
Fulton City School District Technology Plan 2014-2017

Updated June 2015



FULTON

City School District

Expanding Minds and Opportunities

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Introduction

Technology in Support of Lifelong Learning

The following plan reflects the desired outcomes for the integration of technology in teaching and learning in the Fulton School District. Technology can no longer be viewed as an add-on to the teaching and learning process. Technology has become an integral part of how we lead our lives in the workplace and at home. To prepare our students for college and careers, technology use should be integrated in how we instruct and how we analyze learning. Technology in our classrooms must serve as a vehicle to help teachers deliver a variety of learning opportunities to students across many disciplines. In addition, students must gain the necessary skills in the use of technology to enable them to become productive citizens. The outcomes suggested here are designed to provide our schools with a variety of technology-based resources and establish direction for their use.

The district's first long range technology plan, a five-year technology plan, was approved by the Board of Education in January 1996. The district has implemented four Three- Year Technology Plans and a single year extension for the 2010-2011 school year. Through the implementation of these plans, great strides were made to provide students and staff with a technology rich learning environment. The plan being presented for the 2014-2017 school years seeks to enhance what was built as a result of the previous technology plans and prepare to meet the emerging needs of our students and staff. Today's world is marked by increasingly rapid social, political, and technological change. Change happens so quickly in the world of technology that in order to maintain the integrity of a long range technology plan, continuous review and revision is built into the process.

Teaching and Learning in the Information/Communication Age

The Internet has become vehicle with which to revolutionize education. Sir Ken Robinson encouraged the audience at his 2010 TED Talk presentation, "Bring on the Learning Revolution", saying those "who represent extraordinary resources in business, in multimedia, and the Internet to combine technology with the extraordinary talent of teachers to revolutionize education. Not for ourselves but for the future of our kids." It is key to note that it is the connection between the technology resources and pedagogy that impacts change in teaching and learning.

Our students can best be described as the digital generation, or the "net generation" as Don Tapscott dubbed them in his 1998 book "Growing Up Digital". Its members are unique from all who came before them. The net generation has never known life without the Internet. The net generation has developed its own learning culture, demanding information that is immediate, personalized, current, engaging and collaborative.

The Internet offers rich potential for accessing information about anything and everything. IDC, International Data Corporation, has been studying the growth of what is has dubbed the "Digital Universe". In 2012, the Digital Universe in the United States was sized at an 898 Exabyte's. An Exabyte is a billion gigabytes. They project that by 2020, the Digital Universe will grow to a staggering 6.6 Zettabytes (IDC, 2013). Digital learners today access previously unheard of amounts of information and connect with research libraries, experts, and other learners around the globe. Information is available at any time from any place to any Internet user. The world is significantly smaller and more accessible because of the Web. The universality of the Web allows learners to research, communicate, and learn in a global yet

virtual setting. This universal access can create global learning communities with amazing opportunities.

In this type of learning environment the role of the teachers is that of facilitator, guide, mentor and coach. In this environment, the digital generation learners are:

- engaged in authentic work solving real problems,
- working collaboratively,
- assessed on their performance of real tasks,
- facilitated to explore, research and learn,
- And interacting and participating within their learning environment.

The promise of Web-based learning is that by using technology as a tool for research, communication, and collaboration, learners can undertake meaningful and challenging learning that captures the human spirit of discovery. The world in which this digital generation is growing up is one of rapid-fire change. Knowledge needs to be created and problems need to be solved using multiple sources and perspectives. Thinking needs to be fluid and flexible. How the individual responds to change and challenge will determine success in an ever-changing work place.

Just as collaborating and communicating across a global network enhances learning for students, teachers will find that the Internet provides a chance to step outside the walls of their classroom by communicating with colleagues across town, across state lines and across national boundaries on how to achieve the best results for students.

The read and write web, coined Web 2.0, is an exciting new way of using and creating on the Internet where users write and contribute to the online content. In 2008, Steve Hargadon stated that Web 2.0, “Will culturally, socially, intellectually, and politically have a greater impact than the advent of the printing press.” (Hargadon, 2008) This bi-directional capability can and should be used to foster learning in a way consistent with 21st century skill sets.

For the first time, educators and lawmakers across the country have joined together to develop a common core of state standards. The purpose was to develop a, “common core of standards that are internationally benchmarked, aligned with work and post-secondary education expectations, and inclusive of the higher order skills that students need...” (NYSED, 2011) The passage of the Common Core State Standards that were adopted by the NYS Board of Regents in January 2011 has raised the bar on academic rigor. Technology skills and resources are interwoven throughout these standards. Our staff and students are expected to seamlessly integrate technology throughout their curriculum and learning.

Technology poses unlimited learning potential. Due to the sheer hours every day that students are spending in their digital lives, we would be remiss as a district if we did not also address digital citizenship. As Will Gardner, CEO of Childnet International states in the Microsoft Whitepaper on Digital Citizenship (2011), “Children need to be active participants in becoming good digital citizens; they need to define their rights and responsibilities online, and have the skills to exercise their values and judgments to be as safe and secure as possible. Good ‘digizens’ can also be role models for others and inspire the online community in which they live.”

This technology plan addresses the need to help the staff help our students become respectful, responsible and safe in their in-person and digital interactions.

History

The Fulton School District has made tremendous progress in the area of technology integration during the implementation of the five previous technology plans: Five Year Technology Plan 1996-01, Technology Plans 2001-04, 2004-07, 2007-10 that was extended through 2010-2011 and 2011-2014. Before implementing these technology plans, there existed isolated pockets of technology in the district. Students had different levels of access to technology, which was driven by the program they were in. For instance, a high school student who was in a technology or business program would use technology every day as part of their learning process. A student who was in an academic program might have limited access and use of technology. Technology use at the elementary level consisted mainly of lab time which occurred at most once a week. This limited access to technology made it difficult to fully utilize technology as an integral part of the teaching/learning process. Technology cannot become a useful support for students' work if they have access to it for only a few minutes a week. Technology-integrated, project-based instruction requires a high degree of access to the tools of technology and to communication systems. The main focus of the first technology plan (1996-01), was to increase access to technology for **all** students by putting the technology at the point of instruction, in classrooms.

The district has made it a priority to provide equity of access to technology through the implementation of the previous technology plans. There is at least one networked computer in every classroom throughout the school district and we are working diligently to ensure that all learning spaces have interactive technologies. It is the goal of the district technology plan to provide a road map for the implementation of technologies to further enhance the teaching and learning process in the Fulton City School District.

Technology Vision, Beliefs, Goals and Objectives

This technology Plan will focus on the use and implementation of technology as required by the New York State Department of Education (NYSED), the National Technology Education Plan (NETP)/Federal Communications Commission (FCC)/E-rate, and the International Society for Technology in Education (ISTE). Educational technology visions and goals that have been established at the national and state level are listed in Appendix A. The following technology vision, beliefs and goals were developed by the Fulton School District.

Fulton City School District Technology Vision

We envision a learning community prepared to access, analyze, apply and communicate information effectively, enabling all to become successful, contributing members of a changing, information-based global society.

(The learning community consists of students, teachers, staff, administrators, and the community at large.)

FCS D Technology Beliefs

The Fulton School District believes that an ongoing commitment to current technology is an integral component of an educational process designed to:

- prepare students to become competent lifelong learners
- improve student critical thinking, problem solving and decision making skills
- help students work ethically, independently, and collaboratively within a global environment
- enhance the learning environment to meet curricular needs across all subjects and grade levels
- improve equity of access to information, learning tools, and communications for all members of the learning community
- improve instructional strategies to increase student achievement regardless of ethnicity, socioeconomic status, disabilities, learning styles, or abilities
- accurately and efficiently assess, monitor, and communicate student progress
- improve communications among parents, students, teachers, and community
- provide teachers with consistent and high quality professional development opportunities that will allow them to become highly skilled at integrating technology into their curriculum

Fulton School District Initiatives

The Fulton City School District has developed district-wide initiatives that coordinate with goals set by each school's improvement plan. These goals address and include district instructional programs, curricula, assessments, grant supported programs and policies and procedures toward the goal of ensuring student mastery of the NYS Common Core Learning Standards. The Fulton City School District has identified the following overarching goals:

- I. The Fulton City School District shall create a safe, secure and positive learning environment fostering effective relationships among students, parents and staff.
- II. The Fulton City School District shall communicate effectively and intentionally throughout the district and with all communities of which it is a part.
- III. The Fulton City School District shall provide quality educational experiences which meet the needs of all learners.
- IV. The Fulton City School District shall be fiscally responsible through using sound and efficient practices in all matters.

Additionally, the district has completed a Comprehensive District Education Plan covering the 2012-2015 school years. The goals of this plan include the following goals.

- I. Goal 1: Academic: Increase the college readiness rate (ELA 75, Math 80) by 5% annually: (67% to 72% for ELA and 29% to 34% for Math by August 2013), (72% to

77% for ELA and 34% to 39% for Math by August 2014), and (77% to 82% for ELA and 39% to 44% for Math by August 2015).

- a. Objective 1.1: Extend the development of Common Core aligned instruction to all content areas for all students.
 - b. Objective 1.2: Develop knowledge, key skills and a practical roadmap for supporting the academic success of students from poverty and Students with Disabilities.
 - c. Objective 1.3: Implement effective Tier 1 classroom instruction determined through consistent progress monitoring using district-wide Balanced Assessment System that includes formative and summative information.
- II. Goal 2: Behavior: 80% of students district-wide will consistently meet behavior expectations.
- a. Objective 2.1: Continue to refine PBIS system by increasing the level of consistent implementation.
 - b. Objective 2.2: Increase the understanding by all stakeholders of PBIS as a Response to Intervention system for behavior.
- III. Goal 3: Community Involvement: 100% of parents/guardians will have at least one positive personal communication from school staff during 2012-13 school year that is focused on their child's success.
- a. Objective 3.1: Engage families, community members and agency partners in supporting students and their success in meeting the Common Core Learning Standards, behavioral expectations, and attendance.

In order to have **technology used effectively to support the academic goal** it is necessary to accomplish the following:

- Universal availability of technology learning tools for students and teachers
- Teachers will have the skills to effectively integrate technology into their classrooms to achieve improved student learning
- Students will be proficient at using technology tools for information gathering, processing and knowledge construction.

Fulton City School District Technology Goals

Goal 1: Integrate technology and facilitate participation of information sharing, collaboration, and universal design for learning on the Internet throughout the curriculum and content areas to improve student achievement.

Objective: Teachers will create and implement instructional and learning opportunities that apply best practices in teaching with technology integrated throughout.

Objective: Teachers will utilize appropriate technology resources to support and enhance the District's curriculum and the NYS and the Common Core Learning Standards.

Objective: Ongoing professional development programs and self-directed professional development opportunities will be provided that engage staff in the effective use of technology to improve their own productivity and improve student achievement.

Goal 2: All students, Pre-K through 12 Educators and staff will learn, use and take advantage of instructional technologies as powerful and concrete devices of teaching critical thinking and problem solving skills to prepare themselves for post-secondary education or the workplace.

Objective: Staff and Students will use technology resources to access, interpret, analyze, synthesize, apply, create and communicate information.

Objective: Staff and students will use technology resources to assist them in becoming information navigators, self-directed life-long learners, and effective communicators.

Objective: Staff and students will employ technology tools and resources to provide assistive technologies and equal access to curriculum for students of all abilities and disabilities.

Objective: Staff and students will employ technology in the development of strategies for solving problems in the real world.

Objective: Staff and students will extend communication and collaboration with peers, experts and other audiences using telecommunications.

Objective: Staff and students will exhibit ethical behavior in the use of technology.

Objective: Staff and students will demonstrate continual growth in technology skills to stay abreast of current and emerging technologies.

Goal 3: Connections between school and community will be developed through the use of technology to support increased academic achievement and technological literacy of students.

Objectives: Access to information, resources and instructional materials will be provided through the use of the many resources on the Internet.

Objective: Staff and students will use technology to communicate frequently and effectively with parents to support students in achieving their learning objectives.

Goal 4: Staff and students will have access to technology resources to ensure the timely, efficient, and effective delivery of electronic information services.

Objective: Up-to-date equipment, infrastructure, technology based subscriptions and software will be available to staff and students through the implementation of the technology plan replacement schedule, evaluation of and access to emerging assistive technologies and continuous evaluation of present and future technology needs.

Objective: Provide the technology, resources and infrastructure to support ever emerging technologies to enable efficient, effective and meaningful teaching, learning, research and communication.

Technology Competencies For Staff and Students

During the 1999-2000 school year technology competencies were developed for the students and staff of the Fulton City School District. While these competencies are over a decade old, they are still relevant by today's standards. The outcome is changed only by the technology vehicle or device by which staff and students use to attain the competency.

Student Technology Competencies K-12

The key categories for the K-12 learning goals are communication, information and productivity.

Standard I: Communication

Students will use technology to communicate effectively and creatively to support learning in all content areas collaboratively, with teachers, parents and with the greater community.

Standard II: Information Processing

Students will use technology to access, retrieve, evaluate and interpret visual/auditory information to support learning in all content areas.

Standard III: Productivity

Students will apply technology and problem solving resources to maximize productivity and effectiveness to support learning in all content areas.

Grade specific K-12 technology standards, benchmarks and performance objectives are in Appendix C. These goals should be considered by teachers when integrating technology into the curriculum and incorporating the use of technology into the classroom.

Staff Technology Competencies

FCSD Teacher and Administrator Technology Competencies are listed in Appendix C. The teacher competencies were used to develop a self-evaluation inventory that was originally administered to teachers during the 99-00 school year. The survey has since been updated and re-administered in 2002, 2011 and subsequently in 2014. The survey results are in Appendix D.

A comparison was done of each of the questions using the raw data that was obtained during the administrations of the survey. The comparison showed that teachers had made gains in their comfort and ability to use technology in a variety of different areas.

This data from this survey is being used to assess the status of technology use and in staff professional development planning.

The results of the survey are very encouraging. The results confirm the belief that providing increased access to technology and staff development would increase teachers' proficiency in effectively integrating technology into instruction.

The survey was comprised of open-ended questions regarding the hardware and software the staff used professionally for their own productivity and with their students. Other questions asked teachers to rank themselves on their level of integrating technology and what resources they used most when integrating technology in to instruction. Teachers were also asked what form and content they prefer for technology integration staff development. The survey and results are in Appendix D.

National Educational Technology Standards (NETS)

The International Society for Technology in Education (ISTE) developed technology frameworks, standards and performance indicators to guide teachers, technology planners, teacher preparation institutions and educational decision makers in establishing enriched learning environments supported by technology. Forty-nine out of fifty-one states have adopted, adapted, aligned with or referenced the NETS in their state department of education documents. New York State has embraced the NETS. Many educator resources have been developed to support the use of the NETS including technology integration guides, lesson plans, rubrics and online assessments. The Fulton Technology Integration Committee has recommended the district use the NETS as one of the technology benchmark guides for students, staff and administrators. Appendix B contains additional information on the NETS standards and rubrics.

National Education Technology Plan

Late in 2010, the Office of Education released the National Education Technology Plan (NETP), *Transforming American Education: Learning Powered by Technology*. The plan consists of goals in 5 essential areas: learning, assessment, teaching, infrastructure, and productivity. These essential areas and goals are covered in detail in Appendix A. The goals focus on a 21st century skills model of learning infused with technology. As the plan states, "Technology-based learning and assessment systems will be pivotal in improving student learning and generating data that can be used to continuously improve the education system at all levels." (National Education Technology Plan, 2010) The Fulton Technology Integration Committee will be using the NETP as benchmark guides for students, faculty and staff.

Software

Each network computer is equipped with management, communications, and application software. The district has standardized on the Microsoft products for the operating system software and productivity software. The Microsoft Office Suite is used for administrative and instructional applications such as word processing (Word), database (Access), spreadsheet (Excel), desktop publishing (Publisher), presentation (Power Point), Internet browser (Internet Explorer), and e-mail and calendars (Outlook). The District has upgraded to an Educational agreement with Microsoft so that up to date versions of the operating system and office suites are always available.

In addition to the Microsoft Office Suite instructional computers have access to Adobe's Design and Web Premium suite of software that includes Acrobat Professional, Photoshop, and Contribute. Charts of administrative and instructional software are in Appendix G.

In addition to software that is loaded and accessed locally teachers and students access countless web based resources. Software that is focused on reading literacy is Renaissance Learning's Star Enterprise Reading and Early Literacy, Scholastic Reading Inventory, Scholastic Read 180, Fast ForWord, Read Naturally and Learning A-Z.

To assess and practice mathematical skills, the teachers and students in the Fulton City School District use Renaissance Learning's Star Math enterprise and IXLMath. As the cloud based learning tools become more robust, the district evaluates and selects the best tools available to support students and teachers in the learning process.

Students in grades three through twelve prepare for state assessments using a Web-based program called Castle Learning.

All district servers and computers have Sophos anti-virus software. Every effort is made to maintain software at a functional revision level.

The district conducts grade level and department meeting on a regular basis where teachers share how they are presently using technology in instruction and explore new ways they might integrate technology in the future. Technology integration is also an item for discussion at the monthly district Curriculum Cabinet meetings and building School Improvement Team meetings. The District Technology Integration Committee meets monthly to discuss technology needs, trends and planning for the district. Information is shared between the building SIT and the district instructional technology committee through the Director of Technology, and teacher representatives who serve on both committees.

Hardware

All classrooms within the district are equipped with at least one computer workstation connected to the district network and the Internet. Each elementary building has clusters of five (5) computers in classrooms, additional workstation access in the library a static computer lab and at least four (4) mobile labs that consist of at least twenty laptops. The junior high has clusters of five (5) computers in English, social studies, and mathematics classrooms. There is a dedicated lab in the technology department, three (3) general purpose labs, four (4) mobile lab carts, a special education mobile lab, one (1) twenty-five (25) tablet mobile lab and additional workstation access in the library. The high school has four (4) dedicated labs in the technology department, two (2) labs in the business department and three (3) general purpose labs. There is a mini labs used by the English department. There is also additional workstations in the library. G. Ray Bodley High School has four (4) mobile labs shared by all departments, one (1) mobile lab with seven (7) laptops and probeware in the science department, one (1) mobile lab with thirteen (13) laptops shared by the science and mathematics departments and one (1) twenty-five tablet mobile lab shared by the science and mathematics departments.

Distance learning is a new service the district implemented in the 2013-2014 school year through an Oswego BOCES service. Teachers and students are now able to take advantage of the many resources available by virtual connections between classrooms, museums and field trip locations.

Interactive Whiteboards (IWB) have proven to engage students and staff in a tremendous way. This technology is effective at all levels of education and instruction of the 'net generation' in a manner they both crave and understand. Our initiative to implement IWBs began during the summer of 2010 and has progressed where all core area classrooms are currently equipped with interactive technologies. It is projected that all classrooms, including special area classrooms, will be outfitted with IWBs by the end of the 2014-2015 school year.

A list of computers by location is in Appendix F. A chart of summary data on hardware is in Appendix F. A comprehensive database of all hardware with model numbers, serial numbers and location is maintained in electronic format by the IT department.

Infrastructure

An infrastructure has been built that connects classrooms within buildings, connects buildings together, and then goes beyond the district to connect our network first to Oswego BOCES, then to OCM BOCES and out to the public Internet. The high school is the hub of the district WAN (wide area network). The district's current network is a routed network using leased fiber optic lines from Fibertech to interconnect the school buildings and the education center back to the high school. Each fiber line, connected to a layer three (3) switch, communicates at up to 1 Gigabit per second. The junior high is connected to the high school by a district owned fiber optic cable that supports up to 10 Gigabits of communication per second. Internet access is provided by a BOCES leased service. The BOCES network connection is accessed via the high school. This connection which connects us from the high school to Oswego BOCES then to OCM BOCES is currently a Time Warner line metered at 100 megabits per second. The connection from OCM BOCES to the public Internet is currently at 60 Megabits per second.

Each building has a fiber backbone connecting wiring closets within them. Fairgrieve and Volney run a backbone of 1 Gigabit per second. The data wires from wiring panel closets to desktops in these buildings are 100 Megabits per second. These networks will be upgraded as a part of the Excel 2012 project to a 10 Gigabit backbone and 1 Gigabit speed to the desktop. As part of the Excel 2007 project, the wiring in G Ray Bodley High School, the Education Center, and the intermediate wing at Lanigan was upgraded to category 6a. The switches and battery backup units in wiring closets were upgraded also. The backbone in these newly wired buildings now runs at 10 Gigabits per second. Data runs from wiring panel closets to desktops at 1 Gigabit per second. Similar upgrades occurred in the Excel 2009 project for Granby, the junior high school and the primary wing at Lanigan.

During the 2010-2011 school year, G. Ray Bodley high school was setup with wireless throughout the instructional and office areas. In the 2011-2012 school year, G. Ray Bodley was setup with building wireless coverage. In the successive years all buildings except Volney and Fairgrieve were setup with building wireless coverage. At the completion of the data wiring through the Excel 2012 project, both Volney and Fairgrieve will be setup with building wireless coverage.

Originally Novell Netware was the network operating system on the district's servers. A migration plan to move the district network from a Novell/Windows mixed environment to an exclusively Windows server environment was completed in the 2001-2004 plan. Currently, the IT department has implemented VMWare in the high school data center, Hyper-V in the other buildings and a number of Storage Area Network (SAN) devices to virtualize and consolidate servers. In this process, servers are being converted to Windows Server 2012.

The present server room which is located at G Ray Bodley High School is the hub of the district's WAN (wide area network). This facility contains all of the servers that provide district-wide services such as email and the district website. This room also contains telecommunication equipment. As part of the Excel 2007 project, a new state-of-the-art data center was built at G. Ray Bodley. The new data center is connected to a backup power source provided by a Liebert NX battery backup unit and a generator.

Internet content filtering is provided by Lightspeed Systems and is a hardware unit in line with our network. An email archiving appliance has been installed to allow the District to be in

compliance with federal rules of civil procedure, Sarbanes-Oxley. A firewall is in place to restrict unauthorized access to the district network from outside sources.

Charts of the current district network are in Appendix I.

Technology Needs Assessment

The Fulton City School District has developed a comprehensive and effective technology program through the support and dedication of the Board of Education, community, parents, students, faculty and staff. Technology planning is a collaborative and concerted effort to gather input and feedback from many stakeholders. In an effort to determine how well the present level of technology and support was meeting the district needs an online survey was developed and administered to various members of these groups. This survey is a follow up to the surveys completed in previous years.

In the fall of 2013, our staff was asked to complete a survey to rate their use of technology and the quality of their professional development and technical support. This is the first survey to include questions about digital citizenship and ethics. The survey also included open ended questions to allow participants to provide further information. The survey document and survey results are in Appendix E.

The district technology integration committee analyzed the input provided from the survey and made the following observations. The item that was ranked the highest priority by all respondents was access to an up to date, reliable workstation. The next highest priority by all groups was availability of technical support staff. In addition to these areas the following items were in the top priorities for staff: access to software and files from home; email for communication; staff development; robust connection to the Internet. Other items that were a top priority for students, parents and community members were: training for teachers; robust connection to the Internet; collaborating and communicating through email and teleconferencing; access to information about class assignments and instructional support materials through the district web site; and student access to a variety of rich instructional material and resources through the district network and the Internet.

As part of the process of identifying need, the technology committee performed a gap analysis of the present status of technology and a desired state for technology in the district. They identified the present state as outlined below.

Present status:

- ◆ single station or cluster in classrooms
- ◆ elementary level- computer lab/Media Center once a week
- ◆ secondary level – dedicated labs for class or sign up for lab time
- ◆ mobile labs – access to four mobile lab carts per elementary and middle level schools, seven at the high school
- ◆ some access to digital cameras, video cameras
- ◆ access to IWBs, document cameras and LCD projectors
- ◆ infrastructure
 - fiber backbone running at 10 Gig in all but two of our buildings
 - Fiber backbone in all buildings running at 10 gbps (Fairgrieve and Volney were upgraded to meet this standard in the summer and fall of 2014)
 - 1 gbps to desktop in all buildings (Fairgrieve and Volney were upgraded to meet this standard in the summer and fall of 2014)
 - Leased fiber between buildings (1 gigabit) except the JH which is trenched fiber at 10 mbps

- ◆ LAN based applications, storage
- ◆ Student database that encompasses all of the student data from SchoolTool, State and local assessments, behavior, attendance and other sources is in the beginning stages of development
- ◆ Web presence
- ◆ On-going professional development
- ◆ Technical support team
 - Network Administrator
 - LAN technicians
 - PC Support (1 technician for 3 buildings)

Based on a review of the technology goals and the data from the needs assessment the district instructional technology committee identified a desired state for the level of technology in the district which is listed below.

Desired state:

- ◆ 1-to-1 ratio computers to teachers
- ◆ More access to computing devices for entire classrooms of students
- ◆ Use of blended learning to deliver specially designed instruction to every student
- ◆ mobile lab(s) for each grade level/department each building
- ◆ mobile teacher station
- ◆ access to video cameras, digital still cameras, scanners by grade level/department
- ◆ video conferencing equipment available for classroom to classroom, home to school and home to hospital connections
- ◆ Infrastructure
 - State of the art wiring connections in buildings and between buildings
 - Secure and robust wireless infrastructure to support mobile devices that are district owned and student/community owned
 - Centralized servers
 - Centralized management of resources
 - Access throughout the district to software and data files
 - Remote access from outside the district to software and data files
 - WAN storage
 - Robust connection to the Internet
- ◆ Universal use of the Web to
 - access information
 - access resources
 - collaborate and communicate
 - participate in distance learning and virtual field trips
 - to publish or provide information and instructional support materials
- ◆ More effective use of a district Intranet
- ◆ More advanced development of student data to present ways to aggregate and disaggregate data
- ◆ On-going professional development
- ◆ Technical support team
 - Network Administrator

- LAN technicians
- PC Support technicians for each building
- Technology Integration staff development person

This list reflects the ideal state which would be attainable only if there were no budget constraints. Priorities must be set and purchases planned as funds are available. These technology needs are reflected in the recommendations in this technology plan.

The following table gives the status of accomplishing our goals:

Task	Completed			Comment
	No	Somewhat	Yes	
At least one networked computer per classroom			✓	
Workstation replacement schedule		✓		If the computers are not replaced according to at least a 5 year replacement schedule the computers will be unusable.
One LCD projector, IWB and document camera per classroom			✓	Replacement funding is a concern as we progress with our implementation of IWB technologies in every classroom
Digital cameras, camcorders		✓		See comment above for LCD projectors.
Mobile labs in all buildings		✓		There are wireless laptop carts in each building. Insufficient funds in the technology budget constrain the number of mobile device carts available.
Physical Security for all servers and telecommunications equipment in the District, NOC, MDF's and IDF's.			✓	All telecommunications equipment should be in rooms that are lockable, and climate controlled. Only IT staff should be able to physically access the rooms where this equipment is located. Hopefully this will be accomplished through the Excel projects.
Point-to-point distance learning over IP	✓			Insufficient funds have been available to purchase the equipment.
Replace T1 network between buildings with a leased gigabit network			✓	
Upgrade layer 3 gigabit switch at main telecomm room			✓	This was accomplished in the Excel 2007 and 2009 projects.
Replace unmanaged hubs and switches with managed switches capable of supporting QoS		✓		Data and electrical wiring and switches are being upgraded through the Excel 2012 project which will address Fairgrieve and Volney.
All cable in buildings adhere to TIA/EIA 568B Category 6A or better wiring standards		✓		Data and electrical wiring and switches are being upgraded through the Excel 2007, 2009 and 2012 projects.
Replace the HS – J H multi-mode fiber with single mode fiber			✓	The line between the high school and the junior high was replaced as part of the Excel 2007 project.
Build infrastructure to support secure wireless devices		✓		Wireless access points and the necessary switches to manage them have been installed as part of the Excel projects but is not universal among all buildings.
Implement VM Ware			✓	The IT department staff is in the process of implementing VM Ware as servers are replaced.
Build Data Center			✓	Building a data center was part of the Excel 2007 project

Task	Completed			Comment
	No	Somewhat	Yes	
Alternative or backup power			✓	The high school is the hub of the district network. All district-wide servers and telecommunications equipment is located at GRB. If GRB loses power computers in other district buildings lose connectivity to network resources. A generator has been provided. The purchase and installation of equipment was part of the Excel 2007 project.
Data archival and retrieval to be in compliance with legislation			✓	
Disaster Recovery Plan			✓	
All workstation Operating Systems at Windows 7			✓	
Microsoft Office Suite at 2010 level on workstations			✓	The Microsoft EES program allows the district to use up to date Office productivity tools.
One PC Support Specialist per building		✓		Presently there are two PC Support Specialists who cover the six school buildings. Itinerants from OCM and Oswego BOCES assist in maintaining the schools. They also cover the education center as available.
District Web site		✓		Investigate updating the District's Website with improved aesthetics, functionality and ease of use.
Web content created by teachers		✓		A few teachers create and post instructional materials on the Web. The number of teachers using Blackboard or external web hosting sites to create Web content has been increasing.
District Intranet for staff and BOE			✓	

SECURITY, PRIVACY and POLICIES

During the early stages of implementation of the first technology plan (96-01) a policy, including regulations pertaining to students and staff, was developed which lays out the rules and responsibilities for appropriate use of the district network and the Internet. A committee of teachers and library media specialists developed the policy. The AUP is distributed to students and staff through their respective handbooks. Students sign a copy of the AUP which is kept on file for each school year. Additionally, starting in September of 2010, all users are required to accept the AUP prior to logging onto any district owned computer.

The Children's Internet Protection Act (CIPA) was signed into law on December 21, 2000 (Public Law 106-554). The Act places restrictions on the use of funding that is available through the Library Services and Technology Act, Title III of the Elementary and Secondary Education Act, and on the Universal Service discount program known as E-rate. Under CIPA, no school or library may receive funds unless it certifies that it is enforcing a policy of Internet safety and uses technology which blocks or filters certain material from being accessed through the Internet. The district has a Board policy in place which is compliant with the requirements of CIPA. The district also uses filtering technology called LightSpeed, subscribed to through OCM BOCES, to prevent access to unacceptable content on the Internet.

During the implementation of the Technology plan 2001-04 the need for a Web publishing policy emerged. This need was addressed by the Instructional Technology Committee and a Web publishing policy was developed. These policies were reviewed by the District Instructional Technology Committee, by district administration, and district legal counsel. They were then recommended to the Board of Education for their adoption. The policies are reviewed annually and revised as needed. A copy of the AUP, Internet Safety Policy and Web Publishing Policy are in Appendix J.

On September 8, 2010, then Governor David Patterson signed into law the Dignity for All Students Act. This law addresses bullying in not only the traditional form but also electronic cyber-bullying. District policies were updated to reflect this new legislation.

Access to the network is restricted to authorized users with an assigned ID and password. Passwords expire every ninety days for faculty and staff. The technical staff is required to change their password every 42 days. End users are provided with storage on network servers and SAN devices. The software programs that are accessible to users are determined by the needs of the individual and the district's ability to procure licenses. Active Directory Group Policies are utilized to control access levels, profiles and printer connections.

The school district currently uses Sophos anti-virus software to protect the network from virus, spyware and malware attacks. All network computers and servers are on a managed schedule of updates.

A firewall is in place to restrict unauthorized access to the district network from outside sources. Since no filtering or firewalling product can prevent all occurrences of inappropriate access attempts, monitoring/reporting software has been implemented to alert IT staff when these incidents are occurring.

Electronic student records are warehoused at the OCM BOCES Regional Information Center via a subscribed COSER service. Electronic financial and personnel records are also warehoused at OCM BOCES Regional Information Center via a subscribed COSER service. Any public source that wishes to access district electronic records is required to make a request through the Freedom of Information Act (FOIL) and follow procedures outlined in district, state,

and federal policies. Any electronic records not covered under FOIL will be considered confidential, private and not disclosed to the public other than law enforcement agencies.

Support

Technical Support

The following personnel in the IT department provide technical support: Network Administrator (1), LAN technicians (4), PC Support Specialists (2) and Itinerants from OCM BOCES (.4) and Oswego BOCES (.6). Providing the appropriate technological tools and capabilities for our staff and students has placed huge demands on the technical support staff. The number of computers, applications and the complexity of the network have all increased as previous technology plans have been implemented.

“... The corporate standard is to have one support person for every 50 PCs.” (Beattie, R.M., 2000) Applying this corporate standard to our network would require a staff of 30 technicians to support our end users and is unreasonable. Our existing infrastructure of approximately 3000 computers, 45 servers, and infrastructure equipment places our support ratio at approximately 400 computers per technician. This support structure is high compared to organizational and industry standards. We need to continue to increase the level of support until the appropriate balance or ratio between technicians and devices is achieved. The necessary support infrastructure must be built so that our faculty, staff and students best implement technology in their everyday routines. The realities of funding will cause the district to continue to creatively problem solve and attempt to balance district technical support needs.

Best practice in a technology environment dictates that redundancy is built in to the system. This applies to the technical support part of the system as well. To accomplish this there are multiple technicians at each level. Cross- training among our technicians is an area we are working to improve upon. This is necessary to create a consistent network regardless of time off for technicians. The ability to provide backup at the network administrator level is an area that needs to be improved. The network administrator position is a critical position in the IT department and in the district. Every effort should be made to correct the vulnerability created by the lack of backup for the network administrator.

The chart in Appendix K represents recommended improvements in the level of technical support. The positions in gray are additional positions at the desk side support level. Once this goal has been achieved District needs will continue to be assessed by the Director of Technology and the District Technology Integration Committee and recommendations will be made for modifications to services when necessary.

Professional Development

Rationale

The continuing emphasis for technology integration is to ensure that technology is used effectively to create new opportunities for learning and to promote student achievement. If technology is to be used to produce improvements in student achievement, teachers must see a direct link between the technology and the curriculum for which they are responsible (Byrom, 1998). Teachers must determine the purpose of using technology in the classroom, as determined by the specific educational goals and the common core learning standards. Technology can support meaningful, engaged learning for students if it goes beyond the development of isolated skills to the development of critical thinking and problem solving. Technology used to its potential can support inquiry, enhance communication, extend access to resources, guide students to analyze and visualize data, enable product development, and/or encourage expression of ideas.

To transform classroom technology from hardware, software and infrastructure into tools for teaching and learning, our teachers and students must become knowledgeable about its use and skilled enough to integrate it effectively into their learning. To help teachers incorporate technology in ways that support powerful instruction requires an array of professional development opportunities. Professional development for effective technology integration should include, but not be limited to, mentoring, modeling, workshops, special courses, structured observations, summer institutes, and study groups.

Professional development must go beyond training where technology is involved. It must incorporate the implications to learning skills and encompass a means to help teachers learn new skills and develop insights into pedagogy and their own practice. We must find ways to link the innovative power of technology to extend a deeper learning and understanding in order to promote high standards and continuous learning for all (McNamara, Grant, & Wasser, 1998).

Professional development can no longer be considered an event that is done “to” teachers as simply the primary deliverers of content. Staff need to be actively involved in the professional development process. It is a complex and intellectually demanding task requiring the same rigorous level of preparation and career-long learning we expect of other professionals. We can accept no less if our students, teachers, and staff are to become more accomplished learners.

With the advent of instructional technology and its influence on the ways teachers teach, we have the opportunity to construct a long-term developmental process that focuses on fundamentally changing classroom practice. We are also obligated to provide meaningful, engaged learning to a diverse student population. To meet these challenges we must redefine our notion of professional development as a central part of the teaching-learning process (Cook & Fine, 1997).

Professional development is at the core of systemic improvement efforts. It is not an addition to them. Effective professional development is intensive and sustained; it occurs through collaborative planning and implementation; and it engages teachers in opportunities that promote

continuous inquiry and improvement that is relevant and appropriate to meet the needs of the Fulton City School District.

It is critical that much of the adult learning focus upon the issue of improved teaching and learning including how technology can be integrated into the regular classroom program to support student thinking and learning. While there is a place for the narrow focus upon specific software programs and skills, it will not bridge the gap between theory and practice. Staff development must be research-based and data driven. With the advent of web based collaboration resources, professional development can move beyond traditional one shot in-service days, weekends or during summer and become embedded into the daily lives of teachers and staff. The model that follows is based on what the research identifies as current best practices for effective professional development including:

- Activities that are conducted in school settings and linked to other school wide improvement efforts
- Teachers being actively involved in planning, setting goals and selecting activities
- A variety of differentiated instructional opportunities are offered
- Creating an environment where the use of wikis, blogs, and social network sites allows for professionals to share ideas, practices and feedback
- Providing ongoing support and resources
- Instruction that is concrete, data driven and includes ongoing feedback, supervised practice and assistance on request

Professional Development Implementation Strategies Applied To Technology

1. *Activities will be conducted in school settings and linked to other school wide improvement efforts.*
 - Whenever possible instructional technology activities will be held in the building of the department/grade level requesting and participating in the instruction. In addition, these activities will be developed and presented within the context of other non-technology driven methodologies and rooted in adult learning theory.
 - Significant efforts will be made to coordinate and integrate technology driven professional development with other professional development initiatives within the district.
2. *Teachers will be actively involved in planning, setting goals and selecting activities*
 - Surveys will be used to determine the relative level of skills of the instructional and administrative staff. The results of the survey will be used, in conjunction with other data, to support on-going professional development planning.
 - As per the district's Professional Development Plan and Annual Professional Performance Review, teacher input will be a key component of the professional development program
3. *A variety of differentiated instructional opportunities will be offered*
 - Attendance in BOCES sponsored professional development activities will continue to be supported

- Local programming will continue to be offered embedded in the work day with professional development partnerships and teacher leaders, in the summer as well as before during and after the contractual school day. Stipends and release time will be awarded as appropriate.
 - Professional development will be an ongoing process and integral part of teachers' professional lives. It will take on a variety of forms that will engage teachers in activities such as: visitations, workshops, follow-up, technology support groups, peer coaching, mentoring, modeling, study groups, action research, collaborative planning and evaluation, discussion and reflection on new procedures, e-mail and mail groups to form peer groups to collaborate and communicate about technology, attend and present at conferences to learn more and share ideas about teaching with technology.
4. *Creating an environment where the use of wikis, blogs, and social network sites allows for professionals to share ideas, practices and feedback*
- Participation in social networks
 - Use of shared bookmark sites
 - Use of wiki's, blogs, and other public resources to integrate professional development ideas and theories in practice
5. *Providing ongoing support and resources*
- As the accessibility to hardware and software increases for the instructional staff, instruction in their effective use will be expanded
 - Support for local and regional grant writing and acquisition will be continued and expanded as appropriate.
 - With additional support, a combination of theory, demonstration, practice and feedback will be sustainable. Sustained practice of was found to be the critical element in the successful implementation of new teaching strategies and behaviors. (Showers, 1987).
6. *Instruction will be concrete, data driven and include ongoing feedback, supervised practice and assistance on request*
- Technology integration instruction will be designed and presented within the context of other non-technology driven methodologies.
 - Use of the student data to better instruct our students
 - With additional support, expertise will be available within the building(s) as well as the district. This will serve to promote continuous inquiry and improvement on the part of the classroom teacher.

Support Staff Requirements - Turnkey Model

Technology in the classroom does have an important role to play in K-12 education. It can:

- Make learning more interactive.
- Make learning more enjoyable.

- Individualize the curriculum to match learners’ developmental needs and personal interests (learning styles).
- Capture and store data in support of data-driven decision making.
- Enhance the collaboration between schools and their communities.
- Improve methods of accountability and reporting.

If we are to maximize our investment in the tools of technology then we must invest equally in the human factors related to technology instruction. The success or failure of instructional technology is more dependent upon human and contextual factors than on hardware and software. A meta-analysis of 40 comparative studies found that the amount of technology-related teacher instruction is significantly related to the achievement of students receiving technology-related instruction. (Ryan, 1991). The Fulton School District would be well served by continuing to support the turnkey model of disseminating technology-related teacher instruction. Individuals skilled in classroom instruction, as well as the application of technology, will continue to provide resources for classroom teachers. As the skills and abilities of the classroom teachers increase, they in turn will continue to provide support for one another.

To that end, the following positions should ensure that the technology will have the desired positive impact on student learning.

Staff Development Specialist: District –wide whether in house or partnership

- Assist the Executive Director of Curriculum, Assessment and Instruction in coordinating professional development initiatives within the district including instructional technology efforts
- Assist the Executive Director of Assessment and Instruction with coordination and evaluation of the staff development program
- Develop and disseminate district staff development schedules
- Administer and analyze yearly staff needs assessment
- Participate on District Technology Integration Committee
- Assist the Executive Director of Curriculum, Assessment and Instruction in the review and revision of the district’s PDP and APPR
- Write and administer technology related grants as required in collaboration with Director of Assessment and Instruction
- Provide instruction to Turnkey trainers/Mentors as needed
- Provide instruction to teachers at building and district levels as needed
- Provide instruction to administrators as needed

Turnkeys/Mentors/Coaches

- Provide building level technology integration instruction to teachers
- Demonstrate model lessons
- Assist teachers in integration planning process
- Provide coaching, assistance, and documents via electronic platform to assist teachers when not physically available to work with staff

Professional Development Program Planning and Facilitation

- Continue to develop the long rang plan for the integration of technology into the general curriculum through the District Technology Integration Committee
- Work with building level Technology Committees to focus their efforts on creating a local professional development program that addresses the needs of that building and is commensurate with the district's professional development plan
- Pursue partnerships with higher education, and other organizations and resources, to assist in the development of a district wide technology integration assessment program
- Work with teams of teachers who are ready to advance to a more sophisticated level of curriculum development and instructional design in order to make technology a transparent tool in their classrooms

Professional Development Program

- Continue to offer “basic tools” sessions for staff as well as smoothly integrate software upgrades and updates.
 - Effective use of office productivity applications
 - Desktop and digital publishing
 - Using Internet resources
 - Learning Management Systems
 - Interactive Whiteboard technologies
 - Some content/grade level-based software
- Continue working with grade level and subject area teams on developing a level of comfort with a broad range of software, hardware and web based resources
 - Use of digital imaging and creation devices and software
 - Use of content area specific devices, tools and software
 - Expand the use of robotics materials and software
 - Using classroom/student management software (i.e. – SchoolTool, Schoology)
 - Selecting appropriate software and other tools
 - Introducing teachers to the process of instructional re-design to include technology
- Establish a team of teachers skilled in the use of teaching, learning and assessment practices to measure higher-order thinking skills
- Establish a team of teachers skilled in blended learning techniques to meet the needs of all learners that incorporates the use of technology.
- Establish a team of teachers skilled in the use of data aggregation and disaggregation to guide and affect instruction.
- Instruction will be concrete and include ongoing feedback, supervised practice and assistance on request
 - With additional support, expertise will be available within the building(s) as well as the district as needed on a daily basis. This will serve to promote continuous inquiry and improvement on the part of the classroom teacher.

Technology Plan Implementation

The technology plan will be implemented to provide a basic core of technology that is common to all buildings. The district will continue to build and strengthen the computer/telecommunications network to allow for maximum communication and collaboration, as well as universal access to network resources throughout the community, state and world.

Equipment and software:

1. Each classroom in every building will be provided with at least one computer connected to the districts network capable of accessing resources within the district, community, state and world.
2. Each network computer will be equipped with management, communications, and application software.
 - Update existing software in order to maintain a functional revision level.
 - Purchase core set of software that is installed on all machines.
 - Client software: Windows client,
 - General applications software: Microsoft Office suite, Adobe Design and Web suite, Interactive Board and Document Camera software.
 - Management software to provide logging, antivirus and endpoint management and power saving features
 - Purchase content specific software selected by teachers and/or administration to achieve specific teaching objectives ex. AutoCad- Inventor, Learning A-Z, Castle Learning, Fast ForWord, Scholastic Read 180, Read Naturally, IXL Math and Star Enterprise Reading, Math and Early Literacy.
3. All schools will be provided with at least one fixed computer lab consisting of at least 28 workstations and mobile device labs inclusive of computers and tablet technologies.
4. Extend the implementation of mobile labs and wireless infrastructure in instructional buildings to expand access to technology.
5. Implement state-of-the-art distance learning environment through the use of interactive video conferencing equipment to provide for classroom-to-classroom collaboration and virtual field trips. This distance learning equipment would also be used for home to school and home to hospital connections for students who are unable to attend school due to serious illness.
6. Provide all classrooms with an interactive whiteboard and document camera.
7. To maintain what was built through the implementation of the District's first four technology plans (1996-2010) equipment and software must be systematically replaced. Twenty per cent (20%) of the equipment will be scheduled to be replaced each year. The following table is a proposed schedule to replace existing equipment and purchase equipment for new programs such as video conferencing and Interactive Whiteboards.

Technology Replacement Schedule

Technology Plan 2014-17 *	
14-15	<p>Elem. – Teacher laptops for teachers, one additional mobile lab per elementary building, all fixed lab replacements.</p> <p>JH- Teacher laptops for all teachers, one additional mobile lab, replacement of 2/3 of the fixed labs. Complete Interactive Whiteboard, Document camera installation building wide.</p> <p>GRB –All fixed labs will be replaced, teacher laptops for all teachers, additional mobile lab. Complete Interactive Whiteboard, Document camera installation building wide.</p> <p>District – New Email Archiver device, Continue to move building servers to Hyper-V environment, upgrades to infrastructure, building wireless at Fairgrieve Elementary and Volney elementary, new ESX servers to support VMWare infrastructure</p>
15-16	<p>Elem. – Two additional mobile device carts in each building, replacement of 10% of Interactive Whiteboards, Document cameras, Video cameras, Digital Still cameras as necessary</p> <p>JH- Two additional mobile device carts and replacement of 10% of Interactive Whiteboards, Document cameras, Video cameras, Digital Still cameras as necessary</p> <p>GRB – Two additional mobile device carts and replacement of 10% of Interactive Whiteboards, Document cameras, Video cameras, Digital Still cameras as necessary</p> <p>District – Administrative and clerical machines replaced, replace 3 SAN devices that support existing VMWare infrastructure, upgrades to wireless infrastructure to increase density</p>
16-17	<p>Elem. - Two additional mobile device carts in each building, replacement of 10% of Interactive Whiteboards, Document cameras, Video cameras, Digital Still cameras as necessary</p> <p>JH- Two additional mobile device carts, update PLTW equipment and replacement of 10% of Interactive Whiteboards, Document cameras, Video cameras, Digital Still cameras as necessary</p> <p>GRB – Two additional mobile device carts, update PLTW equipment and replacement of 10% of Interactive Whiteboards, Document cameras, Video cameras, Digital Still cameras as necessary</p> <p>District – District custodial, operations support, student support machine replacements, core switch replacement at G. Ray Bodley High School, add SAN equipment to backup location and to NOC</p>

* Each year this schedule will be reviewed and revisions made as necessary.

8. Expand the use of the Internet for Web-based learning activities. This would include accessing and creating resources.
9. Continue to upgrade power, wire and switch infrastructure.

Infrastructure:

Access to the global network of multimedia information and online learning communities requires building and maintaining an extensive technology infrastructure.

The network infrastructure will be evaluated and improvements made as necessary and as the budget allows in order to:

- Provide access to resources
- Provide adequate stability and speeds on the network

The district will continue to experience significant changes in its need for server and storage based resources. A more robust storage area network infrastructure is required to support District use.

Support:

Technical Support

1. Presently the ratio of computers to technicians is 400 to 1. This should be decreased to 350 PC's to 1 technician, which is still more than the industry standard.

At the district level

- Presently a Network Administrator and four LAN Technicians provide support for the network infrastructure.
- One of the LAN technicians assumes primary responsibility for the LAN and WAN infrastructure, remote access services and Firewall and VPN services.
- One of the LAN technicians assumes primary responsibility for the district Web site, staff IntraNet and district database and reporting services.
- One of the LAN technicians assumes primary responsibility for the district storage, software packaging, imaging and virtualization services.
- One of the LAN technicians assumes primary responsibility for network use logging, account creation and inventory processes.
- The LAN technicians share responsibility for helpdesk, account maintenance and inventory follow up.
- Presently there is one PC Support Specialist for every three buildings. Ideally, a 0.5 PC Support technician per building is needed to provide adequate technical support.

Support of Instruction

1. Up until the 2011-2012 school year, the elementary computer labs Technology Teacher Assistants, under the direction of the Library Media Specialist, provided instruction to students in the computer labs and assistance to teachers and students using instructional technology in classrooms. This is a valuable program that was removed due to financial burdens. The district should investigate ways to re-implement features of this program.

2. Teacher Aides in secondary labs provide assistance to teachers and students using instructional technology.

Staff Development

Technology staff development will be part of the District Staff Development Program

1. District-wide technology integration staff development is implemented across all faculty and staff so that we best implement new technologies.
2. Resources for technology staff development will be provided through Oswego BOCES Model Schools Program, OCM BOCES Learning Technologies Department, and other vendors.
3. On-going and continuous support will be provided for identified staff development needs.
 - a. Workshops will be conducted to provide
 - specialized hardware/software training
 - training on the integration of technology in the classroom
 - training on developing innovative instructional practices
 - training based on best instructional practices when using information technology, for example Blended Learning and specially designed instruction
 - b. To collaborate and communicate about technology, a broad range of staff development forms will continue to be embedded into professional practice including but not limited to:
 - Technology support groups
 - Peer coaching
 - Mentoring
 - Modeling
 - Study groups
 - Collaborative planning and evaluation, discussion and reflection on new procedures
 - ListServ groups
 - Wikis, blogs and other shared Internet based technologies

Funding:

1. A sustained effort is needed to provide the resources necessary to support the curriculum in a technologically oriented world.
2. Adequate funds will be provided to maintain, improve and/or expand each component of the tech plan:
 - Equipment
 - Infrastructure
 - Software
 - Staff Development
 - Support
3. A schedule of annual costs to be covered by this technology plan and funding sources follows.

Category	2014-15	2015-16	2016-17	Funding Source
Software				BOCES Aid, State Aid software funds, locally budgeted funds & grants
LAN/OS	70,000	80,000	90,000	
Admin/Management	50,000	60,000	70,000	
Instructional	65,000	70,000	75,000	
Total:	185,000	210,000	235,000	
Hardware				BOCES Aid, Excel funds, State Aid hardware funds, locally budgeted funds & grants
LAN/OS	50,000	100,000	100,000	
Desktop/Notebook	350,000	375,000	350,000	
Peripherals	150,000	160,000	100,000	
Total:	550,000	535,000	550,000	
Telecommunications				
Telecom – Oswego BOCES	57,000	59,000	61,000	BOCES Aid, E-rate funds, and local funds
Telecommunications Interconnect Services	124,000	128,000	132,000	BOCES Aid, E-rate funds, and local funds
Internet Services	18,000	22,000	26,000	BOCES Aid, E-rate funds, and local funds
Telecommunications Network Connection Line Costs	90,000	90,000	90,000	BOCES Aid, E-rate funds, and local funds
Technical Support Staffing				
District Support Staff	280,000	300,000	320,000	locally budgeted funds and BOCES Aid
OCM BOCES Support Staff	45,000	40,000	45,000	locally budgeted funds and BOCES Aid
OCB BOCES Support Staff	46,000	48,000	50,000	locally budgeted funds and BOCES Aid
Professional Development	110,000	115,000	120,000	locally budgeted funds & grants
Totals:	1,505,000	1,547,000	1,629,000	

The costs in the table are projections. Actual costs will need to be calculated on a yearly basis. The technology plan is a framework that is reviewed and revised each year as part of the planning process for implementation the next year.

In summary, to meet present and future needs of the district the following steps should be taken:

- Provide sufficient funds to purchase the necessary management, network, and instructional software.
- Provide sufficient funds to replace computer and tablet devices on a 5 year cycle.
- Provide sufficient funds for the replacement as needed of peripheral equipment such as printers, LCD projectors, document cameras, interactive whiteboards and digital cameras.
- Provide the wireless infrastructure to support mobile technology and expand the use of laptop and handheld carts.
- Provide the equipment and bandwidth necessary to support point-to-point distance learning over IP.
- Invest in network monitoring and administration applications and training to manage and support the FCSD Network.
- Replace unmanaged hubs and switches with managed switches capable of supporting QoS and at least 1Gigabit per second to the desktop.
- All new cable installations to adhere to TIA/EIA 568B Category 6A or better wiring Standards.
- Provide physical security for all district telecommunications facilities; NOC, MDF's and IDF's.
- Increase technical support to provide at least 0.5 PC Support specialist per building.
- Replace the District's Website with improved aesthetics, functionality and ease of use.
- Increase the District use of communication and collaboration tools to work with all stakeholder groups, I.E. social networking

Statement of Equity

Each student is encouraged to develop and achieve individual educational goals. The district will provide every student with equal educational opportunities regardless of race, color, national origin, creed, religion, sex, age, economic status, marital status or handicapping condition. No student will be excluded on such basis from participating in or having access to any course offerings, student athletics, counseling services, employment assistance, extra-curricular activities or other school resources. The Guidance Department will coordinate compliance with the nondiscrimination requirements of Title IX of the Educational amendments of 1972 and Section 504 of the Rehabilitation act of 1973. The office of Instruction and Assessment is responsible for oversight of Title IX compliance; the office of Special Instructional Programs and Pupil Services coordinates 504 issues for our district. Board of Education policies related to equity are in Appendix J.

Alliances and Partnerships

The Fulton City School District maintains alliances with several professional organizations to bring into the district increased awareness, knowledge, skills, and educational opportunities in the area of technology hardware and software, its integration into instruction and network design. Partnerships include but are not limited to:

- Oswego BOCES School Library System
- Fulton Public Library
- Oswego BOCES Model Schools Program
- Oswego County Teacher Center
- Oswego BOCES Directors of Technology
- Central New York Directors of Technology
- OCM BOCES Center for Learning Technology
- OCM BOCES Customer Support Advisory Committee
- OCM BOCES Regional Information Center
- New York State Association for Computers and Technologies in Education (NYSCATE)

Assessment

The goal of the technology plan is to bring rich information and collaborative tools to the classroom to support the kind of learning that will result in our continuous improvement for our students and to establish all stakeholders as effective communicators and problem solvers.

- The District Instructional Technology Committee will refer to the district and building level goals and to the School Report Card to aid in determining areas of concern for the district.
- Technology competencies and assessment tools will continue to be used to determine the relative level of skills of the instructional and administrative staff. The results of surveys will be used, in conjunction with other data, to support on-going professional development planning.
- Performance-based assessments will continue to be used to determine students' skill level in using technology as a learning tool.
- The district's Professional Development Plan and Annual Professional Performance Review will provide direction for areas of focus content and context.

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APPENDIX A

TECHNOLOGY GOALS at the NATIONAL LEVEL

National Educational Technology Plan 2010 Excerpt Executive Summary

Transforming American Education

The National Educational Technology Plan (NETP) calls for revolutionary transformation rather than evolutionary tinkering. It urges our education system at all levels to

- Be clear about the outcomes we seek.
- Collaborate to redesign structures and processes for effectiveness, efficiency, and flexibility.
- Continually monitor and measure our performance.
- Hold ourselves accountable for progress and results every step of the way.

The plan recognizes that technology is at the core of virtually every aspect of our daily lives and work, and we must leverage it to provide engaging and powerful learning experiences and content, as well as resources and assessments that measure student achievement in more complete, authentic, and meaningful ways. Technology-based learning and assessment systems will be pivotal in improving student learning and generating data that can be used to continuously improve the education system at all levels. Technology will help us execute collaborative teaching strategies combined with professional learning that better prepare and enhance educators' competencies and expertise over the course of their careers. To shorten our learning curve, we can learn from other kinds of enterprises that have used technology to improve outcomes while increasing productivity.

Goals and Recommendations

To transform education in America, we must turn ideas into action. The NETP presents five goals that address the key components of this plan—learning, assessment, teaching, infrastructure, and productivity—along with recommendations for states, districts, the federal government, and other stakeholders in our education system for achieving these goals.

1.0 Learning

All learners will have engaging and empowering learning experiences both in and outside of school that prepare them to be active, creative, knowledgeable, and ethical participants in our globally networked society.

To meet this goal, we recommend the following actions:

1.1 Revise, create, and adopt standards and learning objectives for all content areas that reflect 21st century expertise and the power of technology to improve learning.

1.2 Develop and adopt learning resources that use technology to embody design principles from the learning sciences.

1.3 Develop and adopt learning resources that exploit the flexibility and power of technology to reach all learners anytime and anywhere.

1.4 Use advances in the learning sciences and technology to enhance STEM (science, technology, engineering, and mathematics) learning and develop, adopt, and evaluate new methodologies with the potential to enable all learners to excel in STEM.

2.0 Assessment

Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement.

To meet this goal, we recommend the following actions:

2.1 Design, develop, and adopt assessments that give students, educators, and other stakeholders timely and actionable feedback about student learning to improve achievement and instructional practices.

2.2 Build the capacity of educators and educational institutions to use technology to improve assessment materials and processes for both formative and summative uses.

2.3 Conduct research and development that explore how gaming technology, simulations, collaboration environments, and virtual worlds can be used in assessments to engage and motivate learners and to assess complex skills and performances embedded in standards.

2.4 Revise practices, policies, and regulations to ensure privacy and information protection while enabling a model of assessment that includes ongoing student learning data gathering and sharing for continuous improvement.

3.0 Teaching

Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learners.

To meet this goal, we recommend the following actions:

3.1 Design, develop, and adopt technology-based content, resources, and online learning communities that create opportunities for educators to collaborate for more effective teaching, inspire and attract new people into the profession, and encourage our best educators to continue teaching.

3.2 Provide pre-service and in-service educators with preparation and professional learning experiences powered by technology that close the gap between students' and educators' fluencies with technology and promote and enable technology use in ways that improve learning, assessment, and instructional practices.

3.3 Transform the preparation and professional learning of educators and education leaders by leveraging technology to create career-long personal learning networks within and across schools, pre-service preparation and in-service educational institutions, and professional organizations.

3.4 Use technology to provide access to the most effective teaching and learning resources, especially where they are not otherwise available, and to provide more options for all learners at all levels.

3.5 Develop a teaching force skilled in online instruction.

4.0 Infrastructure

All students and educators will have access to a comprehensive infrastructure for learning when and where they need it.

To meet this goal, we recommend the following actions:

- 4.1 Ensure that students and educators have adequate broadband access to the Internet and adequate wireless connectivity both inside and outside school.
- 4.2 Ensure that every student and educator has at least one Internet access device and software and resources for research, communication, multimedia content creation, and collaboration for use in and out of school.
- 4.3 Leverage open educational resources to promote innovative and creative opportunities for all learners and accelerate the development and adoption of new open technology-based learning tools and courses.
- 4.4 Build state and local education agency capacity for evolving an infrastructure for learning.
- 4.5 Support “meaningful use” of educational and information technology in states and districts by establishing definitions, goals, and metrics.

5.0 Productivity

Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff.

To meet this goal, we recommend the following actions:

- 5.1 Develop and adopt a common definition of productivity in education and more relevant and meaningful measures of learning outcomes and costs.
- 5.2 Improve policies and use technology to manage costs including those for procurement.
- 5.3 Fund the development and use of interoperability standards for content, student learning data, and financial data to enable collecting, sharing, and analyzing data to improve decision-making at all levels of our education system.
- 5.4 Rethink basic assumptions in our education system that inhibit leveraging technology to improve learning, starting with our current practice of organizing student and educator learning around seat time instead of the demonstration of competencies.
- 5.5 Design, implement, and evaluate technology-powered programs and interventions to ensure that students progress through our K-16 education system and emerge prepared for the workplace and citizenship.

No Child Left Behind (NCLB) Act Enhancing Education Through Technology Act of 2001

Goals

- 1) PRIMARY GOAL- The primary goal of this part is to improve student academic achievement through the use of technology in elementary schools and secondary schools.
- (2) ADDITIONAL GOALS- The additional goals of this part are the following:
 - (A) To assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability.
 - (B) To encourage the effective integration of technology resources and systems with teacher training and curriculum development to establish research-based instructional methods that can be widely implemented as best practices by State educational agencies and local educational agencies.

TECHNOLOGY VISION & GOALS at the STATE LEVEL

New York State Board of Regents Statewide Learning Technology Plan

MISSION

The education technology mission of the Board of Regents is to develop policies, recommend practices, advocate for resources, and create incentives for action that turn our vision into reality. Our mission, through the University of the State of New York (USNY)*, is to provide a user-friendly and seamless technology-enhanced learning environment that serves the increasing needs of our citizens.

VISION OF TECHNOLOGY FOR TEACHING AND LEARNING

The Regents have an urgent need to raise the knowledge, skill and opportunity of all the people of the State of New York. New technologies have created powerful new learning tools which will transform the learning environment for students of all ages. Learning technologies will be seamlessly integrated into teaching and learning to increase student achievement. USNY will use technology to measure performance and communicate results to learners, teachers, leaders, and citizens. Through USNY, New York citizens will benefit from technology that brings information and knowledge to improve their lives.

USNY will provide learning technologies that change how students learn, what they learn, and why they learn. Students will access information to broaden and deepen knowledge about subjects in ways unimagined by prior generations.

All students will access learning materials in electronic form, including video, text, and other digital content related to the school curriculum. Students will create work, define and solve problems, and research and evaluate information using technology. Students will manage the flow of information and use technology to work with others from diverse backgrounds and locations. Our students will develop innovative approaches to communicate and collaborate.

Multiple environments will exist for teaching and learning, unbound by place, time, income, language or disability. The classroom, gymnasium, laboratory, library, theater, and museum will be a workspace for teachers and learners but will not always be a physical space. Students will access learning resources anywhere, anytime through the use of technology.

Technology is a path for teaching and learning, but it is also a body of practices, skill, and knowledge to be learned. All New York State learners will develop technological literacy to enter college, become productive members of the workforce, and succeed as citizens. Students, teachers, and leaders will have clear standards for what students should know and be able to do with technology; when various elements of technology will be taught; and how to embed technology in learning throughout the curriculum. These standards will be visible to the public to drive the standards even higher.

**The University of the State of New York (USNY) is the most complete, interconnected system of educational services in the United States. USNY includes 7,000 public and private elementary and secondary schools; 248 colleges and universities; 251 for-profit schools; nearly 7,000 libraries; 750 museums; the State Archives, Library and Museum; vocational rehabilitation services for adults with disabilities; State schools for the blind and for the deaf; 25 public broadcasting facilities; and more than half a million licensed professionals.*

THE GOALS

1. **DIGITAL CONTENT** – Standards-based, accessible digital content supports all curricula for all learners.
2. **DIGITAL USE** – Learners, teachers, and administrators are proficient in the use of technology for learning.
3. **DIGITAL CAPACITY AND ACCESS** – New York’s technology infrastructure supports learning and teaching in all environments.
4. **LEADERSHIP** – USNY institutions are united in realizing the vision.
5. **ACCOUNTABILITY** – Information is easy to obtain and understand about the results achieved by New Yorkers in their efforts to build knowledge, master skills, and grasp opportunities for a better life.
6. **FUNDING** – Adequate funding is coordinated, equitably distributed, and sustainable.

Appendix B

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

<https://www.iste.org/standards/standards-for-students>

1. Creativity and Innovation

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

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

2. Communication and Collaboration

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

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

3. Research and Information Fluency

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

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

4. Critical Thinking, Problem Solving, and Decision Making

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

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

5. Digital Citizenship

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

- a.** advocate and practice safe, legal, and responsible use of information and technology.
- b.** exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c.** demonstrate personal responsibility for lifelong learning.
- d.** exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

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

- a.** understand and use technology systems.
- b.** select and use applications effectively and productively.
- c.** troubleshoot systems and applications.
- d.** transfer current knowledge to learning of new technologies.

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

<https://www.iste.org/standards/standards-for-teachers>

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

1. Facilitate and Inspire Student Learning and Creativity

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

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

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

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

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

3. Model Digital-Age Work and Learning

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

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

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

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

5. Engage in Professional Growth and Leadership

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

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

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

<https://www.iste.org/standards/standards-for-administrators>

- 1. Visionary Leadership.** Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization. Educational Administrators:
 - a. inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders
 - b. engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
 - c. advocate on local, state, and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan

- 2. Digital-Age Learning Culture.** Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students. Educational Administrators:
 - a. ensure instructional innovation focused on continuous improvement of digital-age learning
 - b. model and promote the frequent and effective use of technology for learning
 - c. provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners
 - d. ensure effective practice in the study of technology and its infusion across the curriculum
 - e. promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration

- 3. Excellence in Professional Practice.** Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources. Educational Administrators:
 - a. allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration
 - b. facilitate and participate in learning communities that stimulate, nurture, and support administrators, faculty, and staff in the study and use of technology
 - c. promote and model effective communication and collaboration among stakeholders using digital-age tools
 - d. stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning

- 3. Systemic Improvement.** Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources. Educational Administrators:

- a. lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources
- b. collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning
- c. recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals
- d. establish and leverage strategic partnerships to support systemic improvement
- e. establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning

5. Digital Citizenship. Educational Administrators model and facilitate understanding of social, ethical, and legal issues and responsibilities related to an evolving digital culture. Educational Administrators:

- a. ensure equitable access to appropriate digital tools and resources to meet the needs of all learners
- b. promote, model, and establish policies for safe, legal, and ethical use of digital information and technology
- c. promote and model responsible social interactions related to the use of technology and information
- d. model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools

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Appendix C

Student and Staff Technology Competencies

Teacher Competencies in Instructional Technology

Productivity Tools	<ul style="list-style-type: none">• Use word processing, spreadsheet and database software to create instructional materials• Use digital cameras and other peripheral devices to create instructional materials• Use Internet resources to create instructional materials
Instructional Software	<ul style="list-style-type: none">• Select and use software and Internet resources that will meet specific learning objectives• Use software driven management systems, when appropriate, to assess individual student performance• Select and use software to develop learning activities to effectively differentiate instruction
Information Literacy Skills	<ul style="list-style-type: none">• Understand the information literacy process• Construct learning activities that guide students in accessing, evaluating and using information• Construct learning activities that require higher level thinking skills• Authentically assess learning activities through the application of information literacy skills• Demonstrate and embrace ethical use of technology resources
Technology Integration	<ul style="list-style-type: none">• Modify instruction to apply technology as a tool for learning• Modify instruction to use technology to accommodate students with special needs• Use a variety of technology-infused methods for the delivery of instruction
Assessment of Student Performance	<ul style="list-style-type: none">• Use a wide variety of assessments to evaluate student performance• Create and apply assessment techniques and tools appropriate to technology integrated instruction• Use technology to, in part or in whole, record and assess student progress• Use data to assess and make instructional decisions
Professional Growth and Development	<ul style="list-style-type: none">• Use electronic resources to support personal and professional growth• Use electronic resources to keep current in educational practices including instructional technology• Share personal knowledge and experiences with colleagues

Administrator Competencies in Instructional Technology

Personal Productivity	<ul style="list-style-type: none"> • Routinely use word processing, spread sheet and database software to accomplish traditional administrative tasks • Use electronic calendar to track appointments • Routinely use electronic mail to communicate
Information Systems Use	<ul style="list-style-type: none"> • Use electronic resources to track student information including parental contacts, grade reports, discipline reports, and health records. • Use electronic resources to build a master schedule • Use electronic resources and data to replace paper whenever feasible
Record Keeping and Budgeting	<ul style="list-style-type: none"> • Use appropriate software to track department/building/district budget records and accounts • Use the district's online accounting system to track department/building/district budget records and accounts • Use appropriate software to track department/building/district inventory of supplies and equipment
Data Use	<ul style="list-style-type: none"> • Analyze census, discipline, scheduling, student data and financial reports to identify influential trends in the department/building/district • Communicate the results of analyzed data to staff, parents and community in an understandable form
Communications and Public Relations	<ul style="list-style-type: none"> • Effectively uses a variety of tools to communicate with students, teachers, parents and the community • Effectively uses electronic mail resources • Uses technology resources to develop and deliver presentations
Professional Growth and Development	<ul style="list-style-type: none"> • Use electronic resources to support personal and professional growth • Can extract relevant information from online resources • Share personal knowledge and experiences with colleagues
Supervision	<ul style="list-style-type: none"> • Can identify effective uses of technology as an instructional tool • Can offer teachers a variety of alternatives to observed ineffective uses of technology in the classroom
Ethical Use and Policy Making	<ul style="list-style-type: none"> • Clearly understands copyright and fair use issues as they apply to information technology resources • Demonstrates the ethical use of technology resources at all times • Consistently and fairly enforces the district's technology policies and guidelines

Fulton School District

K-12 Technology Standards and Benchmarks

Grades K-2

Standard I: Communications

Students will use technology to communicate effectively and creatively to support learning in all content areas.

Benchmarks:

A. Students will effectively communicate through applications software

1. Create simple documents and presentations using word processing and publishing programs
2. Create original graphics
3. Create simple tables, graphs and charts

B. Students will effectively communicate visually, graphically, and artistically through multimedia presentations

1. Produce a document using a digital resources (ie – Camera, Flip Camera)
2. Create a hypermedia document/presentation (ie - KidPix, HyperStudio)

C. Students will effectively communicate using networks and telecommunication systems

Benchmark	Performance Objective
I. Communications: Word Processing	
A1	• Enters information: copy from existing text
A1, B1, B2	• Dictates a story to someone keyboarding
A1, A2	• Draws a picture and labels with words
A1	• Demonstrates beginning word processing techniques of entering, saving, printing and retrieving text
I. Communications: Graphics	
A2, A3	• Use software to create graphics: draw original pictures, create charts, graphs
I. Communications: Database	
A3, B2	• Demonstrates grouping and sorting
A3, B1, B2	• Makes paper and pencil lists for use in a database
A3, C	• Identifies electronic references as data bases
I. Communications: Presentation	
C	• Shares a document with an audience
C	• Identifies presentation tools: LCD projectors, etc

Standard II: Information Processing

Students will use technology to access, retrieve, evaluate and interpret visual/auditory information to support learning in all content areas.

Benchmarks:

A. Students will access and retrieve electronic information.

1. Use search strategies based on key words
2. Use electronic encyclopedias and online card catalogs
3. Uses network identifications and passwords in accordance with the district's Acceptable Use Policy

B. Students will evaluate and interpret visual/auditory information using network information systems (i.e. interactive WebQuests, Internet resources).

1. Demonstrate responsibility for the privacy of others
2. Distinguish the appropriateness of content and language

Benchmark	Performance Objective
II. Information Processing	
A4, B1	• Logs on and off the school's network properly
A1, A2	• Checks out a library book using on-line catalog
A1, A2, A3	• Loads, accesses, retrieves & prints CD-ROM information
B2	• Uses appropriate language when using electronic communication

Standard III: Productivity

Students will apply technology resources to maximize productivity and effectiveness to support learning in all content areas.

Benchmarks:

A. Students will use technology to enhance their productivity.

1. Use technology to develop a variety of learning and process skills
2. Use software to develop new understandings
3. Develop strategies for problem solving through critical and creative thinking

B. Students will develop basic technology skills.

1. Select and use appropriate technology resources
2. Develop basic keyboarding skills
3. Operate peripheral devices (i.e. digital camera)

C. Students will exhibit positive social and ethical behaviors when using technology.

1. Demonstrate respect for the work of others
2. Care for technology resources and use them safely

Benchmark	Performance Objective
III. Productivity: Basic Operations	
B1	• Begins and exits programs properly
C2	• Turns computer on and off properly
B4	• Identifies computer parts
C2	• Takes proper care of technology equipment
C2	• Proper use of disks: handles, inserts, ejects
B1	• Saves a document
B1, B3	• Prints a document
A1	• Produces a simple document
A1, A3	• Edits a simple document
B3, C2	• Demonstrates correct use of hardware and software
B2	• Distinguishes left and right hand side of the keyboard
B2	• Uses basic key and mouse functions
B2	• Uses the location and function keys
III. Productivity: Ethical Use	
A3	• Identifies users of technology at home and at school
A3	• Identifies the uses of technology in the community
C1	• Demonstrates respect for the computer work of others
C1	• Describes the right of an individual to their created computer work
C2	• Understands care of technology resources: rules about food, theft, vandalism

Grades 3-5

Standard I: Communications

Students will use technology to communicate effectively and creatively to support learning in all content areas.

Benchmarks:

A. Students will effectively communicate through applications software.

1. Create and publish documents using word processing skills and process writing steps
2. Use graphics programs
3. Create and use simple databases and spreadsheets to manage information
4. Create desktop published documents using publishing software and peripherals
5. Integrate databases, spreadsheets and graphics into word processed documents

B. Students will effectively communicate visually, graphically, and artistically through multimedia presentations

1. Create multimedia presentations using appropriate software and peripheral devices
2. Publish original work using appropriate software and peripheral devices

C. Students will effectively communicate using networks and telecommunication systems.

1. Use network communication systems to exchange information (i.e. Gagle.net)
2. Demonstrate appropriate “netiquette” and ethical use of technology resources

Benchmark	Performance Objective
I. Communications: Word Processing	
	<ul style="list-style-type: none"> • Demonstrates K-2 skills
A1	<ul style="list-style-type: none"> • Creates, names and saves a new document to a folder
A1	<ul style="list-style-type: none"> • Makes basic format changes: fonts, styles, etc.
A1, A2	<ul style="list-style-type: none"> • Edits a document: selects, copies, cuts, pastes, spell checks
A1, A5	<ul style="list-style-type: none"> • Creates, edits, saves, retrieves and prints a document
A1	<ul style="list-style-type: none"> • Uses a word processing program to copy and move text
A5	<ul style="list-style-type: none"> • Produces a two page document with text and graphics
A5	<ul style="list-style-type: none"> • Produces a document with text and a simple database
A5	<ul style="list-style-type: none"> • Produces a document with text and a simple spread sheet
I. Communications: Graphics	
	<ul style="list-style-type: none"> • Demonstrates K-2 skills
A2	<ul style="list-style-type: none"> • Manipulates graphics: imports, exports, resizes
A2, A5, B1	<ul style="list-style-type: none"> • Designs and creates a graphic electronically
A5, B1	<ul style="list-style-type: none"> • Adds graphic elements using graphic tools: shapes, colors, textures, etc.

Benchmark	Performance Objective
I. Communications: Database	
	<ul style="list-style-type: none"> • Demonstrates K-2 skills
A3	<ul style="list-style-type: none"> • Enters data into tutorial/template databases
A3	<ul style="list-style-type: none"> • Labels parts of the database: fields, records, etc.
A3	<ul style="list-style-type: none"> • Uses a prepared database to locate, enter and edit data
I. Communications: Spreadsheet	
A4, B1	<ul style="list-style-type: none"> • Demonstrates charting and graphing functions
A4	<ul style="list-style-type: none"> • Enters data into tutorial/template spreadsheet
A3, A4, B1	<ul style="list-style-type: none"> • Uses a prepared spreadsheet to locate, enter and edit data
B2	<ul style="list-style-type: none"> • Prints a spreadsheet
I. Communications: Presentation	
	<ul style="list-style-type: none"> • Demonstrates K-2 skills
B1, B2	<ul style="list-style-type: none"> • Creates simple multimedia presentations: HyperStudio, KidPix, AppleWorks, etc
B1, B2, C1, C2	<ul style="list-style-type: none"> • Publishes original work to audiences inside and outside the school: posters, signs, newsletters, invitations, etc.
C1, C2	<ul style="list-style-type: none"> • Demonstrates the appropriate use of email

Standard II: Information Processing

Students will use technology to access, retrieve, evaluate and interpret visual/auditory information to support learning in all content areas.

Benchmarks:

A. Students will access and retrieve electronic information.

1. Use simple search strategies
2. Use electronic encyclopedias, almanacs, indexes and online catalogs
3. Use strategies to locate graphic images (i.e. from CD's, Internet, clip art collections)
4. Use databases to locate information
5. Use the local area network to locate information

B. Students will evaluate and interpret visual/auditory information using network information systems (i.e. interactive WebQuests, Internet resources).

1. Demonstrate responsibility for the privacy of others
2. Distinguish between different types of data as to which are public and which are private
3. Distinguish the appropriateness of content and language

Benchmark	Performance Objective
II. Information Processing	
	• Demonstrates K-2 skills
A1, A2, A5	• Telecommunicates through Automated Library System independently
A1, A2, A5	• Telecommunicates to access library collections on the Internet
A1, A2, A5	• Telecommunicates to retrieve, download, select and present pertinent information
A1, A2, A4, A5	• Uses the research process (see ELA curriculum)
A1	• Uses appropriate keyword search strategies
B1, B2	• Cites sources
A2, B1	• Creates bibliographies
A1, A4, A5	• Uses the Internet to find Information
A2, A5	• Downloads and prints information
A5	• Saves to appropriate location
A5	• Backs up data
A5	• Saves and prints to different locations
A5	• Accesses a school or district wide web page

Standard III: Productivity

Students will apply technology resources to maximize productivity and effectiveness to support learning in all content areas.

Benchmarks:

A. Students will use technology to enhance their productivity.

1. Use software to strengthen skill development
2. If appropriate, use software for computer assisted instruction
3. Develop strategies for problem solving through critical and creative thinking

B. Students will develop basic technology skills.

1. Select and use appropriate technology resources
2. Develop keyboarding skills to 15 to 20 wpm with hands on home row keys at least 80% of the time
3. Operate peripheral devices
4. Use an expanded technology vocabulary

C. Students will exhibit positive social and ethical behaviors when using technology.

1. Care for technology resources and use them safely
2. Abide by copyright laws
3. Abide by the district's Acceptable Use Policy

Benchmark	Performance Objective
III. Productivity: Basic Operations	
	<ul style="list-style-type: none"> • Demonstrates K-2 skills
A1, A2	<ul style="list-style-type: none"> • When necessary can use electronic drill and practice software
A3	<ul style="list-style-type: none"> • Can apply appropriate software and hardware to complete instructional tasks
B1	<ul style="list-style-type: none"> • Cuts, copies and pastes electronically
B3	<ul style="list-style-type: none"> • Uses digital camera to produce images in documents
B4	<ul style="list-style-type: none"> • Distinguishes between electronic and hard copy
B1	<ul style="list-style-type: none"> • Uses electronic mail system appropriately: Gaggle.net
B2	<ul style="list-style-type: none"> • Demonstrates basic keyboarding skills
III. Productivity: Ethical Use	
	<ul style="list-style-type: none"> • Demonstrates K-2 skills
C2	<ul style="list-style-type: none"> • Understands copyright issues
C3	<ul style="list-style-type: none"> • Understands Internet/online personal safety issues
C3	<ul style="list-style-type: none"> • Uses district Internet policy
C2	<ul style="list-style-type: none"> • Understands the concept of copying materials and programs as illegal
C1	<ul style="list-style-type: none"> • Describes the need for protection of software and hardware from vandalism
C2	<ul style="list-style-type: none"> • Understands that violation of the copyright law is a crime
C2	<ul style="list-style-type: none"> • Observes copyright laws

Grades 6-8

Standard I: Communications

Students will use technology to communicate effectively and creatively to support learning in all content areas.

Benchmarks:

A. Students will effectively communicate through applications software.

1. Use desktop publishing tools in conjunction with peripheral devices
2. Produce a word processed document that incorporates text and graphics through an established writing process
3. Create databases and spreadsheets and integrate them into other documents
4. Collect, manipulate and interpret data
5. Use electronic thesauruses and spelling and grammar checkers

B. Students will effectively communicate visually, graphically, and artistically through multimedia and computer assisted design tools

1. Create multimedia presentations that integrate various media
2. Publish original multimedia work

C. Students will effectively communicate using networks and telecommunication systems.

1. Use network communication tools (i.e. email) to exchange information and ideas
2. Demonstrate appropriate netiquette
3. Demonstrate a basic understanding of viruses, mass mailings, and chain letters

Benchmark	Performance Objective
I. Communications: Word Processing	
	• Demonstrates K-5 skills
A1, A2	• Refines keyboarding techniques
A1, A2	• Uses advanced formatting: tabs, indents, lists, justifications, customized bullets, etc
A2	• Uses import/export functions
A2, A3	• Uses mail merging functions
A3	• Imports and places graphics
A5	• Uses electronic thesaurus, grammar checker, etc.
A2, A3, A4	• Produces a multi-page, word processed document with text and graphics, edited for spelling, grammar, mechanics and usage

Benchmark	Performance Objective
I. Communications: Graphics	
	<ul style="list-style-type: none"> • Demonstrates K-5 skills
A2, B1	<ul style="list-style-type: none"> • Discriminates between paint and draw environments and usage
A2, B1	<ul style="list-style-type: none"> • Uses paint and draw functions
A2, B1	<ul style="list-style-type: none"> • Recognizes different graphic formats
A3, B1, B2	<ul style="list-style-type: none"> • Integrates graphics into projects
I. Communications: Database	
	<ul style="list-style-type: none"> • Demonstrates K-5 skills
A3	<ul style="list-style-type: none"> • Builds a database and enters data
A3, A4	<ul style="list-style-type: none"> • Chooses and applies a filter to sort data
A3, A4	<ul style="list-style-type: none"> • Deletes and duplicates records in a database
A3, A4	<ul style="list-style-type: none"> • Changes information in a database
A4	<ul style="list-style-type: none"> • Prints reports from a database
A4	<ul style="list-style-type: none"> • Uses databases to organize and visually display data to draw conclusions
A4	<ul style="list-style-type: none"> • Given a prepared database, uses sorting and searching techniques to solve a specific problem
I. Communications: Spreadsheet	
	<ul style="list-style-type: none"> • Demonstrates K-5 skills
A3	<ul style="list-style-type: none"> • Builds a simple spreadsheet and enters data
A3, A4	<ul style="list-style-type: none"> • Produces graphic representation of data
A3, A4	<ul style="list-style-type: none"> • Uses cell addresses with the GO TO command
A3, A4	<ul style="list-style-type: none"> • Pastes functions into cells to perform calculations
A3, A4	<ul style="list-style-type: none"> • Selects groups of cells to format
A3, A4	<ul style="list-style-type: none"> • Formats numerical data within cells
A3, A4	<ul style="list-style-type: none"> • Enters and edits data into a prepared spreadsheet to test simple "What if" statements
I. Communications: Presentation	
	<ul style="list-style-type: none"> • Demonstrates K-5 skills
B1	<ul style="list-style-type: none"> • Uses presentation devices: large screen monitor, LCD projector, etc
C1	<ul style="list-style-type: none"> • Uses network resources to gather and disseminate information and ideas

Standard II: Information Processing

Students will use technology to access, retrieve, evaluate and interpret visual/auditory information to support learning in all content areas.

Benchmarks:

A. Students will access and retrieve electronic information.

1. Use search strategies to retrieve electronic information
2. Use electronic encyclopedias, almanacs, indexes, databases, and online catalogs to retrieve and select pertinent information
3. Use a variety of electronic calculators including graphing calculators

B. Students will evaluate and interpret visual/auditory information using network information systems (i.e. distinguishes between fact, fiction, point of view, propaganda and bias).

1. Demonstrate responsibility for the privacy of others
2. Distinguish between different types of data as to which are public and which are private
3. Distinguish between fact, fiction, point of view, propaganda and bias
4. Distinguish the appropriateness of content and language

Benchmark	Performance Objective
II. Information Processing	
	<ul style="list-style-type: none">• Demonstrates K-5 skills
A2	<ul style="list-style-type: none">• Uses the research process (see ELA curriculum)
A1, A2	<ul style="list-style-type: none">• Uses a variety of resources in doing research: CD's, Internet, text based, etc
A2	<ul style="list-style-type: none">• Proficient in the use of library databases
A1	<ul style="list-style-type: none">• Conducts searches and uses bookmark strategies
B1, B2	<ul style="list-style-type: none">• Cites references from a variety of sources
A3	<ul style="list-style-type: none">• Uses an electronic calculator as appropriate
A3, b3	<ul style="list-style-type: none">• Understands limits of written communication: lack of inflection
A4, B3	<ul style="list-style-type: none">• Uses appropriate language when using electronic communication tools

Standard III: Productivity

Students will apply technology resources to maximize productivity and effectiveness to support learning in all content areas.

Benchmarks:

A. Students will use technology to enhance their productivity.

1. Use technology to develop higher order thinking skills
2. If appropriate, use independent learning systems software

B. Students will develop basic technology skills.

1. Develop keyboarding skills to 20 to 25 wpm with hands on home row keys at least 80% of the time
2. Select and use appropriate technology resources

C. Students will exhibit positive social and ethical behaviors when using technology.

1. Care for technology resources and use them safely
2. Understand the basic capabilities and limitations of technology's hardware and software
3. Understand and abide by copyright laws, the district's Acceptable Use Policy and other ethical use issues pertaining to the use of technology in society

Benchmark	Performance Objective
III. Productivity: Basic Operation	
	<ul style="list-style-type: none"> • Demonstrates K-5 skills
A2, B1	<ul style="list-style-type: none"> • Chooses appropriate hardware/software to effectively complete a task
B2	<ul style="list-style-type: none"> • Uses file management functions: find file
B2	<ul style="list-style-type: none"> • Accesses file systems appropriately: H-drive folder
B2	<ul style="list-style-type: none"> • Initializes a floppy disk
B2	<ul style="list-style-type: none"> • Duplicates a file
B2	<ul style="list-style-type: none"> • Changes to active applications efficiently
B2	<ul style="list-style-type: none"> • Sends and receives attachments
B1	<ul style="list-style-type: none"> • Demonstrates proficient keyboarding skills
III. Productivity: Ethical Use	
	<ul style="list-style-type: none"> • Demonstrates K-5 skills
C3	<ul style="list-style-type: none"> • Respects and abides by copyright regulations
C3	<ul style="list-style-type: none"> • Identifies examples of copyright law violations and possible penalties
C1	<ul style="list-style-type: none"> • Understands viruses, worms, mass mailings, and chain letters
C2	<ul style="list-style-type: none"> • Identifies the role of technology in a variety of careers
C2	<ul style="list-style-type: none"> • Identifies technological skills required for various careers
C3	<ul style="list-style-type: none"> • Discriminates between ethical and unethical access to information stored on a computer system
B1, C2	<ul style="list-style-type: none"> • Distinguishes between different types of data as to which are public and which are private
C1, C2, C3	<ul style="list-style-type: none"> • Understands and can explain the need for the protection of software and hardware from computer viruses

Grades 9-12

Standard I: Communications

Students will use technology to communicate effectively and creatively to support learning in all content areas.

Benchmarks:

A. Students will effectively communicate through applications software.

1. Create and communicate information using advanced word processing skills
2. Create and communicate information through spreadsheets
3. Create and communicate information through databases

B. Students will effectively communicate visually, graphically, and artistically through multimedia presentations

1. Create effective multimedia presentations that integrate various media
2. Create effective multimedia presentations that communicate complex data sets graphically
3. Create effective multimedia presentations that relate integrated concepts across the curriculum

C. Students will effectively communicate through computer networks and telecommunication tools

1. Use electronic mail as an appropriate means of communication
2. Use Internet resources for instructional purposes
3. Use distance-learning mechanisms for instructional purposes

Benchmark	Performance Objective
I. Communications: Word Processing	
	<ul style="list-style-type: none">• Demonstrates the K-8 basic word processing skills
A1	<ul style="list-style-type: none">• Designs and enhances page layouts
A1	<ul style="list-style-type: none">• Uses accurate and efficient keyboarding skills
A1	<ul style="list-style-type: none">• Uses accurate and efficient word processing skills across the curriculum
A1, A2, A3	<ul style="list-style-type: none">• Integrates applications to create documents which incorporate text, graphics, charts, tables, and mail merges
A1	<ul style="list-style-type: none">• Searches and replaces information within a document
A1, A2, A3	<ul style="list-style-type: none">• Converts files between various types and/or versions (MS Word ↔ Works, MS Publisher '98 ↔ MS Publisher '00)
I. Communications: Database	
	<ul style="list-style-type: none">• Demonstrates the K-8 basic database skills
A3	<ul style="list-style-type: none">• Designs and applies databases across the curriculum
A3	<ul style="list-style-type: none">• Uses database functions to meet instructional objectives
A1, A2, A3	<ul style="list-style-type: none">• Merges a database with other applications
A3	<ul style="list-style-type: none">• Create a field that calculates information from other fields
A3	<ul style="list-style-type: none">• Designs data entry forms and tables

Benchmark:	Performance Objective
I. Communications: Database (Continued)	
A3	<ul style="list-style-type: none"> Creates sets, applies filters, and generates queries to analyze information
A2, A3	<ul style="list-style-type: none"> Discriminates when and how to use databases
I. Communications: Spreadsheet	
	<ul style="list-style-type: none"> Demonstrates K-8 basic spreadsheet skills
A2, A3	<ul style="list-style-type: none"> Discriminates when and how to use spreadsheets
A2, A3	<ul style="list-style-type: none"> Designs and modifies a spreadsheet to fit given data
A2	<ul style="list-style-type: none"> Uses spreadsheet functions such as cell formulas, locking and unlocking cells, moving cells, columns and rows, transposing rows and columns
A2	<ul style="list-style-type: none"> Converts data to appropriate forms of graphs
A2, A3	<ul style="list-style-type: none"> Creates cell formulas as needed
A2, A3	<ul style="list-style-type: none"> Develops charting and graphic capabilities to solve problems
I. Communications: Digital Imaging	
	<ul style="list-style-type: none"> Demonstrates K-8 basic graphics skills
B1, B3	<ul style="list-style-type: none"> Creates, edits and manipulates digital images (ie – modify backgrounds, texturing, animations, etc.)
B1, B3	<ul style="list-style-type: none"> Integrates graphics into projects across the curriculum using a variety of devices (ie – scanners, cameras, probeware, email, etc.)
B1, B3	<ul style="list-style-type: none"> Applies different graphic formats appropriately
B2	<ul style="list-style-type: none"> Uses layout and graphics to improve a document’s design
I. Communications: Electronic Communications	
C1, C2	<ul style="list-style-type: none"> Uses electronic resources to construct appropriate correspondence
C1, C2	<ul style="list-style-type: none"> Uses electronic resources to exchange documents/files
C1	<ul style="list-style-type: none"> Uses appropriate email/electronic etiquette
C1, C2, C3	<ul style="list-style-type: none"> Understands privacy and confidentiality issues regarding electronic communications
C1, C2, C2	<ul style="list-style-type: none"> Demonstrates safe and responsible uses of electronic communication resources
I. Communications: Presentation	
	<ul style="list-style-type: none"> Demonstrates the K-8 basic presentation skills
B1, B3, C1	<ul style="list-style-type: none"> Uses a variety of multimedia authoring software (ie - HyperStudio, PowerPoint, Digital Chisel, Macromedia Director, FrontPage, etc.)
B3, C1	<ul style="list-style-type: none"> Creates presentation materials to meet assigned criteria
B1, C1, C2	<ul style="list-style-type: none"> Creates resources for use in a multimedia project: video clips, scanned images, digital image photos, recorded audio
B1, B3, C1	<ul style="list-style-type: none"> Integrates applications to effectively present ideas (ie - slide shows, brochures, flyers, etc.)
C1, C2	<ul style="list-style-type: none"> Extends their audience beyond the classroom setting (ie – web page/site work, community projects using desktop publishing, etc.)

Standard II: Information Processing

Students will use technology to access, retrieve, evaluate and interpret information to support learning in all content areas.

Benchmarks:

A. Students will access and retrieve electronic information.

1. Use advanced search strategies to locate electronic information
2. Use electronic encyclopedias, almanacs, indexes and online catalogs
3. Use a variety of electronic resources to gather research data
4. Use a variety of mobile electronic devices to collect and manipulate data (i.e. Graphing calculators, science probeware)

B. Students will evaluate and interpret visual/auditory information using network information systems

1. Use a variety of electronic “tools” to manipulate and interpret data (i.e. Graphing calculators, science probeware, program authoring languages, etc.)
2. Discriminate between ethical and unethical information available through electronic resources

Benchmark	Performance Objective
II. Information Processing: Data Acquisition	
	<ul style="list-style-type: none"> • Demonstrates K-8 basic information processing skills
A4	<ul style="list-style-type: none"> • Uses the appropriate electronic tools to gather data (ie – graphing calculators, probeware, etc.)
A1, A2, A3	<ul style="list-style-type: none"> • Uses established research process (see ELA curriculum)
A1, A2, A3	<ul style="list-style-type: none"> • Uses practical research skills through higher order thinking and decision making processes to locate information efficiently
A1, A3	<ul style="list-style-type: none"> • Designs and carries out effective search strategies using natural language to “pose” search requests (ie - Browse Search (causally inspecting information sources), Hypertext Search (moving electronically from a word/phrase to related information), Hierarchical Search (examining a body of knowledge beginning with broad topics), Analytical Search (Boolean, truncation, wild card, proximity)
A3, A4	<ul style="list-style-type: none"> • Recognizes the relevancy, accuracy, and currency of primary and secondary sources
II. Information Processing: Data Analysis	
	<ul style="list-style-type: none"> • Demonstrates K-8 basic information processing skills
B1, B2	<ul style="list-style-type: none"> • Distinguishes between fact, fiction, point of view, propaganda, and bias
B2	<ul style="list-style-type: none"> • Draws accurate conclusions as the result of effective data analysis

Standard III: Productivity

Students will apply technology resources to maximize productivity and effectiveness to support learning in all content areas.

Benchmarks:

A. Students will use technology to enhance their productivity.

1. Use technology to develop and extend higher order thinking skills
2. Use technology to develop and extend workplace skills
3. Use technology to develop and extend process skills across all content areas
4. Use technology to develop and extend problem solving through critical and creative thinking
5. Promote creativity and innovation through the use of technology

B. Students will develop basic technology skills.

1. Select and use the technology resources that best meet the demands of a specific task.
2. Use technology independently and collaboratively
3. Continue to develop accurate and efficient keyboarding skills

C. Students will exhibit positive social and ethical behaviors when using technology.

1. Follow ethical guidelines for using technology as per the district's Acceptable Use Policy
2. Follow ethical guidelines for using technology within society
3. Demonstrate respect for intellectual property

Benchmark	Performance Objective
III. Productivity: Basic Operation	
	<ul style="list-style-type: none"> • Demonstrates the K-8 basic productivity skills
A2	<ul style="list-style-type: none"> • Effectively organizes and manages personal files and folders
A2, A5, B1, B2	<ul style="list-style-type: none"> • Develops an understanding of and ability to personally apply technology to higher education and/or the world of work.
A1, A3	<ul style="list-style-type: none"> • Develops a basic understanding of an ability to effectively work within a networked environment (ie - printing, saving, backing-up and retrieving files, etc)
A1, A2, B1, C1	<ul style="list-style-type: none"> • Develops a basic understanding of and an ability to effectively use the desktop environment
III. Productivity: Ethical Use	
C1, C2	<ul style="list-style-type: none"> • Demonstrates ethical and appropriate uses of resources
C1, C3	<ul style="list-style-type: none"> • Respects and abides by copyright regulations (ie - properly cites resources)
C1, C2	<ul style="list-style-type: none"> • Respects and abides by the guidelines of the school's acceptable use policy

Appendix D

Fulton City School District Staff Survey of Technology Use and Integration – Powered by Google Apps for Education

3/20/2014

Fulton City School District Staff Technology Survey

[Edit this form](#)

Fulton City School District Staff Technology Survey

* Required

Job Function *

Please select your job function in the Fulton City School District

Please select the technology tools you use weekly *

Please select all that apply

- Email
- Word/Document Processing
- Excel/Spreadsheets
- Presentation Software/Websites (IE Powerpoint, Prezi)
- Interactive Whiteboard (IE Smart, Epson, Promethean)
- Internet Resources
- Search Engines (IE Google, Bing)
- Document Camera (IE Elmo, Lumens, Epson)
- LCD Projector
- Digital Camera (Still and/or Video)
- Classroom Computers
- Lab Computers

https://docs.google.com/forms/d/11OYveN7T7jdNwQDadAGJuuCheB4NXERJpF1PIDW_4/newform

1/6

- Mobile carts
- Apps
- None
- Other:

*Tell us with whom you communicate electronically on a weekly basis. **

Please select all that apply

- Parents/Families
- Students
- Teachers/Staff in my school
- Teachers/Staff in my district
- Teachers/Staff outside of my school
- Administrators
- Outside Service Providers
- Vendors/Manufacturers
- BOCES staff
- Outside Organizations
- None
- Other:

*What technology is most important to you for your professional needs? **

Please select all that apply.

- Up to date computer
- Current software
- Internet access speed

- Email
- Interactive Whiteboard
- Projector
- Document Camera
- Still/Video Camera
- Printer
- Student devices
- Software Subscriptions
- Classroom Management Software
- Student Response Systems (IE Clickers)
- Other:

*What areas and/or technologies should the district implement or increase? **

*What areas and/or technologies should the district remove or decrease? **

*Please rate the quality of the technical support you receive from the IT Department. **

Where 1 is the lowest and 5 is the highest.

1 2 3 4 5

*Please rate the timeliness of the technical support you receive from the IT Department. **

Where 1 is the lowest and 5 is the highest.

1 2 3 4 5

*Please list areas you are interested in receiving professional development on. **

I would like to learn more about online privacy. *

Where 1 is the lowest and 5 is the highest.

1 2 3 4 5

I would like to learn more about cyberbullying. *

Where 1 is the lowest and 5 is the highest.

1 2 3 4 5

I would like to learn more about digital ethics. *

Where 1 is the lowest and 5 is the highest.

1 2 3 4 5

Submit

Never submit passwords through Google Forms.

100%: You made it.

Technology Survey Results

Total Responses	122
Weekly Email Use	100%
Weekly Word Processing Use	98%
Weekly Use of Internet Resources	98%
Weekly Spreadsheet Use	60%
Weekly use of IWB Software	71%
Weekly Electronic Communication with Parents	71%
Weekly Electronic Communication within district	100%
Weekly Electronic Communication Outside District	60%
More access to Devices for staff/students	60%
Learn more about Cyberbullying	50%
Learn more about Digital Ethics	50%
Learn more about online privacy	50%

Appendix E

Staff Professional Development Survey

Fulton City School District

How can we help you use information technology?

Please take a moment to help us customize your information technology professional development in the Fulton City School District. When you're done, please return the questionnaire to your principal.

Technology Use

<p>How often do you use technology tools in your lessons?</p> <p><input type="checkbox"/> Every day</p> <p><input type="checkbox"/> 3 or 4 times a week</p> <p><input type="checkbox"/> 2 or fewer times a week</p> <p><input type="checkbox"/> Less than once a week</p>	<p>How would you rate your comfort when using technology tools?</p> <p><input type="checkbox"/> Completely comfortable</p> <p><input type="checkbox"/> Generally comfortable</p> <p><input type="checkbox"/> Not very comfortable</p> <p><input type="checkbox"/> Very low comfort</p>
<p>What technology tools do you typically use in your lessons? Check all that apply.</p> <p><input type="checkbox"/> Office/Productivity Products i.e. Word, Excel, PowerPoint, PDF files</p> <p><input type="checkbox"/> Flipcharts or Notebook files</p> <p><input type="checkbox"/> Student feedback tools like todaysmeet.com</p> <p><input type="checkbox"/> Projection of materials</p> <p><input type="checkbox"/> Websites including blogs</p> <p><input type="checkbox"/> Other (please specify): _____</p>	<p>What devices do you typically use in your lessons?</p> <p><input type="checkbox"/> Projector</p> <p><input type="checkbox"/> Teacher Computer</p> <p><input type="checkbox"/> Student Computers</p> <p><input type="checkbox"/> Epson or Smart Board</p> <p><input type="checkbox"/> Laptop Cart</p> <p><input type="checkbox"/> Tablet iPad/iPod/handheld devices</p> <p><input type="checkbox"/> Other (please specify): _____</p>

Educational Technology Needs

<p>What Educational Technologies are you most interested in learning more about? Please check all and rate your top 3 to the right of the selection.</p> <p><input type="checkbox"/> Epson Boards/Smart Boards _____</p> <p><input type="checkbox"/> Productivity Suites like Word, Excel, PowerPoint, Adobe Acrobat _____</p> <p><input type="checkbox"/> Graphic Arts/digital photos _____</p> <p><input type="checkbox"/> Google Docs _____</p> <p><input type="checkbox"/> Video/MultiMedia creation _____</p>	<p><input type="checkbox"/> Assessment tools like LinkIt, Socrative _____</p> <p><input type="checkbox"/> Module Resources using technology _____</p> <p><input type="checkbox"/> Use of laptop carts in lessons _____</p> <p><input type="checkbox"/> Blogging/Student writing online _____</p> <p><input type="checkbox"/> Social Media in the classroom like Edmodo _____</p> <p><input type="checkbox"/> District Programs: i.e. SchoolTool/Star _____</p> <p><input type="checkbox"/> Other (please specify): _____</p>
<p>When would technology training be most beneficial for you?</p>	<p><input type="checkbox"/> After School</p> <p><input type="checkbox"/> Before School</p> <p><input type="checkbox"/> During the day/Release Time</p>

Additional Comments

About You (optional)

Name

Email

Thank you for your participation!

	Technology Use	Choice
Total	23	Every Day
Total	0	3-4 Times a week
Total	2	2 or fewer times a week
Total	0	Less than once a week
	Comfort Level	
Total	4	Completely
Total	17	generally
Total	3	not very
Total	0	very low
	What tools do you use in lessons? Check All	
Total	22	Office Products
Total	7	Flipcharts/Notebook files
Total	1	Student feedback tools
Total	19	Projector
Total	18	Websites/blogs
Total	3	Other
	What devices do you use in lessons? Check All	
Total	21	Projector
Total	23	Teacher Computer
Total	15	Student Computers
Total	19	Epson/Smartboard
Total	9	Laptop Cart
Total	5	Tablet iPad/handheld
Total	4	Doc Camera
Total	0	Other
	Ed TechNeeds	
Total	19	Epson/Smartboard
Total	9	Office Products
Total	4	Graphics Arts/digital photos
Total	10	Video/multimedia
Total	9	Google Docs
Total	4	assessment tools
Total	14	module resources in technology
Total	9	laptop carts in lessons
Total	2	blogging/student online writing
Total	0	social media in class
Total	14	district programs
Total	3	other
	When?	
Total	7	Before
Total	11	After
Total	12	During

Appendix F

Hardware Inventory



Fulton City School District Hardware Summary Sheet

Device	Building	Quantity
Wireless Access Points	District Total	86
	G. Ray Bodley High School	21
	Fulton JH	12
	Fairgreive Elementary	9
	Granby Elementary	13
	Lanigan Elementary	13
	Volney Elementary	10
	District Office	8
Interactive Whiteboards	District Total	243
	G. Ray Bodley High School	60
	Fulton JH	42
	Fairgreive Elementary	33
	Granby Elementary	42
	Lanigan Elementary	34
	Volney Elementary	32
	District Office	0
Computers	District Total	2309
	G. Ray Bodley High School	649
	Fulton JH	443
	Fairgreive Elementary	320
	Granby Elementary	314
	Lanigan Elementary	285
	Volney Elementary	298
	District Office	146
Document Cameras	District Total	74
	G. Ray Bodley High School	47
	Fulton JH	12
	Fairgreive Elementary	1
	Granby Elementary	1
	Lanigan Elementary	9
	Volney Elementary	2
	District Office	2
Total Servers	District Total	45
	G. Ray Bodley High School	36
	Fulton JH	2
	Fairgreive Elementary	1
	Granby Elementary	1
	Lanigan Elementary	1
	Volney Elementary	1
	District Office	3

Appendix G

Software

Administrative Software

Type	Name	Access
Productivity	Microsoft Office Suite	Local Network
Staff Professional Development	My Learning Plan	Hosted by Vendor
Staff Evaluative	My Learning Plan OASYS	Hosted by Vendor
Financial	WinCAP	OCM BOCES
Personnel	WinCAP	OCM BOCES
Transportation	Transfinder	Local Network
Security Cameras	Pelco	Local Network
Maintenance	Que Centre	Oswego BOCES
Student Management (Demographics, marks, schedules, health, discipline)	SchoolTool	OCM BOCES
Student Management (Special Education, Academic Intervention Services)	IEP Direct, RtIm Direct	OCM BOCES
Student Scheduling	SchoolTool	Local Network
College & Career Exploration	College view, Choices	Local Network
School Lunch Program	Nutri-Kids	OCM BOCES
Internet Content Filtering	LightSpeed	Local Network
Attendance Calling 7-12, District Calling System	SchoolMessenger	OCM BOCES

Curriculum Based Software by Subject Area and Grade Level

The table below lists the grade appropriate curriculum software currently used by subject area. Some of the software may support multiple subject areas.

Subject Area	Elementary (K-6)	Junior High (7-8)	High School (9-12)
Management, Productivity and general purpose	Microsoft Office Suite (Word, Excel, Access, Powerpoint, Publisher, Photodraw, Internet Explorer) Microsoft Outlook ActivInspire SchoolTool Gradebook (Optional) Schoolology Adobe Design and Web Premium Follett Destiny Library Manager Type To Learn 4 LinkIT	Microsoft Office Suite (Word, Excel, Access, Powerpoint, Publisher, Photodraw, Internet Explorer) SchoolTool Gradebook Follett Destiny Library Manager Smart Notebook Schoolology LinkIT	Microsoft Office Suite (Word, Excel, Access, Powerpoint, Publisher, Photodraw, Internet Explorer) SchoolTool Gradebook Follett Destiny Library Manager Smart Notebook Schoolology LinkIT
ELA	Star Enterprise Reading, Math, Early Literacy and Accelerated Reader Learning A-Z Scholastic Reading Inventory Read Naturally Castle Learning Fast Forward	ExamView Pro Fast ForWord Scholastic Reading Inventory Scholastic Read 180 Read Naturally Castle Learning Brain Pop	ExamView Pro Fast ForWord Scholastic Reading Inventory Criterion Writing Read Naturally Castle Learning Brain Pop
Math	IXL Math Castle Learning EnVision Math Star Math	IXL Math Castle Learning Star Math	IXLMath Castle Learning Star Math
Science	Science A-Z Castle Learning	Castle Learning Brain Pop	Wards Hub Science Wizard Castle Learning
Social studies	Castle Learning	New Millennium Railroad World War II Castle Learning Brain Pop	History Wizard Castle Learning
LOTE	NA	Microsoft Word Microsoft Publisher	Bienvenue Hrw German 2

Subject Area	Elementary (K-6)	Junior High (7-8)	High School (9-12)
			Le Petit Prince Success in French Language Latin Alphabet Reference Latin Flash Drill 3.0 Latin grammar Pro
Music	Finale Smart Music	Finale Smart Music	Finale Smart Music
Art	Adobe Design and Web Premium	Adobe Design and Web Premium	Adobe Design and Web Premium
PE/ Health			Body Works 4.0 Healthsoft Drugs Iprax just play When no means no Pyramid Applications in Biology & Chemistry
Business	NA		Microsoft Word Microsoft Publisher MicroType Pro Micro Pace Pro Mavis Beacon Choices Pagekeeper Quickbooks Turbo tax Adobe Design and Web Premium
Family & Consumer Science	NA	Microsoft Word Microsoft publisher Microsoft Powerpoint Choices Choices Roadmap	Microsoft Word Microsoft publisher Microsoft Powerpoint Dine Healthy
Technology	NA	Gateway to Technology Programming 3D Home Architect Dragster Designer Car Builder Lego Designer Auto CAD Lite West Point Bridge Builder	Mechanical Desktop with AutoCAD AutoDesk Inventor CAD Overlay Lucky Logic Robo Cell Mill CAM 8 Circuit Maker 2000 MDSolids

Subject Area	Elementary (K-6)	Junior High (7-8)	High School (9-12)
			Structural Stress Analyzer 1000 Visual BASIC 5 3D Home Architect Autosketch 8 Macromedia Flash Meet Your Match Mindpath FZ Presentation Presto Page Image
Special Education	Dragon Naturally Speaking Read and Write Gold	Dragon Naturally Speaking Read and Write Gold	Dragon Naturally Speaking Read and Write Gold

Appendix H

Curriculum Map for 4th Grade ELA



EXPEDITIONARY
LEARNING

Grade 4: Curriculum Map



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These grades 3–5 curriculum modules are designed to address CCSS ELA outcomes during a one-hour English Language Arts block. The overarching focus for all modules is on building students’ literacy skills as they develop knowledge about the world.

Taken as a whole, these modules are designed to give teachers concrete strategies to address the “instructional shifts” required by the CCLS.

Structure of a Module

- Each module provides eight weeks of instruction, broken into three shorter units. Each module includes seven assessments:
 - Six unit-level assessments that almost always are on-demand: students’ independent work on a reading, writing, speaking, or listening task.
 - One final performance task that is a more supported project, often involving research.

Structure of a Year of Instruction

- There are six modules per grade level.
- Of these six modules, teachers would teach four: Module 1, followed by either Module 2A or 2B, then either 3A or 3B, then Module 4.
- Teachers should begin the year with Module 1, which lays the foundation for both teachers and students regarding instructional routines.
- For Modules 2 and 3, option B formally assesses all standards formally assessed in Option A (and possibly some additional standards as well).
- Option 2B specifically includes supplemental lessons with explicit writing instruction aligned with NYSP12 ELA CCLS L1–3 and with Reading Foundations instruction aligned with NYSP12 ELA CCLS RF.5 and RF.6. These lessons are intended as models of the type of robust instruction that teachers need to incorporate in their literacy time beyond the bounded “one-hour per day” of the NYS modules.

How to Read This Document

The purpose of this document is to provide a high-level summary of each module and name the standards formally assessed in each module.

- **Module focus:** Read this first. The “focus” is the same across the grades 3-5 band and signals the progression of literacy skills across the year as well as alignment to the CCSS instructional shifts.
- **Module title:** This signals the topic students will be learning about (often connected to social studies or science) and aligns with Instructional Shift #2, building knowledge in the disciplines.
- **Description:** These three or four sentences tell the basic “story” of the eight-week arc of instruction: the literacy skills, content knowledge, and central text.



- **Texts:** This lists texts that all students read. The text in bold is the extended text for a given module: the text(s) with which students spend the most time. Remember that texts can be complex based on both qualitative and quantitative measures. Texts are listed in order from most quantitatively complex (based on Lexile measure) to least quantitatively complex. Texts near the bottom of the list are often complex in ways other than Lexile. Within a given module, the list shows the wide variety of texts students read as they build knowledge about a topic. This aligns with Instructional Shift #2, building knowledge in the disciplines.
- **Final Performance Task:** This is a culminating project, which takes place during Unit 3 of every module. Performance tasks are designed to help students synthesize and apply their learning from the module in an engaging and authentic way. Performance tasks are developed using the writing process, are scaffolded, and almost always include peer critique and revision. Performance tasks are not “on-demand” assessments. (Note: The end of Unit 3 assessment often addresses key components of the performance task.)
- **Unit-Level Assessments**
 - Each unit includes two assessments, most of which are “on-demand” (i.e., show what you know/can do on your own).
 - Mid-unit assessments typically, though not always, are reading assessments: text-based answers.
 - End of unit assessments typically, though not always, are writing assessments: writing from sources.
 - Most assessments have a heavy emphasis on academic vocabulary, particularly determining words in context.
 - Assessments are designed to be curriculum-embedded opportunities to practice the types of skills needed on the NYS assessment.
 - The curriculum map below lists the title of each assessment, the standards assessed, and the assessment format.
 - Selected response (multiple-choice questions)
 - Short constructed-response (short-answer questions of the type that is scored using the NYS 2-point rubric)
 - Extended response (longer writing or essays of the type that is scored using the NYS 4-point rubric) (either on-demand or supported)
 - Speaking and listening (discussion or oral presentation)
 - Scaffolded essay (involving planning, drafting, and revision)
- **Standards:** In each module, the standards formally assessed are indicated with a check mark; see details below.



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
Focus	Becoming a Close Reader and Writing to Learn	Researching to Build Knowledge and Teaching Others	Researching to Build Knowledge and Teaching Others	Considering Perspectives and Supporting Opinions	Considering Perspectives and Supporting Opinions	Gathering Evidence and Speaking to Others
Module Title	Native Americans in New York	Interdependent Roles in Colonial Times	Animal Defense Mechanisms	Simple Machines: Force and Motion	The American Revolution	Susan B. Anthony, the Suffrage Movement and the Importance of Voting
Description	Students learn about Native Americans in New York, with a specific focus on the Iroquois Confederacy. Students read short sections of the Iroquois Constitution, or “Great Law of Peace,” learn to write explanatory paragraphs, study a novel and write a literary analysis, and then connect the past to the present by studying data designed to help them think about places in their school where agreements like those found in the Iroquois Constitution would benefit the school community. As the final performance task, students collaborate to write a class constitution, drawing on the texts they have read.	Students learn about what life was like in Colonial America, focusing on how colonists were interdependent on one another. Students read about various colonial trades (such as the wheelwright, the cooper, etc.), with an emphasis on making inferences, summarizing informational texts and conducting basic research. As the final performance task, students synthesize information from multiple sources as they write a research-based narrative that vividly describes an event in a colonist’s life.	Students build proficiency in writing an informative piece, examining the defense mechanisms of one specific animal about which they build expertise. Students also build proficiency in writing a narrative piece about this animal. They build background knowledge on general animal defenses through close readings of several informational texts and use a science journal to make observations and synthesize information as they research an expert animal in preparation to write about this animal. As the final performance task students write an informative piece describing their animal, the threats to its survival, and how it is equipped to deal with them, and a choose-your-own narrative piece about their animal that incorporates their research.	Students build knowledge of simple machines and how they affect force, effort, and work. Students read basic background text and perform Readers Theater about simple machines (written for classroom use). They read an extended scientific text, <i>Simple Machines: Forces in Action</i> (87oL), focusing on analyzing scientific concepts. Students develop expertise about specific simple machines (inclined plane, levers, pulleys, etc.), read and conduct science experiments using simple machines, and synthesize their findings by writing scientific conclusion statements. They conduct a “simple machine inventory” at school and home. As a final performance task, students write an editorial to an engineering magazine expressing an opinion about which simple machine benefits people most in their everyday lives.	TO COME	Students learn about voting rights and responsibilities. They first focus on the women’s suffrage movement and the leadership of New Yorker Susan B. Anthony, reading firsthand and secondhand accounts of her arrest and trial. Then students read <i>The Hope Chest</i> (historical fiction set in the weeks before the passage of the 19th Amendment) examining the theme of leaders and their impact on others. Finally, students connect the theme of leadership to their own lives by reading about the importance of voting in modern times. As a final performance task, students draft and then create a public service announcement (using VoiceThread technology) to state their opinion to high school seniors about why voting is important.



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
<p>Texts (central text(s) in bold)¹</p>	<ul style="list-style-type: none"> Sections of “The Great Law of Peace,” prepared by Gerald Murphy RI, (1445L) <i>The Iroquois: The Six Nations Confederacy</i>, Mary Englar (RI, 880L) “The (Really) Great Law of Peace,” Cynthia O’Brien. (RI, 790L) “Speaking Up,” Clarisel Gonzalez (RI, 740L) “Smart Speak,” Marilyn Cram Donohue (RI, 640L) Eagle Song, Joseph Bruchac (RL, 840L) 	<ul style="list-style-type: none"> “Apprenticeships in Colonial America,” Expeditionary Learning (RI, 1030L); read aloud “Colonial America: The Craftspeople,” Expeditionary Learning (RI, 1080L) “A New York Merchant: Adam Johnson,” Expeditionary Learning (RI, 990L); read aloud “Inventory of John Allen (1659–1704),” Hampshire Probate Records (RI, NL) “The Colonists and American Indians,” Expeditionary Learning (RI, 970L) “Colonial Trades: The Wheelwright,” Expeditionary Learning (RI, 970L) “The Importance of the Wheelwright,” Expeditionary Learning (RI, 970L) “The Wheelwright’s Role in a Colonial Village” (RI, 970L) “Farming in Colonial America,” Expeditionary Learning (RI, 950L) 	<ul style="list-style-type: none"> Animal Behavior: Animal Defenses, Christina Wilsdon <i>Venom</i>, Marilyn Singer <i>Can You Survive the Wilderness?</i> Matt Doeden Additional short informational texts. 	<ul style="list-style-type: none"> “Who Cares about Polar Bears?” Expeditionary Learning (RI, 990L) “No More Junk in Our Schools,” Expeditionary Learning (RI, 980L) Simple Machines: Forces in Action, Buffy Silverman (RI, 870L) “The Machine,” from <i>Take a Quick Bow!</i>, Pamela Marx (RL play, NL) 	<ul style="list-style-type: none"> Divided Loyalties: The Barton Family During the American Revolution, Gare Thompson and Barbara Kiwak (RL) The Declaration of Independence (excerpts (RI)) Additional texts to come. 	<ul style="list-style-type: none"> “Miss Susan B. Anthony Fined \$100 and Costs for Illegal Voting” <i>The New York Times</i>, (RI, 1270L) Excerpt from “On Women’s Right to Suffrage,” Susan B. Anthony (RI, 1200L) “The Vote,” Rebecca Hershey (RI, 870L) A Firsthand Account of Inauguration Day 2009: email, Corey Scholes (RI, 890L) “A Historic Inauguration Day,” Expeditionary Learning (RI, 840L) “Frederick Douglass: Freedom’s Champion,” Patrick S. Washburn (RI, 790L) “Order in the Court,” Ira Peck and Kathy Wilmore (RI, 770L) The Hope Chest, Karen Schwabach (RL, 800L)

¹ Texts listed in order of informational text first, then literature; both categories shown from most to least quantitatively complex (based on Lexile®).



Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
		<ul style="list-style-type: none"> • “Religion in the Colonies,” Expeditionary Learning (RI, 930L) • “Shipbuilders,” Expeditionary Learning (RI 870L) • “Colonial Trades” (RI, various trades, 790L-1070L) • “Roles in a Colonial Village” (RI, various trades, 820L-1030L) • <i>The Scoop on Homes, Clothes, and Daily Life in Colonial America</i>, Elizabeth Raum (RI, 780L) • <i>If You Lived in Colonial Times</i>, Ann McGovern (RI, 590L) • “Bringing Home the Gold,” Carrol J. Swanson (RL, 880L) • “School of Freedom,” Beverly J. Letchworth (RL, 790L) • “Making Candles, Colonial Style,” Rebecca S. Fisher, <i>Highlights for Children</i>. (RL, 770L) • “Joshua’s Gold,” Mary Lois Sanders (RL, 690L) • “Mystery of the Deep,” Allyson Gulliver (RL, 790L) 			



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
Lexile®	Common Core Band Level Text Difficulty Ranges for Grades 4–5 ² : 740-1010L					
Performance Task	A Constitution for Our School Community (W.4.2, W.4.5, W.4.9b, and L.4.3a) scaffolded essay	Historical Fiction Narrative about Colonial America (RI.4.9, W.4.3, W.4.4, W.4.5, W.4.6, W.4.9b, L.4.2a,b,d, L.4.3a, and L.4.6) scaffolded narrative	Choose-Your-Own-Adventure Animal Defense Narrative (RI.4.9, W.4.2, W.4.3, W.4.7, W.4.8, W.4.9b) scaffolded narrative	Opinion Writing: An Editorial on Simple Machines (RI.4.1, RI.4.3, W.4.1, W.4.4, W.4.5, W.4.7, W.4.9, L.4.3a) scaffolded essay	TO COME	Public Service Announcement about the Importance of Voting (RI.4.9, W.4.1, SL.4.4, and SL.4.5) scaffolded essay and speech

² Supplemental Information for Appendix A of the Common Core State Standards for English Language Arts and Literacy: New Research on Text Complexity
http://www.corestandards.org/assets/EO813_Appendix_A_New_Research_on_Text_Complexity.pdf



Unit-Level Assessments (NYSP12 ELA CCLS)

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
Mid-Unit 1	Answering Questions with Evidence from Text (RI.4.1 and RI.4.3) selected response and short constructed response	Inferring with Pictures and Text (RI.4.1, RI.4.4, and RI.4.7) selected response and short constructed response	Reading about Caterpillars, Answering Questions, and Determining the Main Idea (RI.4.2, RI.4.4, and RI.4.7) selected response and short constructed response	Finding the Main Idea of a Scientific Text (RI.4.2 and RI.4.3) selected response and short constructed response	TO COME	Answering Questions and Summarizing a Text about Frederick Douglass (RI.4.2 and RI.4.4) selected response and short constructed response
End of Unit 1	Paragraph to Explain the Symbols on My Flag (W.4.2a and b, and SL.4.1) short constructed response	Inferring and Synthesizing about Life in Colonial America (from Two Texts) (RI.4.1, RI.4.4, RI.4.9, and W.4.9b) selected response and short constructed response	Answering Questions and Summarizing Texts about Animal Defense Mechanisms (RI.4.1, RI.4.2, and SL.4.2) selected response and short constructed response	Reading and Answering Questions about Readers Theater (RL.4.1, RL.4.5, and L.4.4) selected response and short constructed response	TO COME	Comparing Firsthand and Secondhand Accounts of Inauguration Day (RI.4.2 and RI.4.6) selected response and short constructed response
Mid-Unit 2	Reading, Note-Taking, and Paragraph Writing (RI.4.1, RI.4.2, W.4.2a and b, and W.4.8) short constructed response	Inferring about the Silversmith Trade in Colonial Times (RI.4.1, W.4.2b and d, W.4.8, and W.4.10) selected response and short constructed response	Reading and Answering Questions about Two Texts on the Same Topic (RI.4.1, RI.4.2, and RI.4.9) selected response and short constructed response	Answering Questions about Screws (RI.4.2, RI.4.3, W.4.8, and W.4.9b) selected response and constructed response	TO COME	On-Demand Reading of New Chapter of The Hope Chest (RL.4.1, RL.4.2, RL.4.3, L.4.4, and L.4.5) selected response and short constructed response.
End of Unit 2	Evidence-Based Paragraph Writing (RL.4.3, RL.4.11, W.4.2, and W.4.9) short constructed response	Synthesizing Information from Text and Audio Resources (RI.4.2, RI.4.4, RI.4.9, W.4.8, and SL.4.2) selected response and short constructed response	Writing about the Pufferfish (RI.4.9, W.4.2, W.4.4, W.4.7, W.4.8, L.4.1g, L.4.2a and d, L.4.3a, L.4.4b and L.4.6) scaffolded essay	Reading and Answering Questions about Wedges (Part I); Reading and Answering Questions about Experiments (Part II) (RI.4.3, RI.4.4, W.4.2b and d, W.4.8, and W.4.9) selected response and short constructed response	TO COME	On-Demand Writing: How do Leaders Impact the Actions of Others? Reading and Answering Questions about Characters and Theme (Part I); Writing an Essay Analyzing How a Character's Actions Contribute to the Theme of <i>The Hope Chest</i> (Part II) (RL.4.2, RL.4.3, RL.4.4, RL.4.6, RL.4.7, W.4.2, W.4.9a, and W.4.11)



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
						selected response, short constructed response, and extended constructed response
Mid-Unit 3	On-Demand Reading to Determine Main Idea and Supporting Details (RI.4.1 and RI.4.2) selected response and short constructed response	Draft of Historical Fiction Narrative (W.4.2b, W.4.3a, and W.4.4, and W.4.9b) extended constructed response	Planning for and Drafting an Introduction for the Narrative (W.4.3a and d, and W.4.4) scaffolded extended response	Reading and Answering Questions about Editorials (RI.4.8 and RI.4.4) selected response and short constructed response	TO COME	Reading and Comparing New Informational Texts about Voting (RI.4.5, RI.4.8, and RI.4.9) selected response and short constructed response
End of Unit 3	On-Demand Paragraph Writing (W.4.2a and b, W.4.10 and SL.4.1, SL.4.1b, SL.4.1c and SL.4.1d) short constructed response	On-Demand Historical Narrative (W.4.2b and d, W.4.3, W.4.4, and W.4.9b) extended constructed response	Planning for and Writing Choice 2 of the Choose-Your-Own-Adventure Animal Defense Narrative (W.4.3b, c, d, e, W.4.2a, W.4.4, L.4.1g, L.4.2a, b and d, L.4.3a, L.4.4b, and L.4.6) scaffolded narrative	Planning and Drafting an Editorial (Part I); Revising to Create a Polished Editorial (Part II) (W.4.1, L.4.1f, L.4.2a, c and d, L.4.3a and b) extended constructed response	TO COME	Public Service Announcement about the Importance of Voting: Assessment of First Draft Writing and Presentation (W.4.1, W.4.4, SL.4.3, SL.4.4, SL.4.5, SL.4.6, L.4.1c and f, and L.4.3) extended constructed response



NYSP12 ELA CCLS Standards Formally Assessed, by Module

- In the curriculum map below, any specific CCLS with a check mark indicates formally assessed.
- Some standards are formally assessed in multiple modules.
- “B” modules will assess all the same standards as “A” modules but may address additional standards as well.
- Because of the integrated nature of the standards, even standards that are not formally assessed are often embedded in instruction throughout every module (e.g., RI/RL.1).
- Some standards are not applicable in an on-demand assessment context (e.g., R.10 or W.10). In the curriculum map below, these standards are noted as “integrated throughout.”
- Some standards (e.g., W.2) have a main or “parent” standard and then subcomponents (e.g., W.2a). Often, students’ mastery of the entirety of this standard is scaffolded across multiple modules. Therefore, in the curriculum map below, the “parent” standard is checked only if all components of that standard are formally assessed within that particular module. Otherwise, just the specific components are checked.



Reading Standards for Literature

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
RL.4.1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.				✓	✓	✓
RL.4.2. Determine a theme of a story, drama, or poem from details in the text; summarize the text.						✓
RL.4.3. Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character’s thoughts, words, or actions).	✓				✓	✓
RL.4.4. Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).						✓
RL.4.5. Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.				✓	✓	
RL.4.6. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.					✓	✓
RL.4.7. Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.						✓
RL.4.9. Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	Implemented through Accountable Independent Reading: see “Launching Independent Reading in Grades 3–5: Sample Plan” (stand-alone document on EngageNY.org).					
RL.4.10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Integrated throughout.					
RL.4.11 Recognize, interpret, and make connections in narratives, poetry, and drama, to other texts, ideas, cultural perspectives, personal events, and situations.	Implemented through Accountable Independent Reading: see “Launching Independent Reading in Grades 3–5: Sample Plan” (stand-alone document on EngageNY.org).					
A. Self-select text based upon personal preferences.	Integrated throughout.					



Reading Standards for Informational Text

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
RI.4.1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	✓	✓	✓	✓	✓	
RI.4.2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.	✓	✓	✓	✓	✓	✓
RI.4.3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	✓			✓	✓	
RI.4.4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.		✓	✓	✓	✓	✓
RI.4.5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.					✓	✓
RI.4.6. Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.						✓
RI.4.7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.		✓	✓			
RI.4.8. Explain how an author uses reasons and evidence to support particular points in a text.				✓	✓	✓
RI.4.9. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.		✓	✓			✓
RI.4.10. By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Integrated throughout.					



Reading Standards: Foundational Skills

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
RF.4.5. Know and apply grade-level phonics and word analysis skills in decoding words						
A. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.			✓			
RF.4.6. Read with sufficient accuracy and fluency to support comprehension.			✓			
A. Read grade-level text with purpose and understanding.			✓			
B. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.			✓			
C. Use context clues to confirm or self-correct word recognition and understanding, rereading as necessary.			✓			



Writing Standards

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
W.4.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.				✓	✓	✓
A. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.				✓	✓	✓
B. Provide reasons that are supported by facts and details.				✓	✓	✓
C. Link opinion and reasons using words and phrases (e.g., <i>for instance, in order to, in addition</i>).				✓	✓	✓
D. Provide a concluding statement or section related to the opinion presented.				✓	✓	✓
W.4.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.						✓
A. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.	✓		✓			✓
B. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.	✓	✓		✓	✓	✓
C. Link ideas within categories of information using words and phrases (e.g., <i>another, for example, also, because</i>).						✓
D. Use precise language and domain-specific vocabulary to inform about or explain the topic.		✓		✓	✓	✓
E. Provide a concluding statement or section related to the information or explanation presented.						✓



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
W.4.3. Write narratives to develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences.		✓	✓			
A. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.		✓	✓		✓	
B. Use dialogue and description to develop experiences and events or show the responses of characters to situations.		✓	✓			
C. Use a variety of transitional words and phrases to manage the sequence of events.		✓	✓			
D. Use concrete words and phrases and sensory details to convey experiences and events precisely.		✓	✓		✓	
E. Provide a conclusion that follows from the narrated experiences or events.		✓	✓		✓	
W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.		✓	✓	✓	✓	✓
W.4.5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	Integrated throughout.					
W.4.6. With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.	Integrated throughout.					
W.4.7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.			✓	✓	✓	



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	✓	✓	✓	✓	✓	
W.4.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	✓				✓	
A. Apply grade 4 reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions]”).						✓
B. Apply grade 4 reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).	✓	✓	✓	✓	✓	
W.4.10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	Integrated throughout.					
W.4.11. Create and present a poem, narrative, play, art work, or literary review in response to a particular author or theme studied in class						✓



Speaking and Listening Standards

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
SL.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.	✓			✓	✓	
A. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.				*	✓	
B. Follow agreed-upon rules for discussions and carry out assigned roles.	✓			✓	✓	
C. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.	✓			✓	✓	
D. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	✓			✓	✓	
E. See to understand and communicate with individuals from different perspectives and cultural backgrounds.				✓	✓	
SL.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.		✓	✓			
SL.4.3. Identify the reasons and evidence a speaker provides to support particular points.						✓
SL.4.4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.						✓
SL.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.						✓

* Not formally assessed; to be addressed upon revision,



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
SL.4.6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.						✓



Language Standards

	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
L.4.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.			✓			
A. Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>).			✓		✓	
B. Form and use the progressive (e.g., <i>I was walking; I am walking; I will be walking</i>) verb tenses.			✓		✓	
C. Use modal auxiliaries (e.g., <i>can, may, must</i>) to convey various conditions.			✓			✓
D. Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>).			✓			
E. Form and use prepositional phrases.			✓			
F. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.			✓	✓		✓
G. Correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>).			✓			
L.4.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.			✓			
A. Use correct capitalization.		✓	✓	✓	✓	
B. Use commas and quotation marks to mark direct speech and quotations from a text.		✓	✓			✓

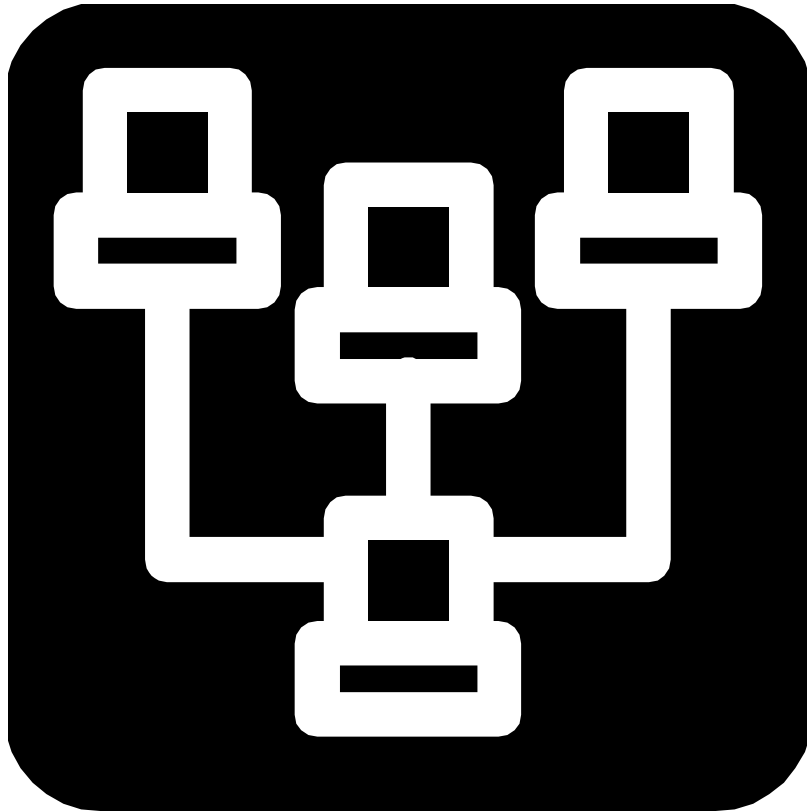


	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
C. Use a comma before a coordinating conjunction in a compound sentence.			✓	✓	✓	
D. Spell grade-appropriate words correctly, consulting references as needed.		✓	✓	✓	✓	
L.4.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.			✓	✓		✓
A. Choose words and phrases to convey ideas precisely.	✓	✓	✓	✓	✓	✓
B. Choose punctuation for effect.			✓	✓	✓	✓
C. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).			✓		✓	✓
L.4.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.						✓
A. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.				✓	✓	✓
B. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>telegraph</i> , <i>photograph</i> , <i>autograph</i>).			✓			✓
C. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.				✓	✓	✓



	Module 1	Module 2A	Module 2B	Module 3A	Module 3B	Module 4
L.4.5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.						✓
A. Explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i>) in context.					✓	✓
B. Recognize and explain the meaning of common idioms, adages, and proverbs.						✓
C. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).					✓	✓
L.4.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., <i>wildlife, conservation, and endangered</i> when discussing animal preservation).	Integrated throughout.					

Appendix I
Network Charts



Network map pages removed for security purposes.

Appendix J

Board of Education Policies

0100

EQUAL OPPORTUNITY

The Board of Education, its officers and employees, shall not discriminate against any student, employee, or applicant on the basis of race, color, national origin, creed, religion, marital status, sex, sexual orientation, age, or disability.

This policy of nondiscrimination includes: access by students to educational programs, counseling services for students, course offerings and student activities, recruitment and appointment of employees and employment pay, benefits, advancement and/or terminations.

The Board of Education authorizes the Superintendent of Schools to establish any and all rules, regulations and procedures necessary to implement and maintain this policy.

Cross-ref: 5311.3, Student Complaints and Grievances
9010, Equal Employment Opportunity
9520, Staff Complaints and Grievances

Ref: Title VI, Civil Rights Act of 1964
Title VII, Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972
Executive Order 11246, as amended by E.O.11375 Equal Pay Act, as amended by the Education Amendments of 1972
Title IX, Education Amendments of 1972
Rehabilitation Act of 1973
Education for All Handicapped Children Act of 1975
Sexual Orientation Non Discrimination Act of 2002

Rewritten: September 22, 2004
Approved: October 12, 2004

EQUAL EDUCATIONAL OPPORTUNITIES

Every individual should be encouraged to develop and achieve to his or her potential. The district therefore shall provide every student with equal educational opportunities regardless of race, color, creed, sex, gender identity, national origin, religion, age, economic status, weight, ethnicity, sexual orientation, marital status, or disability.

An educational environment will be fostered that provides equal educational opportunity for all students. Educational programs and services will be designed to meet the needs of all students and shall not discriminate based upon any of the above-mentioned factors. No student will be excluded on such basis from participating in or having access to any course offerings, student athletics, counseling services, employment assistance, extracurricular activities or other school resources.

Ref:

Civil Rights Act of 1964, as amended in 1972, Title VI, Title VII
Executive Order 11246, 1965, amended by Executive Order 11375
Educational Amendments of 1972, Title IX; 45 CFR, Parts 81, 86
Education for all Handicapped Children Act (P.L. 94-142)
Vocational Rehabilitation Act of 1973, §504
Brown v. Board of Education, 347 U.S. 483 (1954)

Rewritten: October 20, 2010

Approved: January 25, 2011

Fulton City School District

Electronic Information Resources Acceptable Use Policy

The Fulton City School District provides its employees information technology to be used as an instructional and administrative tool in conducting school business. The vast information resources can enhance communication, and help employees stay well informed.

The Board of Education supports access by students to rich information resources.

Telecommunications, electronic information sources and networked services open classrooms to a broad array of resources. Electronic information research skills are fundamental to preparation of citizens and future employees. The Board of Education expects that staff will blend thoughtful use of such information throughout the curriculum and that the staff shall provide guidance and instruction to students in the appropriate use of such resources. Students in the Fulton City School District will use these resources to participate in learning activities; to ask questions and consult with experts; to communicate with other students and electronic information resource users throughout the world; to explore libraries, databases, and electronic bulletin boards; and to locate material to meet their educational information needs.

Students and their parents/guardians will be notified of students' responsibilities when using electronic information resources. The Board of Education requires students and their parents/guardians to be aware of the individual student's responsibility to use electronic information resources in an ethical and educational manner. The Board of Education expects that the students and staff shall hold themselves to the highest standards for conduct when using electronic information resources. The Student Rights and Responsibilities as stated in Board Policy #5311 applies to conduct while accessing electronic information resources.

The Board of Education directs that concerns about electronic information resources shall be handled the same way that concerns about other educational resources are handled and policies dealing with other educational resources also pertain to electronic information resources.

Ref:

Bellingham School District 501 Student Access To Networked Information Resources Board Policy
District 77 Internet Guidelines

Cross-ref:

1420.0, Complaints about Curricula or Instructional Materials
4510.1, Instructional Technology
4526, Computer-Assisted Instruction
5311, Student Rights and Responsibilities
5311.4, Care of School Property by Students
8650, School District Compliance With Copyright Law

Rewritten: May 19, 2010

Approved: June 22, 2010

Fulton City School District***Elementary School Age Student Acceptable Use Regulation***

Fulton City Schools offer a variety of electronic resources for our students. The district provides this service to help you be successful in your education. It is the general policy that all computers on our network will be used in a responsible, efficient, ethical, and legal manner.

Responsible users may use the Computer Resources to:

- Access educational software
- Research assigned classroom projects
- Access educational sites

Responsible users may not use Computer Resources:

- For any illegal purpose, including copyright violations
- To access images, movies, or sound which contains, pornography, profanity, obscenity, or language that offends or tends to degrade others or is inappropriate in an educational setting

Responsible users shall:

- Respect the privacy of others
- Provide no personal information about yourself or others. This includes home telephone numbers, home e-mail addresses, home addresses, pictures with name identifications, or information regarding specific student location at any given time
- Protect their password by not sharing it with others. The user shall use passwords only belonging to them
- Respect the network as a shared resource. The user shall not deliberately attempt to interfere with the work of others
- Observe all laws including copyrights and licensing agreements
- Print only with permission

Any of the following intervention strategies and disciplinary actions may be used by administrators, and are not limited to:**Minimum Action**

- Meeting with the parent, teacher, and/or administrator

Additional Actions as Deemed Appropriate

- Required to receive additional assistance in learning proper use before student is allowed to continue the use of computer equipment
- Loss of access technology resources
- Responsible for the cost of damaged equipment
- Possible in-school or out-of-school suspension

Student: I have read (or it has been explained to me) and agree to follow the FSCD Acceptable Use Regulation. I understand that any violation of the procedures may result in the loss of technology privileges.

Student Signature: _____

Date: _____

Rewritten May 25, 2005

Fulton City School District
Electronic Information Resources Acceptable Use Policy
Secondary Student Regulation

1. Definition and Purpose.

Electronic information resources form a global information infrastructure used by educators, businesses, the government, the military, and organizations. In school and libraries, electronic information resources can be used to educate and inform. As such, electronic information resources are similar to books, magazines, video, CD-ROM, and other information sources.

Students in Fulton shall use electronic information resources to participate in learning activities; to ask questions and consult with experts; to communicate with other students and electronic information resource users throughout the world; to explore thousands of libraries, databases, and electronic bulletin boards; and to locate material to meet their educational information needs. Parents/guardians need to be warned that some materials accessible via electronic information resources may contain items that are illegal, defamatory, inaccurate, or potentially offensive to some people. While the intent is to make access to electronic information resources available to further educational goals and objectives, students may find ways to access other materials as well. All educators have a professional responsibility to work together to help students develop the skills needed to appropriately use electronic information resources as educational tools. Students and staff shall receive instruction on the aspects of security and ethics involved in accessing electronic information resources.

We believe that the advantages to students from access to electronic information resources and the opportunities for collaboration exceed the disadvantages. Fulton educators shall take an active role in making students and their parents aware of the individual student's responsibility to use electronic information resources in an ethical and educational manner. Ultimately, however, the parents and guardians of minors are responsible for conveying the standards that their children should follow when using media and information sources.

Fulton City School District provides access to electronic mail and the Internet for educational purposes. Every effort is made to maintain the integrity of the system but at times users may experience errors or interruptions in service while accessing the district networks. The district is not liable for any losses or damages resulting in corrupted data or inability to access data. Precautions are taken to protect networked computers from viruses however the district does not guarantee that media brought out of the district are virus free and is not liable for any delays or damages caused by them.

Concerns about electronic information resources shall be handled the same way that concerns about other educational resources are now handled and policies now dealing with other educational resources also pertain to electronic information resources. (Board of Education Policy 4513, Library Materials Selection and Adoption)

2. Rules and Responsibilities.

The Fulton City School District provides electronic information resources to be used as an instructional tool. It is expected that all electronic resources on our network will be used in a responsible, efficient, ethical, and legal manner. Inappropriate use may result in denial of access to these electronic information resources. Students shall be instructed as to appropriate use of electronic information resources (including but not limited to, use of e-mail, the World Wide Web, etc.). The system administrators shall determine what is, and is not, appropriate use thereof. All electronic information resource users are expected to abide by the generally accepted rules of computer and network etiquette. The following guidelines are to be followed by all District students:

- Be polite. Use appropriate language. Do not swear, use vulgarities, harass others, or send or display anything offensive.
- Do not access or display materials that are profane or obscene or condone violence or discriminate toward other people or other inappropriate material.
- Practice on-line safety. Do not reveal any personal information without authorization including last name, addresses or telephone number when using e-mail, chat rooms or other forms of direct electronic communication. Do not publish another person's name, phone number, address or e-mail address. All communications on the network are considered published material.
- Use only the e-mail program that is authorized and has been set-up by the district for student use. The use of Free Mail or Internet Service Provider Mail (e.g. AOL, Yahoo, Hot Mail) is prohibited.
- The use of chat rooms is limited to teacher directed activities on educational sites that use ID's and passwords or other means to control access. The use of chat software such as AOL Instant Messenger, Yahoo Chat, MSN Chat, MS Messenger and ICQ is prohibited.
- Do not have any expectation of privacy with regard to any information stored on the network. People who operate the system have access to all files and e-mail. Messages relating to or in support of illegal activities shall be reported to the authorities and you may be liable for civil and criminal consequences.
- The use of streaming audio and video places huge demands on network resources and should be used with discretion. Please use streaming audio and video in a responsible manner and not in a frivolous manner that wastes network resources (bandwidth, storage space, etc.). Students should access, download and store video and audio files with their teacher's permission only.
 - Treat the equipment with respect. Make sure no computer equipment or software is harmed or has its effective use impaired.
 - Only access the network using your own ID/password, do not share it with others. Make sure you log off completely when you leave the computer. You are responsible if someone-else gains access to the network through your ID/password.
 - Do not attempt to bypass any network security measures. Accessing the district network from outside, using a remote access program such as PC Anywhere or Virtual PC, is prohibited.
 - Respect other users. Do not trespass or make changes in another's folders, work or files.
 - Follow copyright laws.

- Take precautions not to spread computer viruses.
- Request or distribute material appropriately. Do not send chain letters or print documents without permission.
- Use the district's computer resources for educational, not personal, commercial, or other inappropriate purposes. (This includes personal e-mail.) Unauthorized software and/or files may be removed without notice.
- Any items you produce shall not be posted on electronic information resources without your permission. If permission is granted, items shall be considered fair use and available to the public.
- Ask for help if you are unsure of what to do in an application.

3. Penalties.

Users are expected to follow the rules listed in the guidelines. A user who commits an act of misconduct whether or not it is listed may also be subject to disciplinary action and/or legal action.

Staff intervention strategies such as teacher/student conferences, auxiliary staff/student intervention and teacher/parent contacts are to be made for acceptable use policy violations when referring for administrative action. Any or all of the following intervention strategies and disciplinary actions may be used by administrators, and are not limited to:

Minimum Actions

- Administrative/student conference or reprimand.

Additional Actions as Deemed Appropriate

- Required to seek additional assistance in learning proper procedures before user is allowed to continue the use of the computer equipment.
- Administrator/parent contact.
- Referrals and conferences involving various support staff or agencies.
- Development of behavioral contracts.
- Confiscation of inappropriate item(s).
- Responsibility for costs and damages incurred.
- Denial of participation in class and/or school activities.
- Denial of access to electronic information networks, or use of all computer equipment and network resources for a period of time to be determined by the administrator after consideration of the offense (generally 3-5 days).
- In-school suspension from one (1) to five (5) days.
- Out of school suspension from one (1) to five (5) days.
- Superintendent's hearing.
- Referral to appropriate civil/law enforcement agencies. Student may be liable for civil and criminal consequences.

4. Student Agreement.

Student last name, first name: _____
name: _____

Teacher

I have read the Electronic Information Resources Acceptable Use Policy. I shall follow the rules. If I do not follow the rules, I understand that disciplinary actions shall be taken.

Student Signature:

Date: _____

Rewritten: May 25, 2005

Fulton City School District
Electronic Information Resources Acceptable Use Policy
Faculty and Staff Regulation

Electronic information resources form a global information infrastructure used by educators, businesses, the government, the military, and organizations. In school and libraries, electronic information resources can be used to educate and inform. As such, electronic information resources are similar to books, magazines, video, CD-ROM, and other information sources.

Faculty/staff access to both hardware and software may be provided at a level above that given to students. Not only does this mean that faculty/staff shall have greater control over the system, but that their access shall carry with it a greater burden of responsibility.

Fulton City School District provides access to electronic mail and the Internet for school district business and/or educational purposes. Every effort is made to maintain the integrity of the system but at times users may experience errors or interruptions in service while accessing the district networks. The district is not liable for any losses or damages resulting in corrupted data or inability to access data. Precautions are taken to protect networked computers from viruses however the district does not guarantee that media brought out of the district are virus free and is not liable for any delays or damages caused by them.

Scope

This regulation applies to **all** District employees and other authorized users of the Fulton School District computer systems.

Access Rights

The Superintendent or his/her designee shall establish levels of access for users according to each employees job duties. Access for employees and other authorized users may include, but is not limited to, the right to:

- Access or submit financial and property records
- Access buildings through the use of security codes
- Access to staff data such as personnel and payroll records
- Submit reports to other governmental agencies
- Communicate with other district staff and colleagues within and outside the school district
- Access student records
- Assign and access student work

Responsibilities:

To use your account responsibly.

- Never reveal your password to anyone.
- Prohibit student access to the computer through an open teacher/staff account. Students should only use the system when logged in under their own USER ID.
- Student teachers and practicum students should only use the system when logged in under their own USER ID.
- Substitute teachers (excluding long term replacement substitutes) are not authorized to use the district network. Students under their supervision should not be accessing the network.
- Never logon under your User ID and allow someone else to access the network.
- Logoff the network when leaving the machine unattended.

To see to it that hardware and software under his/her supervision is being used responsibly:

- Do not assign courseware to students who have not been taught to operate it properly.
- Do not allow students to operate hardware until they have been properly trained in its use.
- Carefully preview any materials, software and Internet sites before providing access or distributing to students. It is important that material of an inappropriate nature not be passed along to students, or be made available to students, even if inadvertently.
- Do not request installation of software on your computer that is not licensed to the school as it may place you in violation of copyright laws. The Technical Support Personnel may install software purchased by individual teachers on building machines only if the media becomes the property of the school district and remains in the possession of the building Technology Teacher Assistant/Aide, except for CD-ROM's required to run the program.
- Do not allow or provide unsupervised access to electronic information resources. Open searches on the Internet should only be conducted by students when the teacher is providing one-on-one supervision.
- Student teachers and practicum students should be involving students in Internet activities only under the direct supervision of their master teacher. The master teacher **must** be in the room at all times while students are on the Internet.
- Substitute teachers shall not have access to the Internet and should never be conducting an Internet activity with the students.

To use the system responsibly.

- Do not send or forward without authorization confidential school district information or confidential information about district employees or students.
- Do not use electronic communications to distribute materials or otherwise promote, or solicit other system users on behalf of commercial ventures, political or religious causes, charitable organizations, or other causes or groups.

- Do not send any electronic communications that cause the district to incur liability, such as ordering goods, unless specifically authorized.
- Do not access or display materials that are profane or obscene; or condone violence or discrimination towards other people or other inappropriate materials.
- Provide appropriate supervision of students when accessing the Internet, including students using e-mail and other forms of direct electronic communications.
- Provide instruction to your students regarding the District's requirements, expectations and student's obligations when accessing the Internet. Notify your students that they are not to reveal personal information without authorization including last name, address, and phone number when using e-mail, chat rooms and other forms of direct electronic communications.
- The use of chat rooms is limited to teacher directed activities on educational sites that use ID's and passwords or other means to control access. The use of chat software such as AOL Instant Messenger, Yahoo Chat, MSN Chat, MS Messenger and ICQ is prohibited.
- Document incidents of inadvertent access to inappropriate material and give the documentation to the building Technology Teacher Assistant/Aide.
- Do not use the District's computer resources for personal, commercial or other inappropriate purposes (this includes personal e-mail). Unauthorized software and/or files may be removed without notice.
- Request and distribute materials through electronic means appropriately. The use of mass emails places huge demands on network resources and should be used only with permission of your supervisor. Staff should forward any email communication intended for a large group of people such as the entire building or all district staff, to their supervisor (in the case of teachers to their building principal) who will then forward the email to the appropriate audience at their discretion. Union Officials, when communicating official union business, are not required to seek the permission of their district supervisors.
- Do not have any expectation of privacy with regard to e-mail or anything stored on Fulton district equipment. All files and data on district machines become the property of the Fulton School District. Inappropriate usage of files or messages shall result in disciplinary action. Messages relating to or in support of illegal activities shall be reported to the authorities and you may be liable for civil and criminal consequences.
- Use only the e-mail program that is authorized and has been set-up by the district for staff use. The use of Free Mail or Internet Service Provider Mail (e.g. AOL, Yahoo, Hot Mail) is prohibited.
- The use of streaming audio and video places huge demands on network resources and should be used with discretion. Please use streaming audio and video in a responsible manner and not in a frivolous manner that wastes network resources (bandwidth, storage space, etc.). Students should access, download and store video and audio files with their teacher's permission only.
- Do not attempt to bypass any network security measures. Accessing the district network from outside using remote access, a program such as PC Anywhere or Virtual PC, is prohibited.
- To prevent infection by viruses, delete e-mail with attachments if it is from someone you do not know.

- Do not use the system to engage in illegal activities, you may be liable for civil and criminal consequences.
- Do not load software on district machines. All software shall be installed district technical support personnel. After installation all media (diskettes/CD-ROM's) shall remain in the possession of the Technology Teacher Assistant/Aide, locked in a suitable location, except for CD-ROM's required to run the program.

Rewritten: October 7, 2004

Approved: November 9, 2004

INTERNET SAFETY POLICY

In compliance with The Children's Internet Protection Act (CIPA) and Regulations of the Federal Communication Commission (FCC), the District has adopted and will enforce this Internet safety policy that requires 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.

However, no filtering technology can guarantee that adults and minors will be prevented from accessing all inappropriate locations. Proper safety procedures as deemed appropriate by the building administrator and/or Director of Technology, will be provided to comply with the CIPA.

Under certain specific circumstances, the blocking or filtering technology measure may be disabled for adults engaged in bona fide research or other lawful purposes. The Superintendent or his/her designee will authorize the disabling of the blocking or filtering technology.

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 adults and minors are prohibited by the District; and violations of such policies shall result in disciplinary action.

Appropriate supervision and notification shall be given to students regarding the prohibition of unauthorized disclosure, use and dissemination of personal information while using electronic mail, chat rooms, and other forms of direct electronic communications.

The determination of what is "inappropriate" for minors shall be determined by the District based on community standards. 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 defined in accordance with CIPA.

The School District shall provide certification, pursuant to the requirements of CIPA, to document the District's adoption and enforcement of its Internet Safety Policy, including the operation and enforcement of technology protection measures for all School District computers with Internet access.

The Superintendent is authorized to develop and implement regulations consistent with this policy. The Superintendent is also responsible for disseminating the policy and associated regulations to school personnel and students.

Ref: 47 United States Code (U.S.C.)
Section 254(h) and (l)
47 Code of Federal Regulations (C.F.R.) Part 54

Cross-ref: 4526.1, Electronic Information Resources Acceptable Use Policy
1420, Complaints about Curricula or Instructional Materials

Written: January 16, 2002
Approved: February 26, 2002

Internet Safety Regulation

Internet access on the District's computer system is provided for adults and minors as a means to enhance the educational mission and instructional programs of the School System, to further District goals and objectives, and to conduct research and communicate with others. Internet access from school computers is reserved solely for educational purposes. Student access to the Internet will be under the direction and supervision of the staff assigned to the particular Internet access area or computer.

In accordance with The Children's Internet Protection Act (CIPA), the District will use technology protection measures (i.e., filtering or blocking of access to certain material on the Internet) on all District computers with Internet access to address safety concerns regarding the online activities of minors. Consequently, the District will block or filter Internet access for both minors and adults to visual depictions that are:

- 1) Obscene - "Obscenity" (as defined pursuant to CIPA) is defined as any work that an average person (applying community standards) would find, taken as a whole, appeals to a prurient interest. The work must depict or describe, in a patently offensive way, sexual conduct as specifically defined in state law. Moreover, the work taken as a whole, has to lack serious literary, artistic, political or scientific value.
- 2) Child pornographic - The term child pornographic (as defined pursuant to CIPA) is defined as ...any visual depiction, including a photograph, film, video, picture, or computer or computer-generated image or picture, whether made or produced by electronic, mechanical or other means, of sexually explicit conduct, where (a) the production of visual depiction involves the use of a minor engaging in sexually explicit conduct; (b) such visual depiction is or appears to be , of a minor engaging in sexually explicit conduct; (c) such visual depiction has been created, adapted, or modified to appear that an identifiable minor is engaging in sexually explicit conduct; or (d) such visual depiction is advertised, promoted, presented, described or distributed in such manner that conveys the impression that the material is or contains a visual depiction of a minor engaging in sexually explicit conduct;
- 3) Harmful to minors - The term "harmful to minors" is defined, pursuant to CIPA, as any picture, image, graphic image file, or other visual depiction that:
 - a. Taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion;
 - b. Depicts, describes or represents, in a patently offensive way with respect to what is suitable for minors, an actual or simulated sexual act or sexual contact, actual or simulated, normal or perverted sexual acts, or lewd exhibitions of the genitals; and
 - c. Taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.

In addition, the District will filter or block minors' Internet access to other material determined to be inappropriate to minors. The determination of what is "inappropriate" for minors shall be made by the Board of Education applying local community standards.

However, no filtering technology can guarantee that adults and minors will be prevented from accessing all inappropriate locations. Proper safety procedures as deemed appropriate by the building administrator and/or Director of Technology, shall be provided to comply with the CIPA. Consequently, if District personnel and/or students find an accessed site that is questionable, the procedure is to notify the appropriate supervisor/teacher who shall notify the appropriate Instructional Technology Department staff.

Under certain specific circumstances, the blocking or filtering technology measure may be disabled for adults engaged in bona fide research or other lawful purposes. The Superintendent or his/her designee will authorize the disabling of the blocking or filtering technology.

In the interest of safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications, appropriate supervision shall be provided by a classroom teacher and/or other appropriate District personnel; and notification shall be given to minors regarding the prohibition as to disclosure, use and dissemination of personal information regarding them. In using electronic mail, chat rooms, and other forms of direct electronic communications, minors are not permitted, without authorization, to reveal personal information such as home addresses, telephone numbers, their real last names or any other information, which might allow someone they are communicating with online to locate them. No minor shall arrange a face-to-face meeting with someone he/she "meets" on the computer network or Internet without his/her parent's permission. The use of e-mail and chat rooms may be blocked as deemed necessary for the safety of students.

Adults and minors shall also be informed regarding unauthorized access to District computers and the Internet, including so-called "hacking," and other unlawful activities by adults and minors while online. It is a violation of this Policy to:

1. Use the School's computer network or the Internet to gain unauthorized access to other computers or computer systems, or to attempt to gain such unauthorized access;
2. Damage, disable or otherwise interfere with the operation of computers, computer systems, software or related equipment through physical action or by electronic means; and/or
3. Violate state or federal law relating to copyright, trade secrets, the distribution of obscene or pornographic materials, or any other applicable law or municipal ordinance.

In accordance with law, The Director of Technology and other Instructional Technology Department staff may access all staff and student files, e-mail, and electronic storage areas to maintain system integrity and to determine if users are complying with the requirements of CIPA and District policy and procedures. Logs of access may be monitored in order to keep track of the sites visited by students as a measure to restrict access to material harmful to minors. Information regarding the logs will be released according to FERPA (Family Educational Rights and Privacy Act).

Written: January 16, 2002

FULTON CITY SCHOOL DISTRICT WEB PUBLISHING

The Board of Education supports the development and maintenance of a Web site to provide information about our District, showcase the work of our students and staff, and to link our students and staff to outside information resources. Web pages should support the educational aims of the Fulton City School District.

All documents on the Fulton City School District's Web Server(s) must conform to law, the Electronic Information Resources Acceptable Use Policy, all other Board of Education policies and regulations, as well as established school guidelines. Persons developing or maintaining Web documents are responsible for complying with these and other policies.

Ref: Winona School District Web Policy

Cross-ref:

4510.1, Instructional Technology

4526, Computer-Assisted Instruction

4526.1, Electronic Information Resources Acceptable Use Policy

5311, Student Rights and Responsibilities

5311.4, Care of School Property by Students

5501, Student Directory Information

8650, School District Compliance with Copyright Law

Rewritten: June 16, 2010

Approved: October 12, 2010

FULTON CITY SCHOOL DISTRICT WEB PUBLISHING REGULATION

Purpose:

School Web pages are public documents welcoming the outside world to the school and linking students and staff to outside sources of information. Guidelines are required in the construction of school web pages to see to it that information on the pages is appropriate for any Internet user from around the world to access. Web pages should support the educational aims of The Fulton City School District. Student Web pages regardless of whether created as a classroom or extra-classroom activity are intended to support and reinforce the District's curriculum and as such will be treated like student newspapers.

In producing web pages the following goals should be considered:

1. Introducing outside visitors to the school and its program
2. Sharing the school's successes with the world
3. Linking internal users to good outside information resources

Requirements:

- Web pages on the district's server **are the property of the district**. The web server will be examined periodically to check for the timeliness and relevance of its pages. Web pages that do not comply with District Policies will be removed.
- All web sponsors must participate in appropriate training to familiarize themselves with and adhere to the related policies, regulations and procedures. Failure to follow these policies or regulations may result in the loss of sponsoring privileges or more stringent disciplinary measures.
- All district web pages must have an objective that conforms to the district web policy. Documents may not contain objectionable material or link directly to objectionable material. Objectionable material is defined as material that is profane or obscene or condones violence or discriminates toward other people, or other inappropriate material.
- All documents on the Fulton City School District's server must conform to the School Board Policies and regulations, the Electronic Information Resources Acceptable Use Policy, as well as established school guidelines. Persons developing or maintaining Web documents are responsible for complying with these and other policies.
- Links to non-district servers must contain a disclaimer indicating that the user is leaving the district server and that the linked material is not necessarily approved by the district.
- Any deliberate tampering with or misuse of district network services or equipment will be considered vandalism and will be handled as such. The District web site will not be used for attempts to breach network security or transmit viruses, etc.
- Only the assigned district web servers shall be configured as Web/FTP servers.
- Appropriate / Acceptable Content for web pages posted to the Fulton City School District's Web Server:

- No “guest books” or response forms which allow immediate, unmediated posting by the public will be hosted on the Fulton City School District web site or linked to from that site.
- The District web site will not be used for personal web pages, and will not use the district site for links that exist only to illustrate personal interests.
- You may not seek to profit in any way, either directly or indirectly, from any content that you publish or any links that you include in that material. You are not allowed to advertise products or services of any kind without district approval. Your web pages may not display advertising banners, links, or other material for which you are compensated.
- Student Directory Information is defined in Board of Education Policy 5501. Information relating to students such as a student’s name, name of the student’s parent or guardian, school currently attending, grade in school, participation in officially recognized activities and sport, awards received, a student’s work (written or otherwise), photographs and video and/or audio clips of students will be published on the District Web site in accordance with this Policy.

- No web page shall contain political material unless related to student body campaigns.
- All web pages must be free from spelling and grammatical errors.
- Copyrighted materials, including graphics, may not be used on Web pages without permission from the copyright holder. Refer to Fulton Schools’ Copyright Permission Request Form. Electronic transmission of materials is a form of copying. No unlawful copies of copyrighted materials may be knowingly produced or transmitted via the district’s equipment, including its web server(s).
- The following persons and organizations will be allowed to publish information on the Fulton City School District’s web server:
 - Schools, departments, offices, official committees and organizations of the school district;
 - Official student organizations under the sponsorship of the designated faculty advisor;
 - Currently enrolled students under the sponsorship of a faculty member;
 - Currently employed faculty and staff;
 - Each school’s Parent-Teacher Organization (PTO) under the sponsorship of the building administrator
- Each web page added to the District Web site(s) will conform to the following technical recommendations which will provide general consistency for District Web Pages:
 - At the bottom of the Web page, there must be an indication of the date of the last update to that page and the name or initials of the person(s) responsible for the page or update. It shall be that person’s responsibility to keep the Web page current.
 - At the bottom of the Web page, there must be a link that returns the user to the District’s main page.
 - Users must exhibit care when creating Web pages with extensive tiled backgrounds or large graphics. Such files require extensive download time, are frustrating for modem users, and slow down the files servers. As a general rule, a Web page should not take longer than one minute to download over a 14.4K

- modem connection. Graphics files shall be under 60K in size unless a special situation exists that requires a larger graphic.
- All graphics should be in GIF or JPG format. Other formats, including sound or video, may not be used.
 - Use Width and Height tags/settings with your graphics, so that your page's text will load completely while visitors to your page are waiting for the graphics to download.
 - File Names:
 - All Web pages must be given names that clearly identify them with regards to the page's content.
 - Do not use any file names for documents, pictures, etc. that indicate the full identification of people involved (i.e., marysmith.jpg).
 - File names should not contain spaces or special characters (hyphens or underscores may be used instead of spaces).
 - File names should use the file name extension "html" instead of "htm".
 - Try to name your files with short, descriptive names.
 - File Management - Use an "images" folder to store all of the images referenced in your web pages.
 - Maintain consistency throughout all of your web pages with the site's stated purpose.
 - Break out of any frames when linking to external sites.
 - Additional consistency standards will be developed by the District as the need arises.
 - Given the rapid change in technology, some of the technical standards outlined in this policy may require change throughout the year. The District Web Policy Development Committee/District Technology Committee will make such changes.

Ref: This document contains excerpts from the following school district web publishing policies: St.John's, Cortland, Winona, Jordon, Kern, Mankato, Hinsdale-District 86, Georgetown, Lyme-Old Lyme, Web Central style guide

Rewritten: October 7, 2004
11/09/04

Fulton City School District Website Sponsor Authorization Request Form

This form is designed for use by Fulton City School District faculty to request permission to sponsor a website on a district server.

Websites on the district server must have a designated Web Site Sponsor for their site. A Web Site Sponsor **MUST** be a Fulton City School District faculty or staff member, **NOT** a student. Although the Web Site Sponsor does not need to personally author the documents that comprise the website, it is the responsibility of the Web Site Sponsor to monitor the content of the material being placed within the site and to make sure that information conforms to district web site policy and is updated in a timely fashion. If at any time a Web Site Sponsor wishes to relinquish this responsibility, he or she needs to notify the Director of Technology in writing.

1. Name: _____
2. E-mail address: _____
(Your address @fulton.cnyric.org)
3. Phone extension/Voicemail #: _____
4. Proposed subject of website: _____
5. Subject category: _____
(Fulton City School District Activity)
6. Use this space to clarify the proposed topic and to provide a brief summary of the proposed content.

7. I am not the official sponsor of this organization.
8. I intend to write supervise the development of this site.
9. Please list the names of students and/or community members who will be involved in the development of this site.

Rewritten: October 7, 2004
11/09/04

Copyright Permission Letter

DIRECTIONS: Whenever a student or staff member wishes to “re-publish” someone else’s writing or graphics on a Fulton City School District Web site, explicit permission must be obtained from the owner of copyright or evidence must be provided that the materials are “in the public domain.” The form below may be copied and sent to the owner of the site and/or the owner of copyright. The reply, which answers all questions fully and grants permission, should be kept as a record of permission to re-publish. Every Web page containing such items must provide full credit to the source, indicate that permission was granted and include a notice clarifying that all rights are still reserved by the copyright owner.

*******Copy the letter below and send to Site Owner*******

Fulton City School District Copyright Permission Request

(Type Name of Site here)

(Type Name of Site Manager here)

(Type e-mail address of Site Manager here)

(Type URL(s) (addresses) of Web page containing desired item(s))

Dear (insert name of Site Manager):

I am a (insert either “Student” or “Teacher”) in the Fulton City School District creating Web pages for academic use. My school is (insert name of school). My e-mail address is (insert full e-mail address).

We are currently engaged in a project which (insert description of the project and its goals here).

While doing research for this project, I visited your excellent site and was very much impressed with what you have done.

I am interested in gaining permission to “re-publish” the following material from your Web site on our school’s Web site:

(describe first item)

(describe additional items)

Are you the holder of a copyright for these materials?

Yes No

If you are not the holder of a copyright, can you identify the owner and supply an e-mail address so that I may contact the owner?

If you are the holder of the copyright, may we “re-publish” these items, including at the bottom of the Web page a clear notice that we are “re-publishing” the item with your permission, with all rights reserved?

I give my permission.

I do not give my permission.

Please write the words you wish for us to place at the bottom of the page describing your copyright restrictions.

Thanks so much for your time and assistance. We appreciate your contribution to the development of excellent content on the Web.

Please send back the entire Copyright Permission Request Form with your name and title at the bottom so that we can identify the source of permission.

Sincerely,
(insert your name)

Adapted from Bellingham Copyright Permission Letter

Rewritten: October 7, 2004
11/09/04

FULTON CITY SCHOOL DISTRICT
Staff Member Internet Release

I hereby give my permission for my original work, to appear on a District web page.

I certify that any work I submit is an original creation and/or that I have submitted written authorization for any included material that is not original.

I understand that all web documents submitted may be modified or deleted at the district’s discretion.

Staff Member Name (Please Print)

Signature

Date

Rewritten: October 7, 2004
11/09/04

STUDENT DIRECTORY INFORMATION

The term "Student Directory Information" for students in grades pre-kindergarten through twelfth grade includes the following information relating to a student: the student's name, name of the student's parent or guardian, school presently attending, grade in school, participation in officially recognized activities and sports, awards received, a student's works (written or otherwise), photographs including the student, and video and/or audio clips of students. "Student Directory Information" for students in grades nine through twelve includes the following additional information: the student's address, electronic mail address, telephone listing, date and place of birth, major field of study, weight and height of members of athletic teams, dates of attendance, the most recent previous educational institution attended by the student.

The District may disclose Student Directory Information without consent of the parent or eligible student. However, a disclosure of Directory Information in any category shall be made only after public notice has been given that the category of information is considered to be Directory Information, of the right of the parent or eligible student to refuse to permit disclosure of some or all of such information, and of the time limit on such right of refusal. The District shall publish such notice at least once annually. The right of refusal must be exercised in writing, and must be received by the student's Principal not later than 20 days after publication of such notice, although the District may, in its discretion, waive this time limitation in specific cases.

The Board of Education directs the Superintendent of Schools to develop an annual public notice regarding Student Directory Information and a procedure to implement such notification.

Reference: Family Educational Rights of Privacy Act of 1974, 20 U.S.C. §1232g; Regulations of the U.S. Department of Education, 34 CFR, Part 99

Cross-ref: 4526.3, Web Publishing Policy
5500, Student Records

Written: October 7, 2004
Approved: November 9, 2004

SAMPLE NOTICE TO PARENTS

The *Family Educational Rights and Privacy Act* (FERPA), a Federal law, requires that the Fulton School District, with certain exceptions, obtain your written consent prior to the disclosure of personally identifiable information from your child's education records. However, the Fulton School District may disclose appropriately designated "directory information" without written consent, unless you have advised the District to the contrary in accordance with District procedures. The primary purpose of directory information is to allow the Fulton School District to include this type of information from your child's education records in certain school publications.

Directory information, which is information that is generally not considered harmful or an invasion of privacy if released, can also be disclosed to outside organizations without a parent's prior written consent. Outside organizations include, but are not limited to, colleges and universities, military recruiters, the media, and prospective employers.

The Fulton School District has designated the following information as "Student Directory Information" for students in grades pre-kindergarten through twelfth grade: the student's name, name of the student's parent or guardian, school currently attending, grade in school, participation in officially recognized activities and sports, awards received, a student's works (written or otherwise), photographs including the student, and video and/or audio clips of students. "Student Directory Information" for students in grades nine through twelve includes the following additional information: the student's address, electronic mail address, telephone listing, date and place of birth, major field of study, weight and height of members of athletic teams, dates of attendance, the most recent previous educational institution attended by the student.

Examples of publications that may contain Directory Information include, but are not limited to, the following:

- A playbill, showing your student's role in a drama production;
- The annual yearbook;
- The Fulton School District Web site;
- Honor roll or other recognition lists;
- Graduation programs; and
- Sports activity sheets, such as for football, showing weight and height of team members.

If you do **not** want the Fulton School District to disclose directory information from your child's education records without your prior written consent, you must notify the District in writing within 20 days, i.e., by [date] . You may use the attached form to provide such notification.

Written: October 7, 2004

11/9/04

SAMPLE OPT-OUT FORM

Reservation of Consent for the Release of Certain Student Information Under the
Family Educational Rights and Privacy Act (FERPA)

Please do **not** release directory information pertaining to the following student:

Name of Student (Please Print)

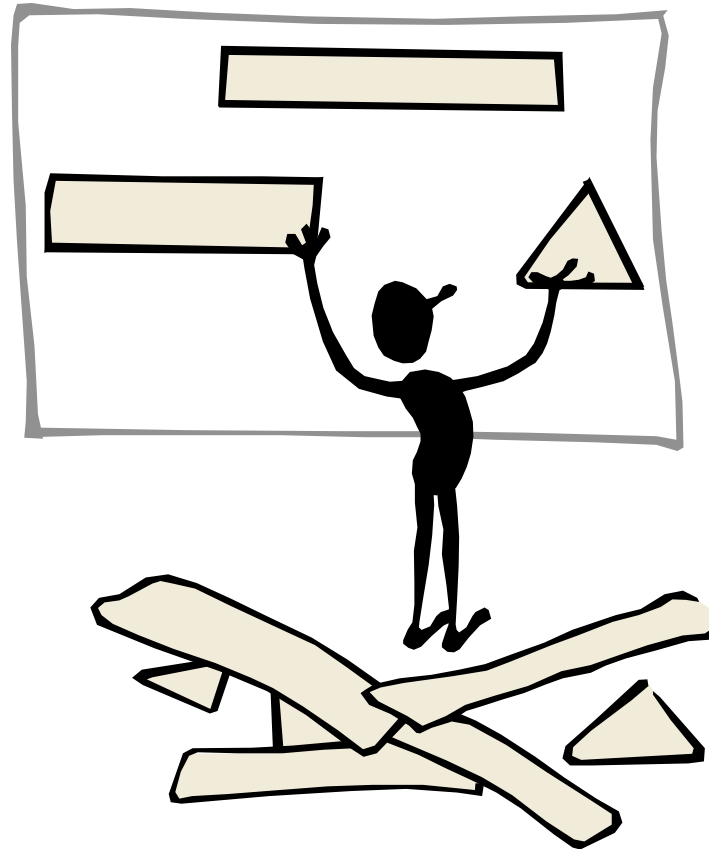
Parent Signature

Date

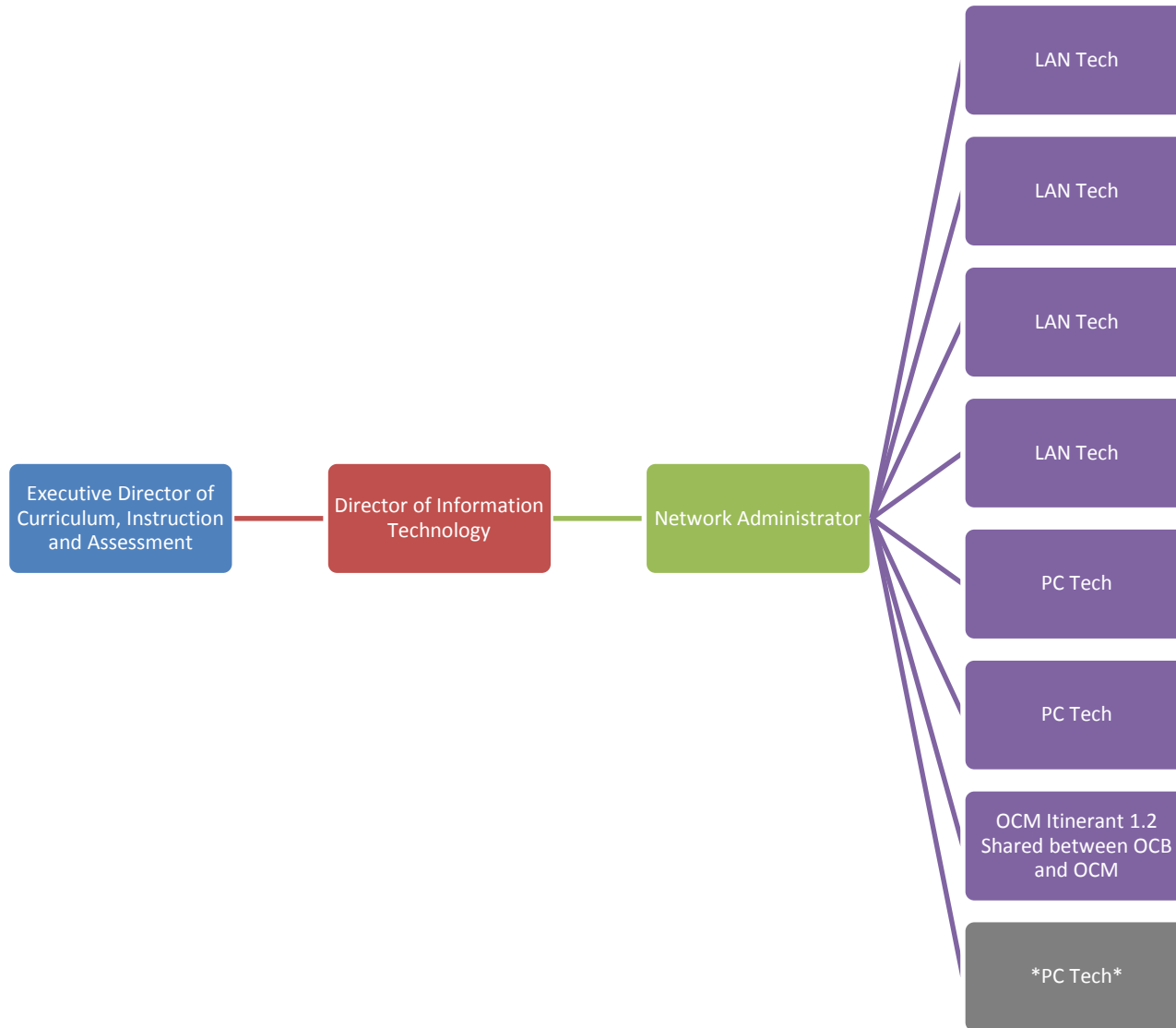
Written: October 7, 2004
11/9/04

Appendix K

Technology Support Staff Chart



Fulton City School District IT Department Structure



Appendix L

E-Rate & Technology Plan Evaluation Rubric

Fulton City School District
Plan Years: 2014-2017

Requirement 1 – Technology Program Assessment

An assessment of telecommunications, hardware, software, professional development, staffing, and other services that are needed to improve education and/or library services.

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Requirement 2 – Goals & Strategies

The establishment of clear goals and realistic strategies for using instructional technologies and technology services to improve education and/or library services.

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Requirement 3 – Professional Development

A professional development strategy that ensures staff members know how to use planned technologies to improve education and/or library services.

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Requirement 4 - Budget

A detailed budget of planned expenses for acquiring and maintaining hardware, software, professional development, telecommunications, staff salaries, BOCES services, and other items that will be needed to implement the technology plan strategy.

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Requirement 5 – Evaluation Process

An evaluation process enabling the district to monitor progress toward the specified goals and make mid-course corrections as needed in response to new developments and opportunities that arise.

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