Technology Plan 7/1/15-6/30/18

Middletown City Schools 223 Wisner Ave Middletown, New York 10940



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http://middletowncityschools.org/cms/lib7/NY01913810/Centricity/dom ain/77/tech plan/Middletown 2018 Tech Plan Final.pdf

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Introductory Material

District Mission Statement

We strive to provide fiscally sound educational opportunities in a safe environment that continuously supports our diverse student population. We will enable all students to graduate, to reach their full potential, to become life-long learners, and to be competitive, productive members of society.

District Demographics

The Enlarged City School District of Middletown is situated in Orange County, New York, 65 miles northwest of New York City. The district covers all of the City of Middletown, as well as portions of the towns of Wallkill, Wawayanda and Goshen. It is the third largest District in the County, operating three elementary schools (K-5), two middle schools (6-8) and a high school (9-12). The district is staffed with 570 teachers, 26 administrators and 580 staff members.

Healthcare providers and educational institutions are the largest employers in the area. The crossroads of Route 17 and Interstate 84 make Middletown a commercial, light industry, and transportation center.

The District serves a diverse socio-economic community. The student population, including out of district students and Pre-K, is 7456. The student demographic is comprised of 51.8% Hispanic, 26.6 % black students, 18.7% white (Not Hispanic) students, 2.7% Asian, and .2% Indian. The percentage of students eligible for free or reduced lunch is 75%.

The current post-secondary plans for graduates going on to a 4-year college are 36%, while 47% go on to 2-Year colleges. The New York State Education Department classifies the Enlarged City School District of Middletown as "an urban or suburban school district with high student needs in relation to district resource capacity."

Development of This Technology Plan

This technology plan provides both revisions and additions to the District Technology Plan developed in May 2013 and June 2015. This plan was collaboratively developed with a District team. Participants in the development of the plan included key technology staff as well as administrative staff from curriculum and instruction, teacher representatives, board of education and community members.

Our Vision

The Enlarged City School District of Middletown is committed to using technology to support learning in our schools and homes by building a community of learners that extends beyond the four walls of our classrooms. We have built on-going community initiatives and partnerships to involve parents and other community members in our efforts to improve our schools. We are using technology, including our website, video programming (Middie TV) and a parent notification system, to communicate and involve parents in their children's schooling. We also use parent meetings, which include special Spanish (ESL/Bilingual population) and students with disabilities sessions to inform parents and increase their involvement. We will increase our collaboration with public libraries and adult literacy providers within the community. While our primary focus is on student learning, through our electronic learning community, we will provide significant benefits to all members of our community, including:

- Students
- Teachers
- Administrators
- Support Staff
- Parents
- Public library and higher education
- Other community and business members

Powerful information and communications technology (ICT) will strengthen the quality of our teaching, thereby helping us to meet the current academic and social needs of all our students, preparing them for continued personal and educational growth as life-long learners. We believe that equipping our schools with current technology is important. We know that a welldeveloped and well-supported technology infrastructure will address NCLB, FCC E-rate and New York State learning standards. We will prepare our students for the challenges they will face in the current and future economies, and increase the opportunities that will encourage them to remain members of the Middletown community. Our core focus is on the development of communications including reading, writing, speaking, listening, digital literacy and mathematical competency for all our children. Furthermore, we built this technology plan upon the concepts reflected in the National 21st Century Skills Partnership Initiative, Framework for 21st Century Learning (P21), National Educational Technology Standards (NETS) and Science, Technology, Engineering, and Mathematics (STEM) coalition. These combined approaches reflect the skills all students need for graduation. We believe that preparing our students through the use of information and communications technology is critical to their future success. These technologies include computers, networked information, video conferencing, Web 2.0 and Web 3.0 resources, the Internet and all varieties of electronic media and tools.

21st Century Skills - http://www.p21.org

INTERNATIONAL SOCIETY OF TECHNOLOGY IN EDUCATION (ISTE) -

HTTP://WWW.ISTE.ORG/STANDARDS/ISTE-STANDARDS

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) - HTTPS://WWW.PLTW.ORG/

BLENDED LEARNING - HTTP://WWW.EDUCATIONELEMENTS.COM

FLIPPED CLASSROOMS - HTTP://WWW.EDUCATIONELEMENTS.COM

COMPUTER BASED TESTING - HTTP://WWW.PARCCONLINE.ORG/

ENGAGENY - HTTPS://WWW.ENGAGENY.ORG/

Our vision for technology's potential for all members of our community is reflected in the following uses of digital technology creating a globalized environment:

- Mobility
- Global awareness
- Communication and collaboration
- Information literacy
- Access to information, instructional resources, and lessons
- Productivity tools for staff and students
- Support for data driven decision-making (D3M)
- Data representation and graphical presentation of information
- Engaging learners in discovery and project-based learning that supports a constructivist learning model
- Preparing students with the 21st Century Skills and P21 Framework
- Supplemental instruction to address the needs of diverse learners:
 - Academic Intervention Services (AIS)
 - English as a Second Language (ESL)
 - Student Enrichment (SUPA)
 - Mastery Classes
 - Transitional Classes
 - Two-Year Kindergarten
 - Mid-Point Classes
 - Summer School Institute
 - Students with Disabilities
 - o 504 Accommodations

Technology Plan Goals (2015-2018)

We believe it is critical to use technology to impact teaching and learning and have established the following four goals:

- To expand teacher and student use of mobile technology in the classroom focusing on technology-enriched English Language Arts (ELA), Mathematics, Literacy, Science, and Social Studies. Technology will support instruction, reinforce student skills, provide alternative instructional methodologies for teaching and learning, and foster internet safety and digital literacy. Including assistive technology and private school needs. Lastly, the District will implement technology-enhanced, resource-rich, blended learning and flipped classrooms with focus on personalized learning environments.
- To sustain existing professional development opportunities and develop new
 approaches focused on safe, ethical use of the Internet and integrating technology into
 the standards-based curriculum. We will continue to assist our staff towards a
 classroom integration model by continuing to train staff in the use of hardware and
 software.
- 3. To focus on using our student information system (SIS) and Data Driven Decision Making (D3M) with emphasis on student growth and achievement. Configure and develop itemized reporting from Prosper assessment software. Utilize Ed Vista, New York State Testing and Accountability Reporting Tool (nySTART), SIRS Manual, the Mid-Hudson Regional Information Center, and Big Data with BrightView Analytics. These systems allow us to make data-driven decisions about teaching and learning.
- 4. To expand and support our technology infrastructure. The district-wide expansion includes installing additional physical security and video surveillance in all buildings. Supporting VoIP system, rapid broadcast system, digital signage, wireless communication, streaming video, and upgrading all data closets and WAN to a 40 gigabyte network. Additionally, researching and implementing a community wireless mesh for home Internet access for all community members.

What we believe:

All learners need and deserve 21st century learning opportunities to thrive as tomorrow's leaders, workers, and citizens.

Learning takes place throughout life in many places and spaces. From birth through their careers, learners need a broad range of experiences that develop their skills, dispositions and abilities to succeed. A strong foundation for success is rooted in learning that happens in and out of school.

21st century learning environments and opportunities are essential to prepare all students for the challenges of work, life, and citizenship in the 21st century and beyond, as well as ensure ongoing innovation in our economy and the health of our democracy.

http://www.p21.org/about-us/our-mission

1. Goal One - To expand teacher and student use of mobile technology in the classroom focusing on technology-enriched English Language Arts (ELA), Mathematics, Literacy, Science, and Social Studies. Technology will support instruction, reinforce student skills, provide alternative instructional methodologies for teaching and learning, and foster internet safety and digital literacy. Including assistive technology and private school needs. Lastly, the District will implement technology-enhanced, resource-rich, blended learning and flipped classrooms with focus on personalized learning environments.

a. Blended Learning Priorities K-8

- i. Personalized learning environments through the use of prescriptive digital content aligned to NYS CCLS
- ii. Small group instruction, center and workstation activities in ELA and Mathematics ~ targeted at student strengths and skill gaps
- iii. Shift from teacher control of learning toward student control of learning

b. Assistive technology K-12

 Apps and programs are loaded to the assistive technology devices based on student need. Some of these programs/ apps include, but are not limited to iBooks, Voice Dream, Calculator, Dictionary, Google Docs, Chrome, Letter Reflex, Math Duel, Dragon Dictation, Cowriter, VoiceOver, Zoom Text USB Magnifier, Read2Go, Bookshare, voice recognition and word prediction software.

Activities for Goal One

2015-2016

- Transition current district computers into a mobile environment
- Continue Education Elements blended learning environment and flipped classrooms
- Create personalized learning environment
- Swap out smartboards for High Def Sharp Aquos Boards
- Install Apple TV and Chromecast in every classroom
- Install Classroom Audio system
- Develop student technology proficiency skills assessments
- Implement Learning management system
- Continue to provide remote access of network software for staff and students
- Utilize video conferencing units to collaborate with learners within the District as well as those in other districts, states, and abroad
- Encourage use of technology resources aligned to District scope and sequence documents
- Enhance existing Project Lead the Way (Engineering and Biomedicine) programs at the secondary level to continue to deliver specialized, rigorous courses that prepare students for a global world Chrome Book for every teacher
- Continue to implement Google apps and docs
- Review and implement digital text books

- Review PARCC guidance on computer base testing (CBT)
- Expand eBook collection
- Conduct Internet safety/digital footprint classes for staff, students and community
- Ensure assistive technology needs are meet
- Continue equipment loan to private schools

2016-2017

- Continue blended learning environment and flipped classrooms
- Continue implementation of personalized learning environment
- Continue to conduct Internet safety/digital footprint classes for students and faculty
- Share software toolkit selection and implementation process
- Continue to encourage the use of technology resources aligned to District scope and sequence documents (i.e. Education Elements)
- Continue development of student technology proficiency skills assessments
- Implement technology resource toolkit selection and implementation process
- Expand virtual learning and video conferencing opportunities
- Continuation of additional teacher presentation systems (Sharp Aquos Boards)
- Continue to provide remote access of network software for staff and students
- On-going software toolkit selection and implementation
- Enhance specialized virtual courses and distance learning delivery options
- Continue to enhance existing Project Lead the Way (Engineering and Biomedicine) programs at the secondary level to continue to deliver specialized, rigorous courses that prepare students for a global world
- Conduct training and implement Internet Safety curriculum plan District-wide
- Explore emerging technologies
- Ensure assistive technology needs are meet
- Continue equipment loan to private schools



2017-2018

- Continue blended learning environment and flipped classrooms
- Continue implementation of personalized learning environment
- Continue to conduct Internet safety/digital footprint classes for students and faculty
- Enhance implementation of student technology proficiency skills assessments
- Continue to implement technology resource toolkit selection and implementation process
- Continue to enhance specialized virtual courses and distance learning delivery options
- Expand virtual learning and video conferencing opportunities
- Continuation of additional teacher presentation systems (Sharp Aguos Boards)
- Expand remote access capabilities
- Continue to provide remote access of network software for staff and students
- Support software toolkit selection and implementation process
- Continue to encourage the use of technology resources aligned to District scope and sequence documents
- Continue to enhance existing Project Lead the Way (Engineering and Biomedicine) programs at the secondary level to continue to deliver specialized, rigorous courses that prepare students for a global world
- Enhance and expand Internet Safety curriculum to address current issues
- Explore emerging technologies
- Ensure assistive technology needs are meet
- Continue equipment loan to private schools

Accountability and Evaluation of Goal One

In order to manage the overall technology plan and track the degree of implementation, the Chief Technology Officer will be responsible for preparing a summary report once a year, in June to be presented to the Superintendent. This report will include activities related to Goal one targeted for that year, and provide the status of their implementation.

In order to evaluate activities related to Goal One, the Chief Technology Officer will:

- Provide a summary count of all hardware and software by building
- Conduct a web-based survey of teachers and students in the spring of each year to assess the level of access to and perceived value of the technology in each school.
- Collect attendee feedback, via web-based evaluation, after each technology related professional development course to identify successful practices and areas for improvement
- Continue to examine student academic achievement data including NYS test data and other performance measures relative to student growth, and identify potential patterns of academic success, as related to specific technology applications.

Resources to Support Goal One:

- Smart Schools Bond Act
- Race To The Top funding DistrictDistrict technology funding
- E-Rate funding
- BOCES staffing and funding support
- BOCES Aid
- State Technology Aid
- Outside consultant support for specialized areas
- Orange County District Attorney's Office Cyber Crimes Unit
- New York State Police Cyber Crimes Unit
- PLTW Computer labs
- Video Conferencing (google hangout, Skype, Facetime)
- Internet Safety Curriculum
- My Learning Plan
- Collaborative Communication tools (i.e. Google Apps)
- Online, subscription based learning resources to design, and adapt relevant experiences that incorporate digital tools and resources to promote student learning and creativity

<u>Math</u>	<u>ELA</u>	
iReady	iReady	
TenMarks	<u>Lexia</u>	
DreamBox	<u>MyOn</u>	
iXL	Achieve 3000	
	<u>iXL</u>	

2. Goal Two –To sustain existing professional development opportunities and develop new approaches focused on safe, ethical use of the Internet and integrating technology into the standards-based curriculum. Continue to provide a variety of higher education opportunities. We will continue to assist our staff towards a classroom integration model by continuing to train staff in the use of hardware and software.

Activities for Goal Two

2015-2016

- Continue to ensure that all technology related professional development (PD) is an
 integral part of the District's total professional development plan, and is coordinated
 with other PD efforts such as those from the Race to the Top District, Education
 Elements, Middletown Teacher Center, BOCES and Mid-Hudson Regional Information
 Center.
- Continue to provide a range of new PD opportunities for staff focused on safe and ethical use of the Internet and integration of technology with particular emphasis on ELA, Math, Literacy, Science and Social Studies.
- Continue to provide support by Technology Integration Coaches
- Adjust PD to meet district needs
- Research new PD delivery opportunities
- Continue to provide higher education opportunities through collaboration with the Middletown Teacher Center and a variety of other agencies (i.e. New York Institute of Technology)
- Examine academic performance patterns and identify additional PD opportunities/needs.
- Presentations will be given to parent clubs (PTO, PTA, etc.) at each building. These presentations will focus on Internet safety. It will address dangers that put children at risk every time they go online including: online enticement, access by children to pornography, child pornography, and cyber bullying. Other issues that will be discussed are: email, instant messaging, blogs and social networking sites. Safety tips and rules will be suggested, as well as a demonstration on setting parental controls.
- Parent Night Staying Safe Online ~ presentations given by New York
 State Police Computer Crimes Unit and Orange County District Attorney's
 Office. Presentations will cover staying safe online, dangers/pitfalls for
 kids, social networking, online predators, cyber bullying, and sexting.
- Acceptable Use Policy is sent home every year and available online at http://middletowncityschools.org
- Further information and a broad list of resources relating to the problems faced by today's e-generation may be obtained by visiting the District website and going to the Web Resources page. Here you will find some valuable information regarding internet safety, cyberbullying, and social networking, and more.
 - http://www.middletowncityschools.org/site/Default.aspx?PageID=246

- Education Elements training
- Infinite Campus grade book and attendance
- Google docs and apps

2016-2017

- Continue to provide PD opportunities linked to curriculum and student performance needs
- Continue to provide a range of new PD opportunities for staff focused on integration of technology and safe and ethical use of the Internet.
- Ensure integration of technology PD activities with overall District PD Plan
- Continue to provide mentoring by Technology Integration Coaches
- Further information and a broad list of resources relating to the problems faced by today's e-generation may be obtained by visiting the District website and going to the Web Resources page. Here you will find some valuable information regarding internet safety, cyberbullying, and social networking, and more.
 - http://www.middletowncityschools.org/site/Default.aspx?PageID=246
- Acceptable Use Policy is sent home every year and available online at http://middletowncityschools.org
- Utilize Middie TV station to provide additional resources to the community. Resources will include items that focus on being safe online.
- Education Elements training

2017-2018

- Continue to provide PD opportunities linked to curriculum and student performance needs
- Continue to provide a range of new PD opportunities for staff focused on integration of technology and safe and ethical use of the Internet.
- Ensure integration of technology PD activities with overall District PD Plan
- Continue to provide mentoring by Technology Integration Coaches
- Adjust PD to meet district needs
- Provide training on new and emerging technologies for students and staff
- Continue to provide a range of new PD opportunities for staff focused on the integration of technology with particular emphasis on ELA, Math, Literacy, Science and Social Studies
- Continue to provide higher education opportunities through collaboration with the Middletown Teacher Center and a variety of other agencies (i.e. New York Institute of Technology, Mercy College, LIU)
- Continue to make presentations to parent clubs (PTO, PTA, etc.) at each building. These
 presentations will focus on Internet safety. It will address dangers that put children at
 risk every time they go online including: online enticement, access by children to
 pornography, child pornography, and cyber bullying. Other issues that will be discussed
 are: email, instant messaging, blogs and social networking sites, such as Twitter and

- Facebook. Safety tips and rules are suggested, as well as a demonstration on setting parental controls.
- Continuation of Parent Night Staying Safe Online ~ presentations given by New York State Police Computer Crimes Unit and Orange County District Attorney's Office.
 Presentations cover staying safe online, dangers/pitfalls for kids, social networking, online predators, cyber bullying, and sexting.
- Continue to update and enhance list of resources relating to the problems faced by today's e-generation may be obtained by visiting the District website and going to the Web Resources page. Here you will find some valuable information regarding internet safety, cyber bullying, and social networking, and more.
- http://www.middletowncityschools.org/site/Default.aspx?PageID=246

Accountability and Evaluation of Goal Two

In order to manage the overall technology plan and track the degree of implementation, the Chief Technology Officer will be responsible for preparing a summary report once a year, in June to be presented to the Superintendent. This report will include activities related to Goal Two targeted for that year, and provide the status of their implementation.

In order to evaluate activities related to Goal Two, the Chief Technology Officer will:

- Collect attendee feedback, via web-based evaluation, after each technology related professional development course to identify successful practices and areas for improvement
- Conduct a yearly web-based survey of staff professional development needs and staff skills related to technology
- Provide a summary of all technology-related professional development delivered.
- Conduct a web-based survey of teachers and students in the spring of each year to assess the level of access to and perceived value of the technology in each school.
- Develop new professional development opportunities by examining student academic achievement data including NYS test data and other performance measures relative to student growth, and identify potential patterns of academic success as related to specific technology applications.

Resources to Support Goal Two:

- Smart Schools Bond Act
- Race To The Top funding DistrictDistrict technology fundingE-Rate funding
- District Professional Development programs and funding
- Middletown Teacher Center
- BOCES Aid
- State Technology Aid
- My Learning Plan

- Education Elements
- 3. **Goal Three** To focus on using our student information system (SIS) and Data Driven Decision Making (D3M) with emphasis on student growth and achievement. We will utilize data mining software BrightView Analytics to track and analyze student progress. Configure and develop itemized reporting from Prosper assessment software. Utilize Ed Vista, engageNY, New York State Testing and Accountability Reporting Tool (nySTART), the capital region BOCES. These systems allow us to make data-driven decisions about teaching and learning. Additionally, review best learning management systems (LMS).

Activities for Goal Three

2015-2016

- Develop and implement parent portal
- Scope and sequence with performance indicators on quarterly assessments.
- Review LMS for implementation
- Implement Prosper assessment software
- Begin training of Infinite Campus (SIS)
- Implement training related to use of Big Data Dashboard
- Implement district-wide use of electronic grade book system.
- Implement Parent Portal (attendance and grading)
- Ongoing training of staff to use student data to make better instructional decisions
- Provide specialized data extracts and reports for staff to support decision-making
- Continue to utilize NWEA Measures of Academic Progress (MAP) results to drive best instructional practices.
- NYS State level 2 reporting.
- NYS SIRS Manual

2016-2017

- Continue support of parent portal
- Align scope and sequence with performance indicators on quarterly assessments.
- Implement Prosper assessment software
- Continue training of Infinite Campus (SIS)
- Sustain training related to use of Big Data Dashboard
- Continue district-wide use of electronic grade book system.
- Continue training and use of IT Direct Software for tracking
- Parent Portal will allow parents to real-time data online.
- Train staff to use student data outcomes for enhanced instructional practices
- Provide specialized data extracts and reports for staff to support decision-making
- Continue to use structure for NWEA MAP adaptive testing.
- NYS State Education Data- Level 2 Reports

2017-2018

- Align scope and sequence with performance indicators on quarterly assessments.
- Implement Prosper assessment software
- Sustain training related to use of Big Data Dashboard
- Continue implementation of electronic grade book system.
- Expand use of technology solution that will allow parents to access real-time data online.
- Train staff to use student data outcomes for enhanced instructional practices
- Empower staff to provide their own data for analysis and decision-making
- Continue to use structure for NWEA (MAP) adaptive testing.

Accountability and Evaluation of Goal Three

In order to manage the overall technology plan and track the degree of implementation, the Chief Technology Officer will be responsible for preparing a summary report once a year, in June to be presented to the Superintendent. This report will include activities related to Goal Three targeted for that year, and provide the status of their implementation.

In order to evaluate activities related to Goal Three, the Chief Technology Officer will:

- Survey administrative staff and teachers relative to their specific needs and perceptions about information system reports and formats
- Survey administrative staff and teachers relative to their use of data and the impact of that data on their educational and program management decisions.

Resources Required to Support Goal Three:

- Smart Schools Bond Act
- Race To The Top funding DistrictDistrict technology funding
- E-Rate funding
- District Professional Development programs and funding
- BOCES Aid
- NWEA Measures of Academic Progress (MAP) Assessments for Grades K-9
- 4. Goal Four To expand and support our technology infrastructure. The district-wide expansion includes installing additional physical security and video surveillance in all buildings. Supporting VoIP system, rapid broadcast system, digital signage, wireless communication, streaming video, and upgrading all data closets and WAN to a 40 gigabyte network. Additionally, researching and implementing a community wireless mesh for home Internet access for all community members.

Activities for Goal Four

2015-2016

- Upgrade current infrastructure to 20 gigabyte
- Review and enhance wireless access infrastructure
- Remove PC workstations for mobile devices
- Review Community WIFI Mesh
- Review electrical capacity throughout the district
- Provide yearly report on inventory area and distribution
- Hardware upgrade and maintenance established as part of regular operational budget
- Continue to track new technological developments that provide either or both enhanced capabilities and more cost-effective services

2016-2017

- Continue to build network infrastructure for 40 gigabyte upgrade
- Implement Community WIFI Mesh
- Continue to remove PC workstations for mobile devices
- Review wireless access infrastructure Implement cloud computing for best practices
- Provide yearly report on inventory area and distribution
- Review electrical capacity throughout the district
- Hardware upgrade and maintenance established as part of regular operational budget
- Continue to track new technological developments that provide either or both enhanced capabilities and more cost-effective services

2017-2018

- Continue to build network infrastructure for 40 gigabyte upgrade.
- Continue to support community wireless mesh
- Review wireless access infrastructure. Continue to implement cloud computing for best practices.
- Total cost of ownership (TCO) study available for review and decisionmaking
- Review district-wide infrastructure requirements and adjust infrastructure plan
- Review electrical capacity throughout the district
- Hardware upgrade and maintenance established as part of regular operational budget
- Continue to track new technological developments that provide either or both enhanced capabilities and more cost-effective services

Accountability and Evaluation of Goal Four

In order to manage the overall technology plan and track the degree of implementation, the Chief Technology Officer will be responsible for preparing a summary report once a year, in June to be presented to the Superintendent. This report will include activities related to Goal Four targeted for that year, and provide the status of their implementation.

In order to evaluate activities related to Goal Four, the Chief Technology Officer will:

- Conduct a yearly web-based survey of staff perceptions related to the existing technology infrastructure resources and capabilities being used by staff
- Review system logs and other technical system data to create a statistical report on system availability, problem tickets and other system data.

Resources Required to Support Goal Four:

- Smart Schools Bond Act
- District technology funding
- E-Rate funding
- BOCES Aid
- Outside technology integrators

Overall Impact Evaluation

In order to address the ultimate question of technology's impact on teaching and learning, it will be crucial that we answer two questions during the implementation of our technology plan over the next three years.

First, to what degree have we implemented the things we planned? To address this question, we will review our technology plan goals and tasks each semester, and will provide a summary report to the Superintendent on the progress to-date and obstacles that have prevented achievement of goals and tasks. This is noted with each of the four goals. This tracking of the plan's implementation will help us to determine whether we have implemented what we

planned. This is the formative evaluation component of our plan, and looks at what was accomplished in implementing our plan.

Second, to what extent has the implemented technology and the professional development changed critical outcomes, particularly student achievement? To address this question is a much larger challenge, linked directly with our overall instructional goals and assessment program. Despite the potential for technology to impact learning, technology does not guarantee improved learning. In addition, technology does not force teachers to reconsider how they teach, nor does it automatically allow students to experience new ways of learning. In order to justify the use of technology, Middletown has focused on ways to use technology more effectively to foster student learning. To further answer this question, a variety of baseline information has been, and will be collected. This baseline information defines the instructional program in terms of curricular outcomes, instructional resources used and the types of technology used. In addition, baseline survey data will continue to be collected on teacher skills and the use of technology in their classrooms. This information is important to measure the extent that technology is used, how it is used and the perceptions of those using it, relative to its impact on students, teachers, parents, and the community. The Enlarged City School District of Middletown has established an ongoing evaluation design to compare baseline information over multiple years and define the areas where there has been an impact on student learning.

The evaluation design attempts to answer a key question: Has the implementation of technology in the school changed and improved the level of learning for students, and if so, in what ways has it changed?

A variety of data about the implementation, use and impact of technology will be collected at key time points over the next three years starting with baseline and annual data points. The summative evaluation will use a variety of methodologies (e.g. web-based surveys, interviews and observations), including:

- Blended learning data dashboard
- PARCC Assessments
- State and national achievement tests
- Portfolio assessments
- Assessment of student technology skills
- Student indicators such as: dropout rates, attendance, disciplinary history, and graduation data
- Interviews and surveys of students subsequent to graduation
- Level of student use of the technology, as documented by teachers as well as logs from the systems
- Post-graduation data
- Entrant and exit surveys for teachers and students
- Online evaluation after each professional development session
- External observations, rubrics and validation from administrators as well as outside observers/evaluators. The evaluation will also examine the use of technology within our on-going curriculum, instruction, and assessment context. A key aspect of this context is

the focus on the New York State Standards as the teaching and learning framework of the district.

Alignment between National, NY State, Local Standards and NETS

The International Society for Technology in Education (ISTE) has released a set of national educational technology standards for pre K-12 students through its National Educational Technology Standards (NETS) Project. These standards have the support of the U.S. Department of Education, as well as being adopted by the New York State Education Department for all of New York. The NETS Standards and detailed profiles are available in electronic format at http://cnets.iste.org additionally; the complete standards and performance indicators can be found in Appendix C. These technology standards reflect the goal of integrating technology into teaching and learning across all instructional areas. The six categories around which these technology standards are written include:

NETS-Students - http://www.iste.org/standards/ISTE-standards/standards-for-students

- 1. Creativity and Innovation
- 2. Communication and Collaboration
- 3. Research and Information Fluency
- Critical Thinking, Problem Solving, and Decision Making
- 5. Digital Citizenship
- 6. Technology Operations and Concepts

NETS-Teachers - http://www.iste.org/standards/ISTE-standards/standards-for-teachers

- 1. Facilitate and Inspire Student Learning and Creativity
- 2. Design and Engage Digital-Age Learning Experiences and Assessments
- 3. Model Digital-Age Work and Learning
- 4. Promote and Model Digital Citizenship and Responsibility
- 5. Engage in Professional Growth and Leadership

NETS - Administrators - http://www.iste.org/standards/ISTE-standards/standards-for-administrators

- 1. Visionary Leadership
- 2. Digital-Age Learning Culture
- 3. Excellence in Professional Practice
- 4. Systematic Improvement
- 5. Digital Citizenship

NETS - Coaches - http://www.iste.org/standards/ISTE-standards/standards-for-coaches

1. Visionary Leadership

- 2. Teaching, Learning, & Assessments
- 3. Digital Age Learning Environments
- 4. Professional Development & Program Evaluation
- 5. Digital Citizenship
- 6. Content Knowledge & Professional Growth

$\label{lem:NETS-computer-science-educators-http://www.iste.org/standards/ISTE-standards/standards-for-computer-science-educators$

- 1. Knowledge of Content
- 2. Effective teaching and learning strategies
- 3. Effective learning environments
- 4. Effective professional knowledge and skills

Curriculum Alignment

The table in the Appendix B provides our approach to organizing the performance indicators for students at each of three levels: elementary, middle and high school. These statements are taken from the NETS-S lists for each category. These standards provide the framework for Middletown's technology initiatives and provide the standards linkages with all subject area standards.

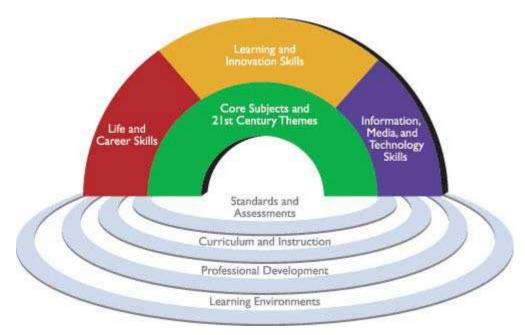
Professional Development Focused on Technology Integration

On-going professional development is critical to effective teachers. Middletown has established the following five key areas of focus for professional development (see Appendix A for detailed plan):

- 1. Teacher integration and use of presentation systems
- 2. Student use of technology within the curriculum
- 3. Teacher use of data for decision-making
- 4. More effective use of software tools and Internet learning systems (ILS) applications to develop student skills
- 5. Support of students with special needs
- 6. Safe and ethical use of district computer system (DCS)

Clearly, all professional development must concentrate on the goal of graduating students who are knowledgeable and competent learners fully prepared with 21st century information and communications skills (www.21stcenturyskills.org). Helping teachers to understand how and where to use technology tools and resources to link with curriculum and instruction is a major area of professional development focus. Middletown has implemented professional development programs that focus on a strong standard based curriculum and remain consistent with the goal of training and supporting teachers in the use of technology. The District has and will continue to offer, a wide range of courses for teachers delivered in a variety of time frames

and formats.



P21 Framework

The professional development offerings of the district are designed to help teachers become more comfortable integrating technology into teaching and learning. Research has demonstrated that the teacher is the most critical variable in the successful use of technology in the classroom, not the hardware or software used. Therefore, Middletown believes it is important to address the factors that can determine a successful professional development program focused on the integration of technology.

Moving teachers forward in their technology skills to the next level requires training that helps teachers to develop familiarity with specific computer software tools for personal (teacher) productivity (e.g. Google Apps and gmail for E-mail), as well as for use as student information, access and communication tools. Tools are general-purpose software packages that can be applied within and across many disciplines. Tool-level training is intended to help teachers learn a variety of general tools that they can then use in their lessons, and have their students use. Middletown has established a basic software toolkit, which is available on all mobile devices. Standardization ensures compatibility across the district.

The highest level of computer use focuses on extending the ability to integrate technology into curriculum, instruction, and assessment. The District must provide technology training so teachers can plan and implement instructional experiences that are appropriate to the curriculum, relevant to each learner's needs and experiences, and promote safe/ethical use of the DCS.

In this process of professional development, focused on integrating technology, teachers

become:

- Capable information technology users
- Information seekers, analyzers, and evaluators
- Problem solvers and decision-makers
- Creative and effective users of productivity tools
- Communicators, collaborators, publishers, and producers
- Informed and responsible technology users

These are the same 21st Century Skills expected of students. It is clear that on-going staff development and training will need to focus on all areas listed above with a particular focus on integration and safe/ethical use. Typically, staff development in the integration of technology into the teaching and learning process is the most extensive and involved part of our staff development process. Teachers need to understand connections between technology resources and their impact on learning.

These are the same 21st Century Skills expected of students. It is clear that on-going staff development and training will need to focus on all areas listed above with a particular focus on integration and safe/ethical use. Typically, staff development in the integration of technology into the teaching and learning process is the most extensive and involved part of our staff development process. Teachers need to understand connections between technology resources and their impact on learning. These factors include:

- Providing a facility for training staff. This will be accomplished primarily through the computer labs or library/media centers in the buildings.
- Providing access to technology for teachers after training. It is important
 that the staff receive training and have opportunities to practice what
 they have learned.
- Ensuring a district commitment to teacher experimentation and preparation of lessons and examples. All learners need time to assimilate what they have learned, and to apply it to their own needs.
- Ensuring that teachers have access to technical assistance and support.
- Ensuring that the curriculum expectations and applications of technology are explicitly identified. Teachers need to know the District's vision and goals for students.
- Ensuring that successful practices are shared with staff.
- Trained teachers model successful approaches with the staff.
- Building on a mentoring approach, teachers in each school provide this support. In addition, the district website will serve as a portal for exemplary lessons developed by teachers to be shared globally.
- Ensuring that curriculum reviews and textbook selections reflect technology applications. Committees must consider technology-related components in their selection process.
- Ensuring that staff development examines the curriculum and instructional impacts of technology, including the changes brought about in classroom management. Staff development must help teachers deal with all aspects of restructuring their teaching and learning environment.

Implementation of certain policies and procedures will be critical to the success of Middletown's professional development program for technology integration and use:

- Staff development policies address the training which teachers need to effectively use workstations in their classrooms.
- Acceptable Use Policy (AUP) for technology and the Internet for both staff and students, as a part of the disciplinary code. An AUP is now in place, in addition to the Internet filtering implemented as a part of the requirements under E-Rate and the Child Internet Protection Act (CIPA).
- The District will build upon and share the ISTE Standards that will define a clear sequence by grade level.
- Policies will be created for adding software to the network, including addressing copyright adherence.

Staff development approaches in Middletown will encompass the following:

- Large-group awareness sessions
- Workshops for staff in the computer labs
- In-class modeling and co-teaching
- Use of electronic course materials via the web or multi-media video

Middletown will also explore a wide range of staff development approaches to ensure that technology is implemented within and across the district's curriculum. The approaches will depend on the nature of the staff, the specific curriculum area, and the technology applications used. Other approaches to professional development will include:

- Web-based, digital-based, streaming video, videos, and learning materials for individual training and updating of skills. Web-based discussion (e.g. Open Source) can be an important part of the district's approach to professional development.
- Using outside consultants and trainers including videoconferencing and satellite technologies.
- Attendance at professional workshops, seminars and courses.
- A variety of staff incentives, release time, staff development days and summer curriculum work to maximize the opportunities for staff training.

Community Relations

The District has been successful in establishing clear, ongoing communication among all stakeholders. The District web page and building web pages are updated regularly with current news and activities. School events and Board Of Education meetings are available live via Internet access. They are replayed and archived on Middie TV, the District television station. In addition, the District has seen success with the use of parent notification system that keeps parent informed of school events, closing, and emergencies.

Community Communications Initiatives (include but are not limited to):

- Board of Education e-mail
- Board Docs
- Middie TV
- District Calendar
- District Website
- Home access to library media resources
- Internet Safety Night
- My Lunch Money (ability to establish electronic lunch money account)
- Parent/Teacher Conference
- PTO e-mail accounts
- Reader, Writers, and Parent Literacy workshop for community members
- Report Cards
- School Messenger
- School Scene-District Bilingual Newsletter
- Streaming of District events
- Parent Portal

Building Communications Initiatives (include but are not limited to):

- PTO Email
- Building Websites
- College Night
- College Planner
- Family Financial Aid Night
- Family Fun Night (K-5)
- Family Literacy Night (6-12)
- Homework Hotline
- Middie Move Up Day (annual grade 8-9 event)
- Middletown High School Course Catalog
- Monthly Newsletter from each school building
- Parent Handbook for college bound students
- School Messenger

Adult Literacy Service Providers

On the District website, we provide resources to students, and their families, about both the transitional bilingual and English as a Second Language (ESL) programs. Resources include a detailed program overview, registration information, and a link to the English Language Learner (ELL) parent meeting schedule. Additionally, we support literacy and technology during Family Fun Night/Family Literacy Night which is available to all stakeholders within the school community

The Enlarged City School District of Middletown is one of two TASC (Test of Assessment Secondary Completion) testing sites in Orange County, recognized by the New York State Education Department (NYSED).

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http://literacyorangeny.org/

Enlarged City School District of Middletown (ECSDM) Website:

- ESL http://www.middletowncityschools.org/site/Default.aspx?PageID=198
- TASC http://www.middletowncityschools.org/Page/207
- TASC in Spanish- http://www.middletowncityschools.org/Page/207
- HSE High School Equivalency http://www.acces.nysed.gov/ged/nys_map/counties.html

Orange-Ulster BOCES TASC - http://www.ouboces.org/AdultEducation.cfm?subpage=1256
Orange-Ulster BOCES ESL

http://www.ouboces.org/AdultEducation.cfm?subpage=1256

SOFTWARE INVENTORY				
Produ	ICTIVITY	ADOBE CREATIVE SUITE		
Google Apps Word		Photoshop Acrobat		
Google Docs	Excel	• Illustrator • Flash		
•	PowerPoint	• InDesign • Dreamweaver		
•	Publisher			
AUTODESK DESIGN	ACADEMY (PLTW)	BIOMEDICAL (PLTW)		
Autodesk	Multisim	Lab View		
Architecture	• Vault	Logger Pro		
Civil 3D	Revit	 Inspiration 		
Inventor	Lab View	ART INSTITUTE		
• MEP	Robo Pro	Adobe Creative Cloud		
• Xilinx				
Music A	ACADEMY	MULTIMEDIA		
Avid Pro	Finale	SAFARI Montage Avid Xpress		
• PreSonus	Smart Music	PowerMedia Plus		
C	OTHER .	SPECIAL EDUCATION ACADEMIC		
SMART Notebook	Movi	IEP Direct MyOn Reader		
NWEA-Measures of	BrainPop Jr.	• RTIm Direct • iReady		
Academic Progress	Brain Pop en espanol	• Lexia		
(MAP)	Geometer's	Dream Box		
• Skype	Sketchpad	• iXL		
SAS Pathways	Google Earth	• TenMarks		
		STUDENT MANAGEMENT/FINANCIAL/HUMAN RESOURCES		
		 Infinite Campus EDR My Learning Plan Ed Elements 		

	NETWORK MANAGEMENT				IT & MAINTENANCE HELPDESK
•	Altiris	•	Cisco	•	IT Direct/School Dude
•	Windows	•	Citrix - Xendesktop	•	Maintenance Direct
	2008/2012	•	Dell Network		
•	What's Up Gold		Management		
•	Active Directory	•	Microsoft Visio		

Online Subscriptions

District Databases

- WorldBook Online (K-12)
- Culture Grams (K-12)
- Gale Virtual Reference Library (MHS)
- ABC Clio World History, American History, The Modern Era (MHS)
- Gale Biography in Context (Twin Towers)
- Gale Cengage Learning Student Resource Center (Monhagen)

GALE CENGAGE LEARNING

- Academic OneFile
- Business Insights: Essentials
- General OneFile
- Health Reference Center Academic
- InfoTrac Newsstand
- National Newspaper Index
- Wall Street Journal, Christian Science Monitor, Los
- Angeles Times and the Washington Post.
- Opposing Viewpoints in Context

PROQUEST

- *eLibrary Elementary*
- Gannett Newsstand Complete

SCHOLASTIC

- Amazing Animals of the World
- America the Beautiful
- Encyclopedia Americana
- Grolier Multimedia Encyclopedia
- La Nueva Enciclopedia Cumbre
- TeachingBooks.net
- Classroom Video on Demand
- SNAP (Learn 360, CCC, Soundzabound)

• Rosen Learning (Ebook collection)

Technology Staffing

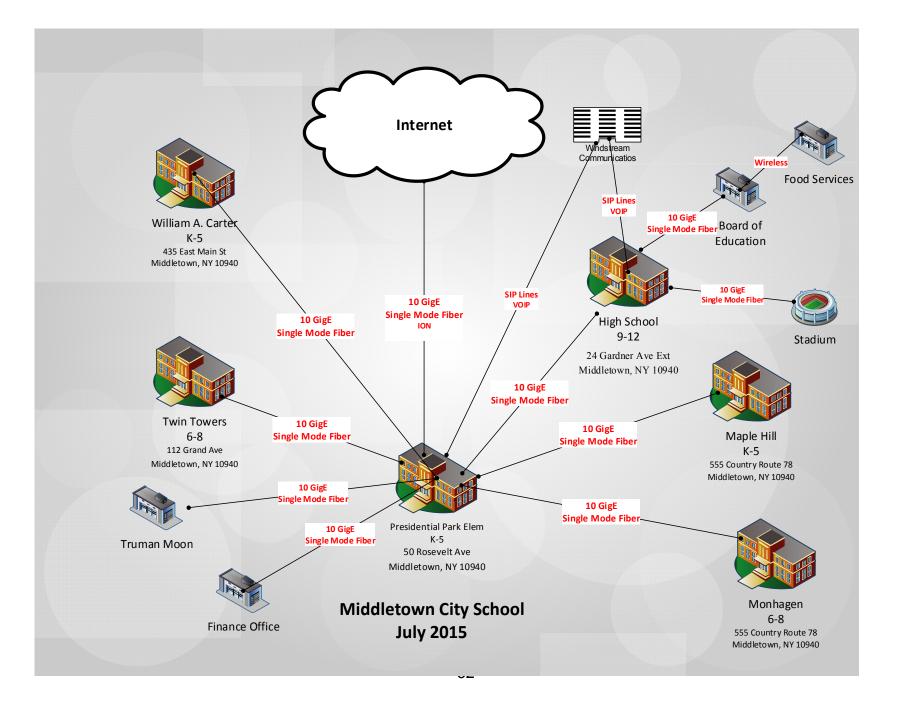
- 1 Chief Technology Officer
- 1 Administrative Assistant
- 1 Technical Services Manager
- 1 Student Services Specialist
- 3 Technology Integration Coaches (RTTT-D Funded
- 1 Technology Integration Coach (BOCES Provided)
- 5 Emerging Technology (3- RTTT-D Funded)
- 2 Programmers
- 4– Technology Teaching Assistants
- 1 Print shop operator
- 1 TV operator
- 1 Community Liaison

TECHNOLOGY INVENTORY			
Servers			
Dell Blade Servers – Windows 2008 (File Storage, DNS, Web)	8		
Dell Power Edge - Windows 2008 (DNS, DHCP, Domain Controllers, Print Servers)	6		
Cisco Server	10		
Cisco Blade Servers (Xen Desktop)	16		
IBM I-Series	1		
Video storage servers	24		
Workstations			
PC/Laptops	500		
Chrome Books	7500		
Mobile Devices			
Apple iPads (2013-14 School Year)	2300		
Network Gear			
Cisco Nexus 7000	1		
Cisco Nexus 5000	1		
Cisco Nexus 2248	4		
Cisco 6513	2		
Cisco 6509	2		
Cisco 4506/4510	41		
Cisco 3560	15		
Cisco 2960S	8		
Cisco 2960	10		
Cisco 2811	6		
Cisco 2801	2		
Cisco 2821	2		

Cisco 5508 Wireless Controllers	3
Cisco Wireless Access Points	728
Cisco ASA 5550 (Firewall, VPN)	1
Cisco ASR 1001 Router	1
Cisco ACS	1
Cisco Mobility Services Engine	1
APC Symetra PX	1
Telephony	
Cisco Publisher - Call Manager v8.6.2	1
Cisco Subscriber – Call Manager v8.6.2	1
Cisco VoIP Phones (7925, 7940, 7941, 7960, 7961, 7962,7975)	1107
Informacast - Berbee paging system	1
Valcom IP Speakers	120
Unified Messaging	2
Digital SIP phone lines	2
10 GIGe Internet Connection	1
School Messenger	1
Filtering	
LightSpeed Systems Rocket	1
Printing	
Networked Printers	132
Video Surveillance	
Axis IP video Cameras	158
IQEye IP Video Cameras	350
Interactive Devices	100
SMARTBoards	180
Projectors	180
Sharp AQUOS Board	220
Interactive Response Unit	35
SMART Document Camera	35
AirLiner Wireless Slate	35
Prime Link Audio Systems	110
Classroom Amplification (Redcat)	365
Video Conferencing	
Google Hangout	
Skype	

Projected Budget Funding for Technology

	2015-2016	2016-2017	2017-2018
Network Infrastructure - network equipment, servers and telecommunications/Internet		\$275,000	\$300,000
New Computers – Mobile Devices		\$1,000,000	\$1,000,000
Upgrading existing computers	\$25,000	\$27,000	\$30,000
Sharp Aqous Board	\$1,000,000	\$100,000	\$100,000
State Aid Software	\$116,000	\$117,397	\$118,189
Instructional resources and On-Line content subscriptions	\$53,684	\$55,295	\$56,953
Maintenance and system support contracts	\$500,000	\$510,000	\$560,000
Professional Development	\$50,000	\$52,000	\$56,000
Administrative Applications	\$55,000	\$56,650	\$58,349
Evaluation	\$10,000	\$10,000	\$10,000
Technology Staffing (Instructional and Technical)	\$1,722,481	\$1,782,767	\$1,845,164
Total	\$3,532,165	\$3,986,109	\$4,134,655



Appendix A (Derived from District PD Plan)

Technology Goal and Objectives

Goal 6: To Provide Professional Development to Enable School Personnel and Administrators to Integrate Technology Effectively into Curriculum and Instruction that are Aligned with State Standards

Objectives:

- Integrate use of technology resources to support standards-based curriculum in the classroom.
- Increase staff knowledge and use of district technology.
- Enhance use of technology for management of standards-based curriculum, instruction and assessment, and student learning.

Aligning with the PDP goals, objectives and strategies the District will organize and continue to support the following activities:

District (e.g. Superintendent's Conference Day and New Teacher Orientation)

- Training on new technology initiatives
- District Wide Interactive Board training and collaboration
- Literacy Framework
- Internet Safety
- Special Services IEP Direct and RTIm Direct
- Literacy RTIM
- Northwest Evaluation Services Measures of Academic Progress (MAPS)
- Chromebook Training
- 1:1 training

Middletown Teacher Center In-service Programs Focus on:

- Helping teachers and students succeed
- Supporting the professional development goals of the Middletown School District
- Helping teachers access research, resources and support materials relevant to their professional needs
- Supporting national, state, and local initiatives
- Providing quality courses which address individual teacher needs
- Developing and promoting effective research-based strategies for teacher growth
- Enabling practitioners to develop as educational leaders of workshops, seminars, and courses
- Promoting the integration of technology into instruction
- Developing and supporting ongoing networking opportunities which build capacity for our students, staff, and community
- Co-sponsoring regional conferences which address the interests and needs of area educators

In-Service Course offerings: http://www.middletowncityschools.org/Page/486

Appendix A (Derived from District PD Plan) Continued

Race to The Top - District

- Blended Learning
- Flipped Classrooms
- Google Docs
- MS Office (Word, Excel, PowerPoint)
- Infinite Campus
 - Student Online
 - o Teacher Online
 - Parent Online
- Technology Integration Coaching
- SAFARI Montage Digital Media and Designing Interactive Learning Environments

Courses and material resources that support technology integration into the classroom and safe and responsible use of the Internet

Appendix B

National, NY State, ISTE and ECSDM Standards—Linking ICT Skills with Communications and Numeracy

Connections between State Standards, National Education Technology Standards (the ISTE NETS project) and local ESCDM standards

Standard	Pre-K-5	6-8	9-12
Basic Operations and Concepts	 Use Keyboard. Use Mouse. Use Software Programs. Use Input Devices. Use the Internet. Identify and label computer parts and functions. Use computer as a modeling tool. Understand saving files. Understand common file storage and retrieval. Understand printing their work in networked printer environment. 	 Use Software Programs to create and present projects. Use Internet for Research. Use Input Devices to support projects. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. Use a computer system to monitor and control external events and/or systems. Have or demonstrate basic knowledge of how to access commonly shared programs, files and storage devices. 	 Use Internet for research. Understand how to make informed and appropriate choices among technology systems, resources and services. Select a computer system that meets personal needs. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. Understand how software applications and networks interact, and how to make best use of network resources.

Standard	Pre-K-5	6-8	9-12
Social Ethical and Human Issues	 Understand, sign and abide by the Internet use policy. Demonstrate respect for computer system hardware and software by handling it gently and with care. Practice responsible use. Work collaboratively and cooperatively with peers, family members and other when using technology in the classroom. Know the school printing policy and use it when printing their work to classroom and network computers. Understand citations and plagiarism rules, and will use materials appropriately. 	 Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. Respect privacy of other users. Respect software application security systems. Abide by district Internet use policy. 	 Respect privacy of other users. Respect software application security systems. Abide by district Internet use policy.

Standard	Pre-K-5	6-8	9-12
Technology Productivity Tools	 Use a variety of media and technology resources for directed and independent learning activities. Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. Make use of technology for presentations, including video editing and image processing. Create a personal portfolio. Store work in electronic portfolios. 	 Use content specific tools, software, and simulations (e.g. environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. Store work/presentations in electronic portfolios. 	 Store work/presentations in sharable, electronic portfolios. Make use of technology for presentations, including video editing and image processing. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.

Standard	Pre-K-5	6-8	9-12
Technology Communication Tools	 Gather information and communicate with others, using telecommunications, with support from teachers, family members, or student partners. Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. 	 Create web pages. Design, develop, publish and present products (e.g. web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. Use telecommunications and online resources to participate in collaborative problem-solving activities for developing solutions or products for audiences inside and outside the classroom. 	 Create web pages. Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity. Select and apply technology tools for research, information analysis, problem solving, and decision-making in content learning. Collaborate with peers, experts and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.
Technology Research Tools	 Introduce the concept of evaluating the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. 	 Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. 	 Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.

Standard	Pre-K-5	6-8	9-12
Technology Problem Solving and Decision Making Tools	 Use technology resources (e.g. puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication and illustration of thoughts, ideas and stories. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. Use technology resources (e.g. calculators, data collection problems, videos, Educational software) for problem-solving, self-directed learning, and extended learning activities. Use modeling and simulation software to emulate authentic problems. Model and simulate the design of a complex environment. 	 Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. Demonstrate an understanding of concepts underlying hardware, software, and connectivity and of practical applications to learning and problem solving. 	 Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.

The ISTE

National Educational Technology Standards (NETS•S) and Performance Indicators for Students

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. Apply existing knowledge to generate new ideas, products, or processes.
- b. Create original works as a means of personal or group expression.
- c. Use models and simulations to explore complex systems and issues.
- d. Identify trends and forecast possibilities.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. Contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a. Plan strategies to guide inquiry.
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. Process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. Identify and define authentic problems and significant questions for investigation.
- b. Plan and manage activities to develop a solution or complete a project.
- c. Collect and analyze data to identify solutions and/or make informed decisions.
- d. Use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. Advocate and practice safe, legal, and responsible use of information and technology.
- b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- C. Demonstrate personal responsibility for lifelong learning.
- d. Exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. Understand and use technology systems.
- b. Select and use applications effectively and productively.
- c. Troubleshoot systems and applications.
- d. Transfer current knowledge to learning of new technologies.

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The ISTE

National Educational Technology Standards (NETS•T) and Performance Indicators for Teachers

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

- a. Promote, support, and model creative and innovative thinking and inventiveness
- b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

- a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
- b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

- a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

- a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. Address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
- c. Promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

- a. Participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

- c. Evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. Contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

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The ISTE

National Educational Technology Standards (NETS•A) and Performance Indicators for Administrators

- **1. Visionary Leadership.** Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization. Educational Administrators:
 - a. Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders
 - b. Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
 - c. Advocate on local, state, and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan
- **2. Digital-Age Learning Culture.** Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students. Educational Administrators:
 - a. Ensure instructional innovation focused on continuous improvement of digital-age learning
 - b. Model and promote the frequent and effective use of technology for learning
 - c. Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners
 - d. Ensure effective practice in the study of technology and its infusion across the curriculum
 - e. Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration
- **3. Excellence in Professional Practice.** Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources. Educational Administrators:
 - a. Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration
 - b. Facilitate and participate in learning communities that stimulate, nurture, and support administrators, faculty, and staff in the study and use of technology
 - c. Promote and model effective communication and collaboration among stakeholders using digital-age tools
 - d. Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning
- **4. Systemic Improvement.** Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources. Educational Administrators:
 - a. Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources
 - b. Collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning
 - c. Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals
 - d. Establish and leverage strategic partnerships to support systemic improvement
 - e. Establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning
- **5. Digital Citizenship.** Educational Administrators model and facilitate understanding of social, ethical, and legal issues and responsibilities related to an evolving digital culture. Educational Administrators:
 - a. Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners
 - b. Promote, model, and establish policies for safe, legal, and ethical use of digital information and technology
 - c. Promote and model responsible social interactions related to the use of technology and information
 - d. Model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools

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The ISTE

and Performance Indicators for Coaches

- 1. Visionary Leadership. Technology Coaches inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology to promote excellence and support transformational change throughout the instructional environment.
 - a. Contribute to the development, communication, and implementation of a shared vision for the comprehensive use of technology to support a digital-age education for all students
 - b. Contribute to the planning, development, communication, implementation, and evaluation of technology-infused strategic plans at the district and school levels
 - c. Advocate for policies, procedures, programs, and funding strategies to support implementation of the shared vision represented in the school and district technology plans and guidelines
 - d. Implement strategies for initiating and sustaining technology innovations and manage the change process in schools and classrooms
- **2. Teaching, Learning, & Assessments.** Technology Coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.
 - a. Coach teachers in and model design and implementation of technology-enhanced learning experiences addressing content standards and student technology standards
 - b. Coach teachers in and model design and implementation of technology-enhanced learning experiences using a variety of research-based, learner-centered instructional strategies and assessment tools to address the diverse needs and interests of all students
 - c. Coach teachers in and model engagement of students in local and global interdisciplinary units in which technology helps students assume professional roles, research real-world problems, collaborate with others, and produce products that are meaningful and useful to a wide audience
 - d. Coach teachers in and model design and implementation of technology-enhanced learning experiences emphasizing creativity, higher-order thinking skills and processes, and mental habits of mind (e.g., critical thinking, meta-cognition, and self-regulation)
 - e. Coach teachers in and model design and implementation of technology-enhanced learning experiences using differentiation, including adjusting content, process, product, and learning environment based upon student readiness levels, learning styles, interests, and personal goals
 - f. Coach teachers in and model incorporation of research-based best practices in instructional design when planning technology-enhanced learning experiences
 - g. Coach teachers in and model effective use of technology tools and resources to continuously assess student learning and technology literacy by applying a rich variety of formative and summative assessments aligned with content and student technology standards
 - h. Coach teachers in and model effective use of technology tools and resources to systematically collect and analyze student achievement data, interpret results, and communicate findings to improve instructional practice and maximize student learning
- 3. Digital Age Learning Environments. Technology coaches create and support effective digital-age learning environments to maximize the learning of all students.
 - a. Model effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources and access to technology-rich learning environments
 - b. Maintain and manage a variety of digital tools and resources for teacher and student use in technology-rich learning environments
 - c. Coach teachers in and model use of online and blended learning, digital content, and collaborative learning networks to support and extend student learning as well as expand opportunities and choices for online professional development for teachers and administrators
 - d. Select, evaluate, and facilitate the use of adaptive and assistive technologies to support student learning
 - e. Troubleshoot basic software, hardware, and connectivity problems common in digital learning environments
 - f. Collaborate with teachers and administrators to select and evaluate digital tools and resources that enhance teaching and learning and are compatible with the school technology infrastructure
- g. Use digital communication and collaboration tools to communicate locally and globally with students, parents, peers, and the larger community
- **4. Professional Development & Program Evaluation.** Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice and student learning.
 - a. Conduct needs assessments to inform the content and delivery of technology-related professional learning programs that result in a positive impact on student learning
 - b. Design, develop, and implement technology-rich professional learning programs that model principles of adult learning and promote digitalage best practices in teaching, learning, and assessment
 - c. Evaluate results of professional learning programs to determine the effectiveness on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning

- 5. Digital Citizenship. Technology coaches model and promote digital citizenship.
 - a. Model and promote strategies for achieving equitable access to digital tools and resources and technology-related best practices for all students and teachers
 - b.. Model and facilitate safe, healthy, legal, and ethical uses of digital information and technologies
 - c. Model and promote diversity, cultural understanding, and global awareness by using digital-age communication and collaboration tools to interact locally and globally with students, peers, parents, and the larger community
- **6. Content Knowledge and Professional Growth.** Technology coaches demonstrate professional knowledge, skills, and dispositions in content, pedagogical, and technological areas as well as adult learning and leadership and are continuously deepening their knowledge and expertise.
 - a. Engage in continual learning to deepen content and pedagogical knowledge in technology integration and current and emerging technologies necessary to effectively implement the NETS·S and NETS·T
 - b. Engage in continuous learning to deepen professional knowledge, skills, and dispositions in organizational change and leadership, project management, and adult learning to improve professional practice
 - c. Regularly evaluate and reflect on their professional practice and dispositions to improve and strengthen their ability to effectively model and facilitate technology-enhanced learning experiences

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National Educational Technology Standards (NETS•CSE) and Performance Indicators for Computer Science Educators

- 1. Knowledge of content. Computer Science Educators demonstrate knowledge of Computer Science and content and model important principles and concepts.
 - a. Demonstrate knowledge of and proficiency in data representation and abstraction.
 - i. Effectively use primitive data types
 - ii. Demonstrate an understanding of static and dynamic data structures
 - iii. Effectively use, manipulate, and explain various external data stores: various types (text, images, sound, etc.), various locations (local, server, cloud), etc.
 - iv. Effectively use modeling and simulation to solve real-world problems
 - b. Effectively design, develop, and test algorithms.
 - i. Using a modern, high-level programming language, construct correctly functioning programs involving simple and structured data types; compound Boolean expressions; and sequential, conditional, and iterative control structures.
 - ii. Design and test algorithms and programming solution to problems in different contexts (textual, numeric, graphic, etc.) using advanced data structures.
 - iii. Analyze algorithms by considering complexity, efficiency, aesthetics, and correctness.
 - iv. Demonstrate knowledge of two or more programming paradigms.
 - v. Effectively use two or more development environments.
 - vi. Demonstrate knowledge of varied software development models and project management strategies.
 - c. Demonstrate knowledge of digital devices, systems, and networks.
 - i. Demonstrate and understanding of data representation at the machine level.
 - ii. Demonstrate an understanding of machine-level components and related issues of complexity.
 - iii. Demonstrate an understanding of operating systems and networking in a structured computer system.
 - iv. Demonstrate an understanding of the operation of computer networks and mobile computing devices.
 - d. Demonstrate an understanding of the role computer science plays and its impact in the modern world.
 - i. Demonstrate an understanding of the social, ethical, and legal issues and impacts of computing, and attendant responsibilities of computer scientists and users.
 - ii. Analyze the contributions of computer science to current and future innovations in sciences, humanities, the arts, and commerce.
- **2. Effective teaching and learning strategies.** Computer Science Educators demonstrate effective content pedagogical strategies that make the discipline comprehensible to students.
 - a. Plan and teach computer science lessons/units using effective and engaging practices and methodologies.
 - i. Select a variety of real-world computing problems and project-based methodologies that support active and authentic learning and provide opportunities for creative and innovative thinking and problem solving.
 - ii. Demonstrate the use of a variety of collaborative groupings in lesson plans/units and assessments.
 - iii. Design activities that require students to effective describe computing artifacts and communicate results using multiple forms of media
 - iv. Develop lessons and methods that engage and empower learners from diverse cultural and linguistic backgrounds.
 - v. Identify problematic concepts and constructs in computer science and appropriate strategies to address them.
 - vi. Design and implement developmentally appropriate learning opportunities supporting the diverse needs of all learners.

- vii. Create and implement multiple forms of assessment and use resulting data to capture student learning, provide remediation, and shape classroom instruction.
- **3. Effective Learning Environments.** Computer Science Educators apply their knowledge of learning environments by creating and maintain safe, ethical, supportive, fair, and effective learning environments for all students.
 - a. Design environments that promote effective teaching and learning in computer science classrooms and online learning environments and promote digital citizenship.
 - i. Promote and model the safe and effective use of computer hardware, software, peripherals, and networks.
 - ii. Plan for equitable and accessible classroom, lab, and online environments that support effective and engaging learning.

- **4. Effective professional knowledge and skills.** Computer Science Educators demonstrate professional knowledge and skills in their field and readiness to apply them.
- a. Participate in, promote, and model ongoing professional development and life-long learning relative to computer science and computer science education.
 - i. Identify and participate in professional computer science and computer science education societies, organizations and groups that provide professional growth opportunities and resources.
 - ii. Demonstrate knowledge of evolving social and research issues relating to computer science and computer science education.
 - iii. Identify local, state, and national content and professional standards and requirements affecting the teaching of secondary computer science.

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Personnel

SUBJECT: STAFF USE OF COMPUTERIZED INFORMATION RESOURCES

The Board of Education will provide staff with access to various computerized information resources through the District's computer system (DCS hereafter) consisting of software, hardware, computer networks and electronic communication systems. This may include access to electronic mail, so-called "on-line services" and the "Internet." It may also include the opportunity for some staff to have independent access to the DCS from their home or other remote locations. All use of the DCS, including independent use off school premises, shall be subject to this policy and accompanying regulations.

The Board encourages staff to make use of the DCS to explore educational topics, conduct research and contact others in the educational world. The Board anticipates that staff access to various computerized information resources will both expedite and enhance the performance of tasks associated with their positions and assignments. Toward that end, the Board directs the Superintendent or his/her designee(s) to provide staff with training in the proper and effective use of the DCS.

Staff use of the DCS is conditioned upon written agreement by the staff member that use of the DCS will conform to the requirements of this policy and any regulations adopted to ensure acceptable use of the DCS. All such agreements shall be kept on file in the District office.

Generally, the same standards of acceptable staff conduct which apply to any aspect of job performance shall apply to use of the DCS. Employees are expected to communicate in a professional manner consistent with applicable District policies and regulations governing the behavior of school staff. Electronic mail and telecommunications are not to be utilized to share confidential information about students or other employees.

This policy does not attempt to articulate all required and/or acceptable uses of the DCS; nor is it the intention of this policy to define all inappropriate usage. Administrative regulations will further define general guidelines of appropriate staff conduct and use as well as proscribed behavior.

District staff shall also adhere to the laws, policies and rules governing computers including, but not limited to, copyright laws, rights of software publishers, license agreements, and rights of privacy created by federal and state law.

Staff members who engage in unacceptable use may lose access to the DCS and may be subject to further discipline under the law and in accordance with applicable collective bargaining agreements. Legal action may be initiated against a staff member who willfully, maliciously or unlawfully damages or destroys property of the District.

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Personnel

Privacy Rights

Staff data files and electronic storage areas shall remain District property, subject to District control and inspection. The Director of Technology may access all such files and communications without prior notice to ensure system integrity and that users are complying with requirements of this policy and accompanying regulations. Staff should NOT expect that information stored on the DCS will be private.

Implementation

Administrative regulations will be developed to implement the terms of this policy, addressing general parameters of acceptable staff conduct as well as prohibited activities so as to provide appropriate guidelines for employee use of the DCS.

NOTE: Refer also to Policy #8271 -- <u>The Children's Internet Protection Act: Internet Content Filtering/Safety Policy</u>

Adopted: 6/2/05

Revised 2010 – BOE Approval 03/04/10

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STAFF USE OF COMPUTERIZED INFORMATION RESOURCES REGULATIONS

The District's computer system (DCS hereafter) is provided for staff to enhance the educational programs of the District, to further District goals and objectives; and to conduct research and communicate with others.

Generally, the same standards of acceptable staff conduct which apply to any aspect of job performance shall apply to use of the DCS. The standards of acceptable use as well as prohibited conduct by staff accessing the DCS, as outlined in District policy and regulation, are not intended to be all-inclusive. The staff member who commits an act of misconduct which is not specifically addressed in District policy and/or regulation may also be subject to disciplinary action, including loss of access to the DCS as well as the imposition of discipline under the law and/or the applicable collective bargaining agreement. Legal action may also be initiated against a staff member who willfully, maliciously or unlawfully damages or destroys property of the District.

Staff is encouraged to utilize electronic communications in their roles as employees of the District. Staff are also encouraged to utilize electronic means to exchange communications with parents/guardians or homebound students, subject to appropriate consideration for student privacy. Such usage shall be limited to school related issues or activities. Communications over the DCS are often public in nature; therefore, general rules and standards for professional behavior and communications will apply.

The District's policies and accompanying regulations on staff and student use of computerized information resources establish guidelines for staff to follow in instruction and in working with students on acceptable student use of the DCS, including access to external computer networks.

PRIVACY RIGHTS

Staff data files, E-mail and electronic storage areas shall remain District property, subject to District control and inspection. The Director of Technology and/or his designee may access all such files and communications to insure system integrity and that users are complying with requirements of District policy and accompanying regulations. Staff should NOT expect that information stored on the DCS will be private.

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PROHIBITIONS

It is not the intention of this regulation to define all inappropriate usage. However, in addition to the general requirements of acceptable staff behavior, activities which shall be prohibited by staff members using the DCS include, but are not limited to, the following:

- 1) Using the DCS which in any way results in unauthorized charges or expense to the District.
- 2) Damaging, disabling or otherwise interfering with the operation of computers, computer systems, software or related equipment through physical action or by electronic means.
- 3) Using unauthorized software on the DCS. No software may be loaded on district-owned computers except by members of the Technology Department or the building Technology Specialist.
- 4) Changing, copying, renaming, deleting, reading or otherwise accessing files or software not created by the staff member without express permission from the computer coordinator.
- 5) Violating copyright law.
- 6) Employing the DCS for commercial purposes or product advertisement.
- 7) Disclosing an individual password to others or using others' passwords.
- 8) Sharing confidential information on students and employees.
- 9) Sending or displaying offensive messages or pictures.
- 10) Using obscene language.
- 11) Harassing, insulting or attacking others. Engaging in practices that threaten the DCS (e.g. loading files that may introduce a virus).
- 12) Assisting a student to violate District policy and/or regulation, or failing to report knowledge of any student violations of the District's policy and regulation on student use of computerized information resources.
- 13) Use which violated any other aspect of Base School District policy and/or regulations, as well as local, state or federal laws or regulations.
- 14) There is to be no transfer of electronic data using floppy disks, CD-ROMs, memory sticks or any other transfer media. If files need to be worked on outside of the workplace they can be transferred via email.
- 15) No files may be saved to the Local Drive (hard drive). All files must be saved on the network.
- 16) There is to be no personal computer equipment used in the district other than the equipment that is owned and maintained by the district.

Any user of the DCS that accesses another network or others computer resources shall be subject to that network's acceptable use policy.

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SANCTIONS

Reports of inappropriate behavior, violations or complaints will be routed to the staff member's supervisor for appropriate action. Violations may result in a loss of access to the DCS and/or disciplinary action. When applicable, law enforcement agencies may be involved.

NOTIFICATION

All staff will be given a copy of the District's policies on staff and student use of computerized information resources and the regulations established in connection with those policies. Each staff member will sign an Acceptable Use Agreement (Form # 6470F) before establishing an account or continuing their use of the DCS.

MIDDLETOWN SCHOOL DISTRICT AGREEMENT FOR STAFF USE OF COMPUTERIZED INFORMATION RESOURCES

In consideration for the privilege of using the Middletown School District's Computer System (DCS), I agree that I have been provided with a copy of the District's policies on staff and student use of computerized information resources and the regulations established in connection with those policies. I agree to adhere to the staff policy and the regulations and to any changes or additions later adopted by the District. I shall report all student violations of the District's policy on student use of computerized information resources to District officials

I understand that failure to comply with these policies and accompanying regulations may result in the loss of my access to the DCS and may, in addition, result in the imposition of discipline under the law and/or the applicable collective bargaining agreement. I further understand that the District reserves the right to pursue legal action against me if I willfully, maliciously or unlawfully damage or destroy property of the District.

 Staff Member Signature
Date
School / Building

Students

SUBJECT: STUDENT USE OF COMPUTERIZED INFORMATION RESOURCES (ACCEPTABLE USE POLICY)

The Board of Education will provide access to various computerized information resources through the District's computer system ("DCS" hereafter) consisting of software, hardware, computer networks and electronic communications systems. This may include access to electronic mail, so-called "on-line services" and the "Internet." It may include the opportunity for some students to have independent access to the DCS from their home or other remote locations. All use of the DCS, including independent use off school premises, shall be subject to this policy and accompanying regulations. Further, all such use must be in support of education and/or research and consistent with the goals and purposes of the School District.

One purpose of this policy is to provide notice to students and parents/guardians that, unlike most traditional instructional or library media materials, the DCS will allow student access to external computer networks not controlled by the School District where it is impossible for the District to screen or review all of the available materials. Some of the available materials may be deemed unsuitable by parents/guardians for student use or access. This policy is intended to establish general guidelines for acceptable student use. However, despite the existence of such District policy and accompanying guidelines and regulations, it will not be possible to completely prevent access to computerized information that is inappropriate for students. Furthermore, students may have the ability to access such information from their home or other locations off school premises. Parents/guardians of students must be willing to set and convey standards for appropriate and acceptable use to their children when using the DCS or any other electronic media or communications.

Generally, the same standards of acceptable student conduct which apply to any school activity shall apply to use of the DCS. This policy does not attempt to articulate all required and/or acceptable uses of the DCS; nor is it the intention of this policy to define all inappropriate usage. Administrative regulations will further define general guidelines of appropriate student conduct and use as well as proscribed behavior.

District students shall also adhere to the laws, policies and rules governing computers including, but not limited to, copyright laws, rights of software publishers, license agreements, and student rights of privacy created by federal and state law.

Students who engage in unacceptable use may lose access to the DCS in accordance with applicable due process procedures, and may be subject to further discipline under the District's school conduct and discipline policy and the Student Discipline Code of Conduct. The District reserves the right to pursue legal action against a student who willfully, maliciously or unlawfully damages or destroys property of the District. Further, the District may bring suit in civil court against the parents/guardians of any student who willfully, maliciously or unlawfully damages or destroys District property pursuant to General Obligations Law Section 3-112.

Students

SUBJECT: STUDENT USE OF COMPUTERIZED INFORMATION RESOURCES (ACCEPTABLE USE POLICY) (Cont'd.)

Student data files and other electronic storage areas will be treated like school lockers. This means that such areas shall be considered to be School District property subject to control and inspection. The Director of Technology may access all such files and communications without prior notice to ensure system integrity and that users are complying with the requirements of this policy and accompanying regulations. Students should NOT expect that information stored on the DCS will be private.

Notification/Authorization

The District's Acceptable Use Policy and accompanying Regulations will be disseminated to parents and student in order to provide notice of the school's requirements, expectations, and student's obligations when accessing the DCS.

Student use of the DCS is conditioned upon written agreement by all students and their parents/guardians that student use of the DCS will conform to the requirements of this policy and any regulations adopted to ensure acceptable use of the DCS. All such agreements shall be kept on file in the District Office.

NOTE: Refer also to Policy #8271 -- <u>The Children's Internet Protection Act: Internet Content</u> Filtering/Safety Policy

Adopted: 6/2/05

Revised 2010 – BOE Approval 03/04/10

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SUBJECT: THE CHILDREN'S INTERNET PROTECTION ACT: INTERNET CONTENT FILTERING/SAFETY POLICY

In compliance with The Children's Internet Protection Act (CIPA) and Regulations of the Federal Communications Commission (FCC), the District has adopted and will enforce this Internet Safety/Internet Content Filtering Policy that ensures the use of technology protection measures (i.e., filtering or blocking of access to certain material on the Internet) on all District computers with Internet access. Such technology protection measures apply to Internet access by both adults and minors with regard to visual depictions that are obscene, child pornography, or, with respect to the use of computers by minors, considered harmful to such students. The District will provide instruction to students regarding appropriate online behavior, including interacting with other individuals on social networking Web sites and in chat rooms, and the District also will provide instruction to students regarding cyber bullying awareness and response. In addition, appropriate monitoring of online activities of minors, as determined by the building/program supervisor, will also be enforced to ensure the safety of students when accessing the Internet.

The Board of Education's decision to utilize technology protection measures and other safety procedures for staff and students when accessing the Internet fosters the educational mission of the District, including the selection of appropriate teaching/instructional materials and activities to enhance the schools' programs, and to help ensure the safety of personnel and students while online. However, no filtering technology can guarantee that staff and students will be prevented from accessing all inappropriate locations. Proper safety procedures, as deemed appropriate by the applicable administrator/program supervisor, will be provided to ensure compliance with the CIPA.

In addition to the use of technology protection measures, the monitoring of online activities and access by minors to inappropriate matter on the Internet and World Wide Web may include, but shall not be limited to, the following guidelines:

a) Ensuring the presence of a teacher and/or other appropriate District personnel when students are accessing the Internet including, but not limited to, the supervision of minors when using electronic mail, chat rooms, and other forms of direct electronic communications. As determined by the appropriate building administrator, the use of e-mail and chat rooms and social networking Web sites may be blocked as deemed necessary to ensure the safety of such students;

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b) Monitoring logs of access in order to keep track of the web sites visited by students as a measure to restrict access to materials harmful to minors;

- In compliance with this Internet Safety Policy as well as the District's Acceptable Use Policy, unauthorized access (including so-called "hacking") and other unlawful activities by minors are prohibited by the District; and student violations of such policies may result in disciplinary action; and
- d) Appropriate supervision and notification to minors regarding the prohibition as to unauthorized disclosure, use and dissemination of personal information regarding such students.

The determination of what is "inappropriate" for minors shall be determined by the District and/or designated school official(s). It is acknowledged that the determination of such "inappropriate" material may vary depending upon the circumstances of the situation and the age of the students involved in online research.

The terms "minor," "child pornography," "harmful to minors," "obscene," "technology protection measure," "sexual act," and "sexual contact" will be as defined in accordance with CIPA and other applicable laws/regulations as may be appropriate and implemented pursuant to the District's educational mission.

Under certain specified circumstances, the blocking or filtering technology measure(s) may be disabled for adults engaged in bona fide research or other lawful purposes. The power to disable can only be exercised by an administrator, supervisor, or other person authorized by the School District.

The School District shall provide certification, pursuant to the requirements of CIPA, to document the District's adoption and enforcement of its Internet Safety Policy, including the operation and enforcement of technology protection measures (i.e., blocking/filtering of access to certain material on the Internet) for all School District computers with Internet access.

Internet Safety Instruction

In accordance with New York State Education Law, the School District may provide, to students in grades K through 12, instruction designed to promote the proper and safe use of the Internet.

Under the Protecting Children in the 21st Century Act, students shall be educated on appropriate interactions with other individuals on social networking Web sites and in chat rooms, as well as cyberbullying awareness and response.

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Access to Inappropriate Content/Material and Use of Personal Technology or Electronic Devices

Despite the existence of District policy, regulations and guidelines, it is virtually impossible to completely prevent access to content or material that may be considered inappropriate for students. Students may have the ability to access such content or material from their home, other locations off school premises and/or with a student's own personal technology or electronic device on school grounds or at school events.

Notification/Authorization

The District's Acceptable Use Policy and accompanying Regulations will be disseminated to parents and students in order to provide notice of the school's requirements, expectations, and student's obligations when accessing the Internet.

Student access to District computers is conditioned upon written agreement by the student and his/her parent acknowledging that the student's use will conform to the requirements of the District's Acceptable Use Policy. All agreements shall be kept on file in the District office.

The District has provided reasonable public notice and has held at least one (1) public hearing or meeting to address the proposed Internet Content Filtering/Safety Policy prior to Board adoption.

The District's Internet Safety/Internet Content Filtering Policy shall be made available to the FCC upon request. Furthermore, appropriate actions will be taken to ensure the ready availability to the public of this policy as well as any other District policies relating to the use of technology.

The Internet Safety/Internet Content Filtering Policy shall be retained by the District for at least five (5) years after the funding year in which the policy was relied upon to obtain E-rate funding.

47 United States Code (USC) Sections 254(h) and 254(l) 47 Code of Federal Regulations (CFR) Part 54 N.Y. Education Law Section 814

Adopted: 06/02/05

Revised & Approved 09/06/12

Permission for Student Use of Computerized Resources

The Board of Education will provide access to various computerized information resources through the District's computer system ("DCS" hereafter) consisting of software, hardware, computer networks and electronic communications systems. This may include access to electronic mail, so-called "on-line services" and the "Internet this may include the opportunity for some students to have independent access to the DCS from their home or other remote locations. All use of the DCS including independent use off school premises, shall be subject to this policy and accompanying regulations. Further, all such use must be in support of education and/or research and consistent with the goals and purposes of the School District.

One purpose of this policy is to provide notice to students and parents/guardians that, unlike most traditional instructional library media materials, the DCS will allow student access, to external computer networks not controlled by the School District where it is impossible for the District to screen or review all of the available materials. Some of the available materials maybe deemed unsuitable by parents/guardians for student use or access. This policy is intended to establish general guidelines for acceptable student use. However, despite the existence of such District policy and accompanying guidelines and regulations, it will not be possible to completely prevent access to computerized information that is inappropriate for students. Furthermore, students may have the ability to access such information from their home or other locations off school premises. Parents/guardians of students must be willing to set and convey standards for appropriate and acceptable use to their children when using the DCS or any other electronic media or communications. The District respects the right of each family to decide whether or not to apply for independent computer access. Student use of the DCS is conditioned upon written agreement by all students and their parents/guardians that student use of the DCS will conform to the requirements of this policy and any regulations adopted to insure acceptable use of the DCS. All such agreements shall be kept on file in the District Office.

Generally, the same standards of acceptable student conduct which apply to any school activity shall apply to use of the DCS. This policy does not attempt to articulate all required and/or acceptable uses of the DCS; nor is it the intention of this policy to define all of inappropriate usage. Administrative regulations will further define general guidelines of appropriate student conduct and use as well as proscribed behavior.

District students shall also adhere to the laws, policies and rules governing computers including, but not limited to, copyright laws, rights of software publishers, license agreements, and student rights of privacy created by federal and state law.

Students who engage in unacceptable use may lose access to the DCS in accordance with applicable due process procedures, and may be subject to further discipline under the District's school conduct and discipline policy and the Student Discipline Code of Conduct. The District reserves the right to pursue legal action against a student who willfully, maliciously or unlawfully damages or destroys property of the District. Further, the District may bring suit in civil court against the parents/guardians of any student who willfully, maliciously or unlawfully damages or destroys District property pursuant to General Obligations Law Section 3-112. Student data files and other electronic storage areas will be treated like school lockers. This means that such areas shall be considered to be School District property subject to control and inspection. The computer coordinator may access all such files and communications to insure system integrity and that users are complying with the requirements of this policy and accompanying regulations. Students should NOT expect that information stored on the DCS will be private. Regulations will be established as necessary to implement the terms of this policy.

Program Implementation

The School District recognizes that effective use of technology is important to our students and will be essential to them as adults. Consequently, the School System will provide access to various computerized information resources through the District's computer system (DCS hereafter) consisting of software, hardware, computer networks and electronic communications systems. This may include access to electronic mail, so called "on-line services" and "Internet." The District shall provide personnel support for such usage.

The DCS is for educational and/or research use only and must be consistent with the goals and purposes of the School District. The standards of acceptable use as well as prohibited conduct by students accessing the DCS, as outlined in District policy and regulation, are not intended to be all-inclusive. Students are responsible for good behavior on school computer networks just as they are in a classroom or a school hallway. In addition to the specific standards of student conduct delineated in this regulation, the general requirements of acceptable student behavior expected under the District's school conduct and discipline policy and the Student Discipline Code of Conduct, also apply to student access to the DCS. Communications on the network are often public in nature. General school rules for behavior and communications apply.

Legal and ethical implications of software use will be taught to students of all levels where there is such software use. In addition, the building principal or his/her designee and/or classroom teacher will be responsible for informing District students of rules and regulations governing student access to the DCS.

In order to match electronic resources as closely as possible to the approved District curriculum, District personnel will review and evaluate resources in order to offer "home pages" and menus of materials which comply with Board guidelines governing the selection of instructional materials. In this manner, staff will provide developmentally appropriate guides to students as they make use of telecommunications and electronic information resources to conduct research and other studies related to the District curriculum. As much as possible, access to the District's computerized information resources will be designed in ways which point students to those which have been reviewed and evaluated prior to use. While students may be able to move beyond those resources to others which have not been evaluated by staff, students shall be provided with guidelines and lists of resources particularly suited to the learning objectives.

Authorization

Students will not be permitted to use the DCS without specific authorization from the appropriate administrator and/or instructor. Furthermore, only those students who have signed an agreement form and provided written permission from parents/guardians may access the DCS, including potential student access to external computer networks not controlled by the School District. (Refer to Forms #7314F and #7314F.1.) Permission is not transferable and may not be shared. All required forms must be kept on file in the District Office.

Standards of Conduct Governing Student Access to the DCS

Inappropriate use of the DCS may result in disciplinary action, including suspension or cancellation of access. Prior to suspension or revocation of access to the DCS, students will be afforded applicable due process rights. Each student who is granted access will be responsible for that usage. The DCS is provided for students in support of their educational program and to conduct research and communicate with others. Student access to external computer networks not controlled by the District is provided to students who act in a considerate and responsible manner. Individual users of the District's computerized information resources are responsible for their behavior and communications over the District computer network. It is presumed that users will comply with District standards and will honor the agreements they have signed.

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A student is responsible for keeping a log of all contacts made on the District's computer network. The full Internet address of each correspondence on the network must be included in this log. A count of all mail received must be included in this log. The District computer coordinator or his/her designee will be responsible for placing a log book near each computer capable of accessing the network.

During school, teachers will guide students toward appropriate materials. Outside of school, parents/guardians bear responsibility for such guidance as they do with information sources such as television, telephones, movies, radio and other potentially offensive/controversial media. Use of the DCS which violates any aspect of School District policy; the Student' Discipline Code of Conduct; and federal, state or local laws or regulations is strictly prohibited and may result in disciplinary action in compliance with applicable District guidelines and/or federal, state and local law including, but not limited to, suspension and/or revocation of access to the DCS. In addition to the District's general requirements governing student behavior, the following specific activities shall be prohibited by student users of the DCS.

- 1) Using, the DCS to obtain view, download, send, print, display or otherwise gain access to or to transmit materials that are unlawful, obscene, pornographic or abusive.
- 2) Use of obscene or vulgar language.
- 3) Harassing, insulting or attacking others.
- 4) Damaging, disabling or otherwise interfering with the operation of computers, computer systems, software or related equipment through physical action or by electronic means.
- 5) Using unauthorized software on the DCS.
- 6) Changing, copying, renaming, deleting, reading or otherwise accessing files or software not created by the student without express permission from the computer coordinator.
- 7) Violating copyright law.
- 8) Employing the DCS for commercial purposes, product advertisement or political lobbying.
- 9) Disclosing an individual password to others or using others' passwords.

- 10) Transmitting material, information or software in violation of any District policy or regulation, the school behavior code, and/or federal, state, and local law or regulation.
- 11) Revealing personal information about oneself or of other students including, but not limited to, disclosure of home address and/or telephone number.

Network accounts are to be used-only by-the authorized owner of the account. Any user of the DCS that accesses another network or computer resources shall be subject to that network's acceptable use policy.

If a student or a student's parent/guardian has a District network account, a non-district network account or any other account or program which will enable direct or indirect access to a District computer, any access to the DCS in violation of District policy and/or regulation may result in student discipline. Indirect access to a District computer shall mean using a non-district computer in a manner-which results in the user gaining access to a District computer, including access to any and all information, records or other material contained or stored in a District computer.

Sanctions

- 1) Violations may result in suspension and/or revocation of student access to the DCS as determined in accordance with appropriate due process procedures.
- 2) Additional disciplinary action may be determined at the building level in accordance with existing practices and procedures regarding inappropriate language or behavior, as well as federal, state and local law.
- 3) When applicable, law enforcement agencies may be involved.

Security

Security on any computer system is a high priority, especially when the system involves many users. Users of the DCS identifying security problem on the District's system must notify the teacher in charge. A student is not to demonstrate the problem to other users. Attempts to log on to the DCS as a computer coordinator will result in cancellation of user privileges. Any user identified as a security risk or having a history of problems with other computer systems may be denied access to the DCS. Further, any violations regarding the use and application of the DCS shall be reported by the student to the teacher in charge.

POLICY - 7314F

AGREEMENT FOR STUDENT USE OF DISTRICT COMPUTERIZED INFORMATION RESOURCES

In consideration for the use of the School District's Computer System (DCS), I agree that I have been provided with a copy of the District's policy on student use of computerized information resources and the regulations established in connection with that policy. I agree to adhere to the policy and the regulations and to any changes or Additions later adopted by the District. I also agree to adhere to related policies published in the Student Handbook.

I understand that failure to comply with these policies and regulations may result in the loss of my access to the DCS. Prior to suspension or revocation of access to the DCS, students will be afforded applicable due process rights. Such violation of District policy and regulations may also result in the imposition of discipline under the District's school conduct and discipline policy and the Student Discipline Code of Conduct. I further understand that the District reserves the right to pursue legal action against me if I willfully, maliciously or unlawfully damage or destroy property of the District. Further, the District may bring suit in civil court pursuant to General Obligations Law Section 3-112 against my parents or guardians if I willfully, maliciously or unlawfully damage or destroy District property.

(Blank lines for items of student information)
Student Signature
Date
School Building

PARENTAL/GUARDIAN CONSENT

I am the parent/guardian of the minor student who has signed the District's agreement for student use of computerized information resources. I have been provided with a copy and I have read the District's policy and regulations concerning use of the DCS.
I also acknowledge receiving notice that, unlike most traditional instructional or, library media materials, the DCS will potentially allow my son/daughter student access to external computer networks not controlled by the School District. I understand that some of the materials available through these external computer networks may be inappropriate and objectionable; however, I acknowledge that it is impossible for the District to screen or review all of the available materials. I accept responsibility to set and convey standards for appropriate and acceptable use to my son/daughter when using the DCS or any other electronic media or communications.
I agree to release the School District, the Board of Education, its agents and employees from any and all claims of any nature arising from my son/daughter's use of the DCS in any manner whatsoever.
I agree that my son/daughter may have access to the DCS and I agree that this may include remote access from our home.
Parent/Guardian Signature and Other Information
Date