

# The West New York Public School District

## Technology Plan

2010-2013

### **Central Administration**

Dr. Robert VanZanten, Superintendent  
Rosemary Donnelly, Assistant Superintendent of Curriculum and Instruction  
John Fauta, Assistant Superintendent of Administrative Services  
Gary Lentini, Director of Human Resources  
Anastasia Olivero, Director of Special Services  
Donald Rucker, Director of Educational Program  
Beverly Lazzara, Director of Educational Programs  
Rena Hendrick, School Business Administrator

### **Trustees of the West New York Board of Education**

Cosmo A. Cirillo, President  
Angelica Jimenez, Vice President  
Vanessa Maria Flores, Trustee  
Alex Locatelli, Trustee  
Domingo Lopez, Trustee

### **The District Technology Planning Committee**

Scott Cannao  
Laura Cirillo  
Barbara Deitmaring  
Rosemary Donnelly  
Yonarkis Estevez  
Patrick Gagliardi  
Edel Gonzalez  
Anita Kober  
Beverly Lazzara  
Anastasia Olivero  
Dennis Petersen  
Reggie Robaina  
Willa White

## TABLE OF CONTENTS

Stakeholders .....	3
Executive Summary .....	4
Technology Overview .....	4
Three-Year Goals and Objectives.....	15
Three-Year Implementation and Strategies Tables.....	17
Funding Plan.....	20
Professional Development .....	22
Evaluation Plan .....	25
Appendix.....	27
A. Board Approval of the 2010-2013 Technology Plan.....	27
B. Board Policy—2361 Acceptable Use of Computer Network/Computers and Resources.....	28
C. Board Policy—3321 Acceptable Use of Computer Network(s)/ Computers and Resources by Teaching Staff members .....	31
D. Board Policy—4321 Acceptable Use of Computer Network(s)/ Computers and Resources by Support Staff Members.....	34
E. Board Policy—5512.02 Cyber Bullying.....	37
F. Board Policy—5512.01 Harassment, Intimidation, and Bullying.....	40
G. Inventory .....	50

<b>I. STAKEHOLDERS</b>		
<b>TITLE</b>	<b>NAME</b>	<b>SIGNATURE</b>
Assistant Superintendent	Rosemary Donnelly	
Principal	Patrick Gagliardi	
Technology Coordinator	Yonarkis Estevez	
Curriculum Director	Beverly Lazzara	
Teacher	Anita Kober	
Special Education Teacher	Laura Cirillo	
Library Media Specialist	Dennis Petersen	
Guidance	Scott Cannao	
Parent	Reggie Robaina	
District Supervisor of Elementary Education	Barbara Deitmaring	
Network Administrator	Edel Gonzalez	
District Supervisor of Technology and Media Arts	Willa White	
Director of Special Services	Anastasia Olivero	

## II. EXECUTIVE SUMMARY

### PHILOSOPHY OF EDUCATION/DISTRICT'S MISSION STATEMENT

The West New York Board of Education supports the belief that free public education for all children is a cornerstone of a democratic society that values the worth and dignity of each individual.

The primary goal of this Board of Education shall be to offer each child in this district the educational opportunity that will enable him/her to function politically, economically, and socially in that democratic society.

The Board of Education pledges its commitment to the mission statement's ongoing implementation:

“Maximizing all pupils’ potential in an ever-changing world through a rigorous curriculum that:

- Focuses on the New Jersey Core Curriculum Content Standards
- Fosters a safe learning environment
- Maintains high expectations for pupil development
- Builds qualities of character and social competencies in pupils to make positive contributions in their communities and world.”

It is the expectation of this school district that all pupils achieve the New Jersey Core Curriculum Content Standards at all grade levels.

## III. TECHNOLOGY OVERVIEW

### A. Technology

The inventory of current technology networking and telecommunications equipment is attached (Appendix G).

The district's technology infrastructure is composed of 13 sites. Within these sites Memorial High School (MHS) acts as our Network Operations Center (NOC). All locations are connected in a ring topology utilizing a 2 Gigabit (GB) private fiber Wide Area Network (WAN).

The NOC at MHS supports a 50MB connection to the Internet. The district is evaluating the 100 MB capacity for possible expansion in the near future. There is a Main Distribution Frame (MDF) that feeds to eight Intermediate Distribution Frames (IDF) via a gigabit fiber backbone. The MDF and all IDFs are equipped with 10/100 Ethernet

Cisco switches that truncate down to the classrooms and labs. Room connectivity is accomplished by terminating four data and one voice Category 5 or 6 cable.

All of our satellite buildings have individual MDFs, as well as IDF infrastructure utilizing 10/100 Ethernet Cisco switches connecting to a 1 GB fiber optic backbone. The classrooms and labs in all schools are set up similarly to MHS. Room connectivity is accomplished by terminating four data and one voice Category 5 or 6 cable.

We have five centralized servers located in MHS that facilitate the district's connectivity to our Student Information System (SIS) PowerSchool. The district maintains a contract with NCS Pearson for technical support for PowerSchool. The use of PowerSchool, which is a completely web based solution, allows for all student records to be accessible to the faculty and staff via the Internet.

The district has an AS/400 mid-range computer for administrative purposes. This device is used by the central office business department handling the district's financial and human resources. The district is currently looking to replace the AS/400 with an Enterprise Resource Planning (ERP) system.

The Information Systems Department also uses a software program called SERTS, supported by Netprofits, Inc., for work orders, requisitions, and inventory. Netprofits is currently being used to support an on-line survey system and the district's web site. The district contracts with Promedia Consulting Group for technical support beyond our district's in-house capabilities.

The WAN serves as the data transport facility for our voice and security networks as well. We have a Nortel Networks voice system which uses both digital and Voice-over IP technology. This integrates with Call Pilot voice mail, which enables our teachers and administrators to have voice mail and in some cases a unified messaging platform for communicating with each other and with students/parents.

Telecommunications services are from Verizon, Sunesys, and from Nortel Networks. From Sunesys, the district is utilizing the private fiber network. This fiber network is designed in a ring topology, which gives the district additional redundancy to insure the continuity of data transmission. This upgrade greatly enhanced the use of data, voice and video throughout the district.

Telephone Systems from Nortel Networks are utilized in all locations in the district. There is a Succession 1000M system at the high school with Option 11s or Succession 1000s at most remote locations. Voice-over IP (VoIP) is currently utilized to communicate between buildings, and we are moving toward IP telephone stations with desktop collaboration. We are evaluating the need to replace or reconfigure this Nortel System. Nortel was purchased by Avaya, and systems and support for our current equipment is being transitioned accordingly. In addition, we are comparing our current configuration with newer and more cost-effective system designs.

The fiber network is used to transport voice calls from the respective buildings to the NOC at MHS. The calls are then processed through the Nortel system and completed out of the district over 2 Primary Rate Interface (PRI) lines from Verizon. Incoming calls are routed via Direct Inward Dial (DID) numbers from Verizon as well as station trunks. POTS lines and Centrex lines are used for back up and also for miscellaneous fax and modem lines. Effective July 1, 2010, we will be replacing the Verizon services with a similar design from Broadview Networks.

The district currently has a Cisco based wireless network in all schools facilitating the use of wireless technology. All access points connect back to two Cisco Wireless Lan Controllers located at MHS for management. Security for wireless clients is provided by two Microsoft based radius servers. Large network printers are housed in every main office, media center, and computer lab in each school building. Classrooms are supported with small ink jet printers or black and white laser jet printers. The district currently maintains over 2,200 computers and laptops that are used primarily by students but also by the faculty and support staff.

The District has a detailed plan to expand its technology inventory and services through 2013. The main focus will be in areas that will maximize student academic achievement.

The West New York School District will continue to fulfill its commitment to technology by maintaining and upgrading their district-wide technology infrastructure of data, voice, and video networking to every classroom, educational support areas and administrative offices. This will empower our staff, administration, and students to evolve with technology.

The West New York School District has adopted Microsoft Office as our standard software suite for all computers in the district. This suite is used not only in all administrative offices but also taught to students as part of the computer education curriculum. Additional subject-specific software is purchased departmentally throughout the district. A concerted effort is made to only adopt new textbooks that contain both software and web-based components. All educational software purchases in the district must be approved by the Supervisor of Technology and the Assistant Superintendent of Curriculum. Additionally, several district wide web-based subscriptions are used for language arts reinforcement and video streaming.

The West New York School District utilizes the WebBlocker filtering service that is provided by Watchguard Technologies. The WebBlocker filtering service incorporates industry-leading technology from SurfControl that enables companies to cost-effectively screen over four million web sites by querying their database of inappropriate sites. This software allows you to block web sites based on key words, 40 categories that are predefined in the SurfControl database, and it also gives us the ability to manually block a site that is not currently included in the database. The SurfControl staff updates their database daily with new inappropriate sites and the district receives these updates nightly to update our local copy of the database.

The district has also deployed a web proxy server that screens all connections going out into the web before it reaches the WebBlocker filtering service. The proxy server gives us the ability to block complete access to a specific user or group of users to help us comply with our acceptable use policy. In addition, this server keeps tracking information of all web-surfing activity that can be analyzed as needed. We will be maintaining our relationship with the Watchguard product line and continue to add on and deploy the latest technology to keep our filtering current.

We use Sunbelt Vipre Enterprise to filter viruses, adware, and spyware. We will continue our regular updating and maintenance of that service. Lastly, we will continue the use of Vipre Spam filtering to filter unwanted e-mails, viruses, and malicious codes. All of these services require licenses, which we maintain and renew yearly.

Maintenance of our voice and data systems is an ongoing process, which will continue over the next several years. We have a yearly review of emergency and back-up procedures for the voice and data services. We employ constant monitoring of all servers, switches, and PBXs via network monitoring software. We have warranties and/or support contracts on all of our servers, switches, and routers, which will be renewed yearly. We continually monitor our software for updates and licenses needed and globally implement those updates.

We have basic maintenance support contracts through our vendors for our technology as follows:

- High level network support
- Router support
- Telecommunications support
- SmartNet support

We plan to continue and expand on those maintenance contracts over the next several years as our use of technology increases.

Technology maintenance is achieved in several ways at the West New York School District. Sunesys maintains our Wide Area Network and all associated WAN equipment. Being primarily a Windows environment, an in-house Microsoft Windows Update Server (WSUS) has been implemented. This server keeps all of our servers, desktop workstations, and wireless workstations with the latest Microsoft patches and security fixes. The district also maintains and implements Sunbelt Vipre Enterprise servers and clients that are updated on a daily basis with new virus definitions. This maintenance ensures and enforces existing security policies that prevent loss of data, compromised systems, etc.

All computers in school labs and media centers are re-imaged on a yearly basis to facilitate the new software and curricular needs for the upcoming school year. Physical maintenance of all networked devices is achieved as needed in a timely manner.

All hardware purchases are from state contracted vendors and have a three-year support contract that includes parts and labor. Site and district licenses are sought that have multi-year upgrades and staff training stipulations.

We have greatly expanded our telecommunications services over the past five years and are continuing to do so. We are expanding our use of Voice over IP telephony (VoIP), and we are implementing a more detailed plan to identify 911 emergencies. We continually expand our voice mail system so that our teachers can more efficiently communicate with their students and parents.

The district is in the process of evaluating the voice communications systems. Much of the Nortel voice hardware we have is approaching ten years old and is no longer supported by Nortel. The upgrades we have done in the past few years have enabled us to move away from a multiple PBX based design to a more streamlined system utilizing VoIP and our fiber WAN. New buildings are being added to the system without a separate PBX by adding IP phones that communicate with the main system. We will be evaluating the current design and developing a cost-effective plan to upgrade or replace the outdated hardware.

The district employs an in-house Information Systems Department consisting of an Information Systems Manager, a Network Administrator, a Telecommunications Administrator, a Student Information System Specialist, an Administrative Assistant, and twelve staff technicians. This department manages the day-to-day maintenance of the data and voice networks including all hardware and software. The technical support received by this department is exemplary. The services needed are completed in an extremely timely fashion ensuring a continuous flow of instruction to our students. Within each school building, the school-based computer teachers and the classroom teachers receive technical support from the staff technicians.

Our district uses the Service Request Tracking System, a web application that allows faculty and staff to submit and track various types of requests for service. It also handles inventory tracking including reporting on funding sources, purchase order tracking and software tracking. This system will continually be maintained and appropriate upgrades will be made.

The increased WAN bandwidth (1.5 MBS to 2 GBS) is the foundation for a number of technology upgrades. Our schools are now sharing resources, such as streaming educational videos via Safari Montage and engaging in video conferencing via Safari Live. We are assessing the bandwidth demand from the increased use of these services, and we expect a need to increase the bandwidth to the Internet accordingly.

We have purchased ten high-end Dell 2950 servers to facilitate the implementation of Microsoft virtualization infrastructure (Hyper-V). We have migrated 50% of our aging servers to the new virtualization environment. We will also evaluate the needs to upgrade memory and processor to maintain the additional physical to virtual server

migrations. This will decrease the ongoing cost of cooling and hardware. It will offer our students more access to our in-house programs and libraries.

We will continue integration of Interactive White Boards throughout the school district. New schools being built by the School Development Association (SDA) are all going to incorporate an Interactive White Board for each instructional classroom. This has given our teachers the ability to continue to integrate technology into the classroom and effectively make learning fun and interesting.

The new fiber WAN also offers the ability to maintain our systems and inventory in a more efficient manner. We will continue maintaining and upgrading our “Exchange Cluster,” which will enable us to continue to efficiently manage our ever growing use of Outlook. We will evaluate the possibility of upgrading our wireless infrastructure to the new wireless N standard. This will double the bandwidth available to our wireless clients. This year we replaced our schools’ library management software moving from Winnebago to Destiny. Destiny is a web-based solution that will empower our students and staff to better manage their library needs. We are also looking to implement School Interoperability Framework (SIF). This will give us the ability to integrate dissimilar databases and exchange common data among them. As an example, the ability to exchange common data will alleviate our staff members from populating the same student information into different databases. The information will be inputted once in our SIS and SIF will populate the other database accordingly. This will help to alleviate input errors and provide a fast and reliable homogenous data environment.

We have been moving aggressively to deploy a higher standard of security in the district by installing intelligent camera systems and a card access system. Most of these are server-based networked systems while others are stand alone systems. Our SDA projects have given us the initiative to move forward in expanding these systems district wide.

Our school system will focus on communications for all students, staff, parent(s) and/or guardian(s), and community members by maintaining its website at [www.wnyschools.net](http://www.wnyschools.net). This website will serve as a communication link for the community, students, and staff by maintaining updated educational information.

The West New York School District utilizes a variety of assistive software throughout its schools. Programs such as Write Out Loud and Co-Writer are used at the Bridges Center in Memorial High School, the West New York Middle School, and #6 School. This software supports students who need assistance in writing. To assist students with comprehension and phonics skills, programs such as Balanced Literacy and Simon—Sound It Out are used. Inspiration is used in the middle school and high school and Kidspiration in the elementary schools for web-mapping as a pre-writing activity. Certain pieces of software have been identified for specific students based upon individual needs.

When appropriate, adaptive keyboards and laptops are used to meet student needs within their schools. Several of the students who are hearing impaired use an FM System in the

classroom. Augmentative communication devices are also used by several in-district students. Assistive technology is also provided to several of our out-of-district students, in particular at the Day Training Center in Jersey City and Washington South in Paramus. The district's Department of Special Services uses Public Consulting Group for their Student Data Base (EASY IEP).

Interactive white boards have also been purchased for twenty-two special education classrooms within the district. These boards present a revolutionary way to create a dynamic environment which allows students to actively participate in their learning. The Promethean Boards are an integrated solution that includes the ability to bring together formative assessment, resources, and dynamic lesson development and delivery tools. The Bridges Program at Memorial High School presently utilizes a smart board during instruction.

The district is currently part of the Recordings for the Blind and Dyslexic New Jersey Unity which provides textbooks and literature on CDs for students.

As previously noted, the district maintains an expansive network of hardware and software applications related to both instructional and administrative uses. Educators in all instructional areas have access to educational technology. Every classroom is equipped with a minimum of three student desktops and one teacher desktop computer. Additionally, all schools have one or more mobile laptop carts that can be used on an as-needed basis.

All new construction and renovation projects include the installation of interactive whiteboards in every classroom. The 2010-2011 school year will include the installation of interactive white boards in an additional 135 classrooms in existing schools. This technology works in conjunction with a district-wide media management system that provides global connectivity and video streaming capabilities in every classroom. Secondary-level educators are currently participating in a pilot program that equips every teacher with a laptop computer.

LCD projectors are available in every school and are permanently installed in classrooms with interactive white boards. Middle School educators use iPods as part of a pod-casting program. Media centers have computer labs with 12-24 desktop computers for use by educators and their students; each media specialist has an online circulation system that can be accessed from the district's web site. All buildings have dedicated computer labs with 24 desktops and an interactive white board for instruction in technology literacy, as well as open access computer labs with 24 desktops and an interactive white board for use by all other teachers in the building.

All educators in the district have district e-mail accounts, access to the Internet, individually-designed web pages, on-line plan books, and on-line gradebooks. As new textbooks are added to the curriculum, books are being purchased with CDs for the educators to use as a resource and to generate tests electronically. The district is also

adding new textbooks that have web links for textbooks to be accessed electronically using the Internet.

All administrators have access to technology for a variety of tasks. Each administrator has a desktop computer in his/her office and many have an additional laptop computer. A technical support person is dedicated to each building so that technical problems are readily solved. Internet access, district e-mail accounts, accounts to access educators' on-line plan books, access to PowerSchool (the district's online student and educator data base) is available, and administrators have access to generate reports using PowerSchool.

Administrators may also have access to smart-phone technology that enables them to work from remote locations. This mobile technology is used not only for voice communication but also for data collection and file sharing. Administrators have access to interactive white boards and presentation systems for use at faculty meetings, assemblies, and professional development workshops.

We are continuing to work on ensuring that our district's web site is accessible to all stakeholders, according to the Federal Accessibility Standards. Due to the complexity of this project and the Federal Accessibility Standards themselves, the district is continuing to improve our site for all stakeholders as well as the community. Our website can be viewed by going to [www.wnyschools.net](http://www.wnyschools.net).

The Information Systems Department is also responsible for replacing obsolete computers/technology by a review process. Computer equipment is reviewed when it has been used for three years. At that time, a decision is made regarding updates and/or replacements. Most equipment is reviewed on an ongoing basis as well and replaced when needed.

## **B. Cyber Safety**

The West New York School District utilizes the WebBlocker filtering service that is provided by Watchguard Technologies. The WebBlocker filtering service incorporates industry-leading technology from SurfControl that enables companies to cost-effectively screen over four million web sites by querying their database of inappropriate sites. This software allows you to block web sites based on key words, 40 categories that are predefined in the SurfControl database, and it also gives us the ability to manually block a site that is not currently included in the database (e.g. categories—adult/sexuality, hate speech, drugs and alcohol). The SurfControl staff updates their database daily with new inappropriate sites, and the district receives these updates nightly to update our local copy of the database. The district has also deployed a web proxy server that screens all connections going out into the web before it reaches the WebBlocker filtering service. The proxy server gives us the ability to block complete access to a specific user or group of users to help us comply with our acceptable use policy. In addition, this server tracks information of all web surfing activity that can be analyzed as needed.

The Acceptable Use Policy for students is attached in the appendix (see Appendix B).

The Acceptable Use Policy for staff members is attached in the appendix (see Appendix C.)

The Acceptable Use Policy for the support staff is also attached in the appendix (see Appendix D.)

The computer education curriculum includes teaching Internet safety principles as well as reinforcing positive social and ethical behaviors. Students in every school are held accountable to the district's Acceptable Use Policy, and an outlined procedure is in place for students who do not adhere to the policy. The district's Web site has cyber safety information for students, parents, and educators as well as links to teach cyber safety.

The West New York Board of Education has adopted a policy for Cyber Bullying as well as outlining reporting procedures for pupils and staff members (see Appendix E). To further ensure safety and proper behavior of students, the Board has also adopted a policy for harassment, intimidation and bullying which includes electronic communications as well as cyber bullying (see Appendix F).

Prior to the adoption of its Internet Safety Policies, the district held a public hearing on June 25, 2008. Public notice of said hearing was provided through the Open Public Meetings Law by notifying the Board approved media channels of said meeting and by posting notice on the district website.

### **C. Needs Assessment**

Over the last several years, the West New York School District has made great strides in integrating technology across the curriculum. Funds from federal, state, and local sources have been used to purchase equipment insuring that educators have access to the latest technology. The procurement of hardware is ongoing based on areas of greatest need.

In assessing the level of technology integration in classrooms across the district, 40% integrated technology into their lessons at least once a week, 30% integrated technology two or three times per week, and 30% on a daily basis. There are numerous and varied applications used including Word, Excel, PowerPoint, Access, Safari Montage, Internet Explorer, interactive white boards, and several content-based software applications.

After assessing the level of technology proficiency of the staff, 75% of the educators have earned intermediate or advanced status. This is due to the concerted effort the district has made to provide professional development in technology to its educators. When electronic lesson plans and electronic grade books were introduced to educators, 12 technology trainers were hired in the district to offer training sessions in every school in the district before and/or after the school day. A master teacher of technology services all of the district's schools by offering professional development training opportunities

for teachers, supervisors, administrators, and students. The master teacher also offers to coach teachers who need assistance with integrating technology into lessons.

Educators are assured technology access through several initiatives. This year every teacher at Memorial High School was issued a laptop with wireless Internet connectivity. Every elementary classroom has access to 2-3 desk top computers; every middle school classroom has 4-5 desk top computers, and each classroom in Memorial High School has 1-2 computers. In addition, every school in the district has the minimum of one computer lab that is available for computer instruction as well as another lab that individual teachers can use for classroom instruction. Laptop carts are available in every school for teachers to use in their classroom when integrating technology. The district is planning to issue more laptop computers for teachers. Teachers have access to computers in all of the media centers as well as in teacher's lounges.

All educators in the district are required to use OnCourse Lesson Planner, a web based tool replacing the out-dated handwritten plan book. Weekly lesson plans are posted by each teacher, and plans are electronically monitored by administrators and supervisors. OnCourse also provides each educator and administrator with a personal web page, which is accessible to others from the district's web site. The web page is useful for improving communication with parents and students, and all students and parents have access to view daily homework assignments. Administrators and educators now have access to OnCourse 24/7 from any computer with Internet access.

The use of on-line grade books (PowerSchool) was implemented in the 2009-2010 school year. All teachers are required to keep their grades and attendance electronically. Administrators are able to generate reports and to view each teacher's grade book. The district is planning to eventually enhance communication between educators, students, and parents by making each teacher's grade book accessible for viewing. Students may electronically access Destiny, the district's electronic database for each school's media center's collection.

Instruction is supplemented via classroom access, where each elementary classroom has 2-3 computers, each middle school classroom has 4-5 computers plus an open access lab, and each high school classroom has 1-2 computers plus 2 open access labs. Additionally, each school offers open access in the library and/or computer lab each morning and afternoon. The district has begun purchasing textbooks that have Internet access links. Each school in the district continues to upgrade the availability of electronic resources in each school.

The technology needs of educators are evaluated through formal surveys, informal surveys, and questionnaires. Administrators' needs are shown in their Professional Growth Plans, and teacher's Professional Development Plans are used to show their needs. Teachers who participate in the West New York/ Ike projects are given pre-tests to evaluate their technology levels and post tests to evaluate the technology they have learned because of their participation in the project.

Benchmark technology proficiency assessments are given to all of the district's fourth grade students, and eighth grade students are assessed through a year-long portfolio assessment. Results of the eighth grade assessment show that 89% of students are proficient or advanced proficient. Formal and informal teachers' analysis of students in technology proficiency is done yearly by all of the districts' computer teachers.

Because prior surveys indicated a need for professional development in fundamental technology skills, past professional development for teachers focused on the use of available software applications. More proficient staff members became technology trainers for each of the district's schools. The district's staff not only met but also exceeded the goals from the 2007-2010 West New York Technology Plan.

All administrators have completed annual technology training. During 2009-2010, administrators received training in PowerSchool and in our purchasing system (Educational Data) before the teachers returned to the district. Throughout the school year, more proficient administrators have assisted in turn keying PowerSchool to other administrators.

The district provided the administrators and staff with an array of professional development opportunities in technology during 2009-2010. Most notably is the West New York Professional Development School Model. A team of 10-12 teachers from the same school participate in 60+ hours of technology integration training. Each participant develops a unit where technology is infused into content. These units are shared with other staff via a year-end Technology Showcase and by posting the units on the district website. Currently, 36 teachers in three schools are participating. Including all past participants, more than 152 staff members from all district schools have successfully completed this year-long initiative. This model will continue throughout the new technology plan until all schools have been serviced. Other professional development offerings this year included:

- Safari Live
- Safari Montage
- PowerSchool for administrators
- PowerTeacher
- Destiny
- Interactive white board training
- Effective technology integration

Other than professional development, the district supports technology integration through release time for staff to learn new skills and practice existing ones. Content supervisors share information about websites that teachers can use in class. Staff from the Information Systems Department visit classrooms not only to troubleshoot hardware

problems but also to offer assistance and guidance. This year a master teacher of technology was hired by the district. The master teacher is available for professional development training on an as needed basis and turn keys workshops to groups and/or individuals.

Administrators must be trained to recognize effective technology integration when evaluating teacher performance. This will require a paradigm shift for the district from application-based training for administrators to a more pedagogical approach. With the opening of several new, state-of-the-arts schools over the next few years, placement of technologically proficient administrators in these schools is a major priority. As curricula continues to be revised, careful attention will be paid to the integration of technology in all content areas.

The district will continue with professional development activities with the ultimate goal that integration of technology will become a natural part of learning. The district will focus on technology integration into all written curricula, and administrators will evaluate technology integration.

## IV. THREE-YEAR GOALS AND OBJECTIVES

### A. History

**Goal 1** in the 2007-2010 Technology Plan is that the West New York School District will demonstrate a system-wide commitment to using technology.

The West New York School District was able to meet this goal by completing all of the infrastructure activities in the timeline. Technology was included in each school's budget, posting and hiring of personnel was on going, online plan books were used in all schools, and the expansion of our district's web site as well as the inclusion of educators' web pages was completed.

**Goal 2** in the 2007-2010 Technology Plan is that the West New York School District will continue to fulfill their commitment to technology by maintaining and upgrading their district-wide technology infrastructure of data, voice, and video networking to every classroom, educational support areas and administrative offices.

The West New York School District was able to meet this goal by completing all of the activities in the timeline. The network was expanded, telecommunications were expanded, and the community accessed educational information from our district web site and from the annual newsletter.

**Goal 3** in the 2007-2010 Technology Plan is that the West New York School District will incorporate technology as a natural part of education through an integrated,

comprehensive framework to govern acquisition, application and evaluation of technological resources.

The West New York School District was able to meet all of its goals for integration of technology through staff members having access to the Internet and computers, being able to create teacher-produced web pages, on-line plan books, 4<sup>th</sup> and 8<sup>th</sup> grade assessments of technology, and the monitoring of technology integration goals.

**Goal 4** in the 2007-2010 Technology Plan is that the West New York School District will plan and use funding collaboratively to infuse technology within the district.

The district was able to meet this goal by completing all of the activities in the timeline. All schools included technology in their operational plans. The West New York/Eisenhower/Professional Development School Project was funded through the No Child Left Behind Act—Title II-Part A and the Star-W Grant funding was also used for professional development on the infusion of technology into the curriculum. Under Title V of No Child Left Behind, Gifted and Talented program teachers worked collaboratively with students in grades seven and eight to product digital videography multimedia projects.

**Goal 5** in the 2007-2010 Technology Plan is that the West New York School District will continue to improve technology literacy by targeting sustained high-quality professional development activities for classroom teachers.

The district was able to complete all of the professional development activities in the timeline. The professional development offered to staff members included mastering of technological tools as well as integration of these tools into the curriculum.

### **B. Goals and Objectives for 2010-2013**

## **2010-2013 IMPLEMENTATION GOALS**

For 2007-2010, the West New York School District will strive to complete the following goals:

**Goal 1**—The West New York School District will demonstrate a system-wide commitment to using technology and learning 21 Century skills.

**Goal 2**—The West New York School District will continue to fulfill their commitment to technology by maintaining and upgrading their district-wide technology infrastructure of data, voice, and video networking to every classroom, educational support area, and administrative office to ensure global connectivity.

**Goal 3**— The West New York School District will incorporate technology as a natural part of education through an integrated, comprehensive framework to govern acquisition, application and evaluation of technological resources.

**Goal 4**— The West New York School District will plan and use funding collaboratively to infuse technology within the district.

**Goal 5**— The West New York School District will continue to improve technology literacy by targeting sustained high-quality professional development activities for administrators and educators.

**V. THREE-YEAR IMPLEMENTATION AND STRATEGIES  
TABLES (July 2010-June 2013)**

**THREE-YEAR IMPLEMENTATION ACTIVITY TABLE**

.	CATEGORY	ACTIVITY	TIMELINE	RESPONSIBILITY	EVALUATION
1.	District	Inclusion of technology within each school's yearly budget	November-February, yearly	School principal	Budget review by Cabinet
2.	District	Inclusion of technology within the district's budget	November-February, Yearly	Cabinet	Budget review by Cabinet
3.	District	District Technology Plan review and update	Yearly	District Technology Planning Committee	Agendas and attendance sheets
4.	District	Acceptance of updated Technology Plan	May, Yearly	Assistant Superintendent	Board of Education Resolution
5.	District	Posting and hiring of technology teachers	Ongoing	Superintendent	Board of Education Resolution
6.	District	Posting and hiring of Information Systems Department employees	Ongoing	Superintendent	Board of Education Resolution
7.	District	Maintain Student Information Systems (PowerSchool)	Ongoing	Information Systems Manager and Network Application Administrator	Information Systems Department
8.	District	Submission of grant proposals	Ongoing	District Supervisors and Administrators	Awarding of grants
9.	Infrastructure	Maintain existing WAN	Ongoing	Network Administrator	Information Systems Department
10.	Infrastructure	Set standards for	Ongoing	Information Systems	Board approval of

		hardware purchases		Manager	purchase orders
11.	Infrastructure	Set standards for software purchases	Ongoing	District Supervisor	Board approval of purchase orders
12.	Infrastructure	Plan for network enhancement	Ongoing	Information Systems Manager	Board approval of expansion plan
13.	Infrastructure	Maintain/expand existing telecommunications system	Ongoing	Telecommunications Administrator	IS Department
14.	Infrastructure	Include in all new construction and renovations a plan for the highest level technology	Ongoing	Information Systems Manager	Construction Specification Documents
15.	Infrastructure	Expand infrastructure to include community access to information	Ongoing	Information Systems Department and Assistant Superintendent	District web site, annual news-letter, Blackboard Connect, PowerSchool
16.	Infrastructure	Plan to upgrade to ERP system	Ongoing	Information Systems Manager	Information Systems Department
17.	Infrastructure	Maintain wireless network to improve connectivity	Ongoing	Information Systems Manager	Board approval of purchase orders
18.	Infrastructure	Maintain server	Ongoing	Information Systems Manager	Board approval of purchase orders
19.	Integration	As per Board policy, review curriculum to appropriately infuse technology into the disciplines	Yearly	Assistant Superintendent	Board of Education Resolution
20.	Integration	Review of lesson plans to monitor integration activities	Ongoing	District Supervisors	Lesson plans
21.	Integration	Open access to computer labs & Media Centers	Ongoing	Principals	Open-access attendance logs
22.	Integration	Professional development activities as per technology integration goals	Ongoing	District Supervisor and master teacher of technology	Awarding of professional development hours
23.	Integration	Post Units of Study on district website as a resource	Ongoing	Information Systems Department	Website
24.	Integration	Encourage integration activities between computer specialists, media specialists, and classroom teachers	Ongoing	Supervisors	Lesson plans
25.	Integration	Utilize appropriate websites for instruction and assessment preparation	Ongoing	Supervisors, instructional staff	Staff memos and lesson plans

26.	Integration	Require technology component in the adoption of all new textbooks	Ongoing	Assistant Superintendent	Core program components
27.	Integration	Assess student technological proficiency as per ESEA requirement	Yearly	Assistant Superintendent	Assessment results
28.	Integration	Implement electronic student portfolios	Ongoing	School Leadership Council, building principals	Portfolios
29.	Professional Development	Plan staff training	Ongoing	Supervisor of Elem. Ed.	Prior evaluations and surveys
30.	Professional Development	Staff needs assessment for technology instruction	Master teacher of technology	Supervisor of Elementary Education	Survey
31.	Professional Development	Staff needs assessment for non-instructional technology	Annually	Supervisor of Elementary Education	Survey
32.	Professional Development	Professional Day Opportunities for Technology	Ongoing	Supervisor of Elementary Education, Supervisor of Technology and Media, Supervisor of Business/Technology/ Consumer Sciences	Personnel records
33.	Professional Development	Job-embedded staff development	Ongoing	School-based Professional Development Committees	School-based plan
34.	Professional Development	Expand web site to include teacher-produced web pages	Ongoing	Assistant Superintendent, Supervisor of Technology and Media Arts, Supervisor of Elementary Education	Web pages
35.	Professional Development	Maintain the use of on-line lesson plans Staff needs assessment for non-instructional technology	Ongoing	Assistant Superintendent	Online plan books
36.	Professional Development	Administrative training in technology integration	Ongoing	Supervisor of Elementary Education	Certificates
37.	Professional Development	Expand the use of online grade books	Ongoing	Assistant Superintendent	Grade books, report cards, and progress reports

**VI. FUNDING PLAN (July 2010-June 2011)**

<b>Three-Year Technology Plan Anticipated Funding Table (2010-2011)</b>				
<b>ITEM</b>	<b>FEDERAL FUNDING</b>	<b>STATE FUNDING</b>	<b>LOCAL FUNDING</b>	<b>MISC. (e.g. Donations, Grants)</b>
Digital curricula (see NIMAS in the HELP section)	<b>\$133,000</b>		<b>\$35,000</b>	
Print media needed to achieve goals	<b>\$32,000</b>		<b>\$16,000</b>	
Technology Equipment	<b>\$625,000</b>		<b>\$24,000</b>	
Network				
Capacity				
Filtering				
Software				
Maintenance			<b>\$96,000</b>	
Upgrades			<b>\$37,000</b>	
Policy and Plans				

Other services	<b>\$27,000</b>		<b>\$45,000</b>	

**Three-Year Technology Plan Projected Funding Table  
(2011-2012)**

<b>ITEM</b>	<b>FEDERAL FUNDING</b>	<b>STATE FUNDING</b>	<b>LOCAL FUNDING</b>	<b>MISC. (e.g. Donations, Grants)</b>
Digital curricula (see NIMAS in the HELP section)	<b>\$150,000</b>		<b>\$44,000</b>	
Print media needed to achieve goals	<b>\$37,000</b>		<b>\$22,000</b>	
Technology Equipment	<b>\$225,000</b>		<b>\$33,000</b>	
Network				
Capacity				
Filtering				
Software				
Maintenance			<b>\$115,000</b>	
Upgrades			<b>\$48,000</b>	
Policy and Plans				
Other services	<b>\$36,000</b>		<b>\$54,000</b>	

<b>Three-Year Technology Plan Projected Funding Table (2012-2013)</b>				
<b>ITEM</b>	<b>FEDERAL FUNDING</b>	<b>STATE FUNDING</b>	<b>LOCAL FUNDING</b>	<b>MISC. (e.g. Donations, Grants)</b>
Digital curricula (see NIMAS in the HELP section)	<b>\$165,000</b>		<b>\$53,000</b>	
Print media needed to achieve goals	<b>\$46,000</b>		<b>\$31,000</b>	
Technology Equipment	<b>\$225,000</b>		<b>\$42,000</b>	
Network				
Capacity				
Filtering				
Software				
Maintenance			<b>\$135,000</b>	
Upgrades			<b>\$62,000</b>	
Policy and Plans				
Other services	<b>\$45,000</b>		<b>\$72,000</b>	

The 2010-2013 technology plan was created on May 17, 2010.

## **VII. PROFESSIONAL DEVELOPMENT**

Barbara Deitmaring, the Supervisor of Elementary Education, coordinates all professional development for the district, including assessment of needs and scheduling

of workshops. Funding for professional development is supported by local funds, state and federal grants.

For the 2010-2013 school years, the district plans to expand the professional development offerings for all teachers, administrators and school library media personnel by providing opportunities for job-embedded networking, collaboration and ongoing professional dialogue with colleagues that supports technology integration and infusion.

The West New York School District plans to continue to increase students' accessibility to technology. To continue to decrease the digital divide, the district expects to increase the amount of interactive whiteboards in the upcoming year so that instructional units can be completed addressing the NJCCCS. The district will continue to provide open-access computer labs for students before and/or after school.

Based upon the results of a completed needs assessment survey, the West New York School District realizes the need to continue high-quality, sustained professional development on infusing technology into the curriculum. The need for additional technology to be available for classroom teachers' and students' access is evident after examining the technology inventory in relationship to the number of faculty members who incorporate technology integration in their daily classroom practice. To this end, the district has initiated an instructional position for a Master Teacher of Technology to provide in-class support for teachers to receive technology integration coaching and mentoring on a variety of topics including, but not limited to Power School/Power Teacher and the training for each school's Data Analysis Task Force to effectively analyze student data.

The district will make readily available to both teachers and parents the lesson plans that have been developed as a result of the professional development experiences. The district web site will be the vehicle for their publication. The lesson plan projects will also be "showcased" at a district articulation meeting and various professional development meetings. An annual newsletter will be sent home to parents to highlight the technology literacy of the students. Student-created programming is cablecast on local cable access for the purpose of informing parents and the community of noteworthy events and activities in the community and the school district.

The West New York School District will continue to improve technology literacy by targeting sustained high-quality professional development activities for classroom teachers. The professional development activities will not only include the mastering of technological tools but also the infusion of these learning tools into the curriculum. Those teachers from selected district schools participating in the West New York/Eisenhower/Professional Development School Project (WNY/IKE/PDS Project) will develop units of instructional plans that can be used by teachers within and outside of the district to improve student achievement in meeting the New Jersey Core Curriculum Content Standards. In this project, teachers are selected via an application process to participate in a year long technology infused curriculum professional development model. Participants receive on-going technology coaching and mentoring

while simultaneously fine tuning lesson objective development and rubric construction. The district has partnered with LIA Technology Consultants and plans to continue the excellent relationship.

The Gifted and Talented Program teacher in the Middle School continues to work collaboratively with students in grades seven and eight to produce digital videography multimedia projects using iMovie and Final Cut Pro software and MAC hardware. Pod Casting projects are in place whereby students are creating pod casts of teacher and student interviews and an informational pod cast for the community.

The West New York School District enjoys a partnership with the Hudson County Professional Development Consortium and allows teachers to attend technology workshops that address their individual needs. In addition, district teachers attend various technology workshops hosted by the Morris Union Jointure Commission as part of a continued collaborative effort.

There are many professional opportunities and resources available for the Information Systems Department in West New York. Such opportunities include Computer Based Training (CBT) which is a library of DVD's made available to the technical staff helping them achieve certifications in technical areas like Microsoft Office, A+, Network +, Security +, Microsoft Certified Systems Engineer (MCSE), and Cisco Certified Network Associate (CCNA). The technical staff regularly attends conferences and seminars with vendors such as Dell, Cisco, Nortel and other third party vendors to ensure they are informed of the latest technologies available in the industry. Webinars are also used as a means for training the technical staff in West New York and is primarily used for training personnel in managing our Student Information System. Members of the IS team must attend one training course per year in their area of specialization from an industry leading IT training company like Learning Tree International or CompuMaster. Additionally, professional development is provided by specific vendors to systems such as media management, card access, and security systems installed in new schools. The members of the Information Systems Department also have resources available to them through subscriptions to Computer Magazine, Information Week Magazine, Technology Review Magazine and other online technical libraries and books.

The Carl Perkins Grant is used by Memorial High School's Business Education Department to purchase new equipment for student use, professional training for the Business Education staff and administration, and to purchase industry-recognized certification tests for Microsoft User Specialist for students qualifying to take this on-line examination.

Teachers in special services have been trained in the use of POWER TEACHER and EASYIEP, the Special Education Student Data Base. On an as needed basis, teachers and staff are trained with augmentative communication systems and assistive technology. Training with such programs as Write Out Loud, Cloze Prose, and Read Out Loud occurs as needed. Future trainings in the area of the use of Promethean Boards will also take place to foster the integration of technology within all educational settings.

## PROFESSIONAL DEVELOPMENT TABLE

	ACTIVITY	TIMELINE	RESPONSIBILITY	EVALUATION
1.	Plan staff training	Ongoing	Supervisor of Elem. Education	Prior evaluations and surveys
2.	Staff needs assessment for technology instruction	Annually	Supervisor of Elementary Education	Survey
3.	Staff needs assessment for non-instructional technology	Annually	Supervisor of Elementary Education	Survey
4.	Professional Day Opportunities for Technology	Ongoing	Supervisor of Elementary Education, Supervisor of Technology Education and Media Arts, Supervisor of Business/Technology/Consumer Sciences	Personnel records
5.	School based staff development	Ongoing	School Leadership Council	Unified Plans
6.	Training through Carl Perkins funding	Ongoing	Supervisor of Business/Technology/Consumer Sciences	Certificates of completion
7.	Web-site lesson plans	Ongoing	Supervisor of Elementary Education	WNY web site
8.	Annual newsletter	Ongoing	Supervisor of Elementary Education	Newsletter

## VIII. EVALUATION PLAN

### Evaluation Plan Table

Three-Year Technology Plan Evaluation Narrative	
<b>Describe the process to regularly evaluate this plan as <u>effectively</u>. . .</b>	
<i>a. integrating technology</i>	The evaluation of the technology plan is based on the completion of activities in the goals and action plans. The chairperson of the District Technology Committee will request a report from each of the responsible staff

	<p>members listed in the implementation of goals and activities table. A meeting of the District Technology Committee will be held each year to review and discuss the levels of achievement of the district's goals. The integration of technology will be reviewed and evaluated on the basis of the ten integration activities in our three-year implementation activity table.</p>
<p><i>b. enabling students to meet challenging state academic standards</i></p>	<p>The Assistant Superintendent will continue to yearly review curriculum as per Board policy to assure students are meeting challenging state academic standards.</p>
<p><i>c. developing life-long learning skills</i></p>	<p>Students will continue to develop life-long learning skills with the district's commitment to support technology, upgrade our infrastructure, and provide professional development activities.</p>