

Table of Contents

Executive Summary	2
Essential Conditions.....	2
Mission.....	3
Vision.....	3
Goals	4
Teachers.....	4
Students	4
Administration/Support.....	4
Community	5
Information Technology Assessment	5
Location	5
Current Enrollment.....	5
Budget Cycle.....	5
Contractual Services and e-Rate.....	5
Support Staffing.....	5
Current Network Environment and Schematics	6
Current Inventory	6
Hardware.....	6
Library/Media Centers	7
Middle Country Web site	7
Internet Access: World Wide Web and E-Mail.....	7
Internet Safety.....	7
Technology Standards.....	10
For Students.....	10
Educational Technology and the Common Core.....	11
For Teachers	13
For Administrators:	14
Profiles for Technology Literate Students	16
Profile for Technology Literate Students Grades PK-2 (Ages 4-8).....	16
Profile for Technology Literate Students Grades 3-5 (Ages 8-11)	17
Profile for Technology Literate Students Grades 6-8 (Ages 11-14).....	18
Profile for Technology Literate Students Grades 6-8 (Ages 11-14).....	18
Duration of Plan	19
Planned Acquisitions.....	19
Professional Development	20
Assessment	20
Appendices.....	21
Appendix A: Instructional Hardware Upgrade Plan & Projected Budget.....	21
Appendix B: Turnkey Course Descriptions	24
Appendix C: Acceptable Use Policy	28
Appendix D: Network Schematics	31

Executive Summary

Technology is constantly changing and rather than trying to “teach technology”, we can best prepare our students for success in their lives beyond high school by setting up opportunities for them to solve real-world problems with the aid of technology. Students should be given opportunities to access, analyze, synthesize and present ideas and information as they work on research based projects.

Integrating technology in support of learning is best accomplished by giving students access to tools for communicating and problem solving. Teaching strategies that support the integration of technology include: less directing and more guiding; designing activities that require students to deal with substantive questions, engaging students in collaborative projects, and work that requires analysis and research. The state standards for all subject areas repeatedly reference the words: analyze, interpret and infer. Having students engage in web-based research to solve problems will help our students to meet and exceed the standards in all subject areas.

Essential Conditions

Necessary conditions to effectively leverage technology for learning

Note: ICT = Implementation of technology for achieving curriculum and technology

Shared Vision	Proactive leadership in developing a shared vision for educational technology among school personnel, students, parents, and the community
Implementation Planning	A systemic plan aligned with a shared vision for school effectiveness and student learning through the infusion of ICT and digital learning resources
Consistent and Adequate Funding	Ongoing funding to support technology infrastructure, personnel, digital resources, and staff development
Equitable Access	Robust and reliable access to current and emerging technologies and digital resources, with connectivity for all students, teachers, staff, and school leaders
Skilled Personnel	Educators and support staff skilled in the use of ICT appropriate for their job responsibilities
Ongoing Professional Learning	Technology-related professional learning plans and opportunities with dedicated time to practice and share ideas
Technical Support	Consistent and reliable assistance for maintaining, renewing, and using ICT and digital resources
Curriculum Framework	Content standards and related digital

	curriculum resources
Student-Centered Learning	Use of ICT to facilitate engaging approaches to learning
Assessment and Evaluation	Continuous assessment, both of learning and for learning, and evaluation of the use of ICT and digital resources
Engaged Communities	Partnerships and collaboration within the community to support and fund the use of ICT and digital resources
Support Policies	Policies, financial plans, accountability measures, and incentive structures to support the use of ICT in learning and in district and school operations
Supportive External Context	Policies and initiatives at the national, regional, and local levels to support schools in the effective implementation of technology for achieving curriculum and technology (ICT) standards

Mission

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

Vision

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

- Resources available on the district website to promote learning opportunities for the MCCSD community.
- Technological systems in place, which reduce paperwork and costs and improve communication.

Goals

Teachers

- Implement an on-line database of lesson plans linked to standards
- Implement an on-line course request system that tracks professional development
- Provide increased access to technology through the use of wireless laptop computers and strategically placed clusters and labs
- Enable WEB based access to the student management system, reports cards and I.E.P. documents.
- Implement on-line period-by-period attendance at the high schools.
- Implement on-line grade book program.
- Expand turnkey training program with emphasis on integration of technology in the learning environment.
- Improve communication district-wide through the use of e-mail and shared calendars.

Students

- Increase the use of wireless laptop labs and tablets to provide increased access to technology.
- Develop school to career partnerships with vendors and internship opportunities in the area of technology.
- Support technology course offerings including: web-design, digital photography, and networking.
- Provide access to an increasing number of educational on-line resources.
- Increase utilization of technology to help students meet and exceed state standards.
- Increase utilization of elementary classroom computer clusters to foster differentiated instruction.

Administration/Support

- Provide on-going training on productivity software.
- Upgrade network infrastructure to include fiber connectivity between buildings.
- Setup an e-mail/calendaring program with shared resources for improved communications (group lists and shared calendars)
- Implement SASI student management system
- Provide electronic grade reporting for all schools
- Move to a financial management system that provides better reporting and analysis capabilities.
- Create a help desk for increased support to end-users.
- Reduce paperwork and costs associated with report generation and publication of information.

Community

- Expand school to community links via website.
- Provide parents with access to selected students information over the web
- Expand number of educational links and resources on the district web site.
- Continue to support adult education technology courses
- Develop partnerships/linkage with area colleges, universities and the business community that afford our students better placement opportunities and link our curriculum more closely with what is happening at the college and professional level.

Information Technology Assessment

Location

Middle Country Central School District is a district with 4 secondary schools, 8 elementary schools and 2 kindergarten centers. In addition, there is a district administrative office, a building and grounds office and an office for special education.

Current Enrollment

As of 10/11/2013:

K-5	4352
6-8	2354
9-12	3196
UPK	502
Out of District	163
Total	10747

Budget Cycle

The Middle Country Central School District budget is from July 1st through June 30th.

Contractual Services and e-Rate

Each year the school district issues Request For Proposals (RFP's) and awards contracts for Internet connectivity, network support, network installation, equipment purchases and equipment support and repair in accordance with state purchasing guides.

The Middle Country Central School District files annually for e-ratable services in the areas of telecommunications, Internet access, and internal connections to meet SLD guidelines and to avail it to applicable discounts and reimbursements.

Support Staffing

The district maintains a computer support center that is staffed by 6 technicians. The support staff consists of a senior support specialist, a network administrator and 4 technicians. In addition, our support center has a system operator who maintains our administrative systems including the student and financial management systems. Teacher Aids (TA) serve as the first level of on-site troubleshooting in each school.

Teachers report problems using a reporting form through their main office to the building TA. If the TA is unable to resolve the problem, they use an on-line reporting system called TroubleTracker to request assistance from the computer center. Technicians are assigned to each problem for resolution. At the current time, repair logs indicate an average 4-7 day turnaround time on repair requests.

Current Network Environment and Schematics

Each building is wired with category 5 Ethernet cabling. Most classrooms have 7 drops and electrification for computer use. We currently are using Alcatel megabit switches for our building LANs. Our buildings are connected to a central site using fiber optic lines. Fiber has been run between our buildings, which allow us to deliver up to 40 mbps of Internet to our schools.

For a detailed schematic, please see Addendum D.

Current Inventory

Hardware

There are over 3000 computers district-wide, which include Intel Core 2 Duo, AMD Athlon 64 X2, AMD Athlon II X2, and AMD A-Series.

At the elementary level, all classrooms have one teacher computer and an n-Computing cluster that consists of one desktop computer and four n-Computing workstations. In addition, each building also has a mobile laptop lab cart consisting of 30 computers, which was installed in the 2011-2012 school year. Each Kindergarten center and New Lane Elementary were given additional laptop lab carts in the 2012-2013 school to support MAP testing.

At the middle school level, all classrooms have one computer per classroom. Each middle school has 2 computer labs of 30 computers each.

At the high school school level, all classrooms have one computer per classroom. Each high school has a computer lab in the library, an art computer lab, a music theory lab, as well as 6 additional computer labs.

Our servers for all buildings were replaced during the 2011-12 school year with updated VMWARE clusters. This virtualization increases performance and data integrity dramatically.

Instructional Software

Available software currently includes Microsoft Office 2010, Adobe Design & Web Premium Suite 6, Riverdeep mathematics and ELA software, Inspiration (mapping), Geometer Sketchpad, Vernier Probes and analysis software, web access to our library holdings and a variety of on-line references.

Administrative Software

Microsoft Office 2010 is the standard productivity package for all administrative users. PowerSchool is our existing student management system. A district wide upgrade was done during the 2012-2013 school year to bring every desktop to Windows 7. All district users with a

GroupWise email accounts were transitioned to Microsoft Office 365, as well. At the present time, financial and human resources are supported by the Finance Manager Suite.

Library/Media Centers

The district's library media centers are equipped with clusters of computers for research and an automated card catalog to access and administer library holdings. In the 2008-2009 school year, web access to the district holdings was put in place with the OPALS system, allowing students to lookup books in each of our school libraries from any networked computer. In addition, the library media centers have multimedia equipment on hand for sign-out use by staff and students. This equipment includes LCD projection units, digital cameras, video cameras, overhead projectors, monitors with DVD/VCRs on carts and related equipment.

Librarians attend training sessions on newly acquired technologies including digital imaging devices and projection systems and serve as lead technologists in buildings. Bi-monthly meetings are held with the Coordinator for Technology and Career Education to plan for greater technology infusion into the library media centers.

Middle Country Web site

The Middle Country Central School District web site is a communications link to our community that includes the district mission, strategic plan, curricula, school calendar, web resources, and information on school programs and policies. Each school has a link to their own web page. Other links include the district technology newsletter and hundreds of educational resources grouped by subject area. The district website can be found at www.mccsd.net.

The site has been awarded the Golden Web Award in 2002 and again in 2003.

Internet Access: World Wide Web and E-Mail

Filtered Internet access for research is available on computers district-wide. The filtering hardware/software currently in use is provided by BASCOM, which facilitates filtering of staff and students that is more aggressive than that laid out in the Child Protection Act (CIPA). In addition, district library media specialists give lessons dealing with appropriate online behavior, including cyber-bullying awareness, response and how to interact with other individuals on social networking sites and in chat rooms.

E-mail accounts are provided to all staff members. Teachers can request e-mail accounts for students on an as needed basis in support of instruction. The district maintains its own e-mail server. User e-mail addresses typically consist of the first letter of the user's first name, followed by their last name, followed by @mccsd.net. We also provide the community with an emergency email notification system.

On July 1st, 2009, Middle Country schools began implementation of an email-archiving system provided by Gaggle.Net. Gaggle continues to facilitate archival services for all incoming and outgoing mail for the school district, even after Middle Country's transition of Office365.

Internet Safety

The Internet has had a profound influence on education, including access to resources and opportunities for collaboration across geographic barriers. Studies show that increased Internet use correlates with an overall higher rate of student achievement. High-speed Internet

connections have made the Web much more interactive. Students quickly adopt new technologies and many do not have the experience or knowledge to understand the risks. MCCSD currently has Internet acceptable use policies and employs advanced filtering software. These policies and filters are necessary as well as integrating Internet safety into the curriculum.

Curriculum Integration Overview

- The Internet is a powerful tool that should be used wisely.
- Not all Internet information is valid or appropriate.
- Students are taught how to maximize the Internet's potential, while protecting themselves from potential abuse.
- Internet messages and the people who send them are not always what or who they seem.
- Predators and cyber bullies anonymously use the Internet to manipulate students. Students must learn how to avoid dangerous situations and get adult help.
- Internet activities, such as playing games and downloading music or video files can be enjoyable. Students need to know which activities are safe and legal.

Resources on Internet Safety

The National Center for Victims of Crime
<http://www.ncvc.org>

Childhelp USA
<http://www.childhelpusa.org>

NetSmartz Workshop
<http://www.NetSmartz.org>

Play It Cyber Safe
<http://www.playitcybersafe.com>

The Children's Partnership
www.childrenspartnership.org

CyberNetiquette Comix
<http://disney.go.com/cybersafety/index.htm>

CyberSmart!
<http://www.cybersmart.org>

CyberTipline
<http://www.cybertipline.com>

Federal Trade Commission
<http://www.ftc.gov/infosecurity>

Internet Content Rating Association (ICRA)
<http://www.icra.org>

Internet Keep Safe Coalition
<http://www.ikeepSAFE.org>

National Center for Missing & Exploited
Children
<http://www.missingkids.com>

SafeKids.com
<http://www.safekids.com>

SafeTeens.com
<http://www.safeteens.com>

Surf Swell Island
<http://disney.go.com/surfswell/index.html>

U.S. Department of Education
<http://www.ed.gov/technology/safety.html>

Virtual Global Taskforce (VGT)
<http://www.virtualglobaltaskforce.com>

WiredKids.org
<http://www.wiredkids.org>

Technology Standards

For Students

National Educational Technology Standards for Students: The Next Generation

“What students should know and be able to do to learn effectively and live productively in an increasingly digital world ...”

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 & 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.

Educational Technology and the Common Core

Technology in Middle Country Schools supports English Language Arts Common Core State Standards ensuring College and Career Readiness. While utilizing educational technology, students have the opportunity to:

- Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.
- Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
- Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
- Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Technology in Middle Country Schools supports Math Common Core State Standards ensuring College and Career Readiness. While utilizing educational technology, students have the opportunity to:

1. Make sense of problems and persevere in solving them.

Using the Internet, a variety of software, visualization, and other technology resources, students can accomplish authentic activities by investigating, making valuable connections and recreating valuable conditions to accomplish their task at hand. In order to engage students to become more independent technology-thinkers, computer lab activities allow students to constructively plan the outcome of their projects.

2. Reason abstractly and quantitatively.

Students logically make choices and reflect on the relevance and importance of the task at hand, integrating a variety of technology skills and resources such as: Web 2.0 applications, websites, software, and various devices. This allows students to communicate and present their own ideas using diverse technology resources and tools.

3. Construct viable arguments and critique the reasoning of others.

Students use technology, to represent and communicate their projects' experiences and findings. Students rationally support their conclusions with the appropriate visualization, models and content. Students collaborate, share and critique with their peers.

4. Model with mathematics.

Using technology, mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software.

6. Attend to precision.

Students use technology and digital media strategically and proficiently to articulate their project goals. Students know how to differentiate the various types of applications and technology resources in order to demonstrate understanding of the subject and enhance the research or presentation.

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure, possibly using technology.

8. Look for and express regularity in repeated reasoning.

Technologically proficient students naturally express regularity in repetition due to their actions and experiences utilizing basic productivity tools such as word processing, spreadsheet, electronic research, and applications for presentations and graphics.

For Teachers

ISTE NATIONAL EDUCATIONAL TECHNOLOGY STANDARDS (NETS) AND PERFORMANCE INDICATORS FOR TEACHERS

All classroom teachers should be prepared to meet the following standards and performance indicators.

1. TECHNOLOGY OPERATIONS AND CONCEPTS

Teachers demonstrate a sound understanding of technology operations and concepts.

Teachers:

- a. Demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Educational Technology Standards for Students).
- b. Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

2. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- a. Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- b. Apply current research on teaching and learning with technology when planning learning environments and experiences.
- c. Identify and locate technology resources and evaluate them for accuracy and suitability.
- d. Plan for the management of technology resources within the context of learning activities.
- e. Plan strategies to manage student learning in a technology-enhanced environment.

3. TEACHING, LEARNING, AND THE CURRICULUM

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- a. Facilitate technology-enhanced experiences that address content standards and student technology standards.
- b. Use technology to support learner-centered strategies that address the diverse needs of students.
- c. Apply technology to develop students' higher order skills and creativity.
- d. Manage student learning activities in a technology-enhanced environment.

4. **ASSESSMENT AND EVALUATION**

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- a. Apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- b. Use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- c. Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

5. **PRODUCTIVITY AND PROFESSIONAL PRACTICE**

Teachers use technology to enhance their productivity and professional practice. Teachers:

- a. Use technology resources to engage in ongoing professional development and lifelong learning.
- b. Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- c. Apply technology to increase productivity.
- d. Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

6. **SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES**

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply that understanding in practice. Teachers:

- a. Model and teach legal and ethical practice related to technology use.
- b. Apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- c. Identify and use technology resources that affirm diversity.
- d. Promote safe and healthy use of technology resources.
- e. Facilitate equitable access to technology resources for all students.

For Administrators:

Adopted From: http://cnets.iste.org/administrators/pdf/NETSA_Standards.pdf

Technology Standards for School Administrators
Framework, Standards, and Performance Indicators

1. **Leadership and Vision**

Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision. Educational leaders:

- a. Facilitate the shared development by all stakeholders of a vision for technology use and widely communicate that vision.
- b. Maintain an inclusive and cohesive process to develop, implement, and monitor a dynamic, long-range, and systemic technology plan to achieve the vision.
- c. Foster and nurture a culture of responsible risk-taking and advocate policies promoting continuous innovation with technology.
- d. Use data in making leadership decisions.
- e. Advocate for research-based effective practices in use of technology.

- f. Advocate on the state and national levels for policies, programs, and funding opportunities that support implementation of the district technology plan.

2. **Learning and Teaching**

Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching.

Educational leaders:

- a. Identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.
- b. Facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.
- c. Provide for learner-centered environments that use technology to meet the individual and diverse needs of learners.
- d. Facilitate the use of technologies to support and enhance instructional methods that develop higher-level thinking, decision-making, and problem-solving skills.
- e. Provide for and ensure that faculty and staff take advantage of quality professional learning opportunities for improved learning and teaching with technology.

3. **Productivity and Professional Practice**

Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others. Educational leaders:

- a. Model the routine, intentional, and effective use of technology.
- b. Employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community.
- c. Create and participate in learning communities that stimulate, nurture, and support faculty and staff in using technology for improved productivity.
- d. Engage in sustained, job-related professional learning using technology resources.
- e. Maintain awareness of emerging technologies and their potential uses in education.
- f. Use technology to advance organizational improvement.

4. **Support, Management, and Operations**

Educational leaders ensure the integration of technology to support productive systems for learning and administration. Educational leaders:

- a. Develop, implement, and monitor policies and guidelines to ensure compatibility of technologies.
- b. Implement and use integrated technology-based management and operations systems.
- c. Allocate financial and human resources to ensure complete and sustained implementation of the technology plan.
- d. Integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources.
- e. Implement procedures to drive continuous improvement of technology systems and to support technology replacement cycles.

5. **Assessment and Evaluation**

Educational leaders use technology to plan and implement comprehensive systems of effective assessment and evaluation. Educational leaders:

- a. Use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communication, and productivity.

- b. Use technology to collect and analyze data, interpret results, and communicate findings to improve instructional practice and student learning.
- c. Assess staff knowledge, skills, and performance in using technology and use results to facilitate quality professional development and to inform personnel decisions. Use technology to assess, evaluate, and manage administrative and operational systems.

6. Social, Legal, and Ethical Issues

Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues. Educational leaders:

- a. Ensure equity of access to technology resources that enable and empower all learners and educators.
- b. Identify, communicate, model, and enforce social, legal, and ethical practices to promote responsible use of technology.
- c. Promote and enforce privacy, security, and online safety related to the use of technology.
- d. Promote and enforce environmentally safe and healthy practices in the use of technology.
- e. Participate in the development of policies that clearly enforce copyright law and assign ownership of intellectual property developed with district resources.

Reprinted with permission from National Educational Technology Standards for Administrators, published by the International Society for Technology in Education (ISTE). NETS Project © 2002, ISTE, 800.336.5191 (US & Canada) or 541.302.3777 (Int'l), iste@iste.org, www.iste.org. All rights reserved.

Profiles for Technology Literate Students

Adopted from ISTE's-NETS Profiles for Technology Literate Students

Note: The numbers in parentheses after each item identify the standards (1–6, from the student standards list, in the previous section) most closely linked to the activity described. Each activity may relate to one indicator, to multiple indicators, or to the overall standards referenced.

Profile for Technology Literate Students Grades PK-2 (Ages 4-8)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during PK–Grade 2 (ages 4–8):

1. Illustrate and communicate original ideas and stories using digital tools and media-rich resources. (1, 2)
2. Identify, research, and collect data on an environmental issue using digital resources and propose a developmentally appropriate solution. (1, 3, 4)
3. Engage in learning activities with learners from multiple cultures through e-mail and other electronic means. (2, 6)
4. In a collaborative work group, use a variety of technologies to produce a digital presentation or product in a curriculum area. (1, 2, 6)

5. Find and evaluate information related to a current or historical person or event using digital resources. (3)
6. Use simulations and graphical organizers to explore and depict patterns of growth such as the life cycles of plants and animals. (1, 3, 4)
7. Demonstrate the safe and cooperative use of technology. (5)
8. Independently apply digital tools and resources to address a variety of tasks and problems. (4, 6)
9. Communicate about technology using developmentally appropriate and accurate terminology. (6)
10. Demonstrate the ability to navigate in virtual environments such as electronic books, simulation software, and Web sites. (6)

Profile for Technology Literate Students Grades 3-5 (Ages 8-11)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 3–5 (ages 8–11):

1. Produce a media-rich digital story about a significant local event based on first-person interviews. (1, 2, 3, 4)
2. Use digital-imaging technology to modify or create works of art for use in a digital presentation. (1, 2, 6)
3. Recognize bias in digital resources while researching an environmental issue with guidance from the teacher. (3, 4)
4. Select and apply digital tools to collect, organize, and analyze data to evaluate theories or test hypotheses. (3, 4, 6)
5. Identify and investigate a global issue and generate possible solutions using digital tools and resources. (3, 4)
6. Conduct science experiments using digital instruments and measurement devices. (4, 6)
7. Conceptualize, guide, and manage individual or group learning projects using digital planning tools with teacher support. (4, 6)
8. Practice injury prevention by applying a variety of ergonomic strategies when using technology. (5)
9. Debate the effect of existing and emerging technologies on individuals, society, and the global community. (5, 6)
10. Apply previous knowledge of digital technology operations to analyze and solve current hardware and software problems. (4, 6)

Profile for Technology Literate Students Grades 6-8 (Ages 11-14)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 6–8 (ages 11–14):

1. Describe and illustrate a content-related concept or process using a model, simulation, or concept-mapping software. (1, 2)
2. Create original animations or videos documenting school, community, or local events. (1, 2, 6)
3. Gather data, examine patterns, and apply information for decision making using digital tools and resources. (1, 4)
4. Participate in a cooperative learning project in an online learning community. (2)
5. Evaluate digital resources to determine the credibility of the author and publisher and the timeliness and accuracy of the content. (3)
6. Employ data-collection technology such as probes, handheld devices, and geographic mapping systems to gather, view, analyze, and report results for content-related problems. (3, 4, 6)
7. Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. (3, 4, 6)
8. Use collaborative electronic authoring tools to explore common curriculum content from multicultural perspectives with other learners. (2, 3, 4, 5)
9. Integrate a variety of file types to create and illustrate a document or presentation. (1, 6)
10. Independently develop and apply strategies for identifying and solving routine hardware and software problems. (4, 6)

Profile for Technology Literate Students Grades 6-8 (Ages 11-14)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 9–12 (ages 14–18):

1. Design, develop, and test a digital learning game to demonstrate knowledge and skills related to curriculum content. (1, 4)
2. Create and publish an online art gallery with examples and commentary that demonstrate an understanding of different historical periods, cultures, and countries. (1, 2)
3. Select digital tools or resources to use for a real-world task and justify the selection based on their efficiency and effectiveness. (3, 6)
4. Employ curriculum-specific simulations to practice critical-thinking processes. (1, 4)
5. Identify a complex global issue, develop a systematic plan of investigation, and present innovative sustainable solutions. (1, 2, 3, 4)
6. Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs. (4, 5, 6)

7. Design a Web site that meets accessibility requirements. (1, 5)
8. Model legal and ethical behaviors when using information and technology by properly selecting, acquiring, and citing resources. (3, 5)
9. Create media-rich presentations for other students on the appropriate and ethical use of digital tools and resources. (1, 5)
10. Configure and troubleshoot hardware, software, and network systems to optimize their use for learning and productivity. (4, 6)

Duration of Plan

The above listed goals, and any that are added, will be the basis for projects to be implemented during the 3 years of this plan. The projects for coming years of the plan will be driven by the status of our existing goals, and newly identified needs. The following is an outline for major accomplishments in years 1 through 3.

Year 1: 2013-2014

- Upgrade network infrastructure for disaster recovery, continue with upgrade plan for all instructional computer systems, as well as moving towards goals set forth with PARCC.

Year 2: 2014-2015

- Second year of upgrade plan for all instructional computer systems, as well as moving towards goals set forth with PARCC.

Year 3: 2015-2016

- Third year of upgrade plan for all instructional computer systems, as well as moving towards goals set forth with PARCC.

Planned Acquisitions

Instructional

In the 2013-2014 school year, we will continue our upgrade plan to replace aging instructional equipment throughout the district. See **Appendix A** for details.

Administrative

Administrative computers were updated in the 2008 and 2009 school years. We have implemented a rolling update schedule that replaces machines upon either age, warranty expiration, and/or a need to replace based on failure.

Professional Development

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

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

Assessment

This technology plan is intended to layout the actions necessary to enhance the ability of the district to deliver services to district members through the use of technology. The goals outlined at the beginning of this document were based on numerous meetings with the district technology committee, students, parents, teachers, administrators and other district members. A needs assessment survey was conducted and helped to define the direction of the plan. The accomplishment of the goals listed in this plan and the feedback received relative to the goals will be key to the assessment of the plan.

Technology changes rapidly new needs are constantly emerging. For these reasons, the technology plan will be revisited each year to modify the plan as needed. To this end, the director of technology will continue to meet with the technology committee, representative groups of teachers from buildings, administrators and other key stakeholders to ensure that the plan is current and appropriate to the needs of the district. We will continue to use surveys as part of our assessment.

Appendices

Appendix A: Instructional Hardware Upgrade Plan & Projected Budget

The majority of money expended by the technology department is devoted to three areas; multi-year projects (~31%), software maintenance agreements (~14%), and BOCES (~35%). There is, however, one additional item that will impact our upgrade plan and projected year to year budgets; PARCC.

Partnership for Assessment of Readiness for College and Careers, more familiarly known as PARCC, is a computer-based assessment system to test student performance on the Common Core Standards. These assessments will determine whether students are on track to college and career readiness in math and ELA/Literacy. As per guidance from New York State Department of Education (NYSED), assessments will initially be designed in Grades 3-8, ELA in Grades 9 – 11, and in Algebra I, Geometry, and Algebra II. The recommendation made by NYSED is to allow for one device per student in the largest grade level. At a minimum, NYSED recommends one device per two students.

At this time, Middle Country would need to add additional assessment devices to the two middle schools and 3 of the 10 elementary schools.

****Note:** On October 22, 2013, the following was released by NYSED:

The Board of Regents has decided that New York State will not implement PARCC in 2014-2015. Whether or not PARCC is adopted at all will be determined in the future. The reasons cited for this delay are inadequate technology, longer administration times, and higher costs. Field testing will continue and New York will remain part of the PARCC consortium. No matter what, districts should continue to prepare for eventual computer-based testing, whether PARCC or NYS assessments are administered.

Multi-Year Projects

Multi-year projects include our current SMART Board rollout, our long-term computer replacement plan, and our district-wide wireless rollout.

SMART Boards

2013-14 will mark year six of Middle Country’s SMART Board rollout. In the interest of having 100% of elementary classrooms with SMART Boards, this year’s entire allocation of boards was given to them. This was done to facilitate the adoption of Pearson’s enVisionMATH program.

	Active Classrooms / Sections	SMART Boards
Hawkins Path Elementary School	12	12
Holbrook Road Elementary	16	16
North Coleman Road Elementary School	15	15
Oxhead Road Elementary School	19	19
Bicycle Path Kindergarten Center	16	16
Eugene Auer Memorial Elementary School	15	15
Dawnwood Middle School	69	27
Newfield High School	85	64
Selden Middle School	75	28
Stagecoach Road Elementary School	17	17
Jericho Elementary School	18	18
Centereach High School	78	68
New Lane Memorial Elementary School	40	40
Unity Drive Kindergarten Center	16	16
Total	491	371

As we enter into year six of

Computer Replacement

Middle Country is currently utilizing a six-year replacement plan for the majority of our desktop computers. This year calls for the replacement of all computers at Oxhead, Holbrook, and North Coleman. There are approximately 180 computers in each building. With desktop computers costing approximately \$370 apiece, this represents an expense of roughly \$200,000.

The one exception to this rule has been the high school labs, which generally require more current computers to support more advanced applications and use.

For informational purposes, here is the replacement schedule for the past six years:

- 2014-2015: Auer, Stagecoach, and Hawkins (anticipated)
- 2013-2014: High School Labs and Classrooms
- 2012-2013: Middle School Labs, Kindergarten Centers, Additional Elementary Laptop Labs
- 2011-2012: New Lane, VMWare Servers, Elementary laptop labs
- 2010-2011: Oxhead, Holbrook, Jericho, and North Coleman
- 2009-2010: High School Labs and Kindergarten Centers
- 2008-2009: Auer, Stagecoach, and Hawkins
- 2007-2008: Middle School Labs and Classrooms
- 2006-2007: High School Labs
- 2005-2006: New Lane, Jericho
- 2004-2005: Oxhead, Holbrook, and North Coleman

Wireless Rollout

This school year, we are in the process of upgrading our network infrastructure for many reasons. These include being able to support advanced communication methods (including video conferencing), VOIP (Voice-Over-Internet Protocol), and wireless network/internet access.

Currently, Middle Country has deployed fully managed, 100% wireless coverage to the following buildings; Auer, Jericho, Oxhead, and Stagecoach. In addition to the aforementioned buildings, the Computer Center has also begun updating switching hardware in each building (and each networking closet within each building) to support the new wireless rollout. In most buildings, wireless has already been installed in key areas in each building; main office, conference/meeting areas, etc...

Software Maintenance Agreements

Included in the budget packet is a comprehensive listing of our yearly renewals.

BOCES

While there are multiple services covered under the BOCES umbrella, nearly 75% of technology's allocation goes towards our Dyntek Computer Technicians. Included in the budget packet is a breakdown of this year's expenses and options for next year.

Technology Budget 2011-2014/ Proposed Technology Budget: 2014-2016

MIDDLE COUNTRY CSD - TECHNOLOGY
DETAIL APPROPRIATION BUDGET REPORT BY FUNCTION

ACCOUNT	DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
A 1680.2020-00-00000	EQUIPMENT REPLACEMENT	\$120,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00
A 1680.4140-00-00000	TRAVEL IN DISTRICT	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
A 1680.4150-00-00000	TRAINING / IN SERVICE	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
A 1680.4350-00-00000	EQUIPMENT MAINTENANCE	\$25,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
A 1680.4490-00-00000	OTHER PROFESSIONAL / TECH SERVICES	\$25,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00
A 1680.4600-00-00000	COMPUTER SOFTWARE	\$20,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
A 1680.4610-00-00000	SOFTWARE MAINTENANCE	\$0.00	\$129,000.00	\$129,000.00	\$129,000.00	\$129,000.00
A 1680.4900-00-00000	BOGES SERVICES	\$398,562.00	\$405,097.00	\$417,249.91	\$427,681.16	\$438,373.19
A 1680.5010-00-00000	GENERAL SUPPLIES	\$20,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
1680...CENTRAL DATA PROCESSING		\$621,062.00	\$689,597.00	\$701,749.91	\$712,181.16	\$722,873.19
A 2630.2200-00-00000	STATE AIDED COMPUTER HARDWARE	\$638,404.00	\$331,614.00	\$331,614.00	\$331,614.00	\$331,614.00
A 2630.4140-00-00000	TRAVEL IN DISTRICT	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
A 2630.4150-00-00000	TRAINING / IN SERVICE	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
A 2630.4490-00-00000	OTHER PROFESSIONAL / TECH SERVICES	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
A 2630.4600-00-00000	COMPUTER SOFTWARE	\$43,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
A 2630.4610-00-00000	SOFTWARE MAINTENANCE	\$271,000.00	\$221,000.00	\$221,000.00	\$221,000.00	\$221,000.00
A 2630.4900-00-00000	BOGES SERVICES	\$275,648.00	\$321,000.00	\$357,667.50	\$405,952.61	\$460,756.22
A 2630.5010-00-00000	GENERAL SUPPLIES	\$1,000.00	\$0.00	\$0.00	\$0.00	\$0.00
A 2630.5150-00-00000	SUPPLIES COMPUTER	\$18,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00
2630...COMPUTER ASSISTED INSTRUCTION		\$1,274,052.00	\$929,614.00	\$966,281.50	\$1,014,566.61	\$1,069,370.22
A 2610.2200-00-00000	STATE AIDED COMPUTER HARDWARE	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
A 2610....SCHOOL LIBRARY & AUDIOVISUAL		\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
TOTAL TECHNOLOGY		\$1,915,114.00	\$1,639,211.00	\$1,688,031.41	\$1,746,747.77	\$1,812,243.40
DELTA FROM PREVIOUS YEAR			-\$275,903.00	\$48,820.41	\$58,716.36	\$65,495.63

Appendix B: Turnkey Course Descriptions

- 1. Let's Read! Using the Internet as a Resource in Guided Reading**
Teachers can use the Internet to help tailor their classroom guided reading libraries to reach each child's instructional level. In this course, we will gather Websites to suit each teacher's needs, so please specify your grade level upon registration."
- 2. Computer Journeys to Enhance the Social Studies' Curriculum**
Take your students on Internet journeys that will give them a deeper understanding of time, place, people and events in history. When registering for this course, please include a curriculum topic (historic event/period/person) that/whom you'd like to explore in the classroom."
- 3. Effective Internet Searching for Subject-Specific Content**
This course will focus on beginning and advanced search techniques for locating content for all subjects.
- 4. Virtual Fieldtrips for Content Areas**
Participants will be taught to search for and identify museums, historical buildings, and other visually oriented sites that relate to their curriculum.
- 5. Achieving Differentiated Instruction with Internet Resources**
Providing differentiated instruction through the use of technology and Internet resources will be covered in this course.
- 6. Internet Freebies for Teachers**
This course will introduce teachers to the wealth of free material on the Internet, such as on-line grade books, on-line quiz sites, atlases, almanacs, and much more.
- 7. Structured Searches and Optimized Learning with WebQuests**
WebQuests: A series of Internet sites on a particular subject, and questions that can be answered with information from those sites. Participants will learn how to utilize existing WebQuests, and those of their own construction, in order to improve student writing and reading comprehension skills.
- 8. Creating Dynamic Lessons with PowerPoint**
Optimize learning by creating and delivering visual lessons with PowerPoint. Wordless books, interactive quizzes and review lessons are some of the many uses of this versatile program. (Two 2hr. sessions)
- 9. Advanced PowerPoint for Turnkey Trainers and Other Accomplished Users**
Learn how to incorporate hyperlinks and other advanced techniques with this course.
Prerequisite: Prior experience using PowerPoint.
- 10. Creating a Classroom Web Page for Classroom-related Information**
Constructing a simple Web page to highlight your classroom, display student work, or list student assignments can be as easy as typing in a word-processing program. Join us and learn how to create a simple Web page.

11. FrontPage Basics

Create eye-catching Web pages with FrontPage, one of the premier Web page design programs. (Two 2hr. sessions)

12. Advanced Web Page Design With FrontPage

Learn advanced design techniques, explore links to the building and district Websites, and learn how to launch your site. (Two 2hr.sessions)

13. Classroom Newsletter Creation with MS Word or MS Publisher

This workshop will utilize Microsoft Word or Microsoft Publisher for the creation of student newsletters for any subject. Columns, layout and use of graphics will be covered.

14. Digital Photos for Classroom Use – Scanners and Digital Cameras on Parade

Scanners and digital cameras offer many opportunities to enhance the educational process through such things as digital portfolios, student newsletters and more. Bring some of your own pictures to scan (and a disk) and learn to save and use them, along with digital camera images, in your class!

15. Photo Enhancement

This workshop represents the next step in the use of digital images. Participants will learn to crop, resize, alter, sharpen and add special effects before using the images for Web pages, newsletters, or student work. Please bring a 3 1/2" disk with digital images, if available. If not, bring a blank disk.

16. Enhancing Student Performance with Camcorders

Learn the basics of camcorder video recording and how video technology can be utilized to improve student performance.

17. iMovie and In-class Projects

Utilize digital video to create presentations for parent-teacher night or student projects. Prerequisite: Workshop #16 (Preference will be given to secondary teachers.)

18. Using Spreadsheets to Enhance Learning

Charting, graphing, calculating grades and many other tasks can be streamlined with a spreadsheet program. This workshop will cover basic spreadsheet skills and will demonstrate application to NYS standards in many subject areas.

19. Using Inspiration for Plot-Mapping and Cause & Effect

Pre-writing outline webs, concept mapping and scaffolding, tools that improve student writing and critical thinking, are made easy using Inspiration.

20. Geometers' Sketchpad for Primary and Intermediate Geometry

Create floor plans and reinforce mathematics and problem-solving skills. Teach students to measure angles, length, area, circumference and more, while proving basic geometric principles!

21. Student-created Web Pages

Learn how to get your students creating Web pages and electronic magazines, with minimal fuss and frustration.

22. Mail Merges- Creating Labels and More With M.S. Word

Utilize M.S. Word for all school to home correspondence. Prior experience with Word is required.

23.DBQ (Document Based Question) Creation

Learn how to create a DBQ and how this improves student writing.

24.Apple Laptop Basics

Review basic laptop navigation and commands, such as creating documents, saving and retrieving work, and printing.

25.Laptops and Display Devices

Learn how to display lessons with the LCD projector and the large screen monitor.

26. Using Portable Laptop Labs

Ideas and Strategies for bringing mobile laptop labs into your classroom

27. Effective Use of the Five-Computer Classroom

Strategies for differentiating instruction using computer clusters

28. Integrating Websites with Lesson Plans in the Elementary Classroom

Participants will explore sites which link to lesson plans that meet Middle Country curriculum objectives.

29. Advanced Photoshop

This course is designed for teachers who have prior experience with photo enhancement and wish to take their knowledge to the next level. Digitized images and extra disks should be brought to this class.

30. Advanced Publishing

This course is designed for those who are comfortable with M.S. Publisher or a similar product. Advanced work in Publisher will be the focus of this workshop. (Two 2hr. sessions)

31. Interactive Internet

Using Bulletin Boards, E-mail, and other interactive Internet features to enhance classroom instruction.

32. The On-line Team Approach

Teams of teachers will benefit from this workshop. Learn how to keep and maintain a team web page, bulletin boards, parental contact and more, all on-line.

Appendix C: Acceptable Use Policy

Parent/Guardian Letter

Dear Parent/Guardian:

The district would like to offer your child access to our educational computer network, including the Internet. With your permission, your child will have access to various software applications, hundreds of databases, libraries and computer services from all over the world through the Internet and other electronic information systems.

The Internet is a system, which links smaller networks creating a large and diverse network. The Internet allows students the opportunity to reach out to many other people to share information, learn concepts, and research subjects by the sending and receiving of messages using a computer, modem and phone lines.

With this educational opportunity also comes responsibility. It is important that you and your child read the enclosed district Computer Network for Education policy, regulation and consent and waiver form and discuss these requirements together. You and your child should understand that inappropriate network use will result in the loss of the privilege to use this educational tool.

As indicated in the enclosed policy and regulation, the district will attempt to discourage access to objectionable material and communications. However, in spite of our efforts to establish regulations governing use the district's computer network and student access to the Internet, a variety of inappropriate and offensive materials are available over the Internet and it may be possible for your child to access these materials inadvertently or if he/she chooses to behave irresponsibly. In addition, it is possible for undesirable or ill-intended individuals to communicate with your child over the Internet. There is no practical means for the district to prevent this from happening, and your child must take responsibility to avoid such communications if they are initiated.

I have included the above information to ensure that your decision regarding your child's access to the district's computer network and the Internet is an informed one. You must be the one to decide whether the benefits of your child having access to the district's computer network and the Internet outweigh the potential risks.

If you do not want to allow your child access to the district's computer network and the Internet, please return the enclosed consent and waiver form to me.

Sincerely,
Principal

Student Agreement

Student Name _____

School _____

Grade _____

I have read and understand the district's Computer Network for Education policy and regulations and agree to abide by their provisions.

I understand that I have no right to privacy when I use the district's computer network and the Internet, and I consent to district staff monitoring of my communications.

I further understand that any violation of these provisions may result in suspension or revocation of my system access and related privileges, other disciplinary action, as appropriate, and possible legal action.

Student Signature _____

Date _____

Note: Depending upon the provisions of district policy and/or regulation, the student agreement may have to be renewed each academic year.

Parental/Guardian Waiver Form


I have read the district's Computer Network policy and regulation. By signing this waiver form, I request that my child NOT be afforded access to the district's computer network system and the Internet.

Parent/Guardian Signature _____

Date _____


Appendix D: Network Schematics

Title Page (Page 1)



Presents


Middle Country Central School District



WAN and LAN Design

SECRET		Middle Country Central School District	
WAN and LAN Design, Page 1			
Date:	11/10/2006	Drawn By:	Thomas Laieta
Filename:	MCCSD Revision4.1.11-10-2006		

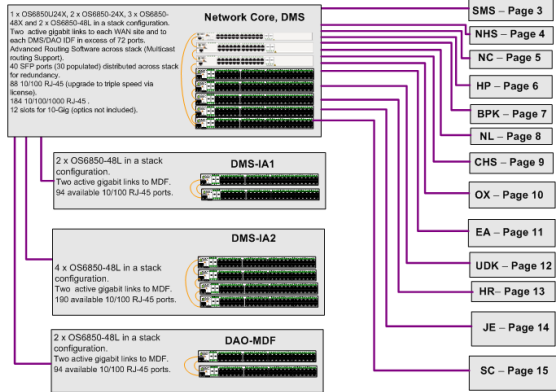
Highlights (Page 2)



Middle Country Central School District

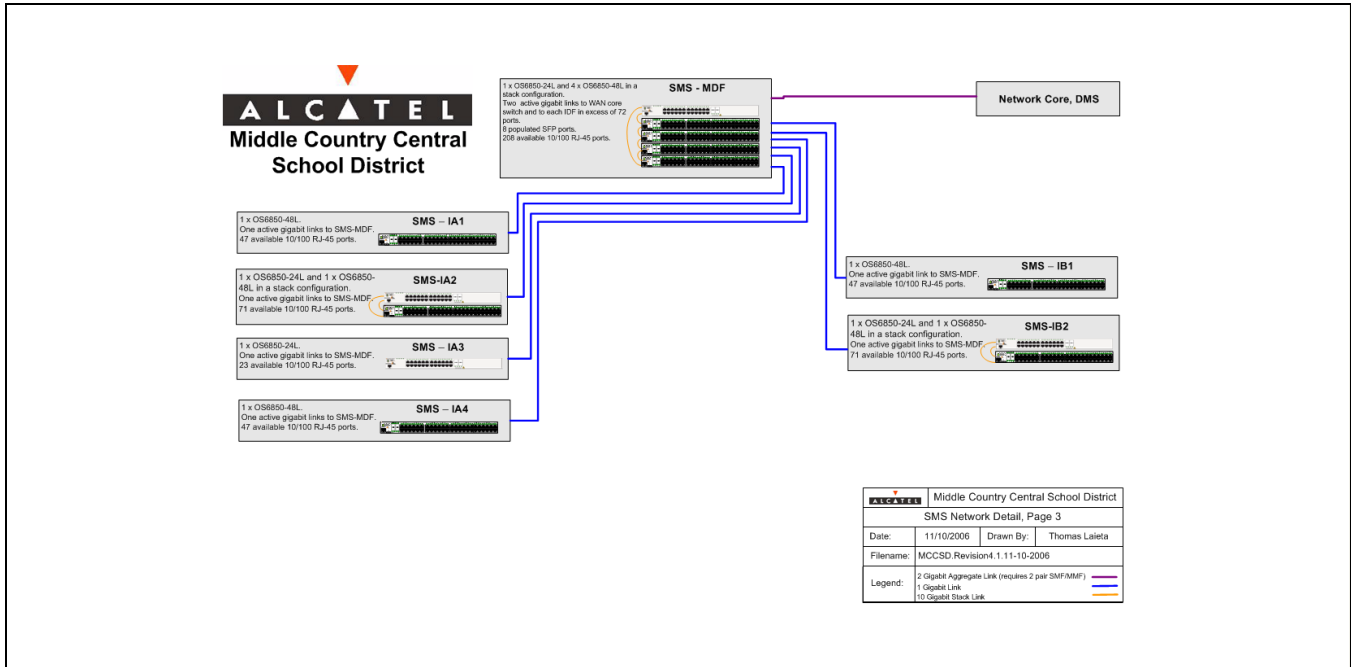
Solution Highlights

- ▼ All buildings connected to core switch via redundant load-sharing gigabit links for a total of 4 Gigabit Full-Duplex.
- ▼ Network core is 10-Gig ready (will require 10 Gig modules and optics – not included).
- ▼ Core stack configured for redundancy. Two 10/100/1000 24 port copper switches for server connectivity. Redundancy to Servers, WAN and IDF's!
- ▼ 6850 series switches come with a limited-lifetime warranty. Configuration provides for spare equipment. There is no need to purchase NBD hardware support on the 6850's.
- ▼ Existing 6600, 6800 and 6100 switches will be reconfigured and reused at IDF's throughout the district. OSR's, 7700,6124's and 6024's will be removed from service helping to reduce OPEX for maintenance charges on aging equipment.

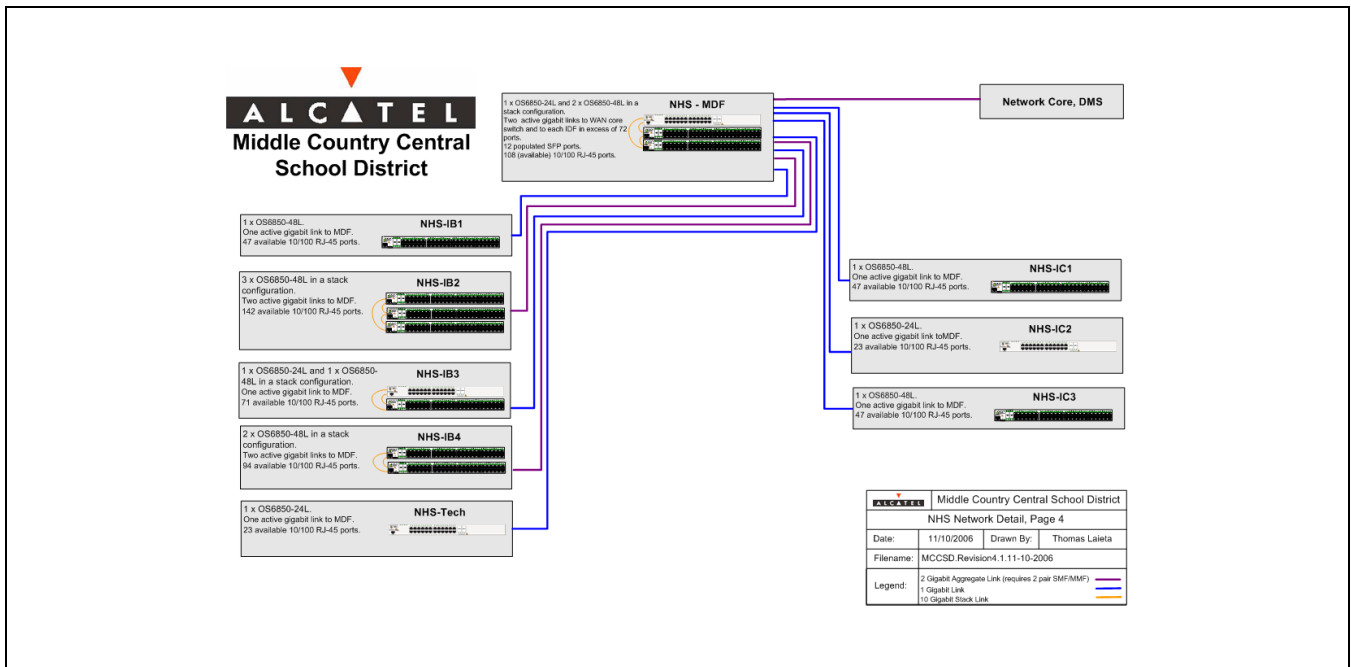


SECRET		Middle Country Central School District	
WAN Overview and DMS / DAO Detail, Page 2			
Date:	11/10/2006	Drawn By:	Thomas Laieta
Filename:	MCCSD Revision4.1.11-10-2006		
Legend:			
2 Gigabit Aggregate Link (requires 2 pair SMF/MMF)			
1 Gigabit Link			
10 Gigabit Stack Link			

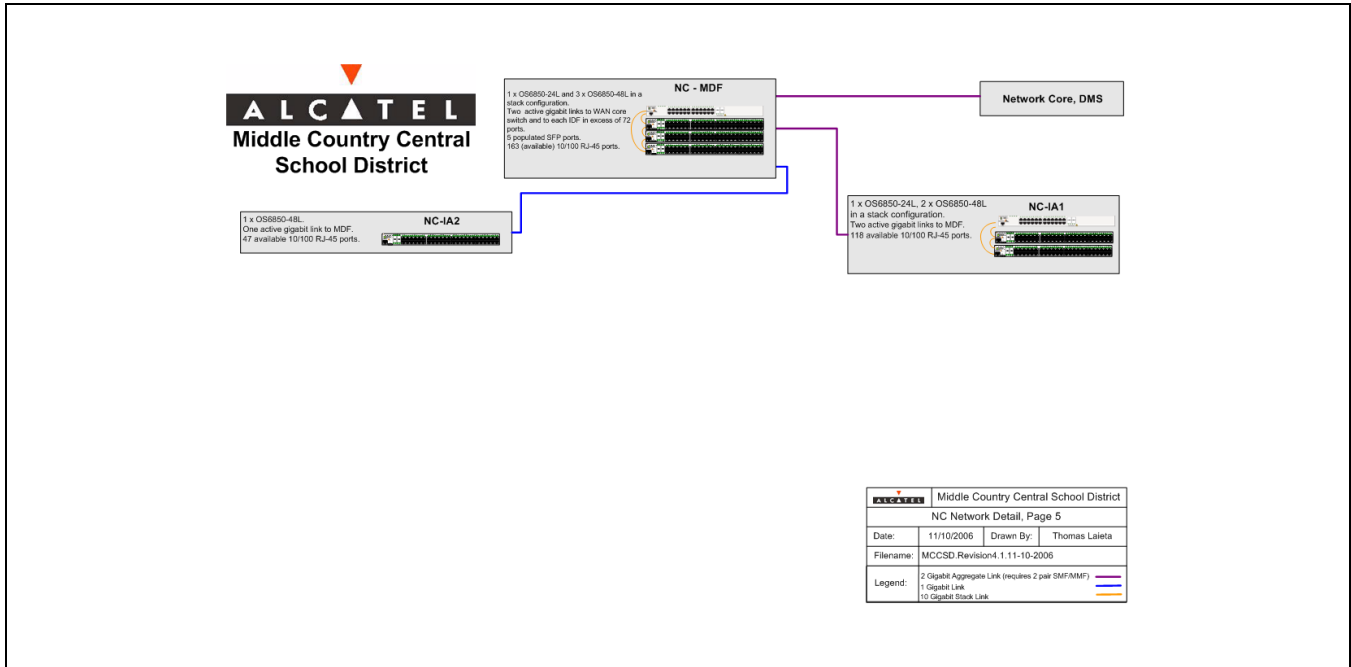
SMS (Page 3)



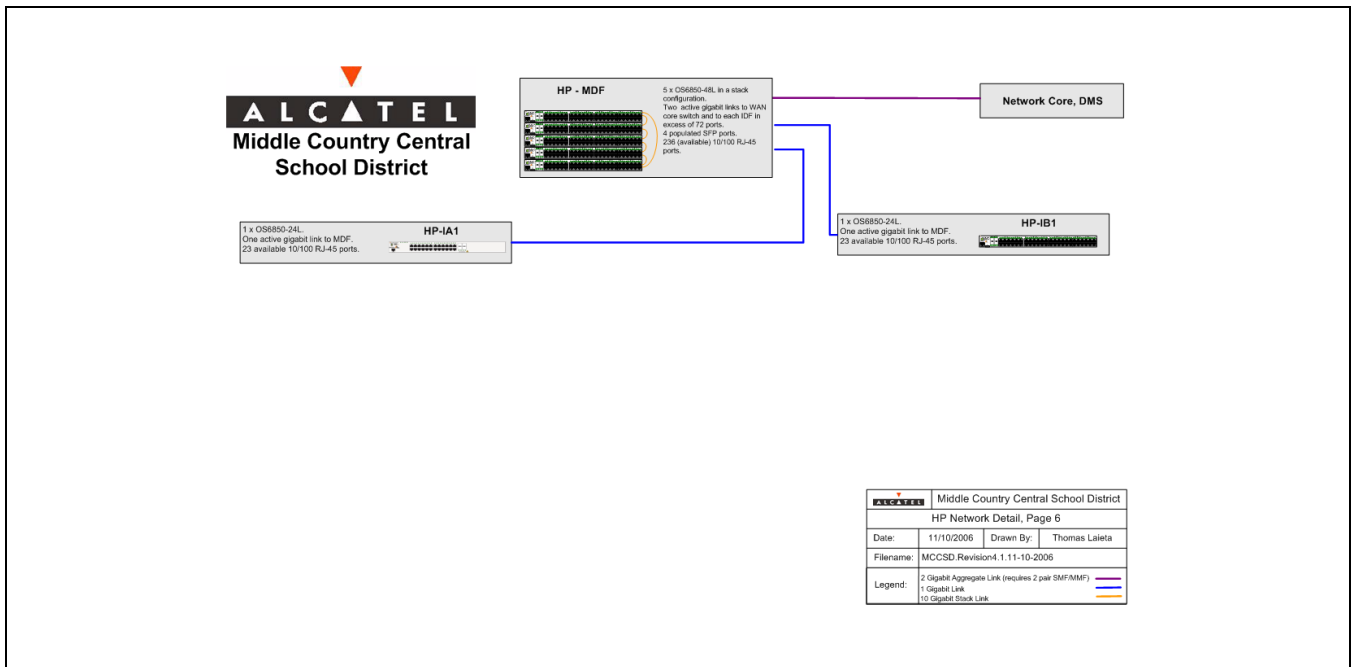
NHS (Page 4)



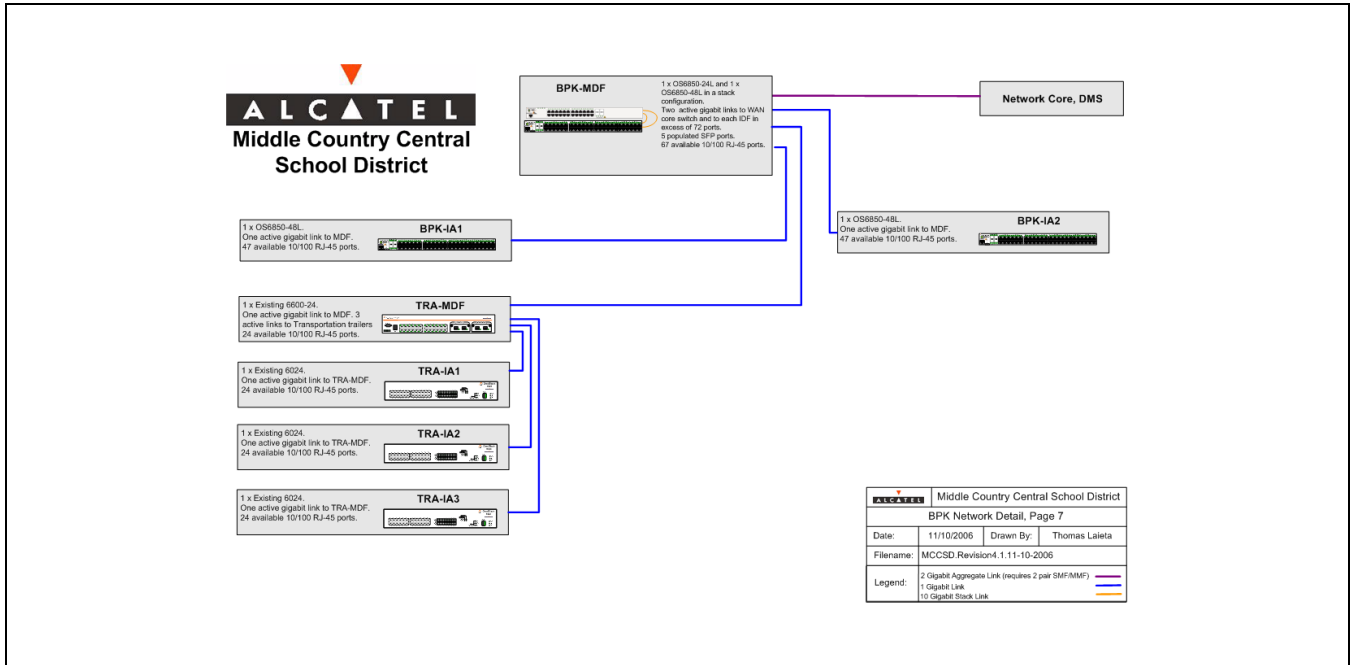
NC (Page 5)



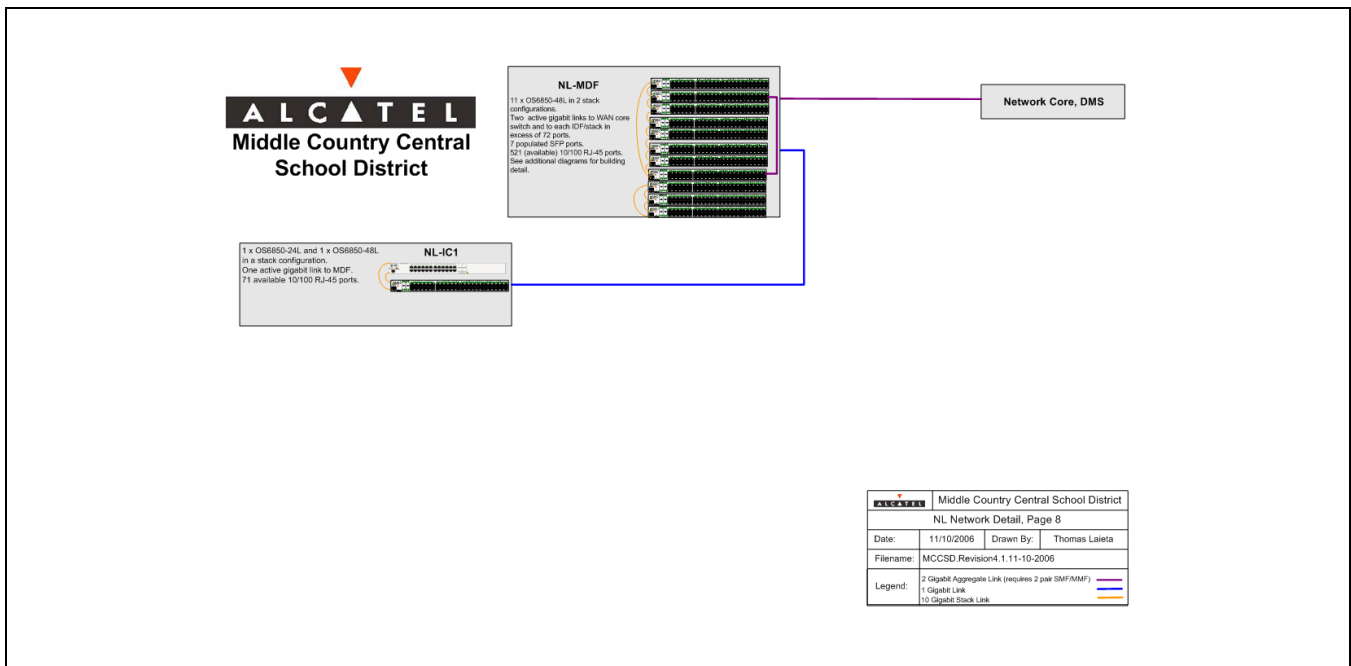
HP (Page 6)



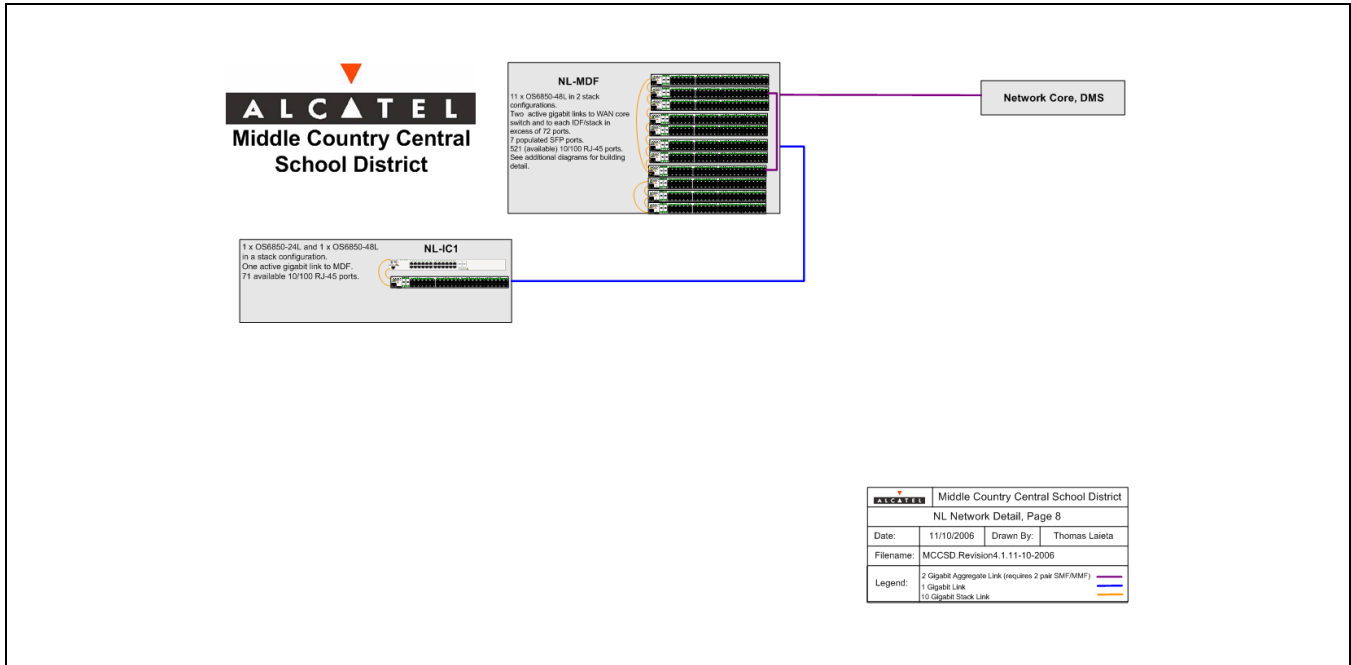
BPK (Page 7)



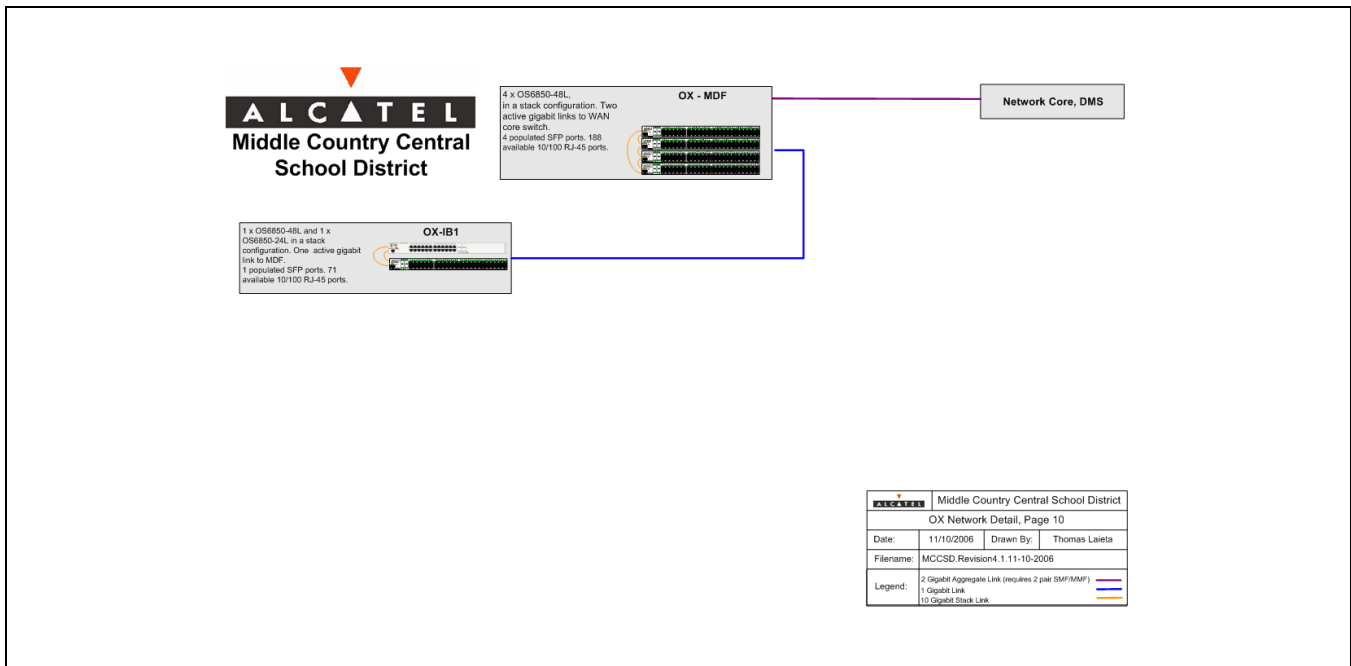
NL (Page 8)



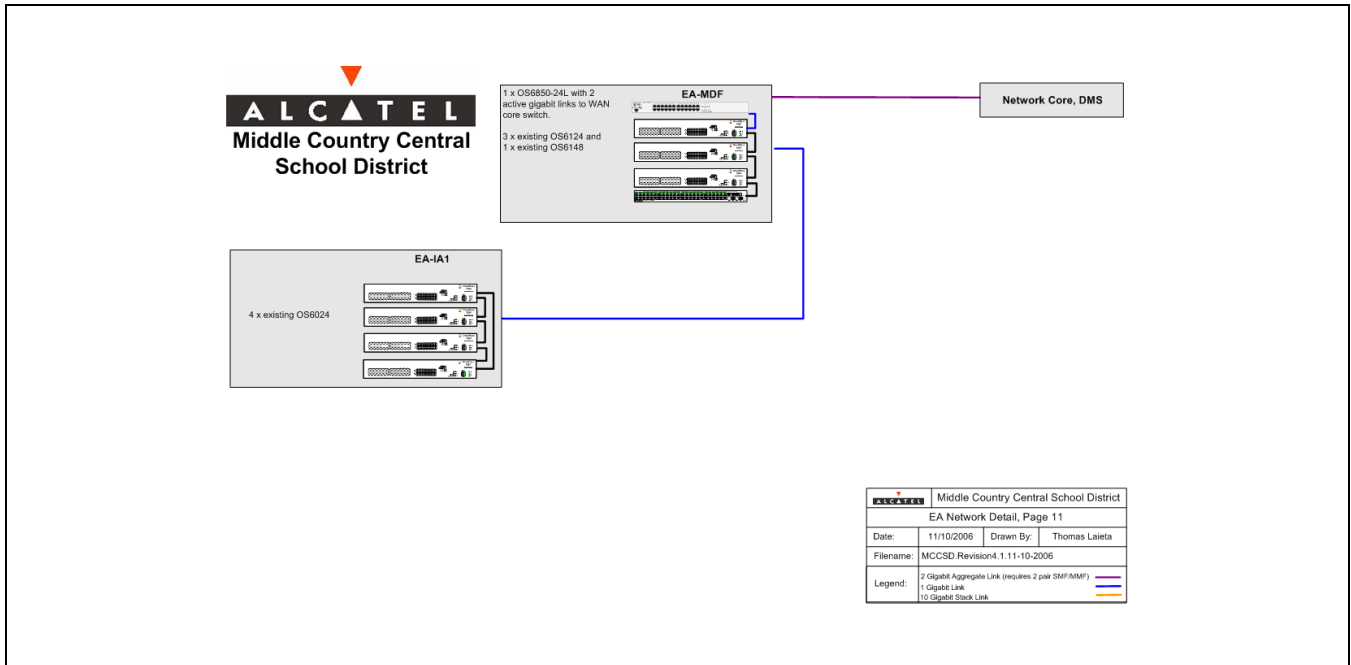
CHS (Page 9)



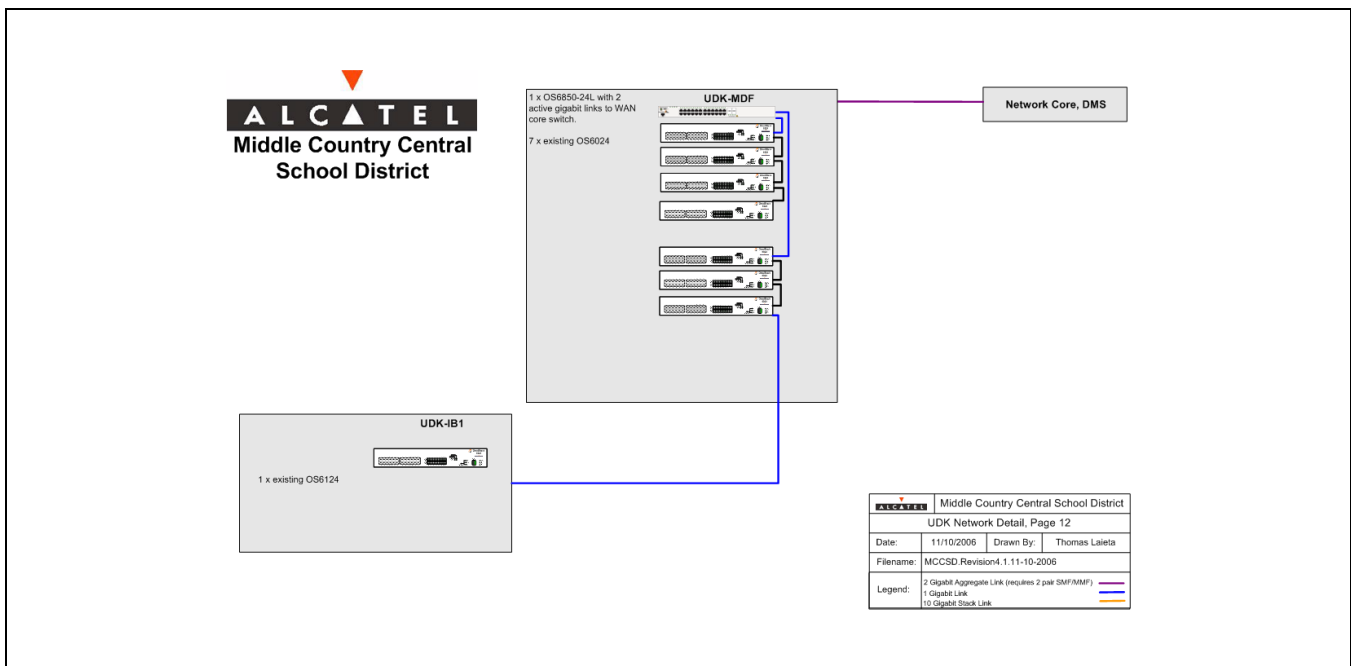
OX (Page 10)



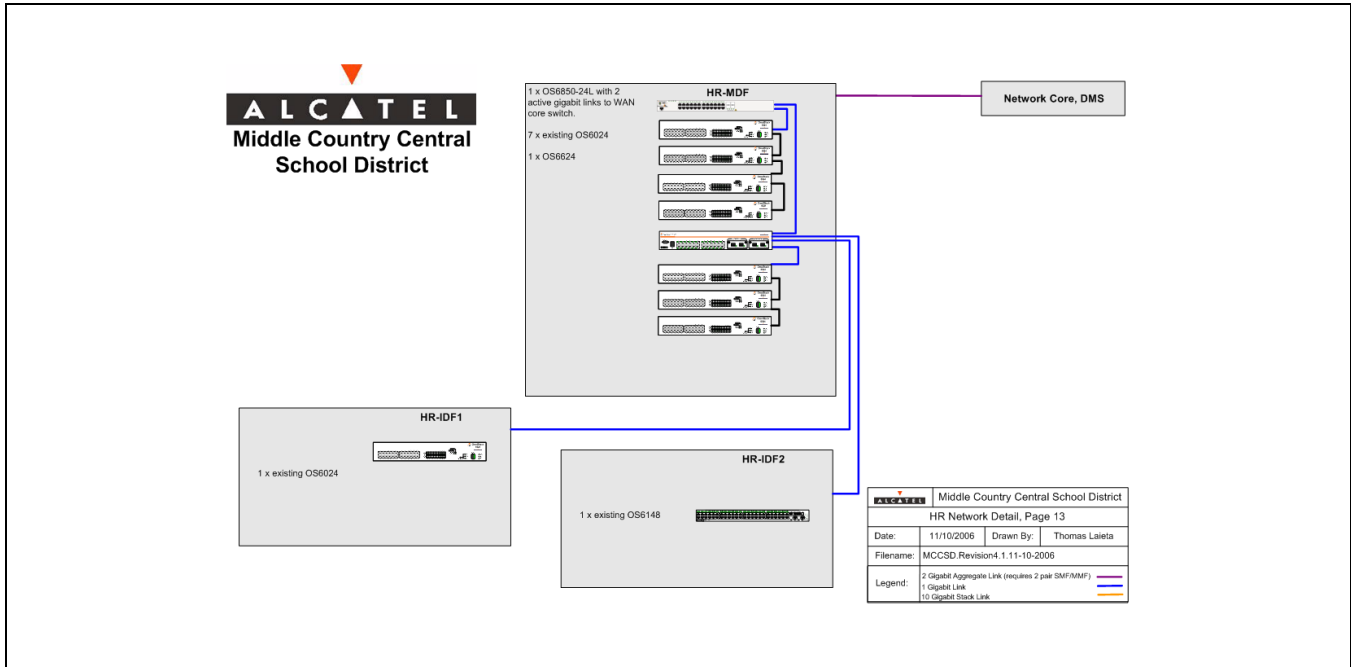
EA (Page 11)



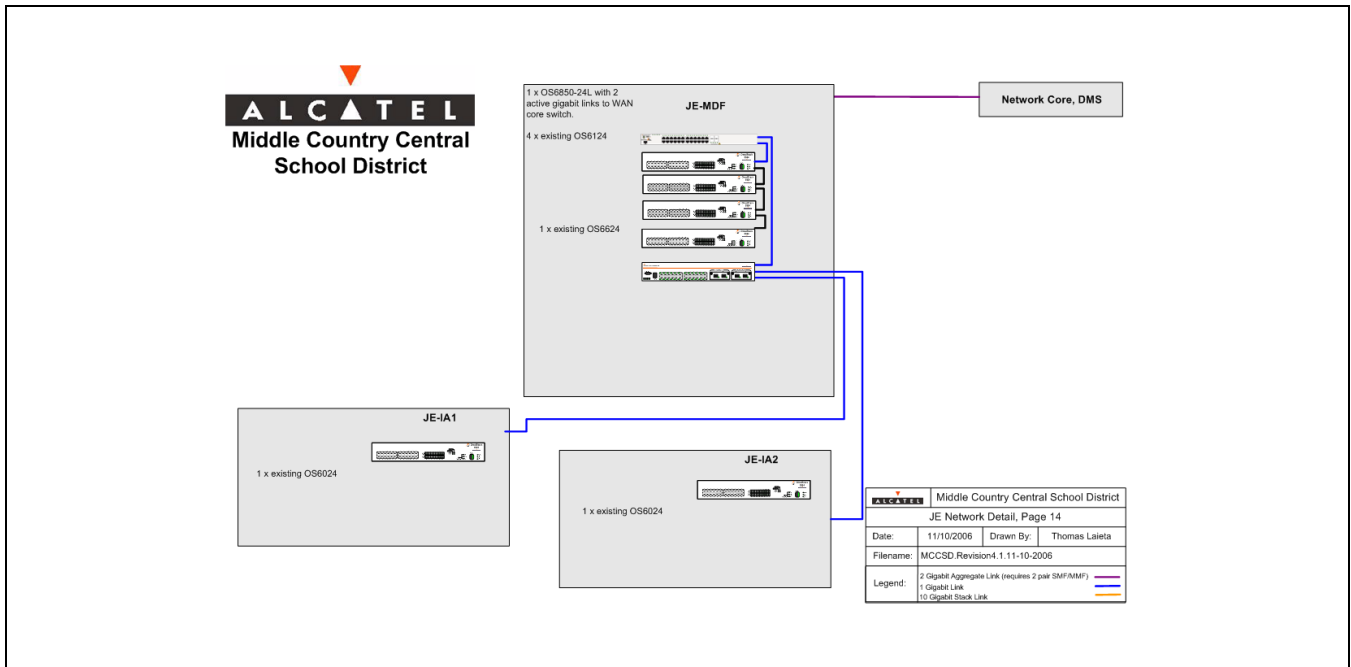
UDK (Page 12)



HR (Page 13)



JE (Page 14)



SC (Page 15)

