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SECTION I STAKEHOLDERS

Signature	Name	Title
	Dr. Vivian C. Rodriguez	Interim Superintendent
	Dr. Vivian C. Rodriguez	Asst. Superintendent of Curriculum
	Manuel Núñez	Board Member
	William Ortiz	Board Member/Parent
	Israel Varela	Board Member
	Obdulia González	Board Member
	Keith Kolibas	Director of Information Technology Systems
	Catherine McNulty	District Supervisor of Educational Technology
	MaryJo McAdam	Director of Counseling
	Dr. Nestor Collazo	Principal
	Dr. Myrna Garcia	Principal
	Michelle Velez-Jonte	Principal
	Susan Roque	Principal
	Michael Heidelberg	Principal
	Greg Cavanaugh	High School Math Dept. Chairperson
	Lindsey Tisch	Middle School Data Coach
	Brian Wilson	High School Teacher
	Jason Garzone	Middle School Technology Educator
	Meina Montalbano	Elementary School Media Specialist
	Ana Del Rosario	Elementary School Technology Educator

SECTION II EXECUTIVE SUMMARY

District Mission Statement

To provide all students with a solid academic foundation through the efforts of all staff, with parental support and collaboration that establishes high expectations, with resources, support services and fiscal management that focuses on achieving or exceeding the New Jersey Core Curriculum Content Standards (NJCCCS) and delivery of services in a safe and healthy environment.

Educational Technology Vision Statement

Educational technology is key to thriving in our global economy because of the unprecedented advances in computing and communications. Technology has advanced at such an extraordinary pace over the last decade that it has caused a major paradigm shift in our educational system. We are preparing our students and teachers to engage in global learning networks. Global interdependence is necessary because individuals and nations will need to work together to solve the kinds of problems this generation faces. The Internet has fostered a progressively more competitive and interdependent global economy and we are getting our students ready to compete in a global workforce. Students in Perth Amboy Public Schools will be ready to expand the boundaries of participation, contribution and achievement in our dynamic global society by leveraging the power of the technology that permeates so many aspects of their daily lives.

This plan is to serve as a "living document" as emerging technologies are evaluated to meet our goals and objectives.

SECTION III TECHNOLOGY OVERVIEW

A. Technology

1. **Inventory of Current Technology Networking and Telecommunications Equipment**
   The District is using the online tool KACE to track tickets, Inventory and image end user equipment.

2. **Technology Needed To Improve Student Academic Achievement**
   Technology Equipment

   At present the district owns 446 virtual hosts running approximately 100 Servers , 2100 1800 Desktop Computer Systems, 3500 2500 laptops/Macbooks, 2000 iPads, 4800 Chromebooks, 1500 Printers, 1500 Phones, 200400 iPod Touches, 650 Classroom Projection Systems, 500650 Document Cameras, 250 Student Response Systems, and various accessories.

   Classroom Technology

   Each classroom has been equipped with a dedicated computer for the teacher. Older stationary student computers have been replaced with laptops, iPads, Chromebooks and Laptops for students. All these systems are connected to the district network via the wired or wireless infrastructure. Classrooms are equipped with digital projection systems for media viewing and interactive learning.

   Goals and Objectives

   - Implement security measures to manage and track portable devices such as laptops, netbooks, iPod Touches, etc.
   - Over the next 3 years, the district will continue to replace outdated teacher and student computer systems with newer mobile technologies. Update or replace outdated teacher computer in the PRE-K schools over the next 12 months in order to standardize throughout the district.

   Update as of 10/6/14

   - *Implemented AIRWATCH to maintain and deploy wireless policies for all mobile devices*
   - *Implemented apple's DEP (device enrollment program) program to track, deploy applications and monitor these devices.*
   - *Replaced all outdated student and teacher desktops with new Dell 3010 or 3020 Computers.*

   Computer Labs

   Each school has at least one computer lab equipped with 15-30 Dell desktop 3020 computers or Apple iMac computers. The labs also have access to carts of Laptops and/or Macbooks. Currently the High School has nine computer labs each equipped with 25-30 Dell 3020 desktop computers and/or iMAC's.

   Goals and Objectives

   - Continue to maintain all labs in good working order for the next three years.

- Begin to replace aging lab computers with newer technologies.

Update as of 10/6/14

- *Replace all existing lab computers and updated OS to windows 7 in order to comply with Microsoft EOL announcement for Windows XP.*
- *All existing outdated computers were replace district wide including support staff, Teachers and students.*
- *The district still owns 1000 White Macbook computers that were upgrade with 4gb of Ram and updated to the latest OS. (mavericks)*

Computers for Administration and Support Staff

All building administrators, guidance counselors, department offices, secretaries, nurses and miscellaneous support staff have Pentium i5 core networked computer systems.

Goals and Objectives

- Maintain all systems in good working order for the next three years.
- Purchase wireless laptops/tablets for administrative purposes.

Update as of 10/6/14

- Replaced all existing Administration and support staff computers with Dell 3010 desktops.
- Purchased 50 laptop computers to stock for administrators that need replacement of existing machines or for new employees.

SECTION III TECHNOLOGY OVERVIEW

Technology Equipment (continued)

Media Centers

All media centers have 8-15 new Dell i5 core networked computer systems available for student research.

Goals and Objectives

- Maintain all systems in good working order for the next three years.
- Begin to replace library computers with newer technologies.

Update as of 10/6/14

- *Replaced all existing Pentium computers with dell 3020 desktops and refreshed OS to windows 7 to comply with district standards.*

Technology for Specialty Areas

Art/Music/TV: Two labs are in place housing 20-25 networked iMac Systems with appropriate hardware and software. Such hardware includes digital cameras, drawing tablets, scanners, color printers, etc. These labs also have access to the Internet, network applications and local applications. iMac

Industrial Arts/Business Labs: Two Business Labs each have 20-30 new Dell computers with access to the Internet, Network Applications and local software. Two high-speed networked printers are provided in each lab.

Technology Labs: The High School has 5 Technology Labs each with 20-30 networked Dell 3020 computers.. A networked large format color printer and high speed laser printer are available. A Paxton-Patterson Techno-Careers Lab is available at the High School.

Technology for Guidance/Careers: In the guidance department, students have access to 7 new Dell networked PC's These systems have access to the Internet, as well as Career related software available for students to learn about and explore various careers and colleges. (High School only)

Goals and Objectives

- To maintain all systems in good working order for the next three years.
- Begin to replace computers with newer technologies.

Update as of 10/6/14

- *Updated memory in existing iMAC computers and refreshed the OS to the latest version to comply with district standards.*

Networking Capacity

The district's Network Infrastructure is comprised of 125 distributed Cisco Catalyst 6500, 3500, 4500and 2900 series network switches. All switches are connected via the district's private fiber-optic plant. A ten Gigabit backbone links all switches across the campus with 1gb backup link. The district's wireless infrastructure is comprised of approximately 600 Cisco Enterprise-level A and/or N Access Points. A NCSPRIME Server supports and manages the wireless network. The staff in the Network Operations Center continually monitors network capacity, performance, and security. Regular maintenance and fine-tuning ensure optimal network performance and maximum throughput. Perth Amboy has planned for more than sufficient potential in the future. Our private fiber-optic WAN includes 36 strands of multi-mode and single-mode fiber between each school and the network operations center. A total of 360 point-to-point strands of fiber are in place and available for use. Currently, only 12 of 36 strands are being used at each facility.

SECTION III TECHNOLOGY OVERVIEW

Networking Capacity (continued)

The 12 strands are being used to facilitate:

- A District-wide Telecommunications System (Phone and Voice-Mail)
- A Multi Gigabit Data Network Backbone
- A Broadband Video Distribution Network, supporting 155 channels of video.

Goals and Objectives

- Maintain a secure and stable network environment, to support all of the needs and functions of the district.
- All network equipment will be supported under an annual maintenance agreement with a Cisco certified partner.
- Network closets will be updated to handle higher capacity wired and wireless technologies. When funds are available, the wireless network will be upgraded to N functionality.

Update as of 10/6/14

- *Updated 3 new sites from T1 circuits to dark fiber to conform with district standards (east campus, South Campus, School 7)*
- *Upgraded existing wireless controller and code version to utilize newer A band technologies.*
- *Maintain internal inventory of switches to cover hardware failure so we can limit turnaround time.*
- *Internal discovery has been completed for EOL devices and we are in the process of replacing these over the next several months.*

Technology Maintenance Policy and Plans

The district inventories and tracks all physical hardware components placed into service with an automated application, “KACE”. Pertinent data, such as: model number, serial number, date of purchase, purchase order number, cost and location are initially recorded. Throughout the life of the equipment, service and repair details are added to the given record, until the item is disposed of. At such time, that information is also included on the record.

The district has a comprehensive maintenance and repair plan that effectively addresses all aspects of our technology program.

All internal building infrastructure including: CAT 3, CAT 5E, CAT 6, Fiber and Coax cabling. All mission critical systems hardware, such as: Data Switches, Telephone Switches, Primary Servers, Media Systems and ITV Systems are covered under post-warranty maintenance agreements.

Computers, printers, and accessories are purchased with a 3-year warranty, effectively providing onsite support and replacement of all defective components. In addition, the district maintains a parts inventory for all Computers, spare printers and accessories. Our plan allows for immediate repair/replacement of malfunctioning systems, with minimal downtime.

Goals and Objectives

- Continue to support and maintain all district infrastructure and hardware with annual vendor-based support agreements.

SECTION III TECHNOLOGY OVERVIEW

Software Used for Curricular Support and Filtering

Adaptive Curriculum – Online Math and Science Curriculum Supplement

Eduphoria – Staff Appraisal Management System

First In Math – Online Fact Practice And Test-Prep

Fitness Gram – Student PhysEd/Health Tracking System

Renaissance Learning – (STAR) Math and Reading Assessment Program

Performance Matters – Benchmark Assessment and Data Management System

PMI – Progressive Math Initiative

PSI – Progressive Science Initiative

Tienet – Special Education IEP Management System
GetWaggle Adaptive Learning System (Shull School)
TeachToOne Math Program and Curriculum (McGinnis)
Teachscape - Evaluation System
LoTi Observer and Profiler - Walkthrough Tool
MyOn Reader – Digitally enhanced online books
ALEKS - Math assessment and personalized learning program (HS)
Turnitin – cloud based plagiarism checker (HS)

Goals and Objectives

- Continue to make use of web-based applications supporting the educational needs of teachers and students.
-

Sophos Internet & Email Traffic Security Solution

All Internet and email traffic is filtered through Sophos. This product facilitates user-based filtering relative to the type of the user. It allows the district to differentiate access controls based on the grade level of the user.

Goals and Objectives

- Continue to monitor and fine tune filtering criteria to ensure that students and staff have access to all educationally appropriate content.

Update as of 10/6/14

- *Due to the number of devices we have introduced the current web filter does not fit into the expansion plans for the district. We are currently testing a new platform and hope to introduce this into the environment shortly. This solution will be scalable and provide redundancy.*

Data/Telecommunications Services

- **X-TelComcast 1GB6b ISP**
- **, 3 10 MB Point to Point Circuits**
- Verizon Services – Various POTS service lines for Fire and Alarm services.
- X-Tel Long Distance Services
- Verizon Cellular
- Avaya Multi-Site Telecommunications System (approx 1600 phone units)

- Modular Messaging Voice Mail System (approx 2000 mailboxes)
- School Messenger Communications Management System
- E-CAS Call Accounting System

Goals and Objectives

- Maintain the established services in support the district's needs and functions.
- Expand and optimize the use of our Telecommunications system.
- Support and maintain each of the above components via annual vendor-based support agreements.

Update as of 10/6/14

- *We have consolidated Data and Voice services to prepare for the changes to the e-rate funding process. This consolidation has saved over $10,000 per month for the district.*

SECTION III TECHNOLOGY OVERVIEW

Technical Support

Our staffing structure provides for the necessary human resources to ensure the technology we have implemented is functional and maintained. The district employs 12 "Technology Support Specialists". These staff members are responsible for troubleshooting, repairing, and maintaining all technology-related hardware. They are also responsible for software installation, and working with building level staff to plan for future needs.

Backing the "Technology Support Specialists", is 1 District "Systems Administrator", and an Infrastructure Manager who are responsible for ensuring the functionality of all Educational and Administrative Systems and Services. These systems and services include: Internet Access, E-mail Access, Backup/Disaster Recovery, Virus Protection, Network Management, Firewall Management, Network Printing, Software Imaging and Installation, Network Data Storage, etc.

The district employs a Director of Technology to oversee and manage the entire operation. The Director of Information Technology Systems oversees all technical operations and manages the personnel associated with implementing and maintaining the physical systems.

Goals and Objectives

- Promote a stronger coordination between Tech Support staff and Tech Educators.
- Establish common training and implementation planning strategies.

Facilities Infrastructure

Facilities and Infrastructure (WAN/LAN)

All facilities have been wired with CAT 3, CAT 5E, CAT 6, Fiber and Coax cabling. Three independent networks have been established in each of the following buildings. They include: a Ten Gigabit Data Network with a 1GB backup circuit, a Telecommunications Network and a Broadband Video Distribution Network.

Administrative Headquarters

The administrative headquarters building houses approximately 75 staff members in support of the following departments and services: Central administration; business office; human services; curriculum supervisors; special services; bilingual department; federal/pre-k program; transportation, food services, buildings and grounds, and security.

Adult School

The Adult School is housed in an older structure that was formerly used by the Board as an elementary school. It has approximately twenty instructional classrooms. Various technological improvements have been included for appropriate upgrades and retrofitting.

SECTION III TECHNOLOGY OVERVIEW

Facilities Infrastructure (continued)

High School

The High School is a relatively modern facility, given it is only thirty-eight years old. It serves grades 9-12 with a current enrollment of approximately 2500 students. The facility houses approximately 80 instructional classrooms as well as the core building facilities (two Gymnasiums, one Media Center, one Cafeteria, and a Theater/Auditorium), and support staff offices. It is staffed by approximately 180 people.

East Campus

East Campus is a leased facility containing 9 instructional classrooms, a computer lab, cafeteria, gymnasium and support staff offices. Current enrollment includes 205 9th and 10th grade students with approximately 40 staff members.

South Campus

There are 20 classroom in the main building with 1 lab. Each classroom has 1to1 Lenovo laptops or HP Laptops in mobile carts. The lab has 30 Dell desktops with 19" monitors. Each room has a dedicated AP and projection system with a podium. Teacher stations are attached to the podiums. The annex has one computer lab with 30 PC desktops also with 19" monitors.

McGinnis School

McGinnis School is a recently renovated 5-8 grade middle school facility that serves approximately 1400 students. The facility houses approximately 65 instructional classrooms as well as the core building facilities (Gymnasium, Media Center, Auditorium and Cafeteria), and support staff offices. It is staffed by 160 people.

Shull School

Shull School is a recently renovated 5-8 grade Middle school facility that serves approximately 1400 students. The facility houses approximately 65 instructional classrooms as well as the core building facilities (Gymnasium, Media Center, Cafetorium), and support staff offices. It is staffed by approximately 160 people.

Flynn School

Flynn School is a newer facility that serves approximately 900 students in grades K to 4. The facility houses approximately 50 instructional classrooms as well as the core building facilities (Gymnasium, Media Center, Cafetorium) It is staffed by approximately 125 people.

Patten School

Patten School is a newer facility that serves approximately 900 students in grades K to 4. The facility houses approximately 45 instructional classrooms as well as the core building facilities (Gymnasium, Media Center, Cafetorium). It is staffed by approximately 125 people.

Ceres School

Ceres School is one of our older elementary school serving grades K to 4. It's current enrollment is approximately 750 students with approximately 100 staff members. The facility houses approximately 38 instructional classrooms and core facilities including a multi-purpose room (gymnasium, auditorium, cafeteria) and a media center.

Richardson School

Richardson School is a new elementary school serving grades K to 4. It's current enrollment is approximately 750 students with approximately 100 staff members. The facility houses approximately 45 instructional classrooms as well as the core building facilities (Gymnasium, Media Center, Cafetorium).

Wilentz School

Wilentz School is a newer facility that opened its doors in September of 2000. It serves approximately 900 students in grades K to 4. The facility houses approximately 50 instructional classrooms as well as the core building facilities (Gymnasium, Media Center, Cafetorium). It is staffed by approximately 125 people.

School #7

School #7 is an old elementary school currently serving as a Pre-School. It's current enrollment is approximately 225 students with approximately 50 staff members. The facility houses approximately 15 Instructional classrooms and minimal core facilities including a multi-purpose room.

Peterson School

Peterson School is an old elementary school that currently serves as an annex to the William C. McGinnis Middle School. The 5th grade program is hosted in this facility, servicing approximately 350 students. The facility houses approximately 14 Instructional classrooms and minimal core facilities including a multi-purpose room.

Hmieleski Pre-School

Hmieleski is a brand new Pre-K facility that was constructed by the SDA. It has 35 preschool classrooms. Approximately 410 students and 60 staff members are housed in this facility

Cruz School

Cruz is a new Pre-K facility. It has approximately 40 classrooms and serves 500 3 and 4 year-old students. It has a multi-purpose room and two play-area courtyards.

SECTION III TECHNOLOGY OVERVIEW

Core Systems

Systems 3000 District's Management application for Human Resources, Payroll and Finances

Infinite Campus District's Management application for Student Records

Exchange E-Mail *(approximately 8000 mailboxes)* E-mail is facilitated for District staff and students with Microsoft Exchange ~~2010~~. We have also implemented an SMTP filter to manage e-mail traffic. The Sophos E-mail product has anti-spam and anti-spoofing abilities to block such types of malicious mail. It also fulfills the federal requirement of the Sarbane Oxley to archive all District mail.

Internet Access Internet Access is facilitated via Sophos. All Internet access is managed through servers that filter and log access by users and groups.

Sophos Virus Protection is a Network Level virus protection solution that is managed and facilitated centrally. This product provides real-time protection for all of our servers and client systems.

Microsoft Windows Domain Controllers, DHCP Servers, DNS Servers, WINS Servers, Remote Access, SQL Servers, Print Servers, Home Folders

SECTION III TECHNOLOGY OVERVIEW

Core Systems (continued)

Casper IOS and Mac OS Management System

Goals and Objectives

- Expand and optimize the use of each of the above systems.
- Support and maintain each of the above systems via annual vendor-based support agreements.
-

Update as of 10/6/14

- *Upgraded domain controller to Windows Server 2008 R2 Datacenter.*
- Standardized OS platform across the board for consistency and patch management
- All servers have been migrated from physical to virtual reducing cost of ownership and allowing the environment to grow for future requirements.

District Applications

AESOP – Staff Attendance and Substitute Management System

INFINITE CAMPUS - Student Information System

Eduphoria – Staff Appraisal Management System

Teachscape – Staff Evaluation System

Ghost/Deep Freeze – Computer Systems Imaging Software

InfoBid – Business Office Supplies Bidding Management System

My Learning Plan – Professional Development Management System for Certificated Staff

Performance Matters – Assessment Data Analysis System

School Dude – Facilities Work-Order Management System

Tienet – Special Education IEP Management System

KACE – Inventory Management and Technology Work-Order System

Follett Destiny– Library Circulation Resource Management System

Goals and Objectives

- Expand and optimize the use of each of the above systems.
- Support and maintain each of the above systems via annual vendor-based support agreements.
- Begin to replace computers with newer technologies.

SECTION III TECHNOLOGY OVERVIEW

Building Management/Control Systems

Card Access Systems –Lenel

Camera Surveillance Systems – Bosch and Lenel

ID Card System – IRIS ID Card Management System

Public Address/Paging Systems – Simplex, Rauland Borg, Lucent and Bogen

Goals and Objectives

- Maintain the established systems in the present facilities.
- Presently seven schools have card access systems. Over the next 3 years the district will attempt to complete the outstanding schools.
- Seven of our 13 facilities have camera surveillance systems. Over the next 3 years the district will install systems in the remaining facilities.

Public Relations Systems

- Channel-34 – Public, Educational and Governmental Access Channel
- Schoolwires – Public Website (www.paps.net)
- Printed Publications – Educator and Various Newsletters
- School Messenger – Make use of the School Messenger Communications System to optimize relations with parents, staff, and the community. School Messenger is a robust system that uses texting, email, and telecommunications resources to contact people.

Goals and Objectives:

- To expand and optimize the use of each of the above systems to communicate with parents and the community.
- To support and maintain each of the above systems via regular maintenance procedures.

Backup Systems

- Tape Backup Systems – Veeam
- UPS Systems – Leibert

Goals and Objectives

- The district has recently upgraded the tape and backup storage capabilities. The focus will be to maintain and expand such capabilities as needs dictate.

Update as of 10/6/14

- *Implement Data domain in order to have 7 years of backups available for recovery purposes.*

SECTION III TECHNOLOGY OVERVIEW

Integration of Assistive Technology Devices into the Network to Accommodate Student Needs

Many learning problems are inherent to the medium of instruction and not necessarily the learner. Teaching and learning cannot be a "one size fits all" approach and accommodating all learners for equalized learning experiences requires universal design. This cognitive and neuroscience research-based set of guiding principles are known as Universal Design for Learning (UDL) and focuses on how student process information. UDL calls for flexible ways to present information such as digital books as required by NIMAS, text-to-speech applications, specialized software. Another UDL principle is to provide all learners with flexible ways to express themselves and demonstrate learning such as visual maps and speech to text. Finally, a third UDL guiding principle is to provide all learners various ways to engage, motivate, inspire, and challenge themselves such as selecting activities that provide choices among different scenarios, collaboration, and scaffolding learning experiences. Our District is committed to reaching all learners and this commitment is evidenced by the recent purchase of devices that promote assistive technology and accessibility options.

The implementation of Chromebooks include assistive technology built-in as standard features at no additional cost. The accessibility features include the ability for users to:

- enlarge the cursor – this makes the cursor more visible on the screen
- turn on high contrast mode – this makes screen easier to read
- turn on spoken feedback – describes what happening on the screen
- turn on sticky keys – allows shortcut keys to be typed in sequence, without pressing modifier key at the same time
- turn on screen magnifier – enlarges items on the screen
- automatically click when the cursor stops – allows you to click without using a mouse
- turn on the on-screen keyboard – displays a keyboard that you can click with a mou

The district also employs a variety of assistive technology devices to augment, supplement and compliment the educational process for students with special needs. All computer systems have the ability to activate the "Accessibility Options" built in to the Microsoft operating system. Additionally, the district uses the "Jaws" application to provide assistance for the visually impaired. "Big Shot" is another application used to assist the visually impaired. Dynavox units are available for students with multiple disabilities. FM amplifications units are used to assist students with hearing impairments. Computer based Braille devices are also available for students with severe visual impairments. Specialized keyboard devices are used in place of traditional keyboards and mice.

SECTION III TECHNOLOGY OVERVIEW

Educators' Access to Education Technology in their Instructional Areas

Each educator has access to a desktop computer or podium-based laptop in the classroom, office and/or media center. Wireless laptop carts are available to reserve for instructional and/or training purposes. Individual laptops have been distributed to each classroom teacher in grades 3 and 4 for the 2014-2015 school year with plans to expand to grade 2 for 2015 – 2016. Laptops are available for use upon request for special projects, training workshops, etc. Printers are available in each classroom, office and media center. All school buildings have wireless Internet connectivity and high speed wired connectivity. Staff members have access to digital cameras available for sign-out in each media center for multimedia projects.

1:1 Chromebooks are used in Samuel E. Shull School across all core content areas. Student laptops support the TeachToOne Math Program in McGinnis School as well as in content classrooms. All classrooms, Grades 3-4 are using 1:1 Chromebooks. Grades Pk-2 utilize Apple iPads and MacBooks. During the 2015 – 2016 school year, the Grade 3-4 Chromebook 1:1 initiative will be carried down to grade 2.

Each High School building has access to laptop carts available on a sign-out basis.

The district continues implementation of Performance Matters, a web-based comprehensive local integrated assessment program and data management system for data-driven instruction and policy decision making.

Teachscape, the district evaluation tool, empowers educators to systematically improve teaching practice and to accelerate their professional growth. With Teachscape's observation and evaluation management, professional learning, and talent management systems, administrators can strategically manage and develop their educators, along with non-teaching personnel, resulting in more highly skilled staff, increased retention, and improved student outcomes. Teacher goals, observation documents, walk-throughs, summative and formative evaluations and intervention plans are all accessible online. Evaluations are archived, stored with the evaluated staff member, and can be accessed at any time.

Other technology accessible to educators include core systems, district applications, and software programs such as: Infinite Campus, Exchange E-Mail, Internet Access, Microsoft Windows, AESOP, Eduphoria, My Learning Plan, Smart Technologies, Tienet, Adaptive Curriculum, First In Math, Fitness Gram, Houghton-Mifflin, Performance Matters, Renaissance Learning, ALEKS and turnitin.

Classrooms across the district have been equipped with projectors/whiteboards for students and staff to use.

Goals and Objectives

- Implement School Messenger call notification system at classroom and specified group levels.
- Adopt and implement online grades and parent portal thought the Infinite Campus System.

SECTION III TECHNOLOGY OVERVIEW

Administrators' Access to Technology in their Workplace

Each administrator has access to a desktop computer with high-speed internet connectivity. Wireless laptop carts are available to reserve for instructional and/or training purposes. Individual laptops are available for use upon request for special projects, training workshops, etc. Printers are available in each office. All school buildings have wireless Internet. Administrators have access to digital cameras available for sign-out in each media center.

Other technology accessible to administrators include core systems, district applications, and software programs such as: Infinite Campus, Systems 3000, Exchange E-Mail, Internet Access, Microsoft Windows, AESOP, Eduphoria, Folio, InfoBid, My Learning Plan, Tienet, Performance Matters. Renaissance Learning, TieNet, School Messenger

Goals and Objectives

- Implement all components of the New Student Information System, Infinite Campus.

SECTION III TECHNOLOGY OVERVIEW

Describe How the District's Web Site is Accessible to All Stakeholders

The district is very cognizant that Access for disabled users is important, because disabled users actually use the Internet at twice the rate of non-disabled users. They are more dependent on this medium to gather information efficiently. Perth Amboy has implemented a web solution that is compliant with the requirements of Section 508 of the American's with Disabilities Act. The Novus CMS product employs content templates that ensure content creators maintain the necessary standards so specialized devices to assist the handicapped will be able to interpret all of the information on our websites.

District Plan for Replacing Obsolete Computers/Technology

The district has developed a cyclical process for replacing outdated equipment. Servers, Computers, Printers and Accessories are scheduled to be replaced on a 5-year life expectancy cycle. When funds allow approximately 20% of the district's hardware will be replaced on an annual basis. Perth Amboy has implemented a plan to distribute the outdated equipment to students for their home use. We have developed an incentive-based plan to select students who receive these systems. This solution not only provides a sensible means for disposing of old equipment, but also furthers the educational opportunities for students and parents.

SECTION III TECHNOLOGY OVERVIEW

Cyber Safety

1. Filtering Methods

The district has implemented several products to protect its network, while filtering Internet and E-mail for inappropriate content. The Sophos Security product combines Internet filtering, Mail filtering, Mail archiving, and several other functions to keep students and staff out of inappropriate sites. Sophos filters use multiple methods including: URL and Domain filtering; Content Phrase filtering, PICS Filtering, MIME filtering, file extension filtering, and Proxy blocking. Additionally, Sophos also manages and controls E-mail traffic by blocking SPAM, Malicious E-mail, and inappropriate content within e-mails. Heuristic filters are used to comb e-mail content. Student e-mail can further be limited to specific sending and receiving groups.

2. Acceptable Use Policies (AUP) for Students and Staff

Please refer to Appendix E for the district's Acceptable Use Policies (AUP)

3. Internet Safety Policy

Students are educated about cyber safety and online peril through direct instruction by the classroom teacher, technology educators, and media specialists both prior to and during activities that involve technology and open access to the Internet. This formal instruction takes place as developmentally appropriate from the early elementary grades through adult settings.

NetSmartz presentations are used to engage, educate, and empower students to extend their safety awareness to prevent victimization and increase self-confidence whenever they go online. The NetSmartz workshop is an interactive, educational safety resource from the National Center for Missing and Exploited Children and Boys and Girls Clubs of America for children aged 5 to 17, parents, guardians, and educators that uses age-appropriate, 3-D activities to teach children how to stay safer on the Internet.

This anecdotal instruction is supplemented through the use of the district's "Acceptable Use Policy" and the various resources provided by the district in both hard copy and electronic mediums as instructional material.

Various district administrators, including the Supervisor of Educational Technology, have been trained as trainers in the county-wide collaborative Internet Safety initiative. The training curriculum was designed to cover cyber bullying, the potential dangers of social networking sites and chat rooms, the behavioral traits of sexual predators and the methods they use to lure potential victims. Consistent with the objectives of this program, assemblies are held and resources are shared throughout the district. Staff members received training at staff meetings as requested by the building principals.

4. Acceptable Use Policy Implementation

The district provided the opportunity for public comment on the Acceptable Use/Internet Safety Policy on May 5, 2001. District policies have been adopted in compliance with the Children's Internet and Protection Act (CIPA).

SECTION III TECHNOLOGY OVERVIEW

Assessment of Current Status, Prioritize Needs, Establish Changes Through Goals and Objectives

In 2009, a thorough educational technology needs assessment was conducted using a triangulation process to validate findings consisting of interviews, observations, and documentation reviews throughout the district. Key technology personnel, staff, supervisors, and administrators were interviewed. A comprehensive report of findings and recommendations was used to direct goals, objectives, and activities throughout the year.
District needs are assessed in the spring of each academic year in preparation for the annual New Jersey Technology Survey. Results are used to identify target areas for universal training initiatives. Individual needs are assessed annually by the teacher in consultation with their department supervisor while developing the professional development plan. The areas identified are then targeted for individualized professional development opportunities within the district or through the use of New Jersey approved professional development providers as appropriate.
Also, staff was surveyed in all buildings regarding their professional development . The respondents identified their experience level in using the new equipment being made available to them, selected specific training topics, and selected preferred methods of training. Methods of training included grade level/common planning meetings, professional development workshops during school, professional development workshops after school, webinars, screencasts/tutorials, and informational websites.

Current Practice in Integrating Technology Across the Curriculum

The newly revised New Jersey Core Curriculum Content Standards proposes an "infusion of interdisciplinary connections, technology and global awareness," and we have laid the groundwork for a unique 21st century education reform. The district has identified the importance of focusing on learning and teaching, as well as a strong professional development plan. So with that in mind we are designing classrooms that promote 21st century learning climates. A big step in that focus in “Going Google” in 2011. Google Apps for Education (GAFE) as a cloud-based operating system help in the students’ learning and teachers’ instruction. New and innovative technological resources, such as GAFE’s cloud applications, are being used to enhance student learning and promote the educational process to transcend the daily interactions between student and teacher that occur in a classroom setting.

In order to document the use of technology in the delivery of instruction and assessment, all administrators responsible for formative and summative evaluations of instruction have been asked to identify and document of technology integration during the observation/evaluation procedure. A mechanism exists to provide similar training to all new administrators responsible for staff observation, evaluation, and development of professional improvement plans.

During the Summer of 2014, the district technology curriculum was rewritten in alignment with the current NJCCCS (revised October 2014)

Goals and Objectives

- Keep revised technology curriculum updated and aligned to the current core curriculum content standards and reflecting today’s times.
- Ensure students receive facilitation of planned learning experiences with multimedia project based learning woven into all content areas.
- Continue to provide online learning experiences for teacher and students.

SECTION III TECHNOLOGY OVERVIEW

Current Education Environment and Barriers

Staff Access to Technology to Facilitate Tech Integration Across Curriculum

All district classrooms, offices, and preparation support rooms are equipped with multimedia capable workstations (as per New Jersey Department of Education definition) utilizing high-speed connections via LAN and WAN. Mobile wireless technology is available at all K through 12 locations. Remote access to district resources is available to all staff at all times.

In September 2009, teachers were presented with the opportunity to submit a technology grant application in order to support the integration of technology across content areas within the classroom. Approximately $150,000 of our entitlement of the American Recovery and Reinvestment Stimulus Act was allotted to support individual grants of up to $10,000 each. The goal of this competitive grant process was to provide teachers with the opportunity to purchase technology related equipment which will motivate and engage students to achieve defined objectives. Individual awards were based on innovation and a well-planned outcome with a clear tech integration focus. Selected recipients are required to report on the increased technological literacy of their students and the success on meeting the goals of the planned project. The various equipment awarded in the applications selected include:

- Digital Microscopes
- Graphing Calculators
- iPod Touches
- SMART Boards
- SMART Tables
- Netbooks
- MacBooks
- Podcasting Equipment
- Tablet PCs
- Projectors
- Digital Cameras
- eBooks

Student Access to Technology to Support the Use of 21st Century Skills

All instructional and support rooms (media centers and computer labs) maintain access to technology for student use before, during and after school hours. Wireless technology supports student access and use of student laptop and mobile computing technology. All locations offer access to supervised technology use within and beyond the traditional school day.

However, there is a growing disparity between how students use technology in and out of school. Students create their own learning experiences with use of the Internet and mobile devices. Ubiquitous access to information in their pockets is transforming the needs of today's students inside classrooms.

The Family Educational Rights and Privacy Act (FERPA) is a federal law that mandates protection of students' privacy and prohibits disclosure of educational records without parental consent, but also sometimes results in barriers to data sharing.

SECTION III TECHNOLOGY OVERVIEW

Evaluation of Needs of Staff

The district formed a Technology Task Force comprised of representatives from each school, discipline, and stakeholder group. The purpose of this task force is to identify areas of success and those in need of improvement in order to adequately prepare for emerging technologies and initiatives. Each member of the committee serves as the liaison for his or her respective group.

The Technology Task Force plays an important part in advising central office administration and the Board of Education as well as in making recommendations regarding educational technology developments and needs.

Evaluation of Needs of Students

The needs of students are evaluated through surveys and student representatives serving on various committees and boards, including the Technology Task Force.

The district conducts an annual technology survey (site based) as per New Jersey State requirements. In preparation for this survey, the individual responsible for the completion of the survey maintains an open dialog with members of the respective school in order to assess the conditions particular to that site. Online surveys are also used to assess needs and analyze data. The results of the annual survey coupled with the recommendations of the district Technology Task Force are used to identify and address the needs of the student community.

SECTION III TECHNOLOGY OVERVIEW

Professional Development Addresses the Educators' and Students' Needs for Technology Integration

Technology related Professional Development takes place via various mediums including: district provided (through LEA employed educators), in-house training by contracted professional development providers, and participation in workshops outside of the district. Each participant in in-district training is required to complete a Professional Development Evaluation form that critically examines the workshop for appropriateness of content, participant expectations, and overall quality of the experience. These assessments are reviewed by the person(s) responsible for providing the professional development opportunity and used to determine the direction of future experiences.

The district has contracted with vendors associated with the learning and assessment programs purchased. The companies provide webinars, on-line supports, and face-to-face professional development opportunities that fulfill the needs of the school community utilizing the programs so their intended use can be maximized in the classroom. Based on the individual educator's professional development plan and initiatives particular to the district, staff members are able to access training through these providers. Online resources are posted on the district website in the form of screencasts, tutorials, and videos for anywhere, anytime training for individuals.

Participants in workshops outside of the district are similarly responsible to complete a Professional Day Reporting form that assesses the qualities of the experience. In addition, material and knowledge acquired as a result of the experience are disseminated to others via department/grade level or team meetings. Results of these reporting measures are used in determining future participation with that provider.

Professional development for new administrators begins with a review of district policy and procedure as it relates to technology use and technology integration into instruction/assessment. Administrators are instructed in how to identify and document appropriate use of technology in the existing observation/evaluation procedures. All administrators are trained in the use of district technology resources (administrative and instructional).

All professional development activities are logged and tracked using mylearningplan.com professional development software. District priorities are categorized in this application and all opportunities are disaggregated by category and examined to ensure adequate progress in each.

SECTION III TECHNOLOGY OVERVIEW

Ongoing, sustained professional development is provided in for all educators to further the effective use of technology in the classroom and library media center

At the beginning of each school year, staff new to the district (veteran and novice) is provided a pre-service seminar prior to the start of the academic year. One component of this in-service is dedicated to an overview of instructional and administrative technology. Participants are introduced to the available technology, its uses, and available resources for training. All professional development activities are logged and tracked using the mylearningplan.com professional development web-based application. District priorities are categorized in this application and all opportunities are disaggregated by category and examined to ensure adequate progress in each. Agencies that the district contracts with annually are subject to an annual value-added assessment and survey of participants in order to determine the future of subsequent contracts.

The district also accommodates three formal staff development days per year. Technology topics presented are in alignment with district goals and preparation for the PARCC exam.

The District Supervisor of Educational Technology has provided professional development during weekly training sessions during PLC meetings across grade levels, during staff meetings, and after school sessions on various topics including GAFE, PARCC preparedness, Chromebooks and cloud computing, and integrating technology into teaching practice.

In addition to the use of Technology Educators for instructional support, the district computer center employs technicians and specialists whose primary function is to maintain the functionality of hardware and network connectivity. The district technology center maintains a network based ticketing system (KACE) to provide timely support and assess/log district technology issues.

Media Specialists are housed at each location to provide support for the inclusion of educational media into instruction. Each media center is equipped to serve as a traditional academic library while providing the infrastructure to support contemporary electronic research and presentation. The media specialists are certified teachers whose qualifications include specialization in educational media and related services.

The district conducts annual professional development surveys designed to both identify areas of need as well as to establish a framework for the district Professional Development Plan. Results of these surveys are scrutinized to determine what obstacles exist in the acquisition and delivery of sustained, high-quality professional development (in general).

In addition to the regularly conducted professional development surveys, the district also uses results obtained from the Professional Development Reporting Forms to identify obstacles and areas of future need. The Professional Development subcommittee then reviews the information acquired via these instruments.

SECTION III TECHNOLOGY OVERVIEW

Needs of the District to Improve Academic Achievement for All Students Through the Integration of Technology Across All Curricular Areas

Based on our needs assessment, many of our educators, including administrators and policy-makers, do not share the same level of expertise in educational technology and online tools and resources as private sector professionals who rely on these tools on a daily basis in order to perform their work functions. The digital divide among education professionals, including administration and policy-makers, affects program and curriculum development, funding decision, and professional development opportunities.

Prioritize Identified Needs

Priority I:
Provide ongoing, sustained, job-embedded, in-class assisted technology professional development. Teachers must be able to experience how to use technology in their practice for the purpose of improving instruction, learning, and assessment.

Priority II:
Provide professional development in the incorporation of online resources, creation of multimedia standards-based projects, and establishment of professional online learning communities for educators and students to enhance their learning and practice.

Priority III:
Provide ongoing rigorous professional development in the analysis and interpretation of data to effectively drive instruction. Data driven decisions need to be made and delivered by training educators in the interpretation of quantitative and qualitative information.

SECTION IV THREE-YEAR GOALS AND OBJECTIVES

History

Evaluation of each goal from the previous plan, in one or two sentences, detailing each goal's success, or reasons for continuation, or issues preventing its success.

Goal I – 10-13:
LEARNING: Leverage educational technology to create engaging, personalized, and meaningful learning experiences we seek both inside and outside the classroom, with core curriculum content standards-based competencies, for all kinds of learners that will prepare them for a global workforce and empower students to take control of their own learning as appropriate.

Over the last three years, we have implemented programs such as MyOn Reading, Renaissance Learning, GetWaggle, TeachToOne, PMI/PSI, GAFE, which support our students' learning through technology. Students also have access to interactive projectors, iPads, Macbooks, and Chromebooks.

Goal II – 10-13:
PROFESSIONAL DEVELOPMENT: All educators, including administrators, will acquire the 21st century skills and knowledge necessary to effectively integrate educational technology in order to enable students to achieve the goals of the New Jersey core curriculum content standards, national educational technology standards, and partnership for 21st century learning framework and experience success in a global society.

We have been able to provide Professional Development training sessions to our educators that provided them with both equipment training and how to utilize the technology in order to improve their lessons. We have worked with multiple vendors and our internal staff to deliver these trainings over the three year period.

Goal III – 10-13:
ASSESSMENT: Use the power of technology to actively measure understanding during the learning process and use data to continually improve desired learning outcomes and productivity.

Our district realizes the need to harness technology to measure how our students are performing and has increased the use of assessment tools over the last three years. EXPLAIN: Teacher and student data is linked and made available to schools through Performance Matters. The data is used to drive the decisions made by teachers, administrators, board members, and parents to improve student learning and educator performance.

Goal IV – 10-13:
ACCESS: Ensure equitable access to rich multimedia learning experiences and Internet access for all students and educators.

Through adding mobile devices and far reaching wireless networks throughout our district, we have increased the ability for our teachers and students to access digital content. Teachers have access to our online SAFARI system which provides streaming digital media throughout the district. Students and teachers can also use our new interactive projectors, document cameras, and student response systems all for interactive learning.

SECTION IV THREE-YEAR GOALS AND OBJECTIVES

Goals and Objectives for 2013-2016

Goals mirror the five goals of the National Education Technology Plan.

Goal 1: LEARNING: ENGAGE AND EMPOWER

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

Objectives:

1.1 The implementation of an online Student/Teacher environment – LMS – resource such as Google Classroom.
1.2 The implementation of electronic resources that will replace hard copy textbooks with digital content and tools.
1.3 Increase and develop initiatives pertaining to the STEM Academy.
1.4 Increase and define a comprehensive set of applications and web resources by grade level to empower independent student learning.

Goal 2: TEACHING: PREPARE AND CONNECT

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

Objectives:

2.1 Assess the technical proficiencies of our educators and support their needs effectively.
2.2 Provide appropriate technology support staff to support technology use and effectiveness throughout the district.
2.3 Encourage the staff to use social media to improve teaching techniques as well as provide and encourage online training and support materials.
2.4 Encourage staff to develop and expand their PLCs.
2.5 Integrate technology into core curriculum

SECTION IV THREE-YEAR GOALS AND OBJECTIVES

B. Goals and Objectives for 2013-2016

Goal 3: ASSESSMENT: MEASURE WHAT MATTERS

Our District, at all levels, will leverage the power of technology to measure what matters and use assessment data to individualize student instruction, and drive continuous improvement.

Objectives:

3.1 Optimize the use of Performance Matters, Infinite Campus, and all other Student Information Systems and Data collections.
3.2 Provide adequate trainings to support the use of the above data collections so educators have access to assessments and data.
3.3 Effectively prepare all stakeholders for the PARCC assessment.

Goal 4: INFRASTRUCTURE: ACCESS AND ENABLE

All students will have access to a comprehensive set of technology tools and the infrastructure to support learning when and where they need it.

Objectives:

4.1 Continue to monitor Internet Bandwidth and expand that bandwidth as the number of devices and usage amounts increase.
4.2 Allow total accessibility to students by committing to fund a 1 to 1 device ratio district-wide so that all students may have access to relevant technology daily. Sustain that level of equipment by supporting an ongoing refresh cycle.
4.3 Maintain the necessary support resources to sustain and maintain all technology hardware.
4.4 Implement Cloud-based solutions that support the objectives of the district.

Goal 5: PRODUCTIVITY: REDESIGN AND TRANSFORM

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

Objectives:

5.1 Continue to implement initiatives that support a “paperless” environment and utilitize electronic and digital copies of data via the use of our Sharepoint Collaborative Intranet Solution.
5.2 Utilize our Websites, Media Systems, and Communications Tools to their full potential.
5.3 Provide staff re-training once procedures are standardized so all are aware of new procedures and processes.
5.4 Enhance school security systems including Camera systems, Card Access, etc. using technology.

SECTION V THREE-YEAR IMPLEMENTATION (TABLE)

Documentation	Person Responsible	Timeline	Strategy/Activity	Goal and Objective
Google cPanel Usage Reports	IT Specialists	2014-2016	The implementation of an online Student/Teacher environment – LMS – resource such as Google Classroom.	1.1
MyOn Reader Usage Reports GAFE Reports	District Supervisor of Educational Technology	2013-2016	Provide cloud-based resources for classrooms through Google Apps for Education and implementation of electronic resources that will replace hard copy textbooks with digital content and tools.	1.2
Lesson Plans	Curriculum Supervisors	2013-2016	Increase and develop initiatives pertaining to the STEM Academy.	1.3
School websites Program Usage Reports, Student Surveys	Technology Task Force	2013-2016	Increase and define a comprehensive set of applications and web resources by grade level to empower independent student learning.	1.4
Individual and group logs of professional development activities mylearningplan.com Staff tech surveys	District Supervisor of Educational Technology	2013-2016	Assess the technical proficiencies of our educators and support their needs effectively.	2.1
Individual and group logs of professional development activities mylearningplan.com	District IT Specialists and Tech Educators	2013-2016	Provide appropriate technology support staff to support technology use and effectiveness throughout the district.	2.2

SECTION V THREE-YEAR IMPLEMENTATION (TABLE)

Documentation	Person Responsible	Timeline	Strategy/Activity	Goal and Objective
Individual and group logs of professional development activities mylearningplan.com	District Supervisor of Educational Technology	2013-2016	Encourage the staff to use social media to improve teaching techniques as well as provide and encourage online training and support materials.	2.3
Individual and group logs of professional development activities mylearningplan.com	District Supervisor of Educational Technology and Instructional Leaders	2013-2016	Encourage staff to develop and expand their PLCs.	2.4
Implementation of student response systems and GAFE PD and PLC agendas, Lesson Plans	Curriculum Supervisors Director of IT District Supervisor of Educational Technology	2013-2016	Integrate technology into core curriculum	2.5
PD agendas and sign-in sheets, PLC agendas, district reports	Technology Task Force/District Administration District Data Team	2013-2016	Optimize the use of Performance Matters, Infinite Campus, and all other Student Information Systems and Data collections.	3.1
Research Findings, PLC agendas, Data Team Meeting agendas	District Data Team	2013-2016	Provide adequate trainings to support the use of the above data collections so educators have access to assessments and data.	3.2
District Hosted Website, PARCC team meeting agendas, Teacher training agendas, teacher surveys	LEA PARCC Coordinator School PARCC Coordinators District Supervisor of Educational Technology	2014-2015	Effectively prepare all stakeholders for the PARCC assessment.	3.3
Task Meeting Reporting	Director of IT	2013-2016	Continue to monitor Internet Bandwidth and expand that bandwidth as the number of devices and usage amounts increase.	4.1

KACE Inventory reports	Technology Task Force and Director of IT	2015-2016	Allow total accessibility to students by committing to fund a 1 to 1 device ratio district-wide so that all students may have access to relevant technology daily. Sustain that level of equipment by supporting an ongoing refresh cycle.	4.2
KACE Inventory Reports	Director of IT Systems	2013-2016	Maintain the necessary support resources to sustain and maintain all technology hardware.	4.3
GAFE reports Software usage reports	Technology Task Force	2013-2016	Implement Cloud-based solutions that support the objectives of the district.	4.4
District Website Intranet	Director of IT Systems	2013-2016	Continue to implement initiatives that support a “paperless” environment and utilitize electronic and digital copies of data via the use of our Sharepoint Collaborative Intranet Solution.	5.1
KACE Records	Director of IT Systems	2013-2016	Utilize our Websites, Media Systems, and Communications Tools to their full potential.	5.2
MyLearningPlan records	Director of IT Systems and District Supervisor of Educational Technology	2013-2016	Provide staff re-training once procedures are standardized so all are aware of new procedures and processes.	5.3
KACE Records	Director of IT Systems	2013-2016	Enhance school security systems including Camera systems, Card Access, etc. using technology	5.4

SECTION V THREE-YEAR IMPLEMENTATION (STRATEGIES)

Strategies to accomplish the educational technology goals and objectives include innovation, implementation, evaluation, and continuous improvement including, but not limited to the following:

- Geographic approach to problem solving that ensures better communication and collaboration with transforming technologies like Geographic Information Systems (GIS), Augmented Reality (AR), Geocaching, Google Earth, and Google Sketch to leverage a geographic insight into the classroom. (Goal 1: Learning)
- Reverse instructional models where direct instruction (lecture) is moved to rich media/mobile media format for anytime anywhere access opening classroom time to more interactive/hands-on learning activities (Goal 1: Learning)
- Project-based learning in which rich/mobile education media structures project-based activities for common core and STEM learning. (Goal 1: Learning)
- Leverage technology to assess and improve learning during the instructional process with handheld tools such as; (Goal 3: Assessment)
  - Student response systems to assess understanding during instruction in the classroom,
  - Group Scribbles systems that allow students to contribute to a classroom discussion by placing and arranging sketches or notes similar to post-it notes on an electronic whiteboard. This allows teachers and students to jointly manage the movement of electronic notes while inventing their own forms of participatory engagement, and
  - Networked graphing calculators for formative assessment.
- Use research and insights from learning sciences about how we learn with the technological innovation to create powerful learning experiences. (Goal 2: Professional Development)
- Accessible digital media labs for students and teachers to implement project based learning (Goal 4: Access)
- Apply the kinds of technology we use every day in our lives to our district in innovative ways that improve designs, accelerate adoption, and measures outcomes. (Goal 1: Learning)
- Shift to model of connected teaching unlike ever before where teachers can easily connect with other subject matter experts to share resources and lessons learned across the district, state, country, and world. (Goal 2: Professional Development)

SECTION V THREE-YEAR IMPLEMENTATION (CONTINUED)

C. Provide details of the process for meeting the NCLB requirement that all students be technologically literate by the end of grade eight.

In order to comply with the NCLB reporting requirement that all students shall be technologically literate by the end of eighth grade, the district will utilize a web-based assessment program. Eighth graders will be assessed in the Spring of each school year in preparation for reporting results on the annual New Jersey Technology Survey Report.

Entering eighth graders will be assessed (via the same instrument) in the Fall of each school year as a pretest to determine the entry level of the technological literacy of each student. Students identified as "partially technologically proficient" will be provided an action plan to ensure adequate technological literacy by the end of eighth grade.

Goals and Objectives

- Evaluate current method of assessment and review with Technology Task Force for recommendations on development of a formal district-wide process to assess and report technological literacy
- Provide professional development for key personnel on how to assess technological proficiency

D. Identify specific telecommunications and information technologies and any other specific resources that are useful to reach the stated goal.

Perth Amboy has and will continue to provide a variety of communication vehicles through which teachers and parents can communicate. All classrooms have telephones and teachers have their own voicemail and email accounts. Teachers, parents, and students are encouraged to maintain open dialogue throughout the educational process. The district will make use of all technology resources referenced in the Inventory section to accomplish the goals and objectives listed above.

In AY2009-2010, the district explored, researched, and selected SchoolMessenger in an effort to upgrade the existing call notification system. SchoolMessenger delivers voice, email, and text messages in any language and at any device so that parents, staff, and students are efficiently well-informed and connected. The implementation of this system is expected to help achieve school goals such as increasing parental involvement and reducing absenteeism. The system will further support efficient emergency notifications and surveys to collect input from parents and staff for better decision-making.

SECTION VI FUNDING PLAN (JULY 2010-JUNE2013)

In this time of historic financial crisis, basic fiscal responsibility in planning for technology demands that we get the most out of every dollar spent. Web-based resources and multimedia tools offers unprecedented abilities to demonstrate complex learning experiences while boasting cost effectiveness. Online learning can help address productivity issues as well as keeping students on track. Electronic textbooks can reduce costs. Very simple technology can be leveraged and sustained with minimal funding and maintenance. Free web-resources and open education resources will be leveraged to sustain cost reductions. Investment dollars spent on technology will be with clear expectations about the learning outcomes we seek.

A. Budgeting Projections

2014-2015 District Expenditures **$2,170,000.00**

Technology Equipment for classrooms **[$1,300,000.00]**
- Laptops, Chromebooks
- Projectors, Smartboards.

Telecommunications Expenses **[$300,000.00]**
- ISP fees
- Telecommunications Circuits
- Local, Regional and Long Distance
- Cellular Calling

Support/Maintenance Services **[$200,000.00]**
- Vendor Maintenance Contracts
- Equipment Repairs

Software, Supplies, and Equipment **[$120,000.00]**
- General Supplies
- NIMAS Compliance
- Software Purchases
- Equipment/Accessories under 2K

Capital Expenditures **[$250,000.00]**
- Upgrade Backup/Storage Systems
- Camera/Card Access Systems
- Wiring/Infrastructure Upgrades
- Network/Server Upgrades
- Core Systems Upgrades

2015-2016 District Projections **$1,400,000.00**

- Technology Equipment for classrooms [$600,000.00]
- Telecommunications Expenses [$300,000.00]
- Support/Maintenance Services [$200,000.00]
- Software, Supplies, and Equipment [$150,000.00]

- Capital Expenditures [$150,000.00]

A. Budgeting Projections *(continued)*

2016-2017 District Projections	**$1,300,000.00**
● Technology Equipment for classrooms	[$500,000.00]
● Telecommunications Expenses	[$300,000.00]
● Support/Maintenance Services	[$200,000.00]
● Software, Supplies, and Equipment	[$150,000.00]
● Capital Expenditures	[$150,000.00]

B. Indicate the federal, state, local and other sources of funds used to help ensure that students have access to technology and ensure that educators are prepared to integrate technology effectively into curricula and instruction.

- The primary source of funds to support the district's technology expenditures comes from State Aide provided to the district out of the General Fund.
- The district also receives Title II-D funding in support of Technology related expenditures. Typically the district is allocated $75,000.00 per year.
- E-Rate Funding also supplements the costs of specific technology expenditures:
- In 2010-11, applications have been placed for approximately $750,000.00 in funding requests.
- In 2011-12, applications will be placed for approximately $350,000.00 in funding requests.
- In 2012-13, applications will be placed for approximately $350,000.00 in funding requests.
- Additional funds associated with Federal Resources and Grants are also available.

C. Attach a copy of the board approval for this technology plan. Be sure it includes the budget for the first year of this plan.

Refer to Appendix E for a copy of the Letter of Board Approval.

D. A board approved budget for each successive year of this plan must be filed with the technology plan for e-rate auditing purposes.

E. Provide your technology plan's creation date which, as defined by e-rate, is the point when these five elements are in your plan.

April 22, 2010

SECTION VII PROFESSIONAL DEVELOPMENT

A. Person Responsible for Coordinating the Technology Professional Development Activities Noted in this Plan

Catherine McNulty
District Supervisor of Educational Technology (K-12)

B. Planned Professional Development Activities for Teachers, Administrators, and Media Specialists

1. How ongoing, sustained professional development for all administrators will be provided to further the effective use of technology in all learning environments.

District administrators new to the position are provided professional development experiences related to district administrative and instructional applications. This professional development is furthered to include ways to identify, assess, and document appropriate uses of technology in educational settings.

The district will continue to provide training on an as needed basis for the following core systems, district applications, and software: Systems 3000, Infinite Campus, E-Mail, Internet Access, Microsoft Office, AESOP, Eduphoria, InfoBid, My Learning Plan, Tienet, Performance Matters, Follett Destiny Library System Software,

The District Supervisor of Educational Technology will continue to coordinate training via online professional networking tools, screencasting, and online videoconferencing platforms for meetings and webinars.

Where appropriate, district administrators will be provided professional development opportunities with outside vendors similar to those available to other staff. All professional development activities are logged and tracked using mylearningplan.com professional development software. District priorities are categorized in this application and all opportunities are disaggregated by category and examined to ensure adequate progress.

SECTION VII PROFESSIONAL DEVELOPMENT

2. How ongoing, sustained professional development for all educators will be provided that furthers the effective use of technology, models 21st century skills and demonstrates global outreach and collaboration in the classroom or library media center.

Staff members new to the district (veteran and novice) are provided a pre-service seminar prior to the start of the academic year. One component of this in-service is dedicated to an overview of instructional and administrative technology. Participants are introduced to the available technology, its uses, and available resources for training. All professional development activities are logged and tracked using the mylearningplan.com professional development web-based application. District priorities are categorized in this application and all opportunities are disaggregated by category and examined to ensure adequate progress in each. Agencies that the district contracts with annually are subject to an annual value-added assessment and survey of participants in order to determine the future of subsequent contracts. In addition, the district will provide ongoing, sustained professional development in the use of effective technology, 21st century skills, and global collaborative initiatives for all educators in the following ways:

- Planning technology topics during formal staff development days.
- Continuing training in use of digital media production, and video conferencing, especially for key school-level technology trainers such as the Technology Educators.
- Building learning time into online department meetings, staff meetings, common planning meetings, and after school sessions. as well as using on various topics including screencasting and video tutorial production, hosting webinars, video conferencing, global collaborative projects, project based learning, management and accountability issues, web 2.0 tools, and technology integration across content areas.
- Technology Educators to continue to provide in-class assistance as scheduled

SECTION VII PROFESSIONAL DEVELOPMENT

3. The professional development opportunities and resources that exist for technical staff.

Technical Support Staff are provided professional development primarily based on need. Technology Support Specialists are provided training relative to the skills they need to perform their daily duties. Vendor-based training is provided when new system or functions are put in place. Techs are also provided the opportunity to attend workshops and conferences of their choosing, as long as it is relevant to their duties. Technology staff members also participate in professional development activities during the scheduled district Professional Development days.

4. How professional development is provided to all staff on the application of assistive technologies to support all students in their learning.

Teachers and support staff who are or will be working with students requiring assistive technologies are provided direct personalized professional development opportunities specific to those technologies. This training is provided by in-house trainers where appropriate and through outside vendors as necessary.

Generalized professional development opportunities regarding the selection and use of assistive technology are provided for all interested staff throughout the year utilizing in-house workshops and through participation in opportunities offered by outside vendors. The district maintains an in-class support system of inclusion whereby a certified Special Education Teacher team-teaches with a general content teacher. The general content teacher often utilizes participation in professional development activities associated with assistive technology. Participation is encouraged for all professional staff regardless of assignment.

The district strongly supports the Universal Design for Learning (UDL) research based framework that fosters access to learning for everyone. Through the implementation of digital media in classrooms each student can be engaged in a barrier free learning environment. Each learner's unique needs are supported through a wide application of assessment, materials and curriculum.

SECTION VII PROFESSIONAL DEVELOPMENT

C. Based on educators' proficiency and the identified needs for professional development, describe only the ongoing, sustained high-quality professional development opportunities planned for 2010-2011 as they relate to the infusion of technology into the curricular process.

Professional development is driven by teacher needs and concerns. Differential training is needed as well as self-initiated professional development for meaningful training to support professional goals and involvement in long-term plans. Teachers will continue to be agents of professional development. The ongoing, sustained high-quality professional development opportunities planned for 2010-2011 as they relate to the infusion of technology into the curricular process include, but are not limited to:

- Technology Educators scheduled to serve as coaches for in-class assistance in integrating technology into the curricular process
- Grade-level PLC meetings for infusion of technology into curricula during lesson planning and after instructional goals are established
- Vertical and horizontal articulation among Technology Educators
- Online webinars and youtube offerings on the use of technology programs and GAFE
- Participation in EdCamps

D. Project professional development activities that will continue to support identified needs through 2016, including all partners

The district is building the capacity for transformation and professional development activities are projected to include:

- Developing professional learning networks using GAFE
- Creating screencasts and video tutorials
- Participation in and hosting of online webinars
- Online tutoring training
- Mobile computing devices
- Multimedia

Projected partners in professional development activities include NJ Department of Education, ISTE, NJAET, FEA, Google, Middlesex County Technology Council, Triumph Learning, and Smart Technologies.

VIII. EVALUATION PLAN

A. Evaluation Process

1. Integrating technology into curricula and instruction to promote 21st century skills and global collaboration and outreach

The district will utilize the Technology Task Force working in conjunction with the district curriculum committee to regularly monitor the integration of technology into curriculum and instruction. Both formal and informal observation of technology integration into instruction takes place regularly through the established observation/evaluation and walkthrough procedure. District administrators have been trained in the recognition and documentation of appropriate technology use in educational settings. School based and district professional development committees regularly monitor the application of professional development results in instruction to responsibly prepare for future needs. Regularly scheduled grade level and department meetings provide opportunity for curriculum supervisors to collaborate with instructional staff regarding instructional priorities such as the integration of technology into instruction. Staff reporting and evaluation forms are scrutinized to ensure that professional development is high quality and implemented as appropriate within educational settings. Decisions are made as a result of this monitoring regarding future vendor and topic selection.

2. Enabling students to meet challenging state academic standards

The district remains committed to ensuring adequate access to appropriate educational technology resources. Students will be able to compete successfully in meeting challenging state academic standards through the following provisions:

- Use technology resources that are flexible in content for individualized learning experiences
- Connect web learning resources to learning standards
- Use data effectively to make responsible decisions regarding future educational goals, objectives, and initiatives
- Regularly review and monitor curriculum across content areas to ensure the inclusion of appropriate educational technology
- Foster online learning communities
- Provide all staff with high quality and sustained professional development
- Use technology tools and resources of professionals to engage in solving problems and project-based learning

3. Developing life-long learning skills.

In order to get our students ready for life long learning, we must reevaluate how and what we teach to include the technologies our students use outside of classrooms. We also must create meaningful dynamic learning experiences that reflect students' everyday lives mirroring what their futures will entail. Technology requires adaptive learning skills and the ability to transfer knowledge form one application to the next. When we differentiate between what needs to be learned (factual vs. procedural knowledge) and how students can take control of their own learning, we are better able to prepare them for life outside of the classroom.

Our district promotes learning as no more a classroom goal, but "life-long, life-wide, and available on demand."

APPENDIX

A. Acceptable Use Policies (AUP)

B. Board Approval Letter

C. NJ CCCS 8.1 and 8.2

D. NETS