

Instructional Technology Plan - 2015

LEA Information

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A. LEA Information

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

10,258

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

	Enrollment
Grades K-2	2,149
Grades 3-5	2,256
Grades 6-8	2,419
Grades 9-12	3,434

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

[REDACTED]

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

[REDACTED]

Instructional Technology Plan - 2015Instructional Technology Vision and Goals

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B. Instructional Technology Vision and Goals**1. Please provide the district mission statement.**

The mission of the Middle Country Central School District is to empower and inspire all students to apply the knowledge, skills and attitudes necessary to be creative problem-solvers, to achieve personal success, and to contribute responsibly in a diverse and dynamic world.

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

Technology is constantly changing and rather than trying to “teach technology”, we can best prepare our students for success in their lives beyond high school by setting up opportunities for them to solve real-world problems with the aid of technology. Students should be given opportunities to access, analyze, synthesize and present ideas and information as they work on research based projects. Integrating technology in support of learning is best accomplished by giving students access to tools for communicating and problem solving. Teaching strategies that support the integration of technology include: less directing and more guiding; designing activities that require students to deal with substantive questions, engaging students in collaborative projects, and work that requires analysis and research. The state standards for all subject areas repeatedly reference the words: analyze, interpret and infer. Having students engage in web-based research to solve problems will help our students to meet and exceed the standards in all subject areas.

Vision

- Students working on collaborative, interactive, challenging projects with the aid of technology.
- Learning opportunities involving the use of technology aligned with New York state standards.
- Students communicating with other students, teachers and specialists in support of learning.
- Teachers communicating with other teachers; accessing information and being part of an on-line learning community.
- Students engaging in self-paced learning.
- Students and teachers using wireless technologies and devices to bring technology to the point of instruction.
- Students involved in web based research in support of instruction.
- Teachers using technology to enhance learning opportunities and ease clerical tasks.
- Students accessing on-line library/database collections.
- Students learning to use technological tools and software that are used in a variety of “real-world” settings.
- Administrative information systems that are accessible to teachers, parents and administrators with appropriate security clearance.
- Administrative and support personnel having access to data that helps guide decision making and allocation of resources.
- Resources available on the district website to promote learning opportunities for the MCCSD community.
- Technological systems in place, which reduce paperwork and costs and improve communication.

Goals*Teachers*

- Expand turnkey training program with emphasis on integration of technology in the learning environment.
- Improve communication district-wide through the use of e-mail and shared calendars.

Students

- Increase the use of wireless laptop labs and tablets to provide increased access to technology.
- Develop school to career partnerships with vendors and internship opportunities in the area of technology.
- Provide access to an increasing number of educational on-line resources.

Administration/Support

- Provide on-going training on productivity software.

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- Reduce paperwork and costs associated with report generation and publication of information.

Community

- Expand school to community links via website.
- Expand number of educational links and resources on the district web site.
- Develop partnerships/linkage with area colleges, universities and the business community that afford our students better placement opportunities and link our curriculum more closely with what is happening at the college and professional level.

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.

Our original three-year technology plan that was developed for 2013-2016 was done so with a cross-section of stakeholders from the school district. The committee discussion included administrators, teachers, library media specialists and support staff from both the building and district level. In addition, staff from the District's Computer Center were included in any conversation, as were outsourced vendor technicians for their expertise, when needed.

Moving forward, the same cross section of stakeholders will be utilized. In addition, recommendations and requests for initiative specific hardware and software platforms come from various District committees. One such committee is the Middle Country Commission for Educational Advancement, which is driving Middle Country's STEM initiative. Major technology acquisitions that have taken place as a result of the synergy between committees include the NAO robots at the elementary level, Lego robotics at the middle school level, and zSpace Virtual STEM labs and 3D printing at the middle and high school level.

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 challenges that are causing the gap? If you chose "No Gap Present" in question four, please enter N/A.

Three challenges that may be contributing to the gap between the current level of technology and the district's stated vision and goals are:

- Funding unfunded mandates via the technology budget
- Funding technology purchases that were not part of the original three-year plan in support of District initiatives
- The pace of change with regard to technology and its ability to be integrated into an educational setting.

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Instructional Technology & Infrastructure Inventory

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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)	200Mb	1Gb
Internal Network Bandwidth: Connections BETWEEN school buildings (LAN)	1Gb	1Gb
Bandwidth: Connections WITHIN school buildings (LAN)	1Gb	1Gb

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

200Mb

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

LightTower

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	<input checked="" type="checkbox"/> Available <input checked="" type="checkbox"/> In Use
802.11b	<input checked="" type="checkbox"/> Available <input checked="" type="checkbox"/> In Use
802.11g	<input checked="" type="checkbox"/> Available <input checked="" type="checkbox"/> In Use
802.11n	<input checked="" type="checkbox"/> Available <input checked="" type="checkbox"/> In Use
802.11ac	<input checked="" type="checkbox"/> Available <input checked="" type="checkbox"/> In Use
802.11ad	<input type="checkbox"/> Available <input type="checkbox"/> In Use
802.11af	<input type="checkbox"/> Available <input type="checkbox"/> In Use

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

Yes

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

71

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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?

1Gb

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)	2,520	2,520
Laptops/Virtual Machine (VM)	680	680
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	60	60
Tablets nine (9) inches or greater without access to an external keyboard	600	600
Totals:	3,860	3,860

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)?

4

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.

Funding and time for professional development--both general and specialized--for teachers and staff to make better use of existing and new technologies. Additional staff dedicated to staff development would be very welcome.

With regard to assistive technology, District staff knowledge is supplemented with outsourced assistive technology experts and integrated by a dedicated special education technician.

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	40
Flat Panel Displays	0
Interactive Projectors	0
Interactive Whiteboards	623
Multi-function Printers	1
Projectors	100
Scanners	14
Other Peripherals	

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	Number of devices in use that are less than five years old
	236
Totals:	1,014

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

Webcams = 100

Science Probes

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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

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?

Not Applicable

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Software and IT Support

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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	Yes
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	No
Android	Yes
Other	Yes

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

Linux

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.

None used at this time.

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

1. Castle Learning

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Software and IT Support

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- 2. SkillsTutor
- 3. enVision
- 4. Learning A-Z
- 5. BrainPop

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

Having library media specialists spread over 14 school buildings and 4 different building levels (Kindergarten Center, Elementary, Middle School, High School) makes narrowing down to five research databases almost impossible. What follows is a list of the most commonly used packages, in no particular order, developed by our library media specialists:

- WorldBook Online
- Culturegrams
- Biography for Beginners
- Kids Infobits
- History Study Center
- eLibrary Science
- DK Eyewitness e-books
- Noodle Tools
- Teaching Books
- SIRS Discover
- Opposing Viewpoints
- Proquest
- NovelList Plus
- Biography Reference Center

8. Does the district have a Parent Portal?

Yes

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

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

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

N/A

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

- Learning Management System
- Emergency Broadcast System

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- Website
- Facebook
- Twitter
- Other

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
Network Administrators	2.00
IT Technicians	7.00
	9.00

Instructional Technology Plan - 2015Curriculum and Instruction

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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 is current attacking digital connectivity and technology to improve teaching and learning and number of different fronts.

- From a network connectivity perspective, the District is completing its district wide rollout of 100% wireless coverage. When coupled with our access management solution, this will allow not only District owned equipment to access network and internet resources, but also facilitate full BYOD.
- We are exploring the implementation of both Blackboard's LMS and Google's Drive/Apps for Education solution.

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

2B. If "Yes", please specify.

The Middle Country Central School District provides robust and reliable access to current and emerging technologies and digital resources, with connectivity for all students.

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

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

The Middle Country Central School District provides appropriate adaptive technology for students with disabilities to meet their specific needs, maintaining fidelity to their individual education program (IEP). To better meet the needs of these students and the teachers that support them, the Offices of Pupil Personnel Services and Technology share a 1 FTE computer technician to prioritize technology issues. To bridge working technology with teachers and students, Special Education contracts with adaptive technology specialists from either BOCES or another appropriate consultant.

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Professional Development

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F. Professional Development

- 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.**

It is understood that the success of attempts to integrate technology in a school or workplace is dependent on appropriate training and support. Middle Country Central School District provides training for teachers, administrators and support staff in the following ways.

- Turnkey training seminars– The district offers in-service credit to teachers who complete 15 hours of curriculum related technology coursework. In-house turnkey trainers conduct these seminars. Courses are offered on an on-going basis at a variety of user ability levels. Our current offering includes over 30 seminars on a variety of topics.
- BOCES administrative courses – Secretarial and administrative staff sign-up for courses on a variety of software packages.
- District Coordinator for Technology – Provides training on the effective integration of technology in classrooms. The technology specialist publishes a technology newsletter, evaluates and publishes educational links on the district web-site, supports turnkey trainers, evaluates software, sets up demonstrations and training sessions, and schedules and delivers training for our staff members.
- Teacher Center – The teacher center offers technology courses on a variety of topics including: using video in the classroom, web based research and digital imaging.
- BOCES Model Schools – As a member of the Model Schools program, the district participates in training opportunities through the model schools program.
- Outsourced training – Specialized training is outsourced as needed.

- 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
Director of Technology	1.00
Coord for Technology	1.00
Coord for Sci & Research	1.00
Tech Teaching Assistants	10.00
Director of SDS	1.00
	14.00

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Technology Investment Plan

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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	223,027	One Time	District Bond, Smart School Bond, Budget
2	Other	532,993	One Time	District Bond, Smart School Bond, Budget
3	Other	104,956	One Time	District Bond, Smart School Bond, Budget
4	Wi-Fi	89,788	One Time	District Bond, Smart School Bond, Budget
5	Desktops	600,000	One Time	District Bond, Smart School Bond, Budget
Totals:		1,550,764		

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

The items below provide detail to the 5 anticipated items or services referenced below:

1. Includes internal fiber replacement in every building between data closets to support 10Gb and replacement of data racks/cubes where necessary
2. Switch upgrades for all data closets to support 10Gb and POE for security, wireless, and VOIP
3. Uninterruptible power supplies for all District data closets
4. Completion of District WiFi project at CHS, NHS, and NL. Includes access points and additional licensing.
5. Continuation of District wide 5-6 year replacement program for classroom and computer labs

Instructional Technology Plan - 2015Status of Technology Initiatives and Community Involvement

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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, in school, at home, and in the community.**

The same technology and services that we will use to improve teaching and learning will also help to foster increased student and teacher access to technology, in school, at home, and in the community. Students and teachers will have additional avenues for interaction via network and internet connectivity utilizing District owned and BYOD while on District property. Although there is no plan for a 1:1 program at this time for students, they will be able to work with teachers at home on their own devices utilizing a LMS like Blackboard and various services under the umbrella of Google for Education.

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

- School
- Home
- Community
- None

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

Cablevision has community access throughout the Route 25 and Route 347 corridors. In addition, many businesses in the area provide free Internet access.

Instructional Technology Plan - 2015Instructional Technology Plan Implementation

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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.**

Our current District Technology Plan expires at the end of the 2015-2016 school year. Major initiatives that will be completed this school year include:

- Internal fiber replacement in every building between data closets to support 10Gb
- Replacement of data racks/cubes to support security/VOIP expansion
- Switch upgrades for all data closets to support 10Gb and POE
- Completion of District WiFi project at Centereach High School, Newfield High School and New Lane Elementary School

All four items are being funded via our passed District Bond. The fiber replacement and data rack/cube replacements may take longer to implement, as we are currently in the process of submitting information to our District architects, who will in turn submit to SED for approval. The switch and wireless projects will be started in the coming weeks with all work being done in house.

With regard to an action plan for integrating technology into curriculum and instruction to improve student learning, our focus this school year will be on continuing to work with the NAO robots at the elementary level and zSpace at the middle and high school level.

Elementary NAO Program

- A committee of stakeholders was called together for the purpose of developing a direction for the NAO program
- The Elementary STEM Committee was given a full day of PD and began work on what PD should look like at each grade level
- Following the committee training, teachers in grades 3, 4, and 5 were given 2 full days of hands-on PD - about 3 months apart.

A similar approach will be used for the secondary zSpace Program. A committee of stakeholders is currently being formed for 4 days of PD starting the last week of September. This committee is comprised of four people from each content area; one from each middle school and one from each high school. After receiving PD, committee members will be charged with sharing what they learned with their content areas. This will take place during professional periods throughout the day, as well as department meetings.

The following are planned projects for the rest of this school year and following two:

- 2015-2016
- 2016-2017
- 2017-2018
- 2018-2019
- 2019-2020

Items that may span multiple years, as they were part of the District Bond as well, are security system updates, upgrades and additions, and an eventual phone system replacement.

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Monitoring and Evaluation

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J. Monitoring and Evaluation

- 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.**

District technology stakeholders meet regularly to discuss progress being made on annual goals and long-term goals and projects. Feedback from staff and the results of any studies or surveys are shared. The District Professional Development Committee conducts surveys of staff to determine the training needs for professional and non-instructional support staff. PDP sub-committees explore current research, developments, and programs, and make recommendations.

The effectiveness of the District Technology Plan is obtained through observations, focus groups, interviews and informal meetings with teachers, students, and parents. Our administrators continue to evaluate the effectiveness of the District Technology Plan through the informal and formal evaluations with teachers, students, and parents. In short, all educators continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.

The evaluation of the programs is communicated at Board of Education meetings, PTA Council meetings, faculty meetings, department meetings, and through digital communications.

- 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.mccsd.net/files/83/Middle%20Country%20-%20Student%20Acceptable%20Use%20Policy.pdf	2010
Internet Safety/Cyberbullying	09/02/2015	http://www.mccsd.net/policies.cfm?pid=508 , http://www.mccsd.net/policies.cfm?pid=169	2014
Parents' Bill of Rights for Data Privacy and Security	(No Response)	http://www.mccsd.net/policies.cfm?pid=273	2014

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

Yes

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Survey Feedback

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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)

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Appendices

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Appendices

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

(No Response)