ONTEORA CENTRAL SCHOOL DISTRICT TECHNOLOGY PLAN 2015-2018

Contact: Victoria McLaren

P: (845) 657-6383
F: (845) 657-8742
E: vmclaren@onteora.k12.ny.us

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Committee Members –

Central Administration
Superintendent: Victoria McLaren (Interim)

Site Administrators, Teachers, Staff
Gabriel Buono
Lance Edelman
Jennifer O'Connor
Scott Richards
Linda Sella
Melissa Rebock
Jacqueline Persons
Cheryl Formont
Amy Weisz

BOCES Support, Community Members
Joshua Volpert

District Vision

An Onteora education fosters intellectual curiosity, mutual respect, self-respect, creative problem solving, individual expression, ethical decision making and active engagement in the world. Our community values and supports its children, through a holistic collaboration among students, families, the educational community, and Onteora residents at large. Students will graduate as engaged citizens and life-long learners with the confidence, self-awareness and skills to reach their maximum potential, and to live rich and successful lives.

District Mission

Our Onteora schools exist to educate and nurture the children of our diverse community. Our mission is to create an engaging and healthy learning environment that empowers all students to pursue their dreams, achieve their goals, and contribute thoughtfully to the global community.

Vision Statement

We envision a technologically integrated education environment which prepares students, staff, parents and the community to be life-long learners and productive, responsible members of the global community. We believe the achievement of these goals must be a collaborative effort. Technology is a key component to address the needs of our diverse population. It is crucial that our educational system rises to the challenge of the ever-increasing technological changes that impact our daily lives. Over the next three years it is vital for the district leadership to evaluate and provide guidance to the ongoing and continuous process of work that will go into the next cycle of improvement for the district. Due to the adverse economic outlook and the subsequent impact on the District's budget at the start of this plan period, and the likelihood that it will persist perhaps through the entire plan period, many of the plan strategies and actions may require evaluation and frequent adjustments.

Overview of District

The Onteora Central School District encompasses approximately 300 square miles, serving 45,000 residents in the townships of Shandaken, Olive, Woodstock, West Hurley and parts of Marbletown and Lexington. The District has three elementary schools and one 7-12 grade middle/high school complex. Approximately 1,400 students attend the schools including 650 in the Middle/High School, 300 in Bennett Elementary, 140 in Phoenicia Elementary, and 240 in Woodstock Elementary.

Socio-economic factors vary from one end of the district to the other. Woodstock, within its environs, is a renowned center for cultural experiences in fine arts, music and theatre groups where many have migrated from New York City. In the mountainous environs of Shandaken and Pine Hill, less employment exists. The mix of social and cultural diversity forms a stimulating educational environment for students to grow and learn.

I.   *CURRICULUM AND INSTRUCTION – Goals & Objectives*

Goal 1: Teaching and Learning
Teachers will integrate technology in the district's curriculum to support the district curricular goal of ALL students attaining proficiency or better in all content areas.

> **Objective 1A:** Creation of benchmarks aligning with the Common Core
> **Objective 1B:** Align special education technology integration with general education
> **Objective 1C:** Prepare students for computer-based testing

Goal 2: Student Acquisition of Technology and Information Literacy Skills
ALL students will acquire the Technology Continuum of Skills K-12 to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

> **Objective 2A:** Creation and adoption of K-12 Curriculum Standards aligned to ISTE Standards and NY State Technology Standards and AASL Standards for 21st Century Learner
> **Objective 2B:** Creation and adoption of K-12 Information Literacy Curriculum
> **Objective 2C:** Student research projects will have technology components that are integral to the research and go beyond the exhibition technologies (i.e. Power Point)

Goal 3: Access to Technology for All Students
ALL students, including those with disabilities, will have equal access to technology to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

> **Objective 3A:** Increase online database subscriptions through the BOCES CoSer
> **Objective 3B:** Access to on-line databases through the library website will be available
> **Objective 3C:** Add Smart Board technology and ensure accessible, age-appropriate classroom installations
> **Objective 3D:** Creative alternative technology environments to meet the information literacy needs of students; and to encourage safe and effective use of digital technology
> **Objective 3E:** Purchase of necessary hardware and software
> **Objective 3F:** Make equipment and resources available to students/teachers for use in instruction, lesson creation, and for practice.
> **Objective 3G:** Include Pre-K programs in technology planning
> **Objective 3H:** Ensure students with disabilities receive the necessary assistive technology, as per their IEP, to enable full participation in both general and technology-based curriculum

Goal 4: Professional Development Opportunities to Support Teaching and Learning
ALL educators will have equitable access to high quality professional development and support which effectively integrates technology into curriculum and instruction and is aligned to NYS, ISTE and AASL standards.

      Objective 4A: Develop an organized plan of ongoing technology professional development for resources available in the library and school

      Objective 4B: Communicate professional development technology opportunities to staff for application for hardware and software available in the school library media center and school

      Objective 4C: Professional Development

Goal 5: Efficient and Useful Student Record Keeping & Assessment
Our district will support use of technology to improve student achievement data collection, analysis, reporting, and decision-making

Goal 6: Communication among Home, School and Community
The district and its schools will use technology to improve communication among home, school, and community

Goal 7: Effective Use
The district will evaluate the effective use of personnel, services, and resources

Standards

International Society for Technology in Education (ISTE) is a not-for-profit organization that focuses on developing best practices for technology integration. ISTE has developed the National Educational Technology Standards (NETS), which have been adopted by New York State. The NET standards have been created for administrators, teachers and students. Onteora Central School District has adopted the ISTE National Education Technology Standards to guide the work of administrators, teachers and students as follows (see Addendum I).

Technology Scope & Sequence

The Onteora Central School District recognizes that in order to meet our goals for technology integration we need to develop a comprehensive Scope and Sequence for technology integration and aligned technology assessments. The technology committee has developed, and will continue to refine, the K-12 Scope and Sequence for curriculum integration. This will include student standards aligned to Common Core for each grade level (see Addendum II).

Student Achievement

One of the technology goals stated in the Comprehensive District Education Plan (CDEP) is to provide *Equitable District-wide Curriculum/Instructional Integration of Technology*. To date it has not been fully met.

Three elementary schools utilize technology teaching assistants to work with teachers and students. Administrators will need to evaluate and elevate the curriculum delivery in the lab, setting an expectation that all teachers participate. Implementation and utilization of the Scope and Sequence will ensure that equitable integration across all elementary schools will occur.

Through a recent emphasis on data and assessment, a need for K-8 formative assessment software arose. Northwest Evaluation Association's Measure of Academic Progress program (NWEA MAPS) (K-8) has been implemented to gauge student progress. The district uses Infinite Campus to monitor student information. Attendance, grades, student personal information and assessment data is now available to staff and accessible to parents.

Distributive and Distance Learning

Online learning is one of the fastest growing trends in educational technology. The National Center for Education Statistics (2008) estimated that the number of K-12 public school students enrolling in a technology-based distance education course grew by 65 percent in the two years from 2002-03 to 2004-05. On the basis of a more recent district survey, Picciano and Seaman (2009) estimated that more than a million K-12 students took online courses in the school year 2007-08.

A systematic search, by the US Department of Education, of the research literature from 1996 through July 2008 identified more than a thousand empirical studies of online learning. Analysts screened these studies to find those that (a) contrasted an online to a face-face condition, (b) measured student learning outcomes, (c) used a rigorous research design, and (d) provided adequate information to calculate an effect size. A review of research has shown:

- Students who took all or part of their class online performed better, on average, that those taking the same course through traditional face-to-face instruction.
- Instruction combining online and face-to-face elements had a larger advantage relative to purely face-to-face instruction than did purely online instruction.
- Studies in which learners in the online condition spent more time on task than students in the face-to-face condition found a greater benefit for online learning.
- The effectiveness of online learning approaches appears quite broad across different content and learner types.
- Online learning can be enhanced by giving learners control of their interactions with media and prompting learner reflection.

Distributive and distance learning tools are utilized when feasible to enhance the education of students. Continuous analysis of curriculum offerings is done to identify and fill instructional gaps. Onteora uses Skype, Go-to-Meetings and webinars to connect students to other schools and locations around the world.

Ulster BOCES provides a Distributive Learning service that develops online course modules for short courses, semester, and full-year offerings. Access to Moodle, video conferencing, video on demand, web conferencing, and in-person meetings can be utilized. Courses and virtual learning experiences are designed for Ulster County schools, students, and staff and may include Advanced Placement, specialized content courses, unit projects, and professional development. Lead educators assist districts to incorporate tools and transform classrooms into 21st Century Learning Centers.

Media is an important tool for engaging students in a blended learning environment. Currently the district uses Learn360, Scienceflix, and PowerMedia Plus through Ulster BOCES to blend standards-based multimedia with state-of-the-art curriculum integration tools in an unparalleled and affordable media-on-demand system. These programs offer thousands of videos, some of which are downloadable, editable and teacher-friendly. The district is focusing on the increased use of online web base products in courses.

Parental/Guardian Communications & Community Relations

The Onteora Central School District currently uses a wide variety of tools to communicate effectively with a broad constituency including:

- Communication with parents using telephone, written notes, e-mail, district and school websites, and the district Facebook page and App
- Resources for parents/guardians available on the website (i.e., school achievement reports)
- Parents/guardians and other community members on the district Technology Committee
- Infinite Campus Parent Portal provides parents/guardians with the ability to check attendance, homework completion, grades, tests, and quizzes
- Teacher websites to allow students and parents access to assignment details and technology links
- Quarterly newsletters and school calendar
- Local newspaper(s)
- Local school channel news
- School phone notification system – Shout Point
- Digital recordings of public speaking forums and Board of Education meetings

Collaboration

The Onteora Central School District will collaborate with the Ulster BOCES Adult and Community Education Department which has established cooperative efforts with several agencies and private enterprises to enhance the understanding and implementation of technology methods and applications.

Many adults attend Ulster BOCES career education classes each year. The majority of these classes are designed so that completers are able to take a certification or licensure exam in their chose profession. Offered in the Information Technology fields are: Network+, A+/Help Desk, and the Microsoft Office User Specialist training. Offered in Healthcare are Practical Nursing, Certified Nursing Assistant, Home Health Aide, Medical Assistant, Medical Administrative Assistant, and various specific classes such as CPR (Cardiopulmonary Resuscitation), Phlebotomy, and EKG (Electrocardiograph). Adult students in high school accredited programs such as Manufacturing, HVAC (Heating, Ventilation, and Air Conditioning), Cosmetology, and Auto-Technology can also be included. Adult students can participate in a five-year electrical apprenticeship program and a 200-hour Photovoltaic Practitioner program. An Ulster BOCES Adult Education guidance counselor assists all career education participants with job placement opportunities. Onteora Central School District also takes advantage of VESID services including the transition services.

Internet Safety

The recent passage of the New York State Education Law on Internet Safety and Appropriate Use (Ed Law Section 814) requires a better education of students for safe and appropriate use of Internet technology and resources. This legislation was an outgrowth of the Federal Children's Internet Protection Act (CIPA) law enacted by Congress in December 2000 to address concerns about offensive content over the Internet on school and library computers.

Ethical use and Internet safety are important topics to include in the technology plan. Our district will provide staff and students with Internet safety training and materials. We will:

1. Provide teachers, staff, and students equitable access to appropriate training and materials.

2. Provide up-to-date information on the newest forms of technology so the instructional materials are relevant for today's cyber students.

3. Identify and implement student activities and outcomes.

Provide teachers, staff, and student equitable access to appropriate training and materials
Our district has access to both synchronous and asynchronous training on Internet Safety. Some of the providers of Internet safety courses include, but are not limited to: Ulster BOCES, NYS Center for School Safety, NYS Model Schools, NYS Law Enforcement, and The Teacher Center. The NYS Model Schools online Internet Safety class is available to all teachers and staff. Teachers are trained within the school to be "turnkey trainers" to assist and support all stakeholders. Parent and student training is also available through these regional partners.

The district has also identified appropriate online resources, both traditional and online. The online resources are linked on the district's website for teachers, staff, students, community and parents.

Provide up-to-date information on the newest forms of technology so the instructional materials are relevant for today's cyber students
The technology committee will continue to explore new technologies, their application in the classroom, and impact on students outside of school. This information will regularly be shared with all stakeholders and action plans will be adjusted as needed.

Identify and implement student activities and outcomes
The district will identify grade appropriate activities that fit into the current curriculum and work with teachers to develop content.

The iSafe Skill Graphs (Addendum III) were adapted using the iSafe Curriculum. Each worksheet represents a module of the iSafe Internet Safety Curriculum. Lessons, units and resources are available from iSafe. Anyone trained and certified in iSafe has access to these materials. i-SAFE Ventures is a hybrid organization (non-profit and for-profit LLC) focused on helping educational and commercial organizations comply with statutory regulations guarding child privacy.

Following is a list of web resources available to students and teachers:

- National Center for Missing and Exploited Children
  This website provides Internet safety-education resources for children (5-17), parents, guardians, educations, and law enforcement.

- Kids Privacy
  This website is particularly informative on Children's Online Privacy Protection Act.

- NetFamilyNews.org: Kid-Tech News for Parents
  This website provides a weekly newsletter that covers online safety, new educational resources, research on Internet use, Internet policies

- American Library Association (ALA)
  The ALA has compiled comprehensive information about The Children's Internet Protection Act (CIPA). Frequently asked questions and answered, articles from related professional associations and legal history are available from this website.

II.   PROFESSIONAL DEVELOPMENT

Staff development is a fundamental part of successful technology integration. New York State recommends that 20-30% of expenditures on technology over a five-year period be designated to provide staff development – which includes training and curriculum development. Ulster BOCES Model Schools provides this support to their component districts including Onteora Central School District.

Professional development with a focus on technology standards is offered periodically within the District. With the adoption of national standards and a broad framework for all state content standards, the district will continue professional development opportunities.

Providing consistent, focused professional development on utilizing and integrating technology in the classroom allows teachers to feel supported in their professional learning community. The most critical factor in effective integration of technologies into the curriculum is sustained embedded professional development and placing the emphasis on the expectation of use. Continued emphasis on the importance of technology integration, through the teacher/building principal partnership, can only enhance effective integration.

All teachers will be provided access to technology and appropriate training. The training must also be available to computer lab teaching assistants, library/media specialists, and building principals.
The issues to be considered here include:
- Coordinating and planning of regular staff development training activities both annually and as needed
- Utilizing a "train the trainers" model to provide mentoring and coaching
- Attending to the effort of technology pioneers
- Providing easy access to support for faculty and staff
- Allocating adequate resources
- Training individuals and groups

It is an expectation of every employee to continually grow professionally through staff development opportunities. Common planning time for teachers allows them time to become familiar with the courseware, manuals, and curriculum correlation materials and to understand how technology can be used to support the current teaching strategies and New York State Learning Standards.

The district will continue to support technology integration with Ulster BOCES, other organizations and consultants who provide instructional services. Throughout the year, the district will take advantage of excellent staff development offerings on a variety of topics such as:
- Interdisciplinary instruction
- Curriculum mapping
- Cooperative learning
- Alternative assessment
- Curriculum design
- Classroom strategies

The following statements (ISTE National Education Technology Standards) describe the district's expectations for successful technology integration in the classroom:

- Teachers will demonstrate a sound understanding of technology operations and concepts
- Teachers will plan and design effective learning environments and experiences supported by technology
- Teachers will implement curriculum plans that include methods and strategies for use of technology to maximize student learning
- Teachers will apply technology to facilitate a variety of effective assessment and evaluation strategies
- Teachers will use technology to enhance their productivity and professional practice
- Teachers will understand the social, ethical, legal, and human issues surrounding the use of technology in Pre K-12 schools and apply those principals in practice
- Teachers will provide suitable assistive devices for students who need them
- Teachers will use technology to collect, store, and analyze student performance date

As new technologies are implemented, teachers are recruited to be early adopters and teacher trainers. This sets an example for reluctant adopters and creates information loci.

Supporting Resources

Currently the Onteora Central School District provides the following structures to support the infusion of technology and instruction management practices:

- District and building level workshops
- After school and summer professional study groups and training
- Release days for staff to attend training
- Superintendent's conference days and staff development programming
- Faculty meetings
- Building-based technology teaching assistants (elementary level)
- The district will make its best effort to upgrade the technology infrastructure as funding is available
- The district will adopt a technology refresh/replace schedule it will strive to adhere to as funding permits
- The district will continue to support technology in the district with highly trained BOCES staff

To support these professional development structures for technology-related training, these additional resources will enrich our menu of services:

Staff:
- Instructional Specialists
- Exemplary teachers/District trainers
- Team Leaders

Outside Providers:
- Institutions of Higher Education
- Ulster BOCES Instructional Services (e.g., Model Schools, BETAC)
- MHRIC Technology Support
- Mid-Hudson Regional Teacher Center
- Mid-Hudson Principals' Center
- My Learning Plan manages the employee professional development records

The technology committee will explore distributive learning which includes distance and online learning opportunities and how they can enhance our current professional development and K-12 course offerings. Members of the committee may visit other districts to observe technology integration strategies.

III. INFRATRUCTURE, HARDWARE, TECHNICAL SUPPORT AND SOFTWARE

The 21st Century was ushered in by a dramatic technological revolution. We now live in an increasingly diverse, globalized, and complex media-saturated society. The vision of learning we embrace focuses on teaching students to become critical thinkers, problem solvers and innovators; effective communicators and collaborators; and self-directed learners. In keeping up with today's increasing needs and anticipating computer-based testing, it is important that students have the technological infrastructure which will allow them to access up-to-date information in a rapidly changing world.

Telecommunications and Infrastructure

The Telecommunications/Infrastructure strategy is to maintain and develop a network infrastructure that is sufficiently robust and will not present constraints to any option the district may want to pursue in the plan's timeline.

The Onteora Central School District utilizes a fiber optic Wide Area Network (WAN) backbone, provided by Ulster County BOCES, to deliver access to all district entities which include voice, data and video. In addition to the WAN connection, each building has its own separate Local Area Network (LAN). Because these networks are available in all buildings, the district allows students and staff access to the Internet as well as shared files located within the network. Use of the Internet provides instant access to web resources as well as interactive content filtering device, which meets the compliance requirements for CIPA (Children's Internet Protection Act).   The content filtering device allows the district to provide users with different content based on their needs. By default, the device will block websites which contain obscene, pornographic, or malicious content.

The district also made significant improvements with its aging phone and PA systems. In 2011, the district switched over from a traditional PBX (Private Branch Exchange) phone system to a new and more feature-rich hybrid VoIP (Voice over IP) and digital phone system at the main campus. This new system allowed the district to operate more efficiently. It has also allowed the district to encompass new features such as Exchange email integration, virtual faxes, auto-attendants, and call monitoring. In the summer of 2012, the remaining buildings were brought online with the new phone system. With the help of Ulster County BOCES, a plan was put in motion to update the hardware on the PA and rewire it out to the classrooms.

A 2014 infrastructure upgrade significantly enhanced the wireless network capabilities at the Middle/High School in order to support the dramatic increase in mobile device density from the 1 to 1 initiative. There are now a total of 67 Access Points throughout the campus which allows a large number of users to connect simultaneously in a given area.

Currently, radios are used to communicate with administrators and with our bus drivers. This is an aging system and the equipment will require upgrading. Our administrators and employees with critical

responsibilities use district-provided cell phones. It is expected that the number of cell phones will remain stable over the plan period.

Hardware

Workstations available throughout the buildings for students and staff include Dell Optiplex 620, 745, 755, 760, 780 and 9020 desktops. HP 4300 and Dell 9030 All-In-One models are also in used in some computer labs and offices. They all run the Microsoft Windows 7 operating system. These workstations are outfitted with energy saving flat panel LCD monitors and DVD writers. All new machines purchased for the district in the last year have 8 GB of RAM and 64-bit Windows to support the fast paced technology drive. It is imperative that the district pursues continuous hardware upgrades to its classroom computers to ensure teacher have adequate or better tools with which to implement new technology driven curriculum.

The district is also currently running a 1 to 1 program with Ipads or Chromebooks. High School students are provided Chromebooks and the Middle School has classroom carts with Ipads available. Staff members continue to explore new ways to utilize these devices for enhanced instruction and student interaction.

There is one wireless mobile laptop cart in the Middle School as well as four in the High School. In 2010, the district established one laptop carts for each of the Elementary schools, which includes thirty laptops as well as a laser printer. With the availability of these carts, teachers have the opportunity to integrate technology into the curriculum by using them for research or for projects.

Throughout the district we are constantly adding to our purchases of Smart Boards, projectors, and document cameras. All new Smart Board and projector installations are being wall and ceiling mounted to eliminate cables running across the floor and to accommodate age-appropriate access. Existing installations are being retrofit this way was funding permits. In anticipation of computer-based testing, labs will need to be more state of the art and better equipped. The district recently built two new 50-computer labs in the High School and Middle School and another 30-computer lab in Bennett Elementary. The computer labs in Woodstock and Phoenicia Elementary should be upgraded soon, as well.

Technical Support

As teachers and administrators begin to rely more upon technology, the need for it to function reliably becomes even greater. Currently, the district has one full-time and one part-time Ulster BOCES Network Specialist, who service all buildings. The responsibilities of these individuals include providing information for the Technology Plan, evaluations, deployment, and support of all hardware and software, systems administration, and network administration. Additionally, each building has a Computer Advisor that serves as the first level support before the Network Specialist is called. They also run and maintain the computer labs while working with the teachers to integrate technology into the curriculum.

Software

Microsoft Office 2010 Standard is the district's choice for a productivity suite. The suite includes Microsoft Word, Excel, PowerPoint, Publisher and Outlook. These programs provide tools for creating documents, spreadsheets, and presentations as well as interfacing with the district's Microsoft Exchange email and calendar system.

Other district programs include Lexia Reading, Accelerated Math, Castle Learning, eBackpack, and Typing Instructor Web. The High School also has a Video Production class featuring Adobe Premiere. Finance Manager is the district's financial software. The Mid-Hudson Regional Information Center (MHRIC) supports this software.

Infinite Campus is the student management software used by the district. Infinite Campus is a web-based program which allows for period by period attendance, scheduling, and grade books. The district has embrace the power of Infinite Campus and opened up the parent portal portion of the program where parents can log on using a username and password to see how their child is doing. In order for a parent to have access, they must fill out required forms, which are then verified for the protection of the information being given. Once verified, parents are given the ability to view their child's schedule, attendance, assignments and grades. In addition, they are able to view their child's immunization records, 5-week reports, report cards, and state assessments. All report cards are produced electronically from the system.

The district has also integrated Infinite Campus into the food services department. Students and parents are able to use the portal part of the program to see student food service accounts. Students are able to use funds from their account to purchase breakfast or lunch. This portal also allows parents to have a way of adding funds to their child's account.

Administrators are using a piece of Infinite Campus called shout-point, which uses a census module and allows for the sending of notifications to staff and parents in regards to emergencies, delays and closings. It also notifies the parents of student absences. This piece has been a great addition because the district is able to get notifications out in a fast and efficient manner. Infinite Campus data is currently available in English, Spanish, Korean and Chinese for anyone needing language accommodations.

Network and Systems Support, Maintenance and Administration

This element encompasses all activities, services, and personnel related to the support, maintenance, administration, and continual updating of all the networking and systems, hardware and software resources. It is important to note that this is an integral and costly element of any proposed new implementations.

The services and capabilities provided to the teachers and students by the networking hardware and software resources are only as good as the underlying maintenance, support and administration of the resources. It is, therefore, crucial to ensure that appropriately trained and experienced experts are sought for both the initial implementation and the continued maintenance and administration of the technology.

The issues to be considered include providing:

- District-wide coordination of ongoing infusion of the technology
- Network support, administration, and troubleshooting
- Instructional support
- Systems support, administration, and troubleshooting
- Helpdesk and desktop support
- Hardware and software inventory and maintenance contracts
- Physical and data security
- Backup

It is apparent with the abundance of technology that one of the most important areas for the district to consider is providing enough on-going coordination, technical support, and infusion of the technology within the district. To ensure the success of any educational technology decisions, the district should have a Director of Technology responsible for overseeing and coordinating district-wide technology implementation and project management. Those districts that successfully move ahead in educational technology have a Director of Technology with this full-time responsibility.

A Director of Technology would need to take overall responsibility for working with the school community to develop implementation plans, procedures for equipment purchases and upgrades, software evaluation and purchase, inventory and maintenance issues, technical support, inter- and intra-building communication, and detailed staff development programs. This position could have responsibility for both instructional and administrative technology applications and include responsibility for other types of technology. Additionally, and just as important, there would be a need for coordination of building requirements, such as telephone lines, public address systems, electrical systems, and computer furniture and fixtures.

In order to succeed at such an all-encompassing task, it is imperative that the Director of Technology be assisted by individuals who could supply on-site network support and administrations, system administration, desktop support, and staff development. These individuals could be hired by the district or from collaborating organizations identified earlier in this plan. In addition, a number of teachers in each building could be given appropriate release time to help coordinate technical and content-specific details of each building's computer implementation.

Every technical support personnel should also have access to appropriate hardware and software support services. Many organizations, including BOCES, offer a number of services including planning, installation assistant, and on-going technical support to implement these goals and objectives.

IV. FUNDING AND BUDGET

Onteora CSD

Appropriation Status Report

ACCOUNT	DESCRIPTION	BUDGET	ADJSTMNT	ADJ BUDGET	EXPENSED	ENCUMBERED	AVAILABLE
A 2630.150-00	SALARIES - INSTRUCTIONAL	$96,795.00	$0.00	$96,795.00	$4,443,42	$0.00	$92,351.58
A 2630.449-30	PROF SERVICES – COMPUTER	$333.00	$0.00	$333.00	$0.00	$0.00	$333.00
A 2630.465-30	EQUIPMENT REPAIR - COMPUTER	$1,500.00	$0.00	$1,500.00	$0.00	$0.00	$1,500.00
A 2630.501-30	SUPPLIES - COMPUTER	$3,195.00	$381.20	$3,576.20	$637.39	$2,012.39	$926.42
A 2630.569-10	SOFTWARE - DISTRICT	$126,500.00	$0.00	$126,500.00	$64,861.08	$7,478.00	$54,160.92
A 2630.569-11	SOFTWARE – PRIVATE SCHOOLS	$2,000.00	$0.00	$2,000.00	$1,074.32	$0.00	$925.68
A 2630...COMPUTER ASSISTED INSTRUCTION		$230,323.00	$381.20	$230,704.20	$71,016.21	$9,490.39	$150,197.60
A 26...INSTRUCTIONAL MEDIA		$230,323.00	$381.20	$230,704.20	$71,016.21	$9,490.39	$150,197.60
A 2...ADMIN & IMPROVEMENT		$230,323.00	$381.20	$230,704.20	$71,016.21	$9,490.39	$150,197.60
		$230,323.00	$381.20	$230,704.20	$71,016.21	$9,490.39	$150,197.60

Reported: 9/11/2015

V.   MONITORING AND EVALUATION

In order to maintain the accuracy and relevance of our Educational Technology Plan, it is essential to monitor, and if necessary, revise components of this plan on an ongoing basis. Ongoing collection of date and the use of that data are used to inform decision-making.

Each of the identified Goals and Objectives in our Technology Plan will be reviewed and evaluated by the district's Superintendent, Technology Committee, and IT Personnel, who have responsibility for ensuring that our goals and objectives are monitored, adjusted as necessary, and accomplished.

More specific details regarding monitoring and evaluation will be developed within the district starting with the Professional Development plan. Currently the district implements monitoring and evaluation at several different levels:

- At the building level, district administrators ensure the implementation by supporting an involvement in Professional Development; observation and also with evaluation instruments.
- The Technology Committee includes representatives from the school district at every level from administrator(s), to parent(s), to student(s) and meets regularly to make certain the technology implementation is supporting the entire strategic plan. Its purpose is to review data and determine if the goals and objectives of the Technology Plan are being met.
- The Professional Development Committee will monitor the district needs including how the district is using technology to meet the milestones its plans.
- By sharing data each of the above groups collaborates to make recommendations and report on the results.

The district will track development and implementation of all activities and accomplishments yearly. Tech planning issues, successes and setbacks will be communicated between stakeholders on an ongoing basis. Data, progress, and any needed revisions to the plan will be reviewed at meetings during the school year.

There are three main aspects of assessment that are reviewed. Within each of these divisions we look at both the use of software and hardware.
1. Curricular uses of technology – These should be age and level appropriate integration of technology into the curriculum.

2. Use of technology by teachers – To facilitate learning or as a presentation tool but not with expectations that the students are using the technology themselves.

3. Functionality and use of infrastructure – Assess its strengths and weaknesses.

Curricular Uses of Technology

As a district we are in the process of creating curricular maps. These curricular maps should include technology based skills that are determined by discipline. Various technology tools have been identified for each grade level (see Addendum II). Middle and High School students are expected to word process papers, create dynamic presentations, understand how to make, use and read spreadsheets, use databases and information systems. Students are often expected to be able to create short films, visual presentations, create booklets, pamphlets or flyers. Students should be able to navigate and negotiate the World Wide Web safely and how to identify a credible source. They should understand how to cite both print and electronic sources.

Curriculum integration is assessed as follows:
1. By completing the technology survey, teachers are able to provide feedback regarding the effectiveness of the software and hardware that is used within their own classrooms. The survey gives teachers the opportunity to describe deficits in the usefulness of the tools that they have at their disposal.

2. Reviewing the feedback that is gained from the conference days. Teachers who are deficient are giving different feedback, both to the trainers and as indicated on My Learning Plan after the conference day.

When needed, surveys are given to all staff and students as a means of evaluation on how to maintain and increase technology use. The information provided from these surveys is used to address staff and student needs, in addition to selecting classes for future development days. Using this data we compare previous years' data to assess the plan. In the future we will continue to devise surveys to evaluate how technology is being used and to determine what technologies still need to be implemented. It is the desire of the committee to continue to increase the amount of technology available in buildings and to stay current on all emerging technologies for the future.

A 2014 survey identified the following areas for professional development attention:

- Smart Board
- Student response systems
- Ipads and apps
- Presentation software
- eBackpack
- Moodle
- Website development

Technology personnel are instrumental in collecting data that will be used in the evaluation and monitoring process.

The district has invested in hardware and software and are driven by both the district goals and principal purchasing/vision. Generally, students enter a much richer technology environment in High School. It should be noted that, by enrollment, the district has some disparities about the disbursement and use of technology by Elementary schools. In addition, the Middle School, which is currently declining in enrollment, will still need a technology enriched environment in order to prepare students for High School. District representatives along with the Technology Committee will develop, implement and evaluate strategies for equitable access to technology and its use in the Elementary schools. In addition, they will also standardize, develop, manage, monitor, and revise as necessary; network, hardware, infrastructure, software, and technical support specifications, policies, and procedures. An evaluation and accountability framework will need to be formally developed in order to reflect progress and continually plan for improvement.

Addendum I - ISTE.NETS Standards/Learning

1. **Creativity and Innovation**
   Students demonstrate creative thinking, construct knowledge, and develop innovative products and process 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 peer, expert, 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 understandings 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 and 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 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 towards 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

ISTE.NETS Standards/Teaching

Effective teachers model and apply the National Education Technology Standards for Students 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.   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

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 NETS. 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 then 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 communications 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

ISTE.NETS Standards/Leadership

1. **Visionary Leadership**
   Educational Administrators inspire and lead development and implantation 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, supports effective instructional practice, and maximizes 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 the 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 improvements

    e. establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching and learning

5. **Digital Citizenship**

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. 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 issue through the use of contemporary communication and collaboration tools

Addendum II - Standards by Grade

Standards	K	1st	2nd	3rd	4th	5th	6th
1. Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations							

1.1 Introduce input devices and output devices to successfully operate computers, and other technologies:
  a.   Launches a computer program
  b.   Identifies and utilizes the monitor
  c.   Identifies and utilizes the mouse
  d.   Identifies and utilizes the keyboard
  e.   Identifies and utilizes the CPU (brain/computer). Selects appropriate hardware for given take
  f.   Identifies network, username and password
  g.   Keyboarding
      i. Uses numbers, spacebar and enter key
     ii. Uses delete, shift, backspace
	X						

1.2 Use input devices and output devices to successfully operate computers, and other technologies:
  a.   Identifies and utilizes a printer
  b.   Uses information provided on desktop to operate a program
  c.   Demonstrates proper start-up and shut-down procedures
  d.   Identifies network, username and password
  e.   Keyboarding
      i. Uses shift key
     ii. Uses arrow key
    iii. Demonstrates proper spacing
		X					

1.3 Practice responsible use of technology systems and software:
  a.   Word-processing
      i. Demonstrates ways to enhance text
     ii. Inserts clip-art
    iii. Saves on the network
		X					

Standards (cont'd)	K	1st	2nd	3rd	4th	5th	6th

1.4 Use input devices and output devices to successfully operate computers, and other technologies:
    b.   Identifies and utilizes a CD/DVD
    c. Keyboarding
        i.   Uses punctuation keys, proper spacing and cap lock
			X				

1.5 Practice responsible use of technology systems and software:
    a.   Word processing
        i.   Identifies basic work processing terminology
        ii.   Enters ideas about topic on computer
        iii.   Introduce how to insert pictures
            1.   Crop
            2.   Format for placement
        iv.   Integrates graphics in text to produce documents
        v.   Demonstrates copy, cut and paste
        vi.   Use publications software
    b.   Power Point
        i.   Introduce the basics of a Power Point Presentation
        ii.   Present a basic multimedia project at grade level
			X				

1.6 Competently use input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. including adaptive devices when necessary, monitor, printer) to successfully operate computers, and other technologies:
    a.   Identifies and utilizes a digital camera
    b.   Is aware of school networking
    c.   Understands a virus
    d.   Keyboarding
        i.   Reinforces use of numbers, spacebar and enter key
        ii.   Reinforce use of shift key
        iii.   Reinforce use of delete and arrow keys
        iv.   Reinforce use of punctuation keys and caps lock
        v.   Reinforce proper spacing after words, punctuation
        vi.   Identifies home row characters (a, s, d, f, g, h, j, k, l)
        vii.   Identifies other keyboard characters (not home row)
        viii. Maintains hand control over home row
        ix.   Maintains hand control over keyboard
				X			

Standards (cont'd)	K	1st	2nd	3rd	4th	5th	6th

1.7 Practice responsible use of technology systems and software:
  a. Word Processing
      i. Uses spell-check
      ii. Uses electronic thesaurus
      iii. Uses meaningful graphics appropriate to document
      iv. Inserts and formats graphics from a variety of sources
      v. Saves on CD, flash-drive and network
      vi. Can crop an image
  b. Power-Point
      i. Imports and formats graphics from a variety of sources
      ii. Presents multimedia projects at grade level
				X			

1.8 Practice responsible use of technology systems and software:
  a. Word-Processing
      i. Uses spell-check
      ii. Uses grammar check for appropriate software
      iii. Uses electronic thesaurus
      iv. Uses meaningful graphics appropriate to document
      v. Inserts and formats graphics from a variety of sources
      vi. Saves on flash-drive, CD and network
  b. Power Point
      i. Imports graphics
      ii. Animates an object
      iii. Presents multimedia project at grade level
					X		

1.9 Competently uses input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. including adaptive devices when necessary, monitor, printer) to successfully operate computers, and other technologies:
  a. Understands file structures
  b. Demonstrates reach for alphabet keys
  c. Maintains eyes on copy, not keyboard
  d. Uses shortcuts in program
					X		

1.10 Competently uses input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. including adaptive devices when necessary, monitor, printer) to successfully operate computers and other technologies:
  a. Understands file structures
  b. Keyboarding: All facets
						X	

1.11 Works cooperatively and collaboratively when using technology: a. Demonstrates proper care of flash-drive, CD's, DVD's						X	

Standards (cont'd)	K	1st	2nd	3rd	4th	5th	6th

1.12 Practice responsible use of technology systems and software:
a. Word-Processing
    i.   Understands file extensions (e.g. .doc, .ppt, .bmp, .gif, .jpeg)
b. Power Point
    i.   Uses transitions, animations, action buttons, etc.
    ii.   Inserts charts and graphs
						X	

1.13 Competently uses input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. including adaptive devices when necessary, monitor, printer) to successfully operate computers and other technologies: a. Understand file structure b. Keyboarding i. Understands and uses all skills taught in grades 3-5							X
1.14 Practice responsible use of technology systems and software: a. Word-Processing – all facets i. Understands Wizards b. Power Point – all facets							X
2. **Digital Citizenship**: Students understand human, cultural and societal issues related to technology and practical legal and ethical behavior							
2.1 Articulates basic issues (e.g. copyright laws) related to responsible use of technology information and describes personal consequences of inappropriate use					X	X	X
3. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology							

3.1 Introduce technology resources for problem solving, communication, and illustration of thoughts, ideas, and stories. Integrate into grade level curriculum:
a.   SMART Board/SMART Notes
b.   Digital Camera/Flip cameras
    i.   Take pictures of events
    ii.   Insert image/text from pre-existing folder
	X						

3.2 Uses technology resources for problem solving, communication, and illustration of thoughts, ideas, and stories: a. SMART Board/SMART Notes b. Digital Camera/Flip cameras		X	X				
3.3 Uses technology resources for problem-solving, self-directed learning and extended learning activities: a. Identifies keywords for research b. Locates research resources c. Locates specific information				X			

Standards (cont'd)	K	1st	2nd	3rd	4th	5th	6th

3.4 Competently uses input devices (e.g. mouse, keyboard, remote control) and output devices (e.g. including adaptive devices when necessary, monitor, printer) to successfully operate computers and other technologies:
  a. Understands file structures
  b. Demonstrates reach for alphabet keys
  c. Maintains eyes on copy, not keyboard
  d. Uses shortcuts in program
					X		

3.5 Uses technology resources for problem-solving, self-directed learning and extended learning activities:
  a. Analyzes data found from research
  b. Understands download and upload information
  c. Understands "And", "Or", "But" (Boolean) in search engines
						X	

3.6 Uses technology resources for problem-solving, self-directed learning and extended learning activities: a. Understands and uses all skills taught in grades 3-5							X
4. **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							
4.1 Communicate about technology using developmentally appropriate and accurate technology using the highlighted vocabulary words from Standard 1, respective grade level activity	X	X	X				

4.2 Work cooperatively and collaboratively when using technology:
  a. Discuss acceptable behavior while working near a computer
  b. Demonstrates proper lab etiquette
  c. Demonstrates respect of computer work of others
  d. Introduce Internet Safety
	X
	a-d
		X
		a-d
			X
			a-c
				X
				a-c
					X
					a-b
						X	X

5. **Research and Information Fluency:** Students apply digital tools to gather, evaluate, and use information							

5.1 Use developmentally appropriate multimedia resources to support learning:
  a. Student Center
  b. Introduce SMART Board/SMART Notes
  c. Pearson SuccessNet
  d. Introduce Microsoft Word and Microsoft Power Point
  e. Utilize SMART Board/SMART Notes
  f. Introduce proper use of CD/DVD's
	X
	a-c
		X
		d-f					

5.2 Introduce a variety of media and technology resources for directed and independent learning activities while on teacher directed websites:
  a. Identifies keywords for research
  b. Locates research resources
  c. Analyzes data found from research
  d. Uses library on-line catalog
			X				

Standards (cont'd)	K	1st	2nd	3rd	4th	5th	6th
5.4 Use developmentally appropriate multimedia resources (e.g. interactive books, educational software, elementary multimedia encyclopedias) to support learning and remediate skill deficits a. Expand research skills b. Digital presentations					X		
5.5 Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources						X	X
5.6 Use developmentally appropriate multimedia resources (e.g. educational software, elementary multimedia encyclopedias) to support learning and remediate skill deficits (i.e. introduce inspiration and related software to students as needed)							X

Standards	7th	8th
1. Technology Operations and Concepts Students demonstrate a sound understanding of technology concepts, systems, and operations		
1.1 Students demonstrate knowledge and skills in the appropriate use of computers and other forms of technology	X	X
1.2 Students access the Local Area Network and Wide Area Network to locate user files, templates and programs	X	X
1.3 Open, navigate, and close curriculum-based, multimedia, creativity, and productivity software programs	X	X
2. Digital Citizenship Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior		
2.1 Recognize, demonstrate, and model ethical behavior relating to security, privacy, passwords, and personal information by following district policies (AUP)	X	X
2.2 Adhere to copyright laws	X	X
3. Creativity and Innovation Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology		
3.1 Identify and use the appropriate productivity and multimedia tools and peripherals to support personal productivity, group collaboration, and classroom learning throughout all content areas (e.g. Language Arts, Math, Science, Social Studies, Related Arts)	X	X
3.2 Create, revise, edit, save, and print documents using appropriate word processing and desktop publishing software	X	X
3.3 Utilize graphic imaging software programs to edit, revise, add text, and convert to other graphic image formats	X	X
3.4 Create and present multimedia projects as a cooperative group/class activity	X	X
3.5 Create appropriate graphs/spreadsheets to process data and report results	X	X
3.6 Contribute information to an individual/group or class database	X	X
4. 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		
4.1 Utilize telecommunication tools to question, collaborate, publish, and interact with peers, experts and others	X	X
4.2 Collaborate with other students to question, gather and discuss data results	X	X
4.3 Investigate real-world situations, issues, and information using various telecommunication tools and electronic media	X	X
4.4 Select from the resources available and use appropriate technology tools to accomplish a variety of tasks and solve problems	X	X

Standards (cont'd)	7th	8th
5. Research and Information Fluency		
Students apply digital tools to gather, evaluate, and use information		
5.1 Select and use technology tools to research, analyze, and compile electronic data/information	X	X
5.2 Conduct online research and evaluate electronic data/information and its sources	X	X
5.3 Use a variety of software applications and technologies to publish and present projects and/or assignments both inside and outside of the classroom	X	X
6. Critical Thinking, Problem Solving, and Decision Making		
6.1 Research specified real-world problems and issues using electronic information sources	X	X
6.2 Utilize technological resources to help with self-directed learning and solve real-world problems	X	X
6.3 Determine when and how to utilize technology appropriately to solve problems and/or find information	X	X
6.4 Combine, paraphrase, organize and cite information from multiple reference sources	X	X

Standards	9th	10th`	11th	12th
1. Technology Operations and Concepts Students demonstrate a sound understanding of technology concepts, systems and operations				
1.1 Practice and refine knowledge and skills in keyboarding/word processing/desktop publishing, spreadsheets, databases, multimedia and telecommunications in preparing classroom assignments and project-based learning in all content areas	X	X	X	X
1.2 Select and use applications effectively and productively	X	X	X	X
1.3 Access the Local Area Network and Wide Area Network to locate users' files, templates, programs, databases, teacher websites, and the Moodle	X	X	X	X
2. Digital Citizenship Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior				
2.1 Practice legal and ethical behavior when using information and technology resources (AUP)	X	X	X	X
2.2 Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems	X	X	X	X
3. Creativity and Innovation Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology				
3.1 Select and use a variety of technology tools and formats for class assignment, project-based learning, and presentations in all content areas (e.g. English, Math, Science, Social Studies, Vocational Education)	X	X	X	X
3.2 Utilize graphic imaging software programs to edit, revise, add text, and convert to other graphic image formats	X	X	X	X
4. 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				
4.1 Use digital/video cameras, scanners, and other peripherals for communication and publishing activities	X	X	X	X
4.2 Utilize telecommunication tools to question, research, collaborate, publish, and interact with peers, experts, and others	X	X	X	X
4.3 Collaborate with other students to question, gather and discuss data results	X	X	X	X
4.4 Investigate real-world situations, issues, and information using various telecommunication tools and electronic media	X	X	X	X
4.5 Select from the resources available and use appropriate technology tools to accomplish research, information analysis, problem solving, and decision-making in all content areas	X	X	X	X

Standards (cont'd)	9th	10th	11th	12th
5. Research and Information Fluency Students apply digital tools to gather, evaluate, and use information				
5.1 Select and use technology tools to research, analyze, and compile, synthesize, produce, and disseminate data/information, models, and other creative works	X	X	X	X
5.2 Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electron information sources	X	X	X	X
6. 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				
6.1 Investigate and apply expert systems and simulations in real-world situations	X	X	X	X
6.2 Utilize technological resources to help with self-directed learning and solve real-world problems	X	X	X	X
6.3 Determine when and how to utilize technology appropriately to solve problems and/or find information	X	X	X	X
6.4 Combine, paraphrase, organize and cite information from multiple reference sources	X	X	X	X
6.5 Collaborate with peers, experts, and others to contribute to content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models and other creative works	X	X	X	X

Addendum III - Internet Safe Scope and Sequence

Module: Cyber Community
Abstract concept of community on the Internet as compared to the physical community and what it means to be a part of it.
Important terms: cyber, digital citizenship, AUP, Netiquette, appropriate, inappropriate

Legend: Introduced (blue), Reinforced (green), Proficient (purple)

Topic	K	1	2	3	4	5	6	7	8	9	10	11	12
Cyber Community – Abstract concept of community on the Internet	Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Digital Citizenship – What does it mean to be a member of a digital society?	Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Acceptable Use Polices		Introduced	Introduced	Reinforced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Places in Cyber Space – Appropriate vs. Inappropriate				Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Online Behavior with Netiquette					Introduced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Safe Website Design						Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Online Gaming (terms, concepts & safety challenges)							Introduced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Negative Networking (Gangs, Cults and Terrorists permeating Internet)							Introduced	Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient
Online Freedoms and the Culture of the Internet (Internet related laws – International Comparison)										Introduced	Introduced	Reinforced	Proficient
Emerging Leaders: Cyber Citizens										Introduced	Introduced	Reinforced	Proficient

Module: Personal Safety

The abstract concept of safety online and how to manage/protect yourself.

Important terms: Netiquette, Web 2.0, Cyber Bullying, Identity Theft, Predator, Digital Footprint, Identity, Social Networking

	Introduced		Reinforced		Proficient	K	1	2	3	4	5	6	7	8	9	10	11	12
Abstract concept of safety online						Introduced	Introduced	Reinforced	Reinforced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Strategies for uncomfortable online situations							Introduced	Introduced	Reinforced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Importance of rules & laws in keeping people safe								Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Online behavior with Netiquette								Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Engagement in interactive technologies (Web 2.0)									Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Cyber Bullying									Introduced	Introduced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Effectively managing & protecting personal information online										Introduced	Introduced	Reinforced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Text messaging and safety strategies										Introduced	Introduced	Reinforced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Identity Theft											Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Predator's Grooming Process											Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Digital Footprint											Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Online Identity												Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient
Online Shopping												Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient
Social Networking												Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient
Online Gaming and Gambling															Introduced	Introduced	Reinforced	Proficient

Module: Intellectual Property

The responsible and ethical use of intellectual property in the digital age.

Important terms: Copyright, Piracy, Citation, Patent, Trademark, Plagiarism, Fair Use

Legend: Introduced (blue) | Reinforced (green) | Proficient (purple)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Introduction to concepts, vocabulary & piracy		I	I	I	I	R	R	P	P	P	P	P	P
How to cite a source		I	I	I	R	R	R	P	P	P	P	P	P
Creative Ownership and Copyright				I	I	R	R	P	P	P	P	P	P
Patents, Trademarks & Copyright					I	I	R	R	R	P	P	P	P
Responsible use of the Internet						I	I	R	R	P	P	P	P
Plagiarism (what is it and how to avoid it)						I	I	R	R	P	P	P	P
File Sharing P2P (legal & security issues surrounding peer-to peer networks)									I	I	R	R	P
Intellectual Property usage as it applies to music										I	I	R	P
Copyright & Fair Use										I	I	R	P

Module: Predator Identification

Recognizing, avoiding online predators.

Important terms: Predator, Grooming Process, SITS, Stranger, Willing Participation

Legend: Introduced (blue) | Reinforced (green) | Proficient (purple)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Cyber Predator/Grooming Process Awareness				I	I	R	R	R	P	P	P	P	P
Identify & comprehend components of grooming process (SITS)						I	I	R	R	P	P	P	P
Strangers Online – anyone met online is a stranger & potential danger							I	I	R	P	P	P	P
Avoiding Online Predators – Identifying risky behaviors online							I	I	R	P	P	P	P
Examining "Willing Participation" – risks posed by pursuing inappropriate online relationships									I	I	R	P	P
Online Relationships – can be potentially harmful									I	I	R	R	P

Module: Cyber Security

Protecting your computer and the integrity of your network.

Important terms: Virus, Anti-Virus Software, E-mail, Spam, Phishing, Pharming, Malicious Code, Spyware, Malware

	Introduced		Reinforced		Proficient	K	1	2	3	4	5	6	7	8	9	10	11	12
Abstract concept of a computer virus						Introduced	Introduced	Reinforced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
E-mail safety & attachments							Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Anti-virus software (what is it and why is it important)								Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Spam, Scams & Phishing									Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient	Proficient
Malicious Code										Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient	Proficient
Spyware											Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient	Proficient	Proficient
Virus Recognition & Action													Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient
National Student Watch (understanding of school's action or disaster plan)													Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient
Homeland Security (terminology & concepts related to potential national security threats facilitated by the Internet)													Introduced	Introduced	Reinforced	Reinforced	Proficient	Proficient
Malware Protection (dangers of & proactive protection strategies															Introduced	Introduced	Reinforced	Proficient
Pharming & Phishing Schemes															Introduced	Introduced	Reinforced	Proficient

Addendum IV –

District Policies

1. Policy 3320 -**CONFIDENTIALY OF COMPUTERIZED INFORMATION**

2. Policy 5322 -**DISTRICT-OWNED CELLULAR TELEPHONES/**
   PERSONAL DATA ASSISTANTS

3. Policy 7314 – **STUDENT USE OF COMPUTERIZED INFORMATION RESOURCES**

4. Policy 7370 – **USE OF ELECTRONIC DEVICES BY STUDENTS**

5. Policy 8270 – **INSTRUCTIONAL TECHNOLOGY**

6. Policy 8271 – **CHILDREN'S INTERNET PROTECTION ACT:**
   INTERNET CONTENT FILTERING/SAFETY POLICY

SUBJECT: CONFIDENTIALITY OF COMPUTERIZED INFORMATION

The development of centralized computer banks of educational data gives rise to the question of the maintenance of confidentiality of such data while still conforming to the New York State Freedom of Information Law. The safeguarding of confidential data from inappropriate use is essential to the success of the District's operation. Access to confidential computerized data shall be limited only to authorized personnel of the School District.

It shall be a violation of the District's policy to release confidential computerized data to any unauthorized person or agency. Any employee who releases or otherwise makes improper use of such computerized data shall be subject to disciplinary action.

However, if the computerized information sought is available under the Freedom of Information Law and can be retrieved by means of existing computer programs, the District is required to disclose such information.

Public Officers Law Sections 84 et seq.

Adopted: 6/29/09

SUBJECT: DISTRICT-OWNED CELLULAR TELEPHONES/PERSONAL DATA ASSISTANTS

The Board of Education recognizes that certain District employees are required to call District-owned cellular telephones/personal data assistants to meet their job responsibilities. Job titles requiring cellular telephones/personal data assistants, including but not limited to Blackberries, shall be approved by the Board of Education each year at the District's reorganizational meeting in July.

The District-owned cellular telephone/personal data assistant shall only be used by the employee to whom the device is issued and shall be used for business purposes only, except for in the event of an emergency. If an employee is to use the cellular telephone/personal data assistant for other than business purposes, the employee will promptly notify the District and reimburse the District within thirty (30) days of the notice of any charges incurred. Employees authorized to use District cellular telephones/personal data assistants shall agree in writing to accept financial responsibility for any inappropriate usage by said employee.

All District-owned cellular telephones/personal data assistants are to remain the property of the District. District-owned cellular telephones/personal data assistants shall be returned immediately upon the employee's termination of employment and/or upon request by the District. Employees who fail to return a District-owned cellular telephone/personal data assistant upon termination of employment and/or at the District's request will be billed for the actual cost of the cellular telephone/personal data assistant and for all charges made after termination of employment and/or the District's request. As with any District-owned equipment, employees must take proper care of cellular telephones/personal data assistants and take all reasonable precautions against damage, loss, or theft. Any damage, loss, or theft must be reported immediately to the Business Office.

At least once a year, the Purchasing Agent shall evaluate the District's cellular telephone/personal data assistant plan and shall recommend any appropriate modification thereto.

Education Law Section 414
Adopted: 6/29/09

SUBJECT: STUDENT USE OF COMPUTERIZED INFORMATION 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 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 (1) 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. 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 us 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.

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

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.

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.

NOTE: Refer also to Policy 8271 – Children's Internet Protection Act

SUBJECT: USE OF ELECTRONIC DEVICES BY STUDENTS

The use of personal electronic devices during the academic school day should not interfere with instruction.

The use and/or possession of electronic devices with photographic, audio, video, internet and/or text messaging capabilities including but not limited to, mobile telephones, beepers/pagers, "walkie-talkies", radios, electronic games, cameras, personal data assistants, iPods, and other devices, creates the potential for violations of privacy as well as threats to testing/examination security. It is recommended that all personal electronic devices not be brought to school as a regular practice.

Thus, the use of these items on school grounds and/or on school property and/or during school hours and/or during any school related activity shall be strictly prohibited unless expressly approved by the Building Principal.

This policy shall be interpreted in a manner inconsistent with the rights of disabled students under their IEPs or Section 504 accommodation plans.

Student Handbook
District Code of Conduct 3410, 7310

Adopted: 8/3/10

SUBJECT: INSTRUCTIONAL TECHNOLOGY

The Board of Education recognizes its responsibility to further the District's educational goals through the use of appropriate and high quality technological materials and equipment. For the purpose of this policy, technology refers to computers, interactive videodiscs, Compact Disc-Read Only Memory (CD-ROM) devices, local area networks, satellite transmission and other telecommunications equipment.

Continuing advances in technology are bringing about changes that have an increasing impact on the way we obtain, process, evaluate and use information. Therefore, the District is committed to:

a)   A comprehensive staff development program to ensure appropriate and effective use of technology.

b)   The preparation of students to utilize multiple types of technology.

c)   The integration of technology within and across all curriculum areas.

d)   The equitable distribution and access to technological equipment and materials for all students.

e)   The promotion of technology as an alternative to traditional methods of gatherings, organizing and synthesizing information.

f)   The provision of sufficient funds, within the budgetary constraints of the Board, for the implementation of technology instruction.

The Board directs the Superintendent or his/her designee to assess the technological needs of the District's instructional program, research and review current materials and make recommendations to the Board.

Adopted: 6/29/09

SUBJECT: 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 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. Further, 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.

Further, 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 schools 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, instant messaging and other forms of direct electronic communications. As determined by the appropriate building administrator, the use of e-mail and chat rooms may be blocked as deemed necessary to ensure the safety of such students;

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

c)   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 identification 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 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. The Commissioner shall provide technical assistance to assist in the development of curricula for such course of study which shall be age appropriate and developed according to the needs and abilities of students at successive grade levels in order to provide awareness, skills, information and support to aid in the safe usage of the Internet.

**SUBJECT: CHILDREN'S INTERNET PROTECTION ACT: INTERNET CONTENT
FILTERING/SAFETY POLICY (Cont'd)**

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 use of the District's computer system (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.

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. Furthermore, appropriate actions will be taken to ensure the ready availability to the public of the District's Internet Content Filtering/Safety Policy, as well as any other District policies relating to the use of technology.

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

Adopted: 6/29/09