

**WASHINGTON TOWNSHIP
SCHOOL DISTRICT**

"Making a Difference"

**TECHNOLOGY
MASTER
PLAN
2007 – 2010**

Washington Township School District
16 Castle Street
Washington, New Jersey 07882
www.warrennet.org/wtsd

**Washington Township School District
Technology Plan**

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Superintendent of Schools

Keith Neuhs
Principal, Brass Castle Elementary

Marjorie Levine
Principal, Port Colden Elementary

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Technology Coordinator

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Marilyn Balzer
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Melanie Plenge
Rob Plenge
Debbie Polhemus
Anita Smith
Abbie Zola
Andrew Zola

WASHINGTON TOWNSHIP SCHOOL DISTRICT

Brass Castle Elementary

Port Colden Elementary

**TECHNOLOGY MASTER PLAN
July 1, 2007 – June 30, 2010**

I. STAKEHOLDERS

Stakeholders		
Name	Title	Signature
Mr. Roger Jinks	Superintendent of Schools	
Mr. Keith Neuhs	Principal/Curriculum Director	
Mrs. Valerie Mattes	Technology Coordinator	
Mrs. Michele Cooper	Teacher	
Mrs. Debbie Polhemus	Teacher	
Mrs. Marilyn Balzer	Special Education Teacher	
Mrs. Heidi Kaiven	Library Media Specialist	
Mrs. Anita Smith	Board Member	
Mrs. Abbie Zola	Parent/PTA President	
Mr. AJ Zola	Student	
Mr. Rob Plenge	Parent/Business Sector Member	
Mrs. Melanie Plenge	Parent/Business Sector Member	

II. EXECUTIVE SUMMARY

We are entering an era of rapid change. The future will be much different from the past. Our definitions of education and literacy from the 20th Century may not apply to the same degree in the 21st. Other skills needed for the adult roles that our students will assume may be quite different, too. We need to look closely today at how and what we teach, and we must be prepared to recognize how that mix needs to change. The question is: How will schools accomplish this? There is no easy fix or pat answer to this question, but we must pursue it –honestly and diligently –in order to prepare our students for the world of tomorrow.

It has been the long-term goal of the Washington Township School District to keep our schools technologically sound with regard to infrastructure, connectivity, and equipment. Our networking has been upgraded to CAT6 wiring and a wireless network has been installed in both schools. Internet access utilize ATM bandwidth Acquisition of mobile labs, a video studio, distance learning equipment, interactive white boards and digital science equipment ensures that our district is committed and ready to advance in the technological education of our students and staff.

Our district is at a turning point in the area of technology—one that will move beyond the area of technology literacy skills and expand into the realm of information and communication literacy proficiencies. Technology has become a powerful tool to enable teachers to motivate and challenge their students in the development of critical thinking skills, problem solving strategies, communication, and real-world accomplishments across the content areas.

The Washington Township School District Technology Plan will set the stage for the use of technology to become an integral part of each student’s learning environment, to instill a love for learning that becomes a lifelong pursuit, and to prepare our students to enter the future workforce with the technology skills necessary to succeed. Digital media has become second nature to this generation of student, and it is the district’s task to build upon these skills to improve the overall quality of education. Professional development is paramount in our effort to enable teachers with a sophisticated understanding of both the technical aspects and the pedagogy for infusing technology into the curricula.

Development and revision of the district’s technology plan has been an on-going collaboration involving various stakeholders. All stakeholders regard the *Technology Master Plan* as a living document that demands continual evaluation to ensure that our technology investments coordinate to our curriculum objectives and to keep our school district current and prepared for future technological needs. It is a living document that ensures technology to be a well-integrated component in our school district that supports our curricular, administrative and classroom needs.

VISION

The future of technology in the Washington Township School District reflects the needs of our students not only to function in today's technological world but to provide them with a strong foundation for becoming productive adults in an ever-changing global society. Our technology plan will enhance our students' educational environment by creating a framework for advancing the use of technology in every aspect of the educational process. In addition, it will instill a positive attitude toward independent, life-long and responsible use of technology. All our students will equitably be able to achieve the Core Content Curriculum Standards by having unlimited access to people, to the vast array of curriculum and instruction offered in the state, and in particular to information and ideas, no matter where they exist.

MISSION

The Washington Township School District utilizes technology to provide the means to focus on student-centered learning, to meet the needs of different learning styles and cultural diversity, and to prepare students for the demands of life in the twenty-first century. The mission is to educate all students by ensuring relevant and focused educational programs that develop responsible, productive, and creative individuals with a capacity for leadership.

Therefore, the Washington Township School District's mission is to:

- Educate our students to prepare them for life in the Information Age by creating a framework for advancing the use of technology in every aspect of the educational process.
- Empower our students to become independent, lifelong learners in a rapidly changing society by ensuring that all students acquire knowledge and skills in accessing, processing, and communicating information using a wide range of technological resources.
- Prepare students to become productive citizens by helping them develop into self-directed learners by providing access to current and future technology to all students and staff.
- Provide technology that will allow students and staff members access to global information systems and improve organizational practices.

III. TECHNOLOGY OVERVIEW

A. TECHNOLOGY

A-1. Technology Inventory

Inventory of current technology networking and telecommunications equipment:

Quantity	Equipment	Function	Location
1	Dell PowerEdge 1600 Server	File Sharing	Brass Castle (BC)
1	Cisco 2651XM Router	Network	Brass Castle (BC)
2	Cisco 2950G Switch	Network	Brass Castle (BC)
1	Cisco 3550 Inline Switch	Network	Brass Castle (BC)
1	Networking Hard Drive	Network	Brass Castle (BC)
2	APC Smart Power Supply	Network	Brass Castle (BC)
8	Cisco 1200 Access Point	Wireless Network	Brass Castle (BC)
4	Datalink Access Point	Wireless Network	Brass Castle (BC)
1	Polycom Viewstation h.323	Distance Learning	Brass Castle (BC)
2	Merlin Legend Phone System	Telecommunication	BC/PC/Admin Bldg
2	Legend Voice Mail System	Telecommunication	BC/PC
1	Dell PowerEdge 1800 Server	File Sharing	Port Colden (PC)
1	Cisco 2600 Router	Network	Port Colden (PC)
1	Cisco 2950G Switch	Network	Port Colden (PC)
1	Cisco 3550 Inline Switch	Network	Port Colden (PC)
1	Networking Hard Drive	Network	Port Colden (PC)
1	APC Smart Power Supply	Network	Port Colden (PC)
11	Cisco 1200 Access Point	Wireless Network	Port Colden (PC)
1	Polycom View Station 7000S	Distance Learning	Port Colden (PC)

A-2. Technology inventory needed to improve student academic achievement through 2010:

1. Technology equipment and networking capacity –
 - a. Additional wireless carts as enrollment and facilities dictate
 - b. Laptop availability for staff and administrators
 - c. Replacement upgrade server for Brass Castle School
 - d. Additional server for Brass Castle School as facility changes dictate
 - e. Switches – replacement and/or maintenance due to facility change
 - f. Power upgrade to put server equipment at Brass Castle on its own circuit
 - g. Computers and upgrades for media centers and labs
2. Software used for curricular support and filtering –
 - a. Internet Filter (Surf Control 3-year license purchased in February 2007)
 - b. Security software, such as Norton Antivirus, Deep Freeze, Zone Alarm
 - c. State Assessment Preparation Program, such as Study Island

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- d. WeatherNet
- e. Web-based Accelerated Reading Program
- f. Follett upgrade
- g. Library Vendor Databases, such as Ebsco, World Book
- h. Grade level software; upgrades or as needed
3. Technology maintenance policy and plans –
 - a. Student Information Services, such as EdSolution
 - b. School Nurse Administrative Program (SNAP)
 - c. IEP software
4. Telecommunications services –
 - a. Verizon long distance
 - b. Verizon local calls
 - c. Warrennet Internet and e-mail provider
5. Technical Support –
 - a. Onsite full-time technician
 - b. Outside consultants
 - i. R Square
 - ii. FloTech (Hewlett Packard laser printer maintenance plan)
 - iii. Promedia
6. Facilities infrastructure –
 - a. Security cameras installed in each building
 - b. Possibility of losing computer lab at Brass Castle School
 - c. Administration moving to Old School House
7. Other services
 - a. WeatherNet

A-3. Assistive Technology:

Washington Township School District integrates assistive technology devices into the network to accommodate student needs. According to the needs of each student, the following technology is used:

1. Software includes –Type to Learn, Earobics, First Categories, First Words, Swim-Swam-Swum, Early Learning, Kidspiration, Inspiration, Clicker 5, Word Maker, and Co Writer
2. Hardware includes – laptops, headphones, CD players, tape recorders, a variety of switches, switch interface pro, Cheap Talk 8, Intellikeys with overlay maker
3. Subscription services include – edHelper (special education materials available), Study Island, access to online reading programs

A-4. District Web Site Accessibility:

1. Equivalent alternatives to audio and visual content are provided.
2. Text and graphics are understandable when viewed without color.
3. Proper structural elements are used to mark up documents. Presentation is controlled with style sheets rather than with presentation elements and attributes.
4. Markup is used that facilitates pronunciation or interpretation of abbreviated or foreign text.
5. Tables have necessary markup to be transformed by accessible browsers or other user agents.
6. Pages are accessible even when newer technologies are not supported or are turned off.
7. Moving, blinking, scrolling, or auto-updating objects or pages may be paused or stopped.
8. The user interface follows principles of accessible design: device-independent access to functionality, keyboard operability, self-voicing, etc.
9. Features are used that enable activation of page elements via a variety of input devices.
10. Interim accessibility solutions are used so that assistive technologies and older browsers will operate correctly.
11. W3C technologies (according to specification) are used and follow accessibility guidelines. Where it is not possible to use a W3C technology, or doing so results in material that does not transform gracefully, alternative version of the content that is accessible is provided.
12. Context and orientation information to help users understand complex pages or elements are provided.
13. Clear and consistent navigation mechanisms -- orientation information, navigation bars, a site map, etc. -- to increase the likelihood that a person will find what they are looking for at a site are provided.
14. Documents are clear and simple so they may be more easily understood.

Taken from: Web Content Accessibility Guidelines 1.0
<http://www.w3.org/TR/WCAG/>

Washington Township School District is currently using (1) Watchfire Bobby to maintain accessibility requirements and compliance with existing accessibility guidelines, including Section 508 of the US Rehabilitation Act and the W3C's Web Content Accessibility Guidelines (WCAG) and (2) OPERA to check for screen reader accessibility. Accessibility requirements include: readability by screen readers, the provision of text equivalents for all images, animated elements, audio and video displays.

Resource: Alliance for Technology Access at
<http://www.ataccess.org/rresources/web/5firststeps.html>

A-5. Plan for Replacing Obsolete Computers/Technology:

1. All computers and laptops, 6 years or older, will be replaced if unable to be upgraded to meet the demands of instructional software.
2. Office computer equipment is on a three-year cycle of replacement.
3. Computer labs – Existence dependent on instructional facilities needs.
4. Specifics of removal are as follows:

Advanced Recovery Company
223 Verona Avenue
Newark, NJ 07104
rtravers@advancedrecovery.com
FAX: 973-485-8844
Phone: 973-485-9100

Computer Recycling
Warren County Recycling Center
Schools may call for direct recycling.
(908) 453-2174, ext. 226

Fees for removal: Truck fee is \$100. No cost for computers and \$7.50 per monitor.
Required paperwork will be completed to comply with the manifest of destruction law.

B. CYBER SAFETY

B-1. Filtering Method:

Washington Township School District utilizes Surf Control as the district Internet filtering software. The program allows for identification and restriction of web and email content based on the following criteria:

1. Specific website or page
2. Web content category (pornography, racist, hate, hacker, etc)
3. E-mail category or message content
4. User
 - a. User name
 - b. Group name
 - c. Time of day
 - d. Time spent online
 - e. Bandwidth allocation

B-2. Acceptable Use Policies:

Appendix A: Student Internet Acceptable Use Policy

Appendix B: Administration, Faculty and Staff Technology Acceptable Use Policy

B-3. Student Education about Online Safety Awareness:

1. Student presentation by the New Jersey State Police Computer Crimes and High Technology Surveillance Bureau
2. Student resources posted on district website
3. Library and computer instruction

B-4. Availability of Parental Resources Regarding Online Safety:

1. Presentation by the New Jersey State Police Computer Crimes and High Technology Surveillance Bureau hosted for parents
2. Parent Resources posted in Technology Links on district website
3. "Technology Tip" column in the monthly PTA Colden Castle Newsletter (print copy)
4. "Technology Tip" column in the monthly online PTA Colden Castle Newsletter posted on district website

C. NEEDS ASSESSMENT

C-1. Needs Assessment:

A *Technology Needs Assessment Survey* was distributed to staff members during the current 2006-2007 school year. Areas of assessment included: practice in integrating technology across the curriculum; technology proficiency, utilization of technology in work-related activities, student use of computer based activities; the perceived impact that technology has on the learning environment; current status of staff development with technology; and areas of professional development that would be beneficial to our staff.

(a) Staff's current practice in integrating technology across the curriculum was identified in the survey. A majority of teachers feel that:

1. Students in their classrooms use technology to help solve problems.
2. Students use technology to support higher-order thinking (i.e., analysis, synthesis, and evaluation of ideas and information).
3. Students use technology to access online resources and information as a part of classroom activities.
4. Students use technology to create new ideas and representations.
5. Students use a range of technologies (i.e., productivity, visualization, research, and communication tools).
6. Students communicate and collaborate with peers, content experts, or others outside the classroom using technology.

The survey indicated that the majority of teachers do not feel:

7. Students use advanced, professional research tools and information (e.g., simulations, databases, satellite imagery).
8. Students work on relevant, technology-enhanced projects that have meaning and approach real-world applications of technology.

(b) The survey provided a summary of teacher and library media personnel proficiency in the use of technology equipment within the district:

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1. Most teachers frequently use a windows-based computer, VCR/DVD player, and digital camera.
2. Most teachers at times use a fax machine and scanner.
3. Most teachers feel they need more training with: video editing equipment, video projectors, document cameras, interactive white boards, digital science equipment, handheld devices, distance learning equipment, and video production equipment.

The survey provided a summary of specific areas that teacher and library media personnel use computer technology in work-related activities:

1. The majority of teachers frequently use student management systems (grading, attendance, assessment), student information services, school management (scheduling/calendar), word processing, Internet or online services, and email.
2. The majority of teachers sometimes use spreadsheets/databases, authoring/multimedia software, tutorials, and computerized testing.
3. The majority of teachers do not utilize desktop publishing, video/audio capture and digitizing, art/graphic development and web page development.

(c) The current educational environment at Washington Township School District assures

- i. staff has access to technology in which to facilitate technology integration through access to:
 1. computer labs
 2. mobile labs and laptops
 3. individual laptops designated for teacher use
 4. at least one desktop computer in each classroom
 5. distance learning equipment
 6. video production studio for taping and/or live broadcasts
 7. interactive SMARTboards
 8. digital science equipment, including PDAs
 9. projectors
 10. document cameras
 11. 100% Internet connectivity
 12. email
 13. assistive technologies
 14. digital cameras and video cameras
- ii. students have access to technology in their learning environment potentially 100% of the time through access to scheduled computer lab time, unscheduled “free” lab sign up, classroom desktop computer, and mobile wireless labs along with access to all of the equipment listed above.

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- iii. the needs of staff are evaluated through formal and ongoing informal needs assessments.
- iv. the needs of students are evaluated through grade level articulation meetings, faculty meetings, ongoing consultation from the technology coordinator and district technician.
- v. past professional development addressed the staff and students' needs for technology integration through individualized off-site workshops and conferences, ongoing consultation from the technology coordinator, before and after school workshops, inservice workshops, ETTC workshops, technology coordinator modeling with students.
- vi. past professional development for all administrators to further the effective use of technology in the classroom or library media center included NJ Excel, EdSolution workshops, webinars for student information systems, faculty meeting presentations, inservice workshops, ETTC programs, NJ Association of School Administrators Techspo conference.
- vii. ongoing, sustained professional development which was provided in 2006-2007 for all staff to further the effective use of technology in the classroom or media center was provided through participation in outside workshops, Warren County Inservice Day, inservice days (PowerPoint, interactive SMART boards, digital science equipment, Inspiration, Internet sites, web site development, document camera).
- viii. ongoing, sustained professional development which was provided in 2006-2007 for administrators to further support the effective use of technology in the classroom or library media center was provided through participation in EdSolution workshops, webinars for student information systems (such as NJ Smart), webinars for administrative software, faculty meeting presentations and inservice programs, in district training (document camera, SMARTboard, Nextel phone, digital camera, digital science equipment, PDA), and security planning (ID, locks, cameras).
- ix. supports were provided for staff other than professional development through ongoing consultation from the technology coordinator, help desk, and online tutorials.
- x. professional development needs and barriers related to using education technology as part of instruction have been identified through an annual needs assessment, schoolwide chats, faculty meetings, grade level articulation meetings, email, and ongoing consultation from the technology coordinator.

C-2. Needs of District to Improve Academic Achievement for All Students:

As an elementary school district (K-8), it is important to prepare our students to be able to:

- know and apply basic skills;
- solve problems using many different strategies;
- be independent thinkers;
- reason skillfully in diverse situations;
- effectively communicate solutions to problems and methods for solving them;
- work alone and in groups to solve problems.

Through the use of technology integration into the mainstream curricula, students are able to practice and perfect in these areas. Technologies such as computers with Internet access continue to provide experiences that touch upon each of these benchmarks. Additional technologies, such as the interactive SMART boards, document cameras, digital science equipment, enrich the learning process of each student. As indicated by the teachers in our survey, students presently use technology to help solve problems; support higher-order thinking; create new ideas and representations; and communicate and collaborate with peers, content experts, or others outside the classroom.

As indicated by teachers, there is a need for students to use advanced, professional research tools and information (e.g., simulations, databases, satellite imagery) and to work on relevant, technology-enhanced projects that have meaning and approach real-world applications of technology. In addition, teachers feel that students do not have enough experiences with: information retrieval, database/spreadsheet activities, authoring programs, desktop publishing, and web page development.

C-3. Priority of Identified Needs:

In order to continue to offer our teachers and students the technology that is needed to meet these identified needs, it is necessary to maintain the quantity and quality of services and equipment that we have in our district. It is also imperative to keep looking ahead and to provide those technologies that will help to improve teaching practices and student learning in the future. Technologies that will keep our district forward thinking and provide our students with the best opportunities to become successful adults in the workforce as well as lifelong learners include:

1. an interactive SMART board and projector installed in each classroom
2. web-based automated information retrieval system
3. vendor databases
4. Follett Destiny library management system
5. ARP web-based service
6. continued professional development in specific curricula areas
7. maintained mobile labs
8. maintained computer lab

IV. THREE-YEAR GOALS AND OBJECTIVES

A. HISTORY

A.1 Goals from the 2004-2007 Plan:

A.1: GOAL	A.2: EVALUATION	A-3: OUTCOMES
<p>GOAL 1: The Washington Township School District will offer students educational opportunities that address the Core Curriculum Standards for technological literacy (computer and information literacy as well as engineering and technological design).</p>	<p>The school district successfully offered students educational opportunities that addressed the Core Curriculum Standards for technological literacy.</p>	<p>A positive community outreach was established with Girl Scout Troop # 269 who used our facilities and equipment to promote technological literacy among its members.</p>
<p>GOAL 2: Washington Township School District will design programs to meet Standard 8.1 of the Core Curriculum Content Standards for computer and information literacy—All students will use technology skills and tools) computer applications to gather and organize information and to solve problems.</p>	<p>The school district successfully designed programs to meet Standard 8.1 of the Core Curriculum Content Standards for computer and information literacy as reflected in our needs assessment.</p>	<p>Elevated standardized test scores coincide with student use of Study Island, our web-based standardized testing preparation program.</p>
<p>GOAL 3: Washington Township School District will design programs to meet Standard 8.2 of the Core Curriculum Content Standards for technology education—All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual society, and the environment.</p>	<p>The school district successfully designed programs to meet Standard 8.2 of the Core Curriculum Content Standards for technology education as reflected in our needs assessment.</p>	<p>Fourth grade mentors worked with kindergarten students to complete a unit on the parts and functions of a computer. The unexpected outcome was the quality of learning that occurred due to the relationships established between the younger and older students. Parents of both grade level students gave positive feedback on the success of the program.</p>

B. GOALS AND OBJECTIVES FOR 2007-2010

B.1/B.2 Goals for 2007-2010

- GOAL 1:** The Washington Township School District will offer students educational opportunities that address the Core Curriculum Standards for technological and information literacy (computer and information literacy as well as engineering and technological design) to prepare students for the workplace.
- GOAL 2:** Washington Township School District will design programs to meet Standard 8.1 of the Core Curriculum Content Standards for computer and information literacy—All students will use (technology skills and tools) computer applications to gather and organize information and to solve problems.
- GOAL 3:** Washington Township School District will design programs to meet Standard 8.2 of the Core Curriculum Content Standards for technology education—All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual society, and the environment.

B.2 Alignment of Goals with District Need and State Plan

The Washington Township School District technology goals contribute to the state educational technology goals. The Washington Township School District technology goals were developed and influenced by the New Jersey State Technology Goals.

New Jersey State Technology Goals

- GOAL 1:** Students will attain the educational technology and information literacy skills that will assist them in achieving the Core Curriculum Content Standards and to succeed in the workplace of the 21st Century.
- GOAL 2:** Educators will attain the skills and knowledge necessary to effectively use educational technology to assist students to achieve the Core Curriculum Content Standards.
- GOAL 3:** Students, teachers and administrators will have access to educational technology in all learning environments, including classrooms, media centers, schools, and other educational settings such as community centers.
- GOAL 4:** New Jersey school districts will establish and maintain the technology infrastructure necessary for students and educators to access electronic information and to communicate freely via technology.

B.3 Objectives for 2007-2010

The district will utilize technology in all its programs to address the above listed goals through the following objectives July 1, 2007 through June 30, 2010. See timeline and indicators for each goal and objective presented in implementation tables that follow on pages 16-20.

1. All students will improve writing, editing, and presentation skills through technology applications.
2. All students will demonstrate the ability to locate, assess, collect and cite information from a variety of online resources.
3. All students will use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.
4. All students will use global interconnectivity of information and communication to collaborate, publish, and interact with peers, experts, and other audiences.
5. All students will use technology resources for solving problems and making informed decisions.
6. All students will develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

V. THREE-YEAR IMPLEMENTATION ACTIVITY TABLES
July 2007 – June 2010

A/B. All students regardless of gender, race, national origin, special need and religious affiliation will acquire educational technology through activities and strategies listed in tables below.

1. All students will improve writing, editing, and presentation skills through technology applications.

Benchmark	Timeline	Responsibility	Documentation
Use word processing software, such as Ultimate Writing & Creativity Center, to develop a complete sentence.	2007-2008 by end of 1 st grade	Classroom teacher	Printed work
Use word processing software, such as Ultimate Writing & Creativity Center or Microsoft Word, to develop a 5-sentence paragraph.	2007-2008 by end of 4th grade	Classroom teacher	Printed work
Organize information or ideas by using webbing or concept-mapping software, such as Kidspiration or Inspiration.	2008-2009 by end of grade	Classroom teacher	Printed map
Use word processing software to write a story about a content area topic.	2007-2008 in all grades	Classroom teacher	Printed work
Use desktop publishing and/or word processing software to publish a book.	2007-2008 in all grades	Classroom teacher	Student's book
Develop advanced word processing skills in the format of title pages, table of contents, page numbering and bibliographical information.	2007-2008 by end of 6th grade	Classroom teacher	Printed report
Insert table to present data within a written document.	2008-2009 by end of 5th grade	Classroom teacher	Printed work
Use word processing software to produce an html document to post online.	2009-2010 by end of 6th grade	Classroom teacher	Web page

2. All students will demonstrate the ability to locate, assess, collect and cite information from a variety of online resources.

Benchmark	Timeline	Responsibility	Documentation
Use online resources to access information for reports.	2007-2010 by end of 2 nd grade	Classroom teacher Library media specialist	Observation
Research biographical information using online resources.	2007-2008 by end of 3 rd grade	Classroom teacher Library media specialist	Observation
Access information and photos from the Internet to incorporate into content area project.	2007-2008 by end of 6 th grade	Classroom teacher Library media specialist	Printed work Rubric

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Use a database in content areas to organize information and to manipulate data.	2008-2009 by end of 4 th grade	Classroom teacher	Printed work
Use spreadsheet applications for mathematics and science.	2009-2010 by end of 6 th grade	Classroom teacher	Printed work
Access and interact with a Website, record the address, and report information to their teacher.	2007-2008 by end of 5 th grade	Classroom teacher Library media specialist	Rubric Printed work
Compose bibliography of Websites using correct format.	2007-2010 by end of 6 th grade	Classroom teacher Library media specialist	Printed work
Re-word and synthesize collected information into an original report avoiding any form of plagiarism.	2007-2010 by end of 6 th grade	Classroom teacher Library media specialist	Printed work
Use an Internet project-based research technique to conduct a research project.	2009-2010 by end of 6 th grade	Classroom teacher Library media specialist	Rubric Project

3. All students will use productivity tools to collaborate in constructing technology enhanced models, preparing publications, and producing other creative works.

Benchmark	Timeline	Responsibility	Documentation
Develop news articles using Internet resources, scanned images and text.	2007-2008 by end of 4 th grade	Classroom teacher Library media specialist	Printed work
Develop multimedia presentations for content areas.	2007-2008 in all grades	Classroom teacher	Rubric
Create animation project for content areas.	2007-2008 by end of 5 th grade	Classroom teacher	Videotape Rubric
Create a curriculum-related multimedia presentation using an authoring program, such as KidPix, HyperStudio or PowerPoint.	2007-2008 in all grades	Classroom teacher	Rubric Project
Use digital camera and scanner to integrate graphics into content area project.	2008-2009 by end of 6 th grade	Classroom teacher	Printed work Portfolio Rubric
Create personal timelines using scanned photos and text.	2008-2009 by end of 6 th grade	Classroom teacher	Printed work
Use school weather station to measure, record, and graph data.	2008-2009 by end of 4 th grade	Classroom teacher Technology coordinator	Printed work Classroom web page
Create a video presentation to present topic from content area.	2008-2009 by end of 6 th grade	Classroom teacher Technology coordinator	Rubric Videotape
Utilize virtual field trips and distance learning activities to create content area project.	2008-2009 by end of 6 th grade	Classroom teacher Technology coordinator	Rubric Project

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4. All students will use global interconnectivity of information and communication to collaborate, publish, and interact with peers, experts, and other audiences.

Benchmark	Timeline	Responsibility	Documentation
Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners.	2007-2008 by end of 5 th grade	Classroom teacher Library media specialist	Observation Electronic submission Rubric
Participate in live online chats with experts related to curriculum.	2007-2008 in grades 3-6	Classroom teacher Technology coordinator	Observation Writing sample
Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.	2007-2008 in grades 3-6	Classroom teacher Technology coordinator	Rubric Writing sample Project
Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests.	2007-2008 in grades 3-6	Classroom teacher Technology coordinator	Observation Report Rubric
Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	2007-2008 in grades 5-6	Classroom teacher Technology coordinator	Online project Videotape Rubric Observation
Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom.	2008-2009 in grades 3-6	Classroom teacher Technology coordinator	Project Rubric Observation Writing sample
Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.	2009-2010 in grades 5-6	Classroom teacher Technology coordinator	Project Rubric Observation

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5. All students will use technology resources for solving problems and making informed decisions.

Benchmark	Timeline	Responsibility	Documentation
Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories.	Prior to Grade 2007-2008 in all grades	Classroom teacher	Project Written work Rubric Portfolio
Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem-solving, self-directed learning, and extended learning activities.	2008-2009 by 6 th grade	Classroom teacher Technology coordinator	Project Written work Rubric
Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems.	2009-2010 in all grades	Classroom teacher	Project Written work Observation
Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.	2007-2010 in grades 3-6	Classroom teacher Technology coordinator Library media specialist	Project Written work Rubric Observation

6. All students will develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

Benchmark	Timeline	Responsibility	Documentation
Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom.	2007-2010 in grades K-6	Classroom teacher Library media specialist	Observation Rubric
Demonstrate positive social and ethical behaviors when using technology.	2007-2010 in grades K-6	Classroom teacher Library media specialist	Observation Rubric
Practice responsible use of technology systems and software	2007-2010 in grades K-6	Classroom teacher Library media specialist	Observation Rubric
Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.	2007-2008 in grades 3-6	Classroom teacher	Observation
Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.	2008-2009 in grades 3-6	Classroom teacher	Observation
Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.	2007-2010 in grades 5-6	Classroom teacher	Observation
Exhibit legal and ethical behaviors when using information & technology, and discuss consequences of misuse.	2009-2010 in grades 3-6	Classroom teacher Technology coordinator Library media specialist	Observation

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Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real world problems.	2007-2010 in grades 5-6	Classroom teacher Technology coordinator Library media specialist	Observation Rubric
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C. The process for meeting the NCLB requirement that all students be technologically literate by the end on eighth grade:

Washington Township School District will continue to assess the attainment of the school-wide goals and objectives listed in this plan. In addition, the district will incorporate a teacher checklist of technology benchmarks at each grade level to ensure that specific skills are being taught at each grade level. Evaluation of student literacy will be a combination of project-based assessment (integrated class assignments accomplished over time to learn the content) and portfolio based assessment (purposeful collection of student work that exhibits the student's efforts, progress, and achievements).

D. Specific telecommunications and information technologies and resources that are useful to reach stated goals.

- Warrennet Internet and email provider
- Verizon long distance phone service
- Verizon local phone service
- Follett Destiny Library Management System
- Vendor Databases
- Countywide Technology Program
- Interactive white SMART boards
- Distance learning equipment
- EdSolution or comparable student information system
- Weathernet program
- Musconetcong Watershed Association – Project WET

VI. FUNDING PLAN
July 2007-June 2010

A. Anticipated Costs for 2007-2008

July 1, 2007 – June 30, 2008

Area	Amount
INTERNET (ATM Lines)	\$15,000
WARRENNT (Internet and email provider)	10,000
ELECTRICAL UPGRADE (Port Colden)	100,000
SOFTWARE	5,000
INK CARTRIDGES	8,000
MAINTENANCE	5,000
DISTANCE LEARNING FEES	1,500
FOLLETT LIBRARY MANAGEMENT SYSTEM FEE	2,000
VENDOR LIBRARY DATABASES	1,000
ARP – UPGRADE & ANNUAL SUBSCRIPTION	3,500
INSTRUCTIONAL ONLINE SUBSCRIPTIONS	1,500
ASSISTIVE TECHNOLOGY	2,500
ED SOLUTIONS	7,500
STAFF DEVELOPMENT	3,000
SALARIES & BENEFITS	154,000
TOTAL	\$319,500

Projected Per Year Costs: July 1, 2008 – June 30, 2010

Area	Amount
MOBILE LABS (2008-09) – If BC lab is needed as classroom	\$100,000
REPLACEMENT SERVER FOR BRASS CASTLE (BC)	8,000
OFFICE AREA EQUIPMENT – Replacement & upkeep	10,000
TEACHER LAPTOPS – 6 per year	12,000
INTERNET (ATM Lines)	15,000
WARRENNT (Internet and email provider)	10,000
DISTANCE LEARNING FEES	1,500
FOLLETT LIBRARY MANAGEMENT SYSTEM FEE	2,000
VENDOR LIBRARY DATABASES	1,000
ARP –ANNUAL SUBSCRIPTION	1,500
INSTRUCTIONAL ONLINE SUBSCRIPTIONS	1,500
REPLACEMENT COSTS – Laptops, scanners, printers	5,000
INTERACTIVE SMART BOARDS & PROJECTORS – Per year	60,000
ASSISTIVE TECHNOLOGY	2,500
SOFTWARE	5,000
INK CARTRIDGES	10,000
MAINTENANCE	5,000
ED SOLUTIONS (Student information system)	8,000
STAFF DEVELOPMENT	3,000
SALARIES & BENEFITS	170,000
TOTAL	\$431,000

B. Funding Sources:

1. Washington Township School Budget
2. Washington Township Parent Association
3. State and Federal Grants

C. Board Approval for this technology plan, including budget for first year

Appendix C: Board Approval for 2007-2010 Washington Township School District Technology Plan

VII. PROFESSIONAL DEVELOPMENT

A. Name of person responsible for coordinating the professional development activities noted in this plan:

Keith Neuhs, Principal

B. Planned professional development activities for teachers, administrators, and school library media personnel:

B.1 Access to Educational Technology – Teachers and Library Media Personnel

All teachers have access to educational technology in their instructional areas:

- Mobile lab with wireless laptops in each school building
- Computer lab in each school building
- Library media center in each school building
- Desktops in classrooms and media centers
- Wireless laptops for teachers
- Interactive SMART boards
- Projectors/Document cameras
- PDAs for digital science equipment
- Distance learning equipment

B.2 Access to Educational Technology – Administrators

All administrators have access to educational technology in their workplace:

- Wireless laptops for every administrator
- PDA with administrative software
- Nextel phones
- Distance learning equipment
- Projectors/Document cameras
- Interactive SMART boards

B.3 Administration Professional Development

Administrators will be provided with sustained professional development to further the effective use of technology in the classroom or library media center:

- Student information system webinars
- Conferences
- Workshops
- Conventions
- Superintendent/Principal round table meetings

B.4 Staff Professional Development

Staff will be provided with ongoing, sustained professional development to further the effective use of technology in the classroom or library media center:

- In-district training
- Faculty meetings and in-service
- Consultation – Technology coordinator or peer mentor
- In-class support – Technology coordinator
- Warren County Countywide In-service
- Workshops and conferences
- Online tutorials

B.5 Professional Development Opportunities and Resources Available for Technical Staff

- Workshops and conferences
- State-wide Conventions
- Graduate class reimbursement
- County Technology Coordinators' round table meetings

B.6 Professional Development – Application of Assistive Technologies

- In-district training
- Faculty meetings and in-service
- Consultation – Technology coordinator, library media specialist, peer mentor
- In-class support – Technology coordinator
- Warren County Countywide In-service
- Workshops and conferences
- Educational Technology Training Center (ETTC) Workshops

C. Professional Development Planned for 2007-2008

All teachers will have opportunities to ongoing, sustained high-quality professional development in 2007-2008 in the following areas:

- Appropriate Software
- Internet Resources
- Distance Learning/Desktop Conferencing
- Interactive SMART Boards
- Assistive Technologies
- Professional Research Tools (simulations, databases, satellite imagery)
- Real World Applications

Partners for training and technical assistance available to teachers and administrators:

- Warren County Educational Technology Training Center
- Technology Coordinator
- Library Media Specialist
- Professional Development Committee
- District Technician
- Mentors/Master Teachers
- Administrators

In-class support, such as modeling and coaching by the technology coordinator or peer mentors, has proved to be an effective method of professional development in our district. Not only does it alleviate the “time to train” restraints but offers individualized and sustained professional development for our staff.

D. Financial and Time Resources for Professional Development

Resources for professional development as it relates to using technology as part of instruction:

- Funding for workshops, conferences, conventions
- Funding for in-house guest speakers/presenters
- Funding for substitutes to allow release time for teachers and training
- Funding for interactive SMART boards and projectors
- Time in schedule for teacher training
- Time in schedule for grade level articulation

E. Professional Development Activities 2008-2010

Teacher training will emphasize skills and knowledge needed to use educational technology as an effective tool to support achievement of the Core Curriculum Standards. In-class training will include use of multimedia presentations, appropriate software,

Internet resources, and integration of curriculum with technology. In-service opportunities will include:

- Assistive technologies
- Interactive SMART boards
- Digital science equipment
- Document cameras
- Distance learning equipment
- Video editing and production
- Digital imaging (camera, scanning, video) techniques
- Web page design

VIII. EVALUATION PLAN

The progress of the Technology Plan will be monitored and revised to meet changing needs on an annual basis.

The monitoring will take the following forms:

- Activity tables will be checked to determine whether target dates have been met.
- Faculty and staff will be surveyed to determine their current level of technological maturity.
- Student achievement will be measured by successful completion of computer literacy, use of technology in course work, and creation of projects and presentations.
- Improvements in current technologies and emerging technologies will be studied for possible inclusion in the Technology Plan.

It will be the joint responsibility of the administration, technology planning committee, instructional council, professional development committee, site-based committees and technology coordinator to evaluate the extent to which goals, objectives, activities, resources and services are effective in integrating technology into curricula and instruction, enabling students to meet challenging state academic standards, and developing life-long learning skills.