuss technology needs and implementation with their stakeholder groups. These discussions often lead to stakeholder recommendations that are brought to the Committee for consideration.
- Committee members annually review the Technology Plan to identify gaps in the plan, and for future planning purposes. Recommendations are brought to district administration for final review and consideration.
- Surveys are administered to staff to gather input and feedback on technology related issues. **Membership**The Technology Committee includes representatives from the following groups:
 - District Administration
 - Building Administration
 - District Computer Leaders
 - Building Computer Leaders
 - School Librarians
 - Teachers
 - Teacher Resource Center Director
 - Community Members

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.**

1. The district is continually evaluating new technology to determine its relevance for education. However, advances in technology far outpace the district's ability to keep current.
2. The district recognizes that ongoing training is key to achieving effective technology integration. Workshops are provided by the district and BOCES. However, the rate technology changes makes it difficult to keep pace with the professional development needs of staff.
3. Evaluating new technology and providing professional development requires staff well versed and comfortable with the integration of technology. Finding staff confident in their ability to perform these functions continues to be a challenge.

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Instructional Technology & Infrastructure Inventory

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?

GV/WFL Educational Technology Service

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 Gbps or Mbps
Minimum Capacity	<ul style="list-style-type: none"> <input type="checkbox"/> Greater than 10 Gbps <input type="checkbox"/> 10 Gbps <input checked="" type="checkbox"/> 1 Gbps - < 10Gbps <input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> Less than 10 Mbps
Maximum Capacity	<ul style="list-style-type: none"> <input type="checkbox"/> Greater than 10 Gbps <input type="checkbox"/> 10 Gbps <input checked="" type="checkbox"/> 1 Gbps - < 10Gbps <input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> 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	<ul style="list-style-type: none"> <input type="checkbox"/> Greater than 10 Gbps <input type="checkbox"/> 10 Gbps <input type="checkbox"/> 1 Gbps - < 10Gbps

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Instructional Technology & Infrastructure Inventory

	Please provide the speed at which classrooms are connected to building wiring/network closet.
	<input checked="" type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> Less than 10 Mbps
Maximum Circuit Speed Within a School Building	<input type="checkbox"/> Greater than 10 Gbps <input type="checkbox"/> 10 Gbps <input checked="" type="checkbox"/> 1 Gbps - < 10Gbps <input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> 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	<input type="checkbox"/> Mbps <input checked="" type="checkbox"/> Gbps
Maximum Capacity of Switches	1	<input type="checkbox"/> Mbps <input checked="" type="checkbox"/> 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?

100

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?

	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)	311	311
Laptops/Virtual Machine (VM)	645	645
Chromebooks	0	0
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	25	25
Totals:	981	981

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Instructional Technology & Infrastructure Inventory

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)?

16

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.

Additional funding would allow the district to purchase assistive technology devices that are not specified on a student's IEP. Currently, the districts provides assistive technology to students as identified on their IEP. With additional funding, the district could purchase technology devices that would help improve these students' engagement in learning, such as iPads, Smart Boards, responders, etc.

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

	Number of devices in use
Document Cameras	72
Flat Panel Displays	3
Interactive Projectors	104
Interactive Whiteboards	104
Multi-function Printers	2
Projectors	5
Scanners	5
Other Peripherals	47
Totals:	342

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

Pasco Science Probes - 40
 3D Printers - 3
 Flat Panel Interactive Display - 4

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

Yes

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?

400

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?

Yes

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Instructional Technology & Infrastructure Inventory

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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Software and IT Support

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	Yes
Windows XP	Yes
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	No
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.

None Used

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

- Microsoft Word
- Microsoft Power Point
- Type to Learn
- Accelerated Reader
- Renaissance STAR

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Software and IT Support

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

- JSTOR
- Gale: Cengage Academic One-line
- World Book Online
- Gale: Newsstand
- Gale: Opposing Viewpoints

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

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

Connect Ed, email, YouTube pages, electronic signboards, teacher webpages

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
PC Support Specialist	1.00
Network Analyst	1.00
Computer Technician	1.00
	3.00

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Curriculum and Instruction

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

The district plans to provide teachers and students with the technological tools, knowledge and opportunities necessary for engaging and relevant 21st century learning. It is expected that teachers will use the technology to create engaging and relevant 21st century instruction. It is also expected that students will be active participants in this instruction.

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.

The district's Director of Pupil Personnel Services monitors the instructional technology needs of special education students. This includes ensuring equitable access to instruction, materials and assessments. The director also ensures that needed assistive technology is available to ensure that these students can access and participate in the general curriculum.

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.

The district's Director of Pupil Personnel Services monitors the instructional technology needs of special education students. This includes ensuring equitable access to instruction, materials and assessments. The director also ensures that needed assistive technology is available to ensure that these students can access and 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).

The Assistant Superintendent for Curriculum and Instruction works with the district's teacher(s) of English Language Learners to meet the instructional technology needs of ELL Students. This includes equitable access to instruction, materials and assessments.

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Professional Development

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.

Professional Development topics include:

- Smart Board Training (new and refresher)
- Smart Board Strategies
- Creating a Classroom Community OUTSIDE the Classroom
- Google Earth and Maps to enhance instruction
- Edmodo
- Web-based Gradebook
- Teacher Website Development
- Video Production
- Using Databases
- Tablets in the Classroom All staff are invited to attend the above workshops. The workshops include a presentation and/or demonstration by the facilitator, and time for participants to implement their learning with support from the facilitator.

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
Tech. Staff Developer	0.25
	0.25

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Technology Investment Plan

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.

	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both?	Funding Sources May choose more than one source
1.	Laptops	100,000	Annual	<input type="checkbox"/> BOCES Co-Ser Purchase <input checked="" type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
2.	Interactive Displays/Projectors/Whiteboards	50,000	Annual	<input type="checkbox"/> BOCES Co-Ser Purchase <input checked="" type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
3.	Instructional Software	25,000	One Time	<input type="checkbox"/> BOCES Co-Ser Purchase <input checked="" type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
4.	Tablets	15,000	Annual	<input type="checkbox"/> BOCES Co-Ser Purchase <input type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
5.	Wi-Fi	100,000	Annual	<input type="checkbox"/> BOCES Co-Ser Purchase <input checked="" type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act

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Technology Investment Plan

	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both?	Funding Sources May choose more than one source
				<input type="checkbox"/> Other
Totals:		290,000		

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

(No Response)

Instructional Technology Plan - Annually - 2016Status of Technology Initiatives and Community Involvement

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.**

The district plans to increase the number of portable student technology devices by adding additional laptop carts and tablet carts at the elementary level. Provide teachers with access to the student information system at home. Purchase additional web-based learning subscriptions that students can access at school and home, to enhance student learning. Purchase additional web-based subscriptions that teachers can access at school and home, to enhance instruction.

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.**

Currently, WiFi is available to students at the Waterloo Public Library, and the following local businesses - Dunkin Donuts, McDonalds, Burger King

Instructional Technology Plan - Annually - 2016

Instructional Technology Plan Implementation

I. Instructional Technology Plan Implementation

- 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.**

Date(s)	Action	Outcomes
2016-2019	Purchase additional technology equipment, i.e. Smart Board, Laptops, tablets, etc.	All staff has ready access to desired technology equipment.
2016-2019	Purchase additional software and web subscriptions for instruction and assessment	All staff has ready access to desired software and web-subscriptions.
2016-2019	Provide adequate professional development for instructional staff on technology equipment and software and web-subscriptions	All staff has opportunity to participate in professional development offerings.
2016-2019	Research and implement new technology resources	District Technology Committee maintains a list of technology resources for future purchase and use by staff and students.
2016-2019	As needed, provide staff with opportunities to attend technology workshops through WTRC, Edutech, and other vendors	Staff attends workshops and share learning with colleagues.
Annually	Purchase one laptop cart each year for student use at LaFayette School	3 additional laptop carts will be available for grade level use.
Annually	Purchase 20 tablets annually for student use at Skoi-Yase and LaFayette schools.	Tablets will be available for student use at each building.
Annually	Monitor and adjust Waterloo Technology Skills K-12	Technology Committee reviews and implements changes to the student technology skills document.
Annually	Keep the infrastructure of district facilities current.	District IT department will review and replace outdated infrastructure equipment as needed.

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Monitoring and Evaluation

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.

Annually - January and June	Technology Committee will review new technology purchases and compare to the technology plan	Update technology plan with an explanation of any variations.
Annually - January and June	Technology Committee will review technology professional development offerings and enrollment.	Update professional development plan based on findings.
Annually - January and June	Technology Committee will review the new technology resources list	List will be updated as needed.
Annually - January and June	Technology Committee will review the Technology Skills K-12 document	Update the document as needed.
Annually - January and June	Network Analyst will provide Technology Committee with a report on infrastructure status.	Presentation is reviewed and needs are identified.

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

	URL	Year Policy Adopted
Acceptable Use Policy -- AUP	http://waterloocsd.org/documents.com	2016
Internet Safety/Cyberbullying*	http://waterloocsd.org/documents.com	2016
Parents' Bill of Rights for Data Privacy and Security	http://waterloocsd.org/documents.com	2016

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Survey Feedback

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)

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Appendices

Appendices

1. Upload additional documentation to support your submission

Long Range Technology Plan 2016-19.doc