

# *Cherry Hill Public Schools*



## 2007-2010 Technology Plan

April 27<sup>th</sup> 2007






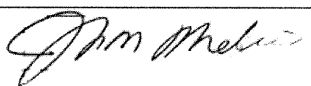
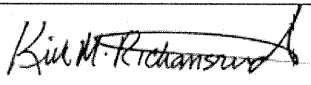
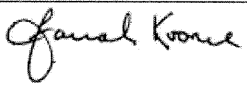

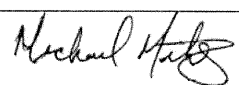
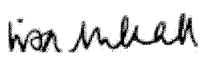

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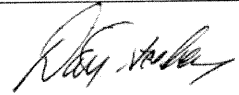


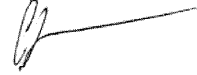

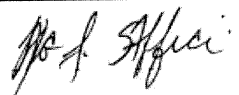

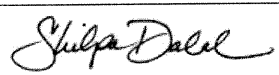
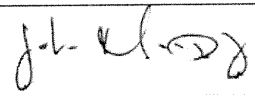

### I Stakeholders

This technology plan would not have been possible without the input and assistance of the stakeholders listed. The CHPS technology department would like to thank each of the individuals listed for their candid input and ideas on how technology can be enhanced throughout our district.

A wide variety of stakeholders throughout our district were consulted and contributed to this technology plan. By including a diverse group of district staff in the technology planning process, we are able to accurately reflect the vision and needs of our large and diverse district.

| Stakeholder Table              |                    |   |
|--------------------------------|--------------------|---|
| Title                          | Name               | Signature   |
| Superintendent                 | Dr. David Campbell |    |
| Director of Support Operations | Don Bart           |    |
| Director of Special Education  | Israela Franklin   |   |
| Principal                      | Joe Meloche        |  |
| Principal                      | Krik Rickansrud    |  |
| Principal                      | Dr. Farrah Koonce  |  |
| District Technology Manager    | Marc Plevinsky     |  |
| Technical Support Specialist   | Michael Milnes     |  |
| Language Arts Supervisor       | Dr. Lisa Mullhall  |  |
| Mathematics Supervisor         | Tony Trongone      |  |

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|   |                    |   |
|---|--------------------|---|
| Network Engineer  | Rich Simmers       |    |
| Teacher   | Mike Skalski       |    |
| Teacher – MS<br>Technology                              | Ralph Preisano     |    |
| Teacher – MS<br>Technology                              | Dan Feeley         |    |
| Special Education<br>Colleague Teacher                  | Marta Audino       |    |
| Special Education<br>Assistive Technology<br>Consultant | Kevin Cohen        |    |
| Library Media Specialist                                | Cindy O'Reilly     |   |
| Library Media Specialist                                | Nina Kempes        |  |
| Guidance Counselor                                      | Lisa Saffici       |  |
| Parent/Community<br>Member                              | Michael Matlack    |  |
| Assistant Principal                                     | Shilpa Dalal       |  |
| Supervisor of Special<br>Education                      | John Moody         |  |
| Student Assistance<br>Coordinator                       | Jennifer DiStefano |  |

## II Executive Summary

### Vision Statement

In a society that is dependent on information and knowledge, equitable and universal access to technology is essential to the learning process. With the guidance of skilled educators and the support of our community, all students will have the opportunity to use technology tools throughout and beyond the school day. These tools support active engagement in the learning process as students and teachers think, create, inquire, solve problems and communicate in collaborative and interdisciplinary environments. Students will emerge as lifelong learners, equipped with the skills to adapt and contribute to an ever changing information-centered society.

Our district believes:

- The school of tomorrow will not be bound by walls or limited to a standard school day
- The community of tomorrow will be one of continuous learning
- Information and communication are essential tools for the process of improving our curriculum
- Using technology ethically and appropriately, students can enhance their learning by communicating with professionals and students from around the world
- With increasing global information, students must be able to scrutinize for information validity
- As students grow up in a techno-centric world, teachers must continuously update their technology skills to model effective technology use
- Effective student assessment is an integral part of strong teaching; technology is central in providing this information to teachers

### Board Goals

Technology within our district should not, and does not exist in a vacuum and district technology initiatives must support the main goals of our Board of Education. Board goals for the 2006-2007 school year are provided below with select examples of how technology will support the stated goal.

1. Continue to improve student achievement at all grade levels and close achievement gaps where they exist.

*Technology will support this goal by:*

- Leveraging software tools such as Accelerated Reader & Cognitive Tutor to improve student achievement

2. Begin implementation of an integrated curriculum, instruction, assessment and professional development framework that will assure continuous student progress within an aligned PreK-12 educational program.

*Technology will support this goal by:*

- Aligning technology resources with curricular requirements, as defined by curriculum staff.

3. Develop an action plan to improve school facilities with a focus on learning, safety, space, infrastructure and maintenance.

*Technology will support this goal by:*

- Ensuring that the technology infrastructure and equipment is in place to support the learning needs of our students.
- Promptly responding to technology service requests to ensure technology equipment is ready and working when needed by our students and staff.

4. Review special education programs to ensure that every child's needs are met in accordance with the Individual Educational Program (IEP) and in compliance with State mandated program requirements.

*Technology will support this goal by:*

- Devising specific protocols for requesting technological support in training and implementation of assistive technology as it pertains to individual student needs.
- Ensuring quick responses to technology service requests to sustain individual education plans for students in programs throughout the district.
- Introducing a web based data system, Project Special, to govern the IEP process and bring about a common, uniform language related to IEP development that is consistent with district policy and state regulations on special education.

### **Curriculum and Instruction Alignment System**

The Cherry Hill Curriculum Development & Alignment System will engage the district in a process by which curricula will be reviewed, designed, and developed. The components of the system will involve: a review of current programs, researching the best materials and curricula, professionally developing teachers effectively, implementing, supporting, and evaluating effectiveness. The system also incorporates an analysis of student assessment data for the purpose of informing curricula. An expectation of the process is the continued growth of students' academic achievement.

Each discipline will be treated as a whole and developed with PreK-12 articulation with one outcome being a clear and seamless scope and sequence chart for each subject area.

A curriculum committee comprised of teachers and administrators will be formed to review the current educational program in light of the latest research, best

practice, and current trends. Technology should be used to enhance their work affiliated with:

- Analyzing all available assessment data to determine patterns and trends across the curriculum;
- Surveying certificated staff to help ascertain needs relevant to curriculum and professional development.

The curriculum committee will write the curriculum, clarify staff needs to be incorporated into the district professional development plan, recommend resources, and create an assessment system to measure student achievement. When writing curriculum, technology should be used to enhance and facilitate the work associated with:

- The development of a curriculum map will include essential questions as well as the content and skills to focus on for each period of time (e.g., month, marking period). Common and suggested assessments should also be listed.

Within the map, each of the following must be addressed:

- How the needs of all learners will be met; how the curriculum can be differentiated for all learners
- How technology will be integrated into the learning opportunities for our students
- How reading, writing, and important mathematical skills (e.g. problem solving, use of logic) will be integrated across the curriculum
- How to address higher order thinking skills for all students
- Alignment to Life Skills standards to address Character Education and Information Literacy

Throughout the implementation of new curricula professional development will be on-going and the committee will receive feedback from teachers involved in initial implementation. Technology should be used to support the following efforts:

- The provision for professional development offerings to occur at a variety of times and through a variety of approaches throughout the summer and school year.
- Additional methods of support offered may include but are not limited to: Eboards, coaching, collaborative time

Regularly scheduled meetings of teachers will be conducted to review lesson and unit plans for the purpose of supporting colleagues throughout the initial implementation. Web access to such resources will facilitate and enhance the entire process.

### **Technology Initiatives**

The Cherry Hill Public Schools technology department has embarked on a wide variety of initiatives over the past three years to support both the board's goals and the district's technology vision. These projects include:

- Evergreen technology replenishment

- Chancery SMS – web based student information system
- Expanded district website
- Custom web-based data services and systems
- Network file storage for students and staff
- Standardized computer hardware, printers and software configurations

These initiatives are evaluated and refined on an on-going basis to ensure that they continue to support the board goals as stated above. Throughout the next three years the district technology department will continuously evaluate and improve upon the initiatives that are detailed throughout this technology plan.

### **Summary**

Technology has become part of our everyday lives, and we must continue to grow and expand our knowledge and use of technology as we educate tomorrow's leaders. First and foremost classroom need must drive our technology requirements. We must view technology as a tool to be used in classrooms, in addition to the traditional pencil, paper and chalkboards. In district offices these tools are essential pieces to ensure we are working as efficiently as possible, reducing the amount of repetitive work and costly resources such as paper and ink cartridges. These tools must be up-to-date, in good working order and have users who are knowledgeable in the use of the tools.

There are many challenges in meeting our goals within technology, and we must maintain our flexibility and creativity to ensure that technology tools are planned for, acquired, maintained and used to their fullest advantage throughout our district.

### III Technology Overview

#### A Technology

1. Provide an inventory of current technology networking and telecommunications equipment.

Below is the current inventory of Desktop PCs, Laptops, and Printers

| School         | Desktops    | Laptops     | Printers   |
|----------------|-------------|-------------|------------|
| Barton         | 55          | 104         | 18         |
| Cooper         | 44          | 45          | 15         |
| Harte          | 45          | 78          | 15         |
| Johnson        | 63          | 60          | 21         |
| Kilmer         | 59          | 61          | 20         |
| Kingston       | 48          | 61          | 16         |
| Knight         | 74          | 60          | 25         |
| Mann           | 46          | 59          | 15         |
| Paine          | 58          | 60          | 19         |
| Sharp          | 56          | 60          | 19         |
| Stockton       | 48          | 60          | 16         |
| Woodcrest      | 41          | 76          | 14         |
| Barclay        | 41          | 2           | 14         |
| Beck           | 157         | 100         | 52         |
| Carusi         | 184         | 115         | 61         |
| Rosa           | 192         | 153         | 64         |
| East           | 651         | 113         | 150        |
| West           | 464         | 98          | 125        |
| AHS            | 42          | 15          | 14         |
| Administration | 75          | 10          | 25         |
| <b>Totals</b>  | <b>2443</b> | <b>1390</b> | <b>718</b> |

Cherry Hill currently supports a total of 78 servers spread throughout the district. Each elementary school has 2 servers. The middle schools have 3 servers each. The high schools (East and West) have a total of 7 servers each. The Data Center has the remaining servers in a climate controlled secure server room.

The district currently has in place over 80 IDF switches and 21 MDF switches and routers to manage the network traffic.

Internet connectivity to the district is provided by CamNet/Comcast via a 10Mbit full duplex fiber connection. CamNet/Comcast also provides intra-building connectivity via a 100Mbit fiber connection between all schools.

Each Elementary and High School has at least one Polycom Video Conference unit for distance learning and inter-school video conferences. A video conferencing unit is also available at the central administration building. Cherry Hill contracts with the Camden County ETTC to use the ETTC Telecom Bridge for all external ISDN video conferencing calls.

Over the past two years, a new phone system that utilizes Voice Over IP (VOIP) for calls between school buildings was installed in all classrooms and school offices within the district to improve communication and security. These phones improve communication within the building and give each teacher access to a voice mail box for phone messages. Cherry Hill contracts out to *XO Communications* to provide the incoming and outgoing circuits for telecommunications. Cherry Hill contracts out to *RFP Solutions* to support and manage the phone and voicemail systems throughout the district.

2. Describe the technology inventory needed to improve student academic achievement through 2010 including but not limited to technology equipment and networking capacity, software used for curricular support and filtering, technology maintenance policy and plans, telecommunication services, and technical support

### **Technology equipment and networking capacity**

As reflected in the inventory for the school district, CHPS currently has in production over 3800 PCs, 1300 laptops and over 350 networked printers. The laptops are part of movable labs (a laptop cart with 20 laptops, a wireless access point and a networked printer). With the school district population at approximately 12000 students, the ratio of students to computer is 4:1.

The CHPS Technology department has standardized the printing solution throughout the district. The department is phasing out support of desktop inkjet printers due to short lifecycle, the high cost of repair and the high cost of ink. The district preference will be to use network only inkjet and laser printers such as the HP Business Inkjet 1200DN or the Dell 3100N laser color printer. This change to networked connected, high-volume printers will result in reduced ink and toner costs while increasing the reliability and speed of printing services.

CHPS has 78 servers that are currently in production operating in various roles, from Domain Controllers to simple File/Print servers. These servers are segmented as follows:

- 60% Student / Staff use
- 40% Facilities / Administration use

The network itself consists of one hundred pieces of CISCO branded equipment that connects the district's 21 buildings via a fiber-optic network solution leased

from a third party vendor. Within designated locations in each building are wireless access points established to allow wireless connectivity to the district network. Currently the district is utilizing 85% of available network ports.

As the district grows in population, so will the CHPS network infrastructure. The district will have to provide workstations, laptops, servers, and other infrastructure components to maintain a minimum 5:1 ratio of students to computers.

### **Software used for curricular support**

A variety of software packages are used throughout the district to support the district curriculum. All computers within the district are loaded with the *Microsoft Office* suite of applications for use in classroom work. Throughout the district a variety of applications such as *Read 180*, *Accelerated Reader*, *Math Investigations* and *Cognitive Tutor* are available for student use. As enhancements and upgrades are released by each software vendor, the district will evaluate and implement each enhancement to ensure curricular software continuously contributes to improving student achievement.

Additionally, the district continues to move to a web-based suite of software applications to support the needs of our students. By using web-based software, the district can support a wide range of applications and save installation time by centrally installing software instead of having to update every computer that requires the application.

The CHPS has used *TechPaths: Curriculum Mapping Platform*, a web-based system to assist with curriculum mapping and alignment. This system provides the district with a powerful tool for aligning standards with current curriculum maps. The Curriculum department is currently evaluating other curriculum mapping software that will suit the district's current and future needs.

The CHPS utilizes *Chancery SMS* from Pearson School Systems as its student information system. This system manages student demographic records, grades, attendance, discipline, and localized assessment data for the four core curriculum areas in elementary schools.

The district is currently piloting the "School to Home Portal" component of Chancery SMS which is called *K12planet*. K12planet allows parents to login to a secure website which contains a "snapshot" of attendance and report card grades for their child. The K12planet website will help to improve communication of information with parents and assist with keeping parents involved at every grade level.

As the data warehousing needs of the district continue to grow, the district will need to evaluate a variety of add on software packages beyond our core SIS that

are specifically designed for educational data collection, aggregation and storage.

The CHPS Guidance Department utilizes the *Workspace K12* suite of web-based software from Naviance to assist families with the college selection process. The use of this software will continue to expand to allow more student and parental involvement in the high school course and college selection process.

As the software that is available to support the curricular needs of the district is constantly evolving, the district will continue to explore the options of software that are available to improve student achievement over the next three years.

### **Filtering and Security**

CHPS uses Surf Control's Web Filtering application to monitor all internal internet traffic and filter when needed. The technology department is constantly updating the rules to filter out filtering/proxy avoidance sites, current social websites, and various non-categorized sites.

CHPS has incorporated 2 different approaches to network security. The first approach is using Symantec's Norton Antivirus installed on the local machine. This provides a frontline defense from any intrusion stemmed from a foreign file entering the network.

The second approach is an external firewall that sits between the CHPS network and ISP. This solution prevents any attempt from the outside to gain access to the infrastructure of CHPS.

As the district population grows and the use of technology in the classroom increases, CHPS will have to re-evaluate on a yearly basis whether or not the existing applications can meet the needs of the district. If not, the staff will have to work with different vendors to identify the best application for the tasks of filtering and security.

### **Technology maintenance policy and plans**

All equipment procured by the Technology Department of CHPS is purchased under a three year lease agreement which includes a next day on-site warranty. This provides the district with the ability to take a machine out of production for the least amount of days while saving the district money on parts and labor. For machines that are out of warranty, the district will repair the machine provided that spare parts are available within the district spare part inventory.

As the district population and infrastructure grows, the CHPS will continue to allocate additional funds to acquire parts to provide support for current equipment.

### **Telecommunications services**

The network infrastructure that CHPS uses is provided through CamNet, the educational and government arm of Comcast Corp. The CamNet network provides the fiber optics that interconnect the 21 buildings that make up the Cherry Hill Public Schools. The current allocation of bandwidth is as follows:

- 100MB/sec fiber connection for building to building connections
- 10MB/sec fiber Internet connection for district wide internet access

The CHPS utilizes XO Communications to manage the external telecom circuits and RFP Solutions to manage the internal VOIP phone network. Any changes that are required for the internal phone network are handled through the CHPS purchasing department and RFP Solutions.

### **Technical support**

The CHPS Technology Department uses the following to support the equipment and staff.

- Phone Support
- Online Request for Support system – Provides the staff a self-service application to identify a problem and request assistance from a district field technician.
- 6 FTE Field Technicians
- 1 Network Administrator
- 1 Technology Manager
- 1 Technology Support Specialist (Project / Field tech Manager)
- 1 Student Management Systems Coordinator
- Online Resource landing page for teachers accessed via the intranet and internet
  - Standard FAQ page
  - Access to Staff handbooks
  - E-Board (a content management system service) links to department specific information

As the district population and infrastructure grows, there will be a need to streamline the existing support process even further to provide the best service to the staff and students.

3. Describe how the district integrates assistive technology devices into the network to accommodate student needs.

Assistive technology is defined as any item, piece of equipment or product system, whether acquired commercially or off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capability of students with disabilities. The term, assistive technology, does not include a medical device that is surgically implanted or the replacement of such device.

Students are deemed eligible for assistive technology evaluations by Child Study Teams and action plans are implemented in accordance with New Jersey Administrative Code for Special Education (6A:14-3.7). The Cherry Hill School District insures that assistive technology devices and services are made available to a student with a disability if required as part of the student's special education, related services or supplementary aids and service. In addition, on an individual basis, the use of school purchased assistive technology devices in a student's home or in other settings is required if the Child Study Team determines that the student needs access to those devices in order to receive a free, appropriate public education.

Moreover, the integration of assistive technology into curriculum-oriented efforts requires support and assistance. Cherry Hill Schools maintain a highly qualified consultant, specializing in integrating assistive technology, to implement assistive technology, train teachers, staff, students, and parents, when appropriate, and provide monthly monitoring. Student progress and use of assistive technology is further reviewed at IEP meetings at least one time annually.

Examples of assistive technology devices that are currently used in Cherry Hill School district are DANA, Alpha Smart, Dynavox, touch screens, FM/Sound field systems, clicker mouse and Smart Talker. Students also use laptops and video conferencing. Software that is incorporated into curriculum that uses assistive technology includes: Edmark Reading, Screen Reader, RFBID (Reading For Blind and Dyslexic), Clicker 5, Talking Word Processor, Dragon Speak, Bookshare.org, Read 180, and The Premiere Assistive Technologies Software Suite.

4. Describe how the district's web site is accessible to all stakeholders (for example using Federal Accessibility Standards).

The Cherry Hill Public Schools Website is accessed by thousands of visitors each day. It is imperative that all users of the site be able to access the important information contained on the site. Our site has been approved by the website accessibility tool <http://webxact.watchfire.com/> to meet section 508

“Bobby” guidelines for accessibility. As we continue to expand our website we will continue to ensure that our site meets accessibility guidelines so that our website is accessible to all stakeholders.

5. Describe the plan for replacing obsolete computers/technology and include the criteria for obsolescence.

In 2004 the Cherry Hill Public Schools began Phase I of the “Evergreen” computer replacement program which brought in 524 desktop computers and 732 laptop computers. This technology leasing program is designed to ensure that technology within the district is replaced on a regular basis and is meeting the needs of students. The Evergreen program centralizes and standardizes the acquisition of technology equipment throughout the district. By standardizing the specifications on equipment, the support needs of the district are reduced, and when a repair is necessary repairs can be accomplished faster due to the interchangeability of parts.

In 2006 Phase II of this program began, bringing an additional 334 desktops and 400 laptops as well as printers and laptop carts. The district is currently evaluating the impacts of the new curriculum management system to ensure that future Evergreen cycles directly support the curricular needs of the district.

At the submission time of this plan, the CHPS technology department is currently evaluating the implementation of Phase III of the Evergreen program.

The CHPS Technology department considers the following to determine whether a piece of equipment is obsolete:

- Age of equipment
  - Computers – six years or older (currently Pentium II or Pentium III classed computers)
  - Printers – 10 years
  - Monitors – 10 years
- Availability of parts and total cost of repair. A technology item will be recommended for replacement if the cost to repair the item exceeds 55% of the replacement value.
- Meets the minimum requirements for software

As the technology needs of the district and the availability of technology is constantly evolving, the district will regularly evaluate the criteria for obsolescence to ensure that the technology needs of the district are being met.

CHPS utilizes Lynswell Technologies to handle all disposal of equipment including but not limited to computers, monitors, and printers. The standard lifecycle of all PCs in the district is a 6 year life cycle. All newly purchased PCs are under a 4 year parts replacement warranty. When a machine is no longer

covered and is not functional, all parts that are salvageable are removed and the machine is flagged for disposal. At the end of a school year, Lynswell Technologies retrieves all flagged machines and equipment. If there are hard drives that are being disposed of, the drives will go through a Department of Defense standard wipe of the information of the hard drive before it is picked up by Lynswell Technologies.

CHPS also recognizes the importance of recycling and is currently beginning a recycling program for consumable technology. When a laptop battery fails, the Technology Department will collect the battery and store it. Once a quarter, the department will take the batteries to the Cherry Hill Township Public Works department to ensure proper disposal of the batteries. The CHPS has informed the staff that going forward, if a classroom or multi-area printer runs out of toner or ink, to send the cartridge to the Technology Department. The department will then handle the recycling of toner cartridges. The district is currently looking at the possibility of using this recycling to generate alternative funds for the district.

## **B Cyber Safety**

1. List the filtering method(s) used. (Note: Be specific as this is a federal mandate)

CHPS utilizes Surf Control's web filtering product to manage all inbound and outbound internet traffic. The filtering is done via a server at the main internet connection for the district, and will filter content to any computer connected to the district network without additional software being installed. The software vendor provides daily updates to the filtering rules used to block inappropriate sites. The CHPS Technology department, in conjunction with the teaching staff, are constantly monitoring and updating the filtering rules that are applied to limit the risk of students being exposed to websites that contain inappropriate or harmful content.

CHPS also incorporates a CISCO PIX firewall to limit the external access to the district network. The PIX firewall is also used to monitor common ports that are used for instant messaging programs, file sharing programs, and other potentially illegal programs that could put the district at risk of a lawsuit. Changes to the allowed ports on the firewall configuration are evaluated on a case by case basis and only when a documented educational need is brought to the Technology Department.

2. Identify the Acceptable Use Policies (AUP) used for students and staff and include a copy of the AUPs with the submission of this technology plan

As technology is constantly evolving, an up-to-date acceptable use policy reflecting current day technologies is crucial to ensuring that our students and staff are aware of district expectations for the acceptable use of technology. The CHPS technology department is currently in the process of updating our current AUP. This revision will be implemented for the 2007-2008 school year.

**The current board approved AUP for staff and students can be found in Appendix 1.**

3. Explain how students are educated about online safety awareness.

Each of the 19 schools in the district provides Online Safety instruction via classroom lessons and assembly presentations throughout the school year to students, parents and staff. The district website also contains links and information about Online Safety.

The district employs a Student Assistance Coordinator that works with the local police department and the district security department to offer seminars to educate staff, students, and the community on ways to safely communicate online, and how to prevent all forms of abuse, whether it is drugs, physical, and/or mental abuse.

Partnering with the Cherry Hill Police, Community Policing Unit, our school district provides a series of presentations to both parents & students to educate them on safe online practices.

*This program includes:*

**Grade 2 thru 4** – Lessons & Presentations on overall Internet Safety

**Grade 5** – Lessons & Presentations on overall safety and emphasis on Internet bullying

**Grade 6** – Every Incoming 6<sup>th</sup> grader receives an Internet safety presentation given by the Cherry Hill police that demonstrates the possible dangers of online communications and electronic communities such as “My Space”. This program has been in place since the 2005-2006 school year, when all middle school students (Grades 6-8) in the district were given a presentation on cyber bullying by the Cherry Hill Police Department.

Throughout the elementary schools, the district reinforces online safety. In the Parent/Student handbook, there is a section which directly addresses the safe

and ethical use of technology. At the beginning of the year, teachers review the CHPS AUP in each of their classrooms. The teaching staff reinforces safety and protocol when the students are given the assigned laptops for research and online activities. The Media Specialists also provide students online resources for safety during the student's weekly library time.

At the high school level, students are presented with online safety awareness in two manners. The first is through a standard discussion during an extended homeroom at the beginning of the academic year. The second is through media specialists, who provide information on a monthly basis for online safety awareness.

The Cherry Hill Standards for technology literacy also state that:

**CH 1.27** – The student demonstrates an understanding of the social, ethical, cultural and societal issues related to technology, practicing responsible use of technology systems, information and software, and developing positive attitudes toward technology uses that support lifelong learning.

|   |
|---|
| 4. Provide information on how parental resources regarding online safety are made available to parents. |
|---|

Parental involvement is key to ensuring the online safety of our students. The Cherry Hill Public Schools provide the following resources to ensure that parents are as up-to-date as possible on current and emerging trends in online safety.

- The district website provides links to resources on line safety.
- Community and PTA events regarding online safety are publicized to the school community via the weekly "e-news" e-mail and are also posted on the news section of the district website.
- Every school has an internet safety presentation by the Cherry Hill Police given once a year at a PTA meeting. Students also are encouraged to attend this meeting with their parents.
- At the beginning of the school year, the parents of children in the elementary schools are asked to review the Cherry Hill Public Schools AUP with their child and sign indicating that they are aware of the online resources and precautions that the district takes to ensure online safety.
- Certain schools offer individual classroom training for parents and students together on online safety.
- The high schools provide online safety awareness information through the mailers that are sent out to each student's parent at the beginning of the year.

## C Needs Assessment

1. Complete a needs assessment for educational technology in your school district or charter school. Begin by determining current status. Afterwards, determine the educational needs, prioritize the identified needs and establish necessary changes through goals and objectives.

a. Evaluate staff's (not to include teachers) current practice in integrating technology across the curriculum

Throughout the Cherry Hill Public Schools, technology is being used not only to enhance the education of our students, but also to enhance the productivity and efficiency of our district support staff. A variety of technology tools are used to accomplish our goals of increased productivity. These tools include:

- **Chancery SMS** - A Web based Student Information System. Our student information system serves as the core database to track information related to our students including demographics, enrollment and attendance. Additionally at our High Schools and Middle Schools, the system is used to generate and manage student schedules and to collect grades for report cards and transcripts which are also generated by the system. We are currently piloting an additional feature of the Chancery SMS package which will allow parents to log-in to a separate secure website to track the attendance and report card grades of their children.
- **Keystone** – Budget, Purchasing and Payroll Management. – All budget management and payroll activities are captured electronically and maintained via this system. In the past year additional efficiencies and paper savings were gained by moving the districts purchase requisitions system online. Currently, all purchase requisitions are entered by the end users into this system, cutting back on the amount of time and paper required to process a purchase. By implementing electronic purchase requisitions, fewer personnel are required to process orders, and orders can be delivered to schools in less time.
- **Microsoft Exchange/Outlook Email & Calendars** – As email has become an essential tool to the office user, our district email server has become increasingly critical to our operation. Not only is the server used to provide a method of electronic communication, but many office staff utilize the electronic calendar functionality to maintain their schedules. By having users maintain an online calendar, meeting scheduling is streamlined by the ability to check the calendars of meeting attendees without multiple phone calls and emails. Meeting rooms and shared classroom space are also scheduled electronically in our buildings via the exchange calendar.
- **District Developed Custom Web Systems** – To meet the unique needs of our district, many web based information systems are developed in-

house. By creating these systems in house, specific needs of our district can be addressed by the software, and staff productivity is increased by streamlining our business process. An additional benefit of these online systems is the reduction in the use of paper and expensive multi-part forms, which were previously required by the tasks addressed by the web based systems. Some examples of these web-based systems are:

- Technology Request for Service (RFS)
- Maintenance Request for Service (MRFS)
- Technology Asset Inventory System (TAIS)
- Summer Cleaning Readiness System
- New Staff Professional Development Registration & Tracking
- **Network document sharing** – Multiple file servers and network shared workspaces have been set up to allow users to securely share and store files across our network.
- **EduLog** – Transportation Management – Through this system, bus routes are managed.
- **NutriKids** – Lunch Point of Sale (POS) – This systems enables the district to offer parents and students electronic accounts for lunch purchases. The system is also used to track students who qualify for free and reduced lunch.
- **Project Special** – Special Education Management – This system is the core database used by the special education department to track the needs, services and information required to generate IEPs and report information to the state. During the 2006-2007 school year, the Special Education Department began to implement the web access components of the *Project Special* system. By integrating the work of all IEP stakeholders into a single database, the IEP process will be streamlined. This streamlined process will benefit the district by bringing about a common, uniform language related to IEP development that is consistent with district policy and state regulations on special education.

In the future, as new district needs arise, the technology department of the CHPS will evaluate additional ways to improve district efficiency via the use of technology.

b. Provide a summary of teacher and library media personnel proficiency in the use of technology within the district.

The technology needs survey indicated that there are a wide range of technology skills present across our teaching staff

Highlights of the skills cited as being used by staff include the following:

- Creating a newsletter with graphics for the students and parents
- Utilizing a spreadsheet to track the student's grades
- Using applications such as PowerPoint for an interactive presentation to both parents and students
- Utilizing the workstations to access their files and / or email from any building within the district
- Creating lessons (i.e.: web quests) that give the students the opportunity to research using both CD Media and the Internet for resources and answers
- Actively participating in email threads, discussion groups and / or mailing lists to improve teaching and understanding technology and the use of technology in the classroom both within the district and at home

**Refer to Appendix 2 to review the results of the Teacher Technology Survey.**

As a result of this survey, the CHPS technology department will address the additional needs of our staff. We will continue to annually survey the needs of our staff to identify areas of strength and areas needing improvement.

c. Determine the current educational environment and barriers by describing how:

i. staff are assured access to technology to facilitate technology integration

Teachers and staff that were consulted along with the district needs assessment indicate that technology is widely infused into day-to-day classroom activities throughout the district. In the elementary schools teachers and students have access to a minimum of one computer per classroom, mobile laptop labs, and in some instances, full computer labs. In the middle schools, there are multiple mobile laptop labs, and classrooms dedicated to technology. In the high schools, staff are provided with computers in their teaching locations as well as the dedicated staff areas. There are also "specialized" technology resources that are provided for the specific applications of each specific department.

Some barriers that are present in our current environment:

- **The number of shared pieces of technology equipment that are available at a given school.** Many pieces of technology equipment in our schools are shared among numerous classrooms and teachers. Items such as *SmartBoards & LCD (Proxima) Projectors* are in high demand as teachers continue to integrate technology into lessons across the curriculum. Additional projectors and other accessory items will need to be acquired with computers and printers to enable teachers to continue expanding the use of technology in classrooms.
- **Maintaining 100% uptime of all equipment.** The district maintains over 4000 pieces of technology equipment, and while we aim to ensure that every piece of equipment is optimally functioning every day of the year, hardware and software failures do occur. Our online RFS (Request for Service) system enables our technicians to quickly and efficiently address issues as they arise. Within many of our elementary schools an educational assistant within the building is designated to assist with “first level” technical support. This assists classroom teachers with their immediate technology needs when a computer technician is not in the building. Additionally, continuing our Evergreen computer replenishment program will ensure that technology equipment in classrooms are current and not in use beyond their expected life cycle.

ii. Often students have access to technology in their learning environment.

All students in the Cherry Hill Public Schools have access to technology from Kindergarten thru 12<sup>th</sup> grade in a variety of learning environments. In elementary schools every grade level has access to rolling laptop computer labs and in some schools where space is available there are computer labs that have at least 25 machines that are available to students and teaching staff. There is also a bank of at least five computers available in the schools media center.

Each middle school and high school has multiple rolling laptop computer labs in addition to rooms dedicated to technology, which contain equipment from high-end workstations (for CAD and other CPU intensive applications) to large scale printers.

With these resources available, students are utilizing technology in every grade level. In the elementary grades the each student will use a laptop or PC at least once a week to complete research, projects or engage in instructional programs. In the middle grades, students participate in classes that are designed to enhance the student’s technology literacy. They also participate in creating presentations, creation of websites, and web quests. In the middle schools, each student is required to participate in a “Computer Exploratory” class. This is further discussed in Section V, subsection C. In the high schools, students

continue basic computer and office application classes. Students that have an interest in technology have the option to take specific electives geared to different facets of technology.

iii. The needs of staff are evaluated.

A teacher needs assessment was developed based on the six National Educational Technology Standards for Teachers (NETS). This survey was collected electronically via zoomerang.com. 502 teachers in our district participated in this assessment. The CHPS will continue to regularly survey the needs of our staff to identify areas of strength and areas needing improvement.

**Refer to Appendix 2 for the results of the Teacher Survey.**

**Refer to Appendix 3 for the Teacher Survey used for the 2007 – 2010 Technology Plan.**

iv. The needs of students are evaluated.

A student needs assessment was developed based on the sample survey that was provided to the district from the Camden County ETTC and is based on the ISTE NETS standards for students. This survey was offered to all 8<sup>th</sup> grade students who were in technology electives as of March 2007, and was collected electronically via zoomerang.com.

Based on the responses of the 8<sup>th</sup> grade students surveyed, the following strengths were identified:

- Over 60% of students have a firm understanding on the basic use of a computer
- Over 70% of students have strong organizational skills when it comes to managing files and folders
- Over 60% of students utilize a word processing application (e.g. Microsoft Word 2003) for editing their work
- Almost 50% of students use a spreadsheet application (e.g. Microsoft Excel 2003) to manipulate data
- Over 60% of students utilize the computer to assist them with researching information on various electronic sources and the Internet
- Over 60% of students use a presentation application (e.g. Microsoft PowerPoint 2003) to create a multimedia presentation that incorporates audio, images, and video for a specific topic

Based on the responses of the 8<sup>th</sup> grade students surveyed, the following areas for improvement were identified:

- Understanding security, privacy, and acceptable use of technology within the school district
- Understanding and utilizing spreadsheet applications for core subjects such as math and science.
- Increase awareness of the using desktop publishing software (e.g. Microsoft Publisher 2003) as a tool to create electronic and paper communications such as flyers and newsletters.

The CHPS will continue to regularly survey the needs of our students to identify areas of strength and areas needing improvement.

**Refer to Appendix 4 for the Student Survey used for the 2007 – 2010 Technology Plan.**

**Refer to Appendix 5 for the results of the Student Survey.**

v. Past professional development addressed the staff and students' needs for technology integration.

In the past, CHPS has provided professional development by offering classes in basic computing skills, basic and advanced Microsoft Office, E-Boards, Chancery, and Internet research. Teachers also have the option to take additional technology courses at the Camden County ETTC.

In the elementary schools, the media specialists have been training the staff to utilize the distance learning technologies that are available in the district. Designated International Baccalaureate (IB) elementary schools in the district have incorporated the International Baccalaureate Organization (IBO) Curriculum Centre Website to enhance their professional development.

In the middle schools, a pilot program has begun to encourage communication between the parents and the school district. The staff has been trained on the web portal and the various features that are available through this service. The staff have also been given instruction on United Streaming, a service that provides multimedia presentations on various topics. There are also afternoon training sessions in the Microsoft Office Suite and basic computer use.

At the high school level technology integration professional development is provided for all newly hired staff at the beginning of the academic year as well as through departmental meetings during the course of the year. The staff also have access to the county ETTC programs.

vi. Past professional development for all administrators was provided to further the effective use of technology in the classroom or library media center.

CHPS administrators have had access to various training centers such as the Camden County ETTC to enhance their knowledge about integrating technology in the classroom and media centers. They have brought in trainers to provide instruction to staff, media specialists, and administrators. This training has been performed on an “as needed” basis.

vii. Ongoing, sustained professional development was provided in 2006-2007 for all staff to further the effective use of technology in the classroom or library media center.

Over the past year a variety of professional development classes were offered to staff to broaden their knowledge of technology resources. These classes were on topics such as E-boards, Chancery, Microsoft Excel and using smart boards.

CHPS is currently developing an in-house Professional Development Center to enhance professional development opportunities for adult learners. This center will provide instruction in basic computing, email, Microsoft Office suite, E-Boards, Chancery, and Researching on the Internet. Along with the aforementioned courses, there will also be more advanced courses made available to the staff, who will then be able to implement this knowledge into their instruction.

The district also provides support for staff members to pursue graduate studies via online resources and attending accredited colleges and universities.

viii. Ongoing, sustained professional development was provided in 2006-2007 for administrators to further support the effective use of technology in the classroom or library media center.

Administrators have access to the Camden County ETTC as well as online training tools and resources to enhance their knowledge of technology. Administrators also have access to the same resources that teaching staff have for professional development.

ix. Supports were provided for staff other than professional development.

Administrative and teaching staff have resources in addition to professional development instruction at their disposal. All technicians for CHPS have been trained to provide basic instruction and support in the Microsoft Office applications and various in-house applications that have been developed. Should a staff member need further instruction, the CHPS has a Technology Support Specialist on staff that can provide more intense or advanced training in specific software applications. District staff also has access to an Eboard of online resources for help and support.

In the elementary schools, there are educational assistants that provide first level support to the teaching and administrative staff.

In all schools, the Media Specialists provide training and resources to the staff to integrate technology into the curriculum.

x. Professional development needs and barriers related to using educational technology as part of instruction have been identified.

There is a need within the district for more training in the Microsoft Office Suite. With a stronger understanding of the applications, teaching staff will be able to provide more interactive classroom instruction using tools such as Microsoft Power Point.

One of the major barriers is the lack of newer, interactive technology available to the teaching staff. Due to the overwhelming response and adoption of SmartBoard systems by the different school districts and states, there has been a high demand for this type of equipment. Unfortunately, budgetary constraints have limited the CHPS to the amount of equipment that has been purchased. However, the district is looking for alternative funding so that each school will be able to acquire SmartBoards and other innovative resources for students.

2. Based on the answers given above, indicate the needs of the district to improve academic achievement for all students through the integration of technology.

Through surveys and other items previously noted, the following needs are evident throughout our district:

- Continue to provide a high level of technical support for hardware and software to ensure 100% equipment operation
- Acquire additional desktop computers
- Acquire additional laptop computers for use in instructional environments
- Replace obsolete or non-functioning equipment
- Acquire additional accessories for computers – IE Smartboards & LCD projectors
- Continue to provide a broad range of technology centered workshops
- Acquire additional software tools that support the district curriculum & NJ Core Curriculum Content Standards
- Upgrade internal network infrastructure and external network connectivity to support expanded network use and additional technology hardware on the district network
- Expand the amount of network storage available to students
- Expand the amount of network storage available to staff to store classroom acquired educational data, lesson plans and related multimedia exhibits

3. Prioritize the identified needs.

**Tier I Priorities**

- Replace obsolete or non-functioning equipment
- Acquire additional accessories for computers – IE Smartboards & LCD projectors
- Acquire additional laptop computers for use in instructional environments

**Tier II Priorities**

- Acquire additional desktop computers
- Continue to provide a high level of technical support for hardware and software to ensure 100% equipment operation
- Acquire additional software tools that support the district curriculum & NJ Core Curriculum Content Standards
- Continue to provide a broad range of technology centered professional workshops

**Tier III Priorities**

- Upgrade internal network infrastructure and external network connectivity to support expanded network use and additional technology hardware on the district network
- Expand the amount of network storage available to students
- Expand the amount of network storage available to staff to store classroom acquired educational data, lesson plans and related multimedia exhibits

## IV Three Year Goals and Objectives

### A History

1. List the goals from 2004 – 2007 plan.
2. Evaluate 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.
3. Describe any unexpected outcomes or benefits specifically linked to the educational technology in place.

Listed below are the goals from the 2004-2007 Technology Plan. The associated evaluation and unexpected outcomes for each goal are listed below the goal.

### Math

**Goal M1:** To enable students to acquire the mathematical skills regarding area, perimeter, volume, scale and unit conversion that will need to be successful in their careers and daily lives by June 2007.

- **Objective M1A:** Students will use Geometer's Sketch Pad to develop a strong geometry sense by:
  - Constructing two and three dimensional shapes
  - Using scale drawings
  - Converting one unit of measurement to another unit of measurement
  - Finding perimeter and area of plane figures
  - Exploring and finding volume
  - Using fractions, decimals and percents interchangeably
  - Using a ratio to compare two quantities
  - Solving proportions
  - Solving percent problems using ratios, proportions and equations
  - Find circumference and area of circles using formulas
  - Solve problems involving percents using proportions and equations
  - Compare similar figures using scale factors
  - Use ratios and indirect measurements
  - Determine perimeter and area of polygons and irregular figures
  - Develop formulas to find volume
  - Apply ratios and proportions

**Evaluation:** This objective was met and the program will continue in all 6<sup>th</sup> grade to 12<sup>th</sup> grade classrooms.

- **Objective M1B:** Students will collect, graph and analyze data using graphing programs designed specifically for students using TI-83 calculators in grades 6-12

**Evaluation:** While some data collection tools were used, the math curriculum team continues to explore newer technologies in this paradigm to expand the use of data. With the latest versions of TI Graphing calculators, TI-Navigator, Inspire, and online activities the district will be in an improved position to meet this goal.

- **Objective M1C:** Students will develop logical thinking and problem solving skills by exploring simulations and applications

**Evaluation:** This objective has been met. In secondary schools students participate in lab activities that utilize technology to develop logical thinking and problem solving skills with every unit (six times per year). The district will be phasing out this objective due to the fact that it encompasses all mathematical learning with technology. This objective will be embedded in all subsequent district goals.

## English

**Goal E1:** Student reading scores will increase as a result of educational technology and information literacy skill integrated into instructions and student work by June 2007.

- **Objective E1A:** Students will have access to a reading improvement program such as READ 180
- **Objective E1B:** Encourage students to use electronic systems to expand their repertoire of skills to build confidence as learners.
- **Objective E1C:** Provide technology for students to reflect on their own learning while monitoring their progress as it relates to reading comprehension
- **Objective E1D:** Use online resources to help students improve and promote active learning
- **Objective E1E:** Empower students to make decisions, collaborate and work in teams
- **Objective E1F:** Students will use presentation technology to communicate and collaborate with others

**Evaluation:** This goal was achieved. Secondary English teachers and media specialists collaborate to include instruction on using technology to search for information and to evaluate information effectively. Elementary media specialists collaborate with classroom teachers to ensure that information literacy standards are met. Media specialists have offered professional development to new teachers interested in learning more about using the internet with students and searching for information on the web and through subscription databases.

## District Technology

### Goal D1: Learning Opportunities

All students will have access to and use technology to enhance learning across the curriculum by June 2007.

- **Objective D1A:** Use technology tools to enhance learning, increase productivity, and promote creativity. Reference ISTE 3.1
- **Objective D1B:** Employ productivity tools to collaborate in constructing technology enhanced models, preparing publications, and producing other creative works. Reference ISTE 3.2
- **Objective D1C:** Utilize telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. Reference ISTE 4.1
- **Objective D1D:** Use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Reference ISTE 4.2
- **Objective D1E:** Apply technology tools to process data and report results. Reference ISTE 5.2
- **Objective D1F:** Demonstrate a sound understanding of the nature and operation of technological systems. Reference ISTE 1.1
- **Objective D1G:** Develop a proficiency in the use of technology. Reference ISTE 1.2
- **Objective D1H:** Understand the ethical, cultural, and societal issues related to technology. Reference ISTE 2.1
- **Objective D1I:** Practice responsible use of technology systems, information, and software. Reference ISTE 2.2
- **Objective D1J:** Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity. Reference ISTE 2.3
- **Objective D1K:** Use technology resources for solving problems and making informed decisions. Reference ISTE 6.1
- **Objective D1L:** Employ technology in the development of strategies for solving problems in the real world. Reference ISTE 6.2
- **Objective D1M:** Foster a culture of lifelong learning
- **Objective D1N:** Follow New Jersey Core Curriculum Content Standards for Technological Literacy

**Evaluation:** This goal was largely met throughout the district through the application of the Cherry Hill 1.26 – 1.31 technology standards that are implemented throughout the district.

### Goal D2: Teaching

All teachers will have access to and use technology to enhance teaching, planning, assessing, reporting, and personal professional development by June 2007.

- **Objective D2A:** Demonstrate a sound understanding of technology operations and concepts

- **Objective D2B:** Plan and design effective learning environments and experiences supported by technology
- **Objective D2C:** Implement curriculum/unit plans that include methods and strategies for applying technology to maximize student learning
- **Objective D2D:** Apply technology to facilitate a variety of effective assessment and evaluation strategies
- **Objective D2E:** Use technology to enhance productivity and professional practice
- **Objective D2F:** Understand the social, ethical, legal, and human issues surrounding the use of technology in PreK-12 schools and apply those principles
- **Objective D2G:** Make learning relevant, individualized, and personalized

**Evaluation:** Teachers throughout our district continue to infuse technology in daily classroom activities. While all teachers currently do have access to technology, continued professional development will allow our teachers to expand and infuse technology in their daily work.

### **Goal D3: School and Central Operations**

All school and central operations will use appropriate technology to enhance planning, communication, financial management, and the flow of information by June 2007.

- **Objective D3A:** Use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. Reference ISTE 4.1
- **Objective D3B:** Use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Reference ISTE 4.2
- **Objective D3C:** Use technology to locate, evaluate, and use information from a variety of sources. Reference ISTE 5.1
- **Objective D3D:** Use technology tools to process data and report results. Reference ISTE 5.2
- **Objective D3E:** Design online learning experiences that are flexible, scaleable, individualized and adaptive to divergent learning styles
- **Objective D3F:** Promote smaller learning environments
- **Objective D3G:** Harness the transformative power of information and communication
- **Objective D3H:** Enhance the variety and quality of course offerings
- **Objective D3I:** Deploy and support the technologies required to support online accessibility
- **Objective D3J:** Provide for greater instructional design and efficiency by re-directing the efforts of existing staff in support of the creation of virtual classrooms
- **Objective D3K:** Provide synchronous as well as asynchronous opportunities for students to engage in online learning opportunities.
- **Objective D3L:** Use technology to locate, evaluate, and use information from a variety of sources. Reference ISTE 5.1

- **Objective D3M:** Apply technology tools to process data and report results. Reference ISTE 5.2
- **Objective D3N:** Employ technology resources for solving problems and making informed decisions. Reference ISTE 6.1
- **Objective D3O:** Utilize technology in the development of strategies for solving problems in the real world. Reference ISTE 6.2
- **Objective D3P:** Provide for anytime/anywhere access to learning
- **Objective D3Q:** Empower users with real-time access to institutional data, school intelligence, efficiency, and accountability
- **Objective D3R:** Connect learning, services, and resources in a dynamic, collaborative web-based environment

**Evaluation:** Through the use of the district website and a variety of tools such as Chancery SMS, this goal was met. The district continues to develop and acquire tools to enhance communication and the flow of information and data among district stakeholders.

#### **Goal D4: Service and Support**

Services will be available to assist schools and central service departments in formulating and implementing plans for technology

- **Objective D4A:** Provide for resources and services to be in place in order to maintain school/district technology assets
- **Objective D4B:** Provide for an adequate number of personnel needed to provide school/district technical support
- **Objective D4C:** Provide ample opportunities for staff to meet and plan for technology initiatives and deployment
- **Objective D4D:** Provide sufficient funding to provide for sufficient service and support
- **Objective D4E:** Continue to track technology work orders and repairs
- **Objective D4F:** Provide for the ongoing evaluation of technical services and support

**Evaluation:** Currently, the district employs six full time technicians to support the technical needs of our buildings. During the 2004 school year an online system to enter support requests was created. This has streamlined our support operations resulting in faster technical support response times.

#### **Goal D5: Planning**

All schools and central service departments will plan effectively for technology integration and change

- **Objective D5A:** Implement and evaluate the district's 2004-07 technology plan
- **Objective D5B:** Develop technology policies in support of the District's technology initiatives
- **Objective D5C:** Develop a funding plan to assure the successful deployment and continued support of district technology initiatives
- **Objective D5D:** Plan for ongoing replenishment of the district's infrastructure
- **Objective D5E:** Plan for the continued integration of technology within the curriculum

- **Objective D5F:** Fund and support professional development opportunities for all district staff
- **Objective D5G:** Use evaluation data to plan for future technology initiatives
- **Objective D5H:** Involve all stakeholders including administrators, instructors, staff members, students, parents, community leaders and technology experts
- **Objective D5I:** Be broad but realistic with economical and technically feasible solutions
- **Objective D5J:** Formalize the procedures and methods for making technological decisions – setting of priorities and the purchase, evaluation, upgrading and use of technology
- **Objective D5K:** Be driven by educational goals and objectives, rather than by technological developments

**Evaluation:** This goal was met and continues through our future plans. We must continue to be driven by the educational needs of our district and constantly evaluate our current technology use when planning for future integration.

**B Goals and Objectives for 2007 – 2010**

1. List and support the goals that continue from the '04 – '07 plan.
2. Modify goals or write new goals to meet the needs identified from the assessments. Goals for '07 – '10 should support district need and align with the state plan.
3. Add to the goals the specific objectives for integrating technology to improve student academic achievement aligned with NJ Core Curriculum Content Standards (including software and other electronically delivered learning materials). Also, include a timeline for such integration and the corresponding measures (also known as indicators) that are evidence that the goals or objectives have been achieved.

Over the term of this technology plan, the CHPS will be implementing the Cherry Hill Curriculum Development & Alignment System. The Cherry Hill Curriculum Development & Alignment System will engage the district in a process by which curricula will be reviewed, designed, and developed. The components of the system will involve: a review of current programs, researching the best materials and curricula, professionally developing teachers effectively, implementing, supporting, and evaluating effectiveness. The system also incorporates an analysis of student assessment data for the purpose of informing curricula. An expectation of the process is the continued growth of students' academic achievement.

Each discipline will be treated as a whole and developed with PreK-12 articulation with one outcome being a clear and seamless scope and sequence chart for each subject area.

A curriculum committee comprised of teachers and administrators will be formed to review the current educational program in light of the latest research, best practice, and current trends. Technology should be used to enhance their work affiliated with:

- Analyzing all available assessment data to determine patterns and trends across the curriculum;
- Surveying certificated staff to help ascertain needs relevant to curriculum and professional development.

The curriculum committee will write the curriculum, clarify staff needs to be incorporated into the district professional development plan, recommend

resources, and create an assessment system to measure student achievement. When writing curriculum, technology should be used to enhance and facilitate the work associated with:

- The development of a curriculum map will include essential questions as well as the content and skills to focus on for each period of time (e.g., month, marking period). Common and suggested assessments should also be listed.

Within the map, each of the following must be addressed:

- How the needs of all learners will be met; how the curriculum can be differentiated for all learners
- How technology will be integrated into the learning opportunities for our students
- How reading, writing, and important mathematical skills (e.g. problem solving, use of logic) will be integrated across the curriculum
- How to address higher order thinking skills for all students
- Alignment to Life Skills standards to address Character Education and Information Literacy

The goals that are listed below will be evaluated and re-aligned with the new district system as it is implemented throughout the district.

### Information Literacy & Lifelong Learning Goals for 2007 - 2010

**IL Goal 1** – Students will use technology tools in grades K – 12 to improve student academic achievement.

- **Objective 1** - Students will incorporate the use of appropriate software to improve their reading level as measured by the number of students meeting Cherry Hill literacy standards
- **Objective 2** - Students in grades 3 – 8 will use the technology literacy standards as measured by the state of New Jersey. At least 75% of all eighth grade students will meet the proficient level
- **Objective 3** - Students in grades 3 – 12 will participating in problem based projects that require using technology tools and online information sources

**IL Goal 2** - All students will demonstrate ethical and legal behavior in regards to information and technology.

- **Objective 1** - Students will demonstrate their understanding of the proper use of technology by reviewing annually the district Acceptable Use Policy
- **Objective 2** - Students in grades 3-12 will exhibit adherence to copyright laws and fair use guidelines in their academic work
- **Objective 3** - Students in grades 3-8 will demonstrate an understanding of safe Internet usage

- **Objective 4** - Students will effectively communicate with diverse groups using online technologies

**Goal 3** - Students will access, evaluate and use information from a variety of reliable sources to meet academic needs and to pursue personal interests.

- **Objective 1** - Students will evaluate and select information sources based on the appropriateness of the source for a given task
- **Objective 2** - Student will collect and analyze information to make informed decisions
- **Objective 3** - Students will collaborate both in person and online with others to construct knowledge.
- **Objective 4** - Students will communicate their knowledge using a variety of technologies

**Goal 4** – Students will develop a deeper cultural understanding and global awareness by engaging with people in other cultures by using technology communication tools.

- **Objective 1** - By June 2008, students in grades 6-12 will participate in at least one online learning and video conferencing experience
- **Objective 2** - By June 2010, students in grades 3-12 will participate in at least two online learning and video conferencing experience

### **Math Goals for 2007 – 2010**

**Goal M1** - Calculators and computers are to be used along with other mathematical tools by students in both instructional and assessment activities. These tools will be used, not to replace mental math and paper-and-pencil computational skills, but to enhance understanding of mathematics and the power to use mathematics.

Students will explore both new and familiar concepts with calculators and computers and should also become proficient in using technology as it is used by adults.

- **Objective 1** - Use calculators as problem-solving tools and to gather, analyze, and communicate mathematical information
- **Objective 2** - Increase use of electronic visual learning tools in classrooms, which increases employment of visual learning modalities
- **Objective 3** - Use computer software to make and verify conjectures about geometric objects
- **Objective 4** - Use computer software to provide students with individualized instruction, ample practice, immediate feedback and coaching

## Technology Support Goals for 2007 – 2010

**Goal T1:** Ensure that administrative offices are using technology to increase efficiency

- **Objective 1:** Provide training to the staff in on the Microsoft Office suite, Chancery, Keystone, and other business-specific applications
- **Objective 2:** Maintain equipment to 100% operability to prevent lapse in use

**Goal T2:** Ensure that the teaching staff is utilizing the software and hardware tools available to them for both administrative work and instructional use.

- **Objective 1:** Provide at least one PC per classroom at each building for the teaching staff to use for administrative use (email, attendance, grading, lesson planning)
- **Objective 2:** Maintain equipment to 100% operability to prevent lapse in equipment use

**Goal T3:** Ensure that both teachers and students have access to equipment to be used for research and instruction.

- **Objective 1:** Maintain equipment to 100% operability to prevent lapse in use
- **Objective 2:** Expand the use of laptop carts within buildings
- **Objective 3:** Increase the amount of technology equipment in common areas such as Media Centers and “drop-in” computer labs

**Goal T4:** Provide additional professional development for the teaching and administrative staff.

- **Objective 1:** Survey staff on a yearly basis to establish training needs in common applications such as Microsoft Office suite and Chancery
- **Objective 2:** Provide targeted workshops and seminars based on needs identified from staff surveys
- **Objective 3:** Provide “one-on-one” tutoring to staff members that have either requested support and training, and/or have been identified as a member that is having difficulty with technology
- **Objective 4:** Provide training on classroom equipment such as Laptop Carts, SmartBoards and LCD projectors
- **Objective 5:** Work in conjunction with Child Study Teams to provide training to staff on the understanding and use of Assistive Technology in the classroom

**Goal T5:** Ensure that staff members are infusing technology into daily classroom activities and instruction.

- **Objective 1:** Work with the Director of Curriculum and content area supervisors to verify or include the vertical articulation of technology into the curriculum

- **Objective 2:** Provide online resources for staff members to use for research and instruction for implementing technology into the classroom

**Goal T6:** Continue to provide the highest standard of support to administrative and teaching staff.

- **Objective 1:** Provide training in both hardware and software for field technicians
- **Objective 2:** Maintain equipment to 100% operability to prevent a lapse of use by staff
- **Objective 3:** Train staff to prioritize service requests
- **Objective 4:** Develop a plan to cross train staff so that in the event of a prolonged absence in a particular position, the department will be able to handle the additional workload

**Goal T7:** Continue to develop and streamline the CHPS Intranet.

- **Objective 1:** Continue growth and innovation to the existing web services that are provided
- **Objective 2:** Develop new web services that will help various departments to run more efficiently
- **Objective 3:** Create effective communication tools for both administrative staff and teaching staff to foster growth of technology in education via web message boards and online weblogs

**Goal T8:** Continue to develop and streamline the CHPS Internet site

- **Objective 1:** Develop and maintain a communication tool that would provide relevant information to parents about their student's progress and school progress
- **Objective 2:** Continue to grow the communications model that is used by the district to send communications to parents and interested parties of the school district
- **Objective 3:** Develop a plan to move to a content management system to streamline and standardize the 19 different websites for individual schools

**Goal T9:** Continue to standardize hardware and software throughout the district

- **Objective 1:** Develop a workflow for the approval of software that will be compatible with existing and future equipment
- **Objective 2:** Continue to work with vendors to provide a standard in brands for computers, printers, projectors and peripherals
- **Objective 3:** Identify new needs for the district in regards to instructional technology and develop a test plan to implement the new technology
- **Objective 4:** Consolidate, where possible, infrastructure and implement newer technology
- **Objective 5:** Research alternative funding for technology through county, state, federal, and private business grants

**V Three Year Implementation Activity Tables (July 2007 – June 2010)**

**A Implementation strategies for goals and objectives**

*Describe the implementation strategies/activities that relate to the goals and objectives. Include in the description, the timeline, person responsible and documentation (or evidence) that will prove the activity occurred.*

| <b>Three-Year Technology Implementation Activity Table</b> |   |                 |  |  |
|--|---|-----------------|--|--|
| <b>District Goal and Objective</b>                         | <b>Strategy/Activity</b>  | <b>Timeline</b> | <b>Person Responsible</b>  | <b>Documentation</b>   |
| <b>IL Goal 1 Objective 1</b>                               | Students will use software tools such as Read180 and Accelerated Reader to assist them in meeting this goal   | 2007-2010       | Teaching Staff   | District assessment data on students meeting literacy standards              |
| <b>IL Goal 1 Objective 2</b>                               | Lessons & classes taught to students on technology and software applications that align with Cherry Hill and NJ state standards<br><br>Development of student electronic portfolios | 2007-2010       | Teaching Staff   | 8 <sup>th</sup> Grade Student Portfolios                                     |
| <b>IL Goal 1 Objective 3</b>                               | Ensure unit planning involves appropriate information use and technology infusion   | 2007-2010       | Teaching Staff   | Student Portfolios   |
| <b>IL Goal 2 Objective 1</b>                               | Review District AUP   | 2007-2010       | Building Principals  | Signed copies of AUP kept each year  |
| <b>IL Goal 2 Objective 2</b>                               | Teaching staff will review student portfolios and review presentations to ensure that plagiarism has not occurred   | 2007-2010       | All Teaching Staff   | Observation of student work and presentations                                |
| <b>IL Goal 2 Objective 3</b>                               | Presentations by Cherry Hill Police Department to students and parents<br><br>This topic is covered by classroom staff and special area technology teachers                         | 2007-2010       | All Teaching Staff<br>District Student Assistance Counselor<br>Guidance Counselors | Presentations given to students & parents<br><br>Student reflective writings |
| <b>IL Goal 2 Objective 4</b>                               | Teachers will incorporate communications with diverse groups in normal classroom activities   | 2007-2010       | Teaching Staff<br>Library Media Specialists  | Student reflective writings  |
| <b>IL Goal 3 Objective 1 thru 4</b>                        | Ensure unit planning involves appropriate information use and technology infusion   | 2007-2010       | Teaching Staff<br>Library Media Specialists  | Student Portfolios   |

Cherry Hill Public Schools  
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| <b>Three-Year Technology Implementation Activity Table</b> |  |                 |   |   |
|--|--|-----------------|---|---|
| <b>District Goal and Objective</b>                         | <b>Strategy/Activity</b>   | <b>Timeline</b> | <b>Person Responsible</b>                       | <b>Documentation</b>                                    |
|  | Review student work for inclusion of appropriate sources<br><br>Encourage students to use technology when giving presentations and presenting work   |                 |   |   |
| <b>Goal IL 4 Objectives 1 &amp; 2</b>                      | Ensure that online learning & video conferencing tools are available to all buildings<br><br>Ensure that staff members are trained in the use of these tools   | 2007-2010       | Teaching Staff<br><br>Library Media Specialists | Teacher Unit Plans<br><br>Student Reflective Writings   |
| <b>Goal M1 Objective 1</b>                                 | Collect, graph and analyze data using graphing programs designed specifically for students using TI calculators in grades 6-12<br><br>Use computer spreadsheets, software, and graphing utilities to organize and display quantitative information<br><br>Use graphing calculators and computer software to investigate properties of functions and their graphs | 2007-2010       | Math Supervisors<br>Teachers                    | Unit Assessments<br>Unit Labs<br>Classroom Observations |
| <b>Goal M1 Objective 2</b>                                 | Install SMARTboards in classrooms and provide educational software to increase student understanding of mathematical phenomena via a visual learning modality  | 2007-2010       | Math Supervisors<br>Teachers                    | Classroom Observations<br>SMART-Lesson Plans            |
| <b>Goal M1 Objective 3</b>                                 | Provide teachers with Geometers Sketchpad software and incorporate into SMART lesson plans   | 2007-2010       | Math Supervisors<br>Teachers                    | Classroom Observations<br>SMART-Lesson Plans            |
| <b>Goal M1 Objective 4</b>                                 | Provide students with instantaneous feedback of their mathematical learning via Cognitive Tutor. This concept provides all students with the skills and knowledge in a differentiated environment  | 2007-2010       | Math Supervisors<br>Teachers                    | Data from Carnegie Learning                             |
| <b>Goal T1 Objective 1</b>                                 | Provide after-school work seminars and one-on-one training, when needed, to administrative staff on business specific applications   | 2007-2010       | Technology Department                           | Enrollment forms for seminars                           |
| <b>Goal T1 Objective 2</b>                                 | Utilize RFS application to monitor and address user needs as they arise  | 2007-2010       | Technology Department                           | RFS System  |
| <b>Goal T2 Objective 1</b>                                 | Ensure that the maximum amount of equipment is purchased each year and configured for classroom use  | 2007-2010       | Technology Department                           | Budget  |

| <b>Three-Year Technology Implementation Activity Table</b> |  |                 |   |   |
|--|--|-----------------|---|---|
| <b>District Goal and Objective</b>                         | <b>Strategy/Activity</b>   | <b>Timeline</b> | <b>Person Responsible</b>   | <b>Documentation</b>                              |
| <b>Goal T2 Objective 2</b>                                 | REFER TO GOAL T1 OBJECTIVE 2   | 2007-2010       | REFER TO GOAL T1 OBJECTIVE 2  | REFER TO GOAL T1 OBJECTIVE 2                      |
| <b>Goal T3 Objective 1</b>                                 | REFER TO GOAL T1 OBJECTIVE 2   | 2007-2010       | REFER TO GOAL T1 OBJECTIVE 2  | REFER TO GOAL T1 OBJECTIVE 2                      |
| <b>Goal T3 Objective 2 &amp; 3</b>                         | REFER TO GOAL T2 OBJECTIVE 1   | 2007-2010       | REFER TO GOAL T2 OBJECTIVE 1  | REFER TO GOAL T2 OBJECTIVE 1                      |
| <b>Goal T4 Objectives 1 thru 5</b>                         | Work with the Professional Development team to create classes and workshops for Curriculum Days and/or Professional Development seminars           | 2007-2010       | Technology Department Professional Development Team                   | Workshop sign-ups<br>End of year surveys of staff |
| <b>Goal T5 Objective 1</b>                                 | Work with the Director of Curriculum and Content Area supervisors to verify or include the vertical articulation of technology into the curriculum | 2007-2010       | Director of Curriculum Content Area Supervisors Technology Department | Curriculum Roadmap                                |
| <b>Goal T5 Objective 2</b>                                 | Create a resource page and interactive content management page to list different resources for research and instruction                            | 2007-2010       | Director of Curriculum Content Area Supervisors Technology Department | Intranet – Staff Dashboard                        |
| <b>Goal T6 thru Goal T9</b>                                | Please refer to the objectives listed in the goals for specific strategies   | 2007-2010       | Technology Department   | CHPS Website, RFS system, Equipment purchased     |

**B Strategies to ensure use of technology**

*Develop strategies to ensure that the technology plan addresses the use of technology, including assistive technology, to support the learning communities.*

- Meet regularly with technology stakeholders throughout the district to gather requirements and to ensure that technology implementation and usage is consistent. Have a cross section of the district including teachers, administrators and central office staff represented on this committee will ensure that all aspects of district technology are being evaluated.

- Implement a strategy that will ensure that technology is replaced on a regular basis and meets the needs of both staff and students. This strategy will allow staff to integrate the latest technology, both software and hardware, into the curriculum and allow students to develop life-long skills.
- Provide continuous professional development to the staff by offering classes in-house and suggesting courses offered outside of the district at the Camden County ETTC, EIRC or [www.newhorizons.com](http://www.newhorizons.com) . This will assure the district that teaching staff are on the cutting edge of technology.
- Develop a plan to grow the existing infrastructure to allow for the continuing growth of the district. Identify potential problems with the current infrastructure and create an action plan to address the potential problems.

The following are suggestions from the CHPS Child Study Team on how to integrate assistive technology into learning communities.

- Increase the percentage of hardware purchased to be included or installed in special education classrooms.
- Incorporate “roaming profiles” for students that need access to specific data for assistive technology. This will give the district the ability, as long as the software license allows it, to install assistive technology software on all machines, allowing students to gain access to resources from any classroom in the district.
- Provide In-Service and Turn-Key trainings to staff to introduce assistive technology, both hardware and software. Provide clear support documentation on how this technology can be integrated with curriculum for special needs students.

### **C 8<sup>th</sup> Grade technology literate NCLB requirement process**

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

Elementary schools begin Information Literacy training for students primarily through regular classroom instruction. In addition to the joint training provided and regular classroom instruction, librarians instruct students on the use of appropriate search engines. Students receive explicit instruction in the use of Microsoft Office applications. They are expected to demonstrate their knowledge with power point presentations, data charts, and documents. Some fifth grade classes require that students conduct research and prepare a presentation that uses these tools. One school had students demonstrate their technological literacy through the creation of digital portfolios.

Listed below are examples of activities that are conducted at the elementary level to demonstrate student progress toward meeting NCLB requirements in technology literacy that are product and performance based:

- Math and Reading software grades K -5
- Keyboarding starting in 1<sup>st</sup> grade
- Microsoft word in grades 2 – 5
- Power point in grades 3 -5
- Student led conferences / digital portfolios – Grades 4 -5
- Classroom instruction – K-5 and in special areas
- Educational assistant technical support for grades K-5, teachers and parents

Although many schools participate in the activities listed above to level up students' technology skills, it should be noted that currently there is no vertical articulation or alignment in how the technology curriculum is taught.

At Rosa International Middle School, students take an exploratory program which runs on a continuous 10 day cycle in which all students in the school receive instruction in each of their exploratory classes. At Beck & Carusi Middle Schools, a 5 week exploratory technology course is taught to all students. Below are narratives of each school's exploratory classes.

*Rosa International Middle School:*

A sampling of learning opportunities provide a context in which technology is used so that students at Rosa International Middle School can demonstrate their ability to meet two sets of standards as described in Standards 8.1 and 8.2 of the New Jersey Core Curriculum Content Technology Standards. Students currently use technology as a tool to enhance learning in other disciplines. In this way, both the content-area standards and the *NETS* for Students are addressed within the context of the same learning opportunity.

Students at Rosa maintain an electronic portfolio for all work created via electronic media (computer, digital camera, video camera, etc.) This portfolio includes samples of student's work, as well as rubric scored assessments and reflections for technology.

Students in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades use computers for many aspects of their school work, including but not limited to: research, presenting information, organizing and analyzing data, and the creation of original work. Students in 8<sup>th</sup> grade hone their technology skills with advanced picture editing, creating animated movies and web design/development.

Students are assessed, not only through rubric scored assessments, but also through web-based tests, performance based assessments and knowledge based assessments.

*Beck & Carusi Middle Schools:*

The computer curriculum is designed to prepare students to use computers as a tool to develop skills, which include word processing, storing and retrieving information, developing communication skills, analyzing data, and presenting data. The course of study will be conducted through demonstration and hands – on activities at the computer.

This is accomplished by the following defined skills:

- The components of a computer system
- Computer operation
- Computer ethics
- Touch keyboarding skills
- Store and retrieve data
- Production of useful information using computer applications programs
- The role of the computer as a tool

Across all grade levels students utilize keyboarding applications to increase their knowledge and skill of keyboarding. From here, content and skills are segmented to different grade levels. In 6<sup>th</sup> grade students learn about the components of a computer system, computer ethics, emphasis on Microsoft Word and introduction to Excel, PowerPoint, and the Internet. In 7<sup>th</sup> grade, students reinforce their knowledge of parts of a computer, computer ethics, and begin expanding their knowledge in the Microsoft Office suite. In 8<sup>th</sup> grade, students review and hone their knowledge of the Microsoft Office suite. Students also begin exploring different applications that provide higher level functionality such as photo-editing software.

|   |
|---|
| <b>D Specific technologies to meet NCLB Goals</b> |
|---|

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

Throughout the goals and objectives is an underlying need for current technology. Every year the district purchases new workstations and laptops to fill this need. The district also maintains current licensing for the Microsoft Office suite, along with licensing for other specific pieces of software that help achieve the goals stated above.

Other technical equipment currently in place, such as video conferencing equipment, is available to achieve the goals stated above. The district not only has dedicated Video Conferencing equipment, but the district is also utilizing web-cams and other peripherals that attach to a PC to enable students and staff to perform video conferencing activities. The district also utilizes online, subscription based services such as United Streaming, to enhance instruction in the classroom.

## **VI Funding Plan – July 2007 to June 2008**

### **A Budget Requirements 2007-2010**

*Provide the anticipated costs for 2007-2008 and then indicate the projected funding for 2008-2010 of the technologies to be acquired and expenses such as hardware/software, digital curricula including NIMAS compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan, including specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.*

**The anticipated budget for fiscal year 2007 – 2008 is listed on the next page.**

Cherry Hill Public Schools  
2007-2010 Technology Plan

| <b>Approved Budget for 2007 - 2008</b>        |   |
|---|---|
| <b>Lease Purchase (Multinstr) Tech</b>        |   |
| Evergreen I Lease                             | \$ 604,500.00                           |
| Evergreen II Lease                            | \$ 267,100.00                           |
| Evergreen 2007-2008                           | \$ 263,000.00                           |
| Chancery Final Lease Payment                  | \$ 42,000.00                            |
| <b>Total:</b>                                 | <b>\$ 1,176,600.00</b>                  |
| <b>Telephone Voice (GenSupport)</b>           |   |
| Communication Devices                         | \$ 5,500.00                             |
| E-Boards                                      | \$ 14,000.00                            |
| <b>Total:</b>                                 | <b>\$ 19,500.00</b>                     |
| <b>Technology Supplies</b>                    |   |
| Email Archive Hardware                        | \$ 13,000.00                            |
| Email Archive Software                        | \$ 20,000.00                            |
| Parts and Supplies                            | \$ 5,000.00                             |
| Unmanaged Switches                            | \$ 2,000.00                             |
| <b>Total:</b>                                 | <b>\$ 40,000.00</b>                     |
| <b>Purchase Tech Service (Technology)</b>     |   |
| Fiber charges - Internal / External links     | \$ 231,000.00                           |
| Camnet Membership                             | \$ 500.00                               |
| Chancery Annual Renewal                       | \$ 58,000.00                            |
| Cyber Patrol - Surf Control                   | \$ 35,000.00                            |
| Symantec Antivirus                            | \$ 23,000.00                            |
| Microsoft School Agreement                    | \$ 144,312.00                           |
| Keystone - Annual Renewal                     | \$ 20,803.00                            |
| Keystone - Fusion Licenses                    | \$ 3,500.00                             |
| Keystone - IBM                                | \$ 6,912.00                             |
| Keystone - OMPlus                             | \$ 1,245.00                             |
| ETTC Bridge                                   | \$ 500.00                               |
| GSDLC Annual Fee                              | \$ 175.00                               |
| Microsoft Support                             | \$ 1,225.00                             |
| Warranty - Compaq Servers                     | \$ 15,000.00                            |
| Warranty - Cisco Switches                     | \$ 15,000.00                            |
| <b>Total:</b>                                 | <b>\$ 556,172.00</b>                    |
| <b>Travel (Technology) InState</b>            | <b>\$ 3,000.00</b>                      |
| <b>Total for Technology Department</b>        | <b>\$ 1,795,272.00</b>                  |
| <b>Technology in Other Department Budgets</b> |   |
| United Streaming                              | \$ 5,000.00                             |
| Miscellaneous Software                        | \$ 5,000.00                             |
| Child Study Software*                         | \$ 15,000.00                            |
| <b>Total:</b>                                 | <b>\$ 25,000.00</b>                     |
| <b>Salary Other Prof (Technology)</b>         |   |
| Technology Staff (district budget)            | 8 FTE                                   |
| Technology Staff (school budgets)             | 3 FTE                                   |
| <b>Total</b>                                  | <b>11 FTE</b>                           |
| <b>Grand Total</b>                            | <b>\$ 1,820,272.00</b><br><b>11 FTE</b> |

Cherry Hill Public Schools  
2007-2010 Technology Plan

**Below is a projected budget for Fiscal Year 2008 – 2009**

| <b>Projected Budget for 2008 - 2009</b>   |                     |
|---|---------------------|
| <b>Lease Purchase (Multinstr) Tech</b>    | <b>\$ 804,000</b>   |
|   |                     |
| <b>Telephone Voice (GenSupport)</b>       | <b>\$ 22,000</b>    |
|   |                     |
| <b>Technology Supplies</b>                | <b>\$ 25,000</b>    |
|   |                     |
| <b>Purchase Tech Service (Technology)</b> | <b>\$ 587,000</b>   |
|   |                     |
| <b>Travel (Technology) InState</b>        | <b>\$ 3,000</b>     |
|   |                     |
| <b>Other Technology Purchases</b>         | <b>\$ 27,000</b>    |
|   |                     |
| <b>Projected 2008-2009 Grand Total</b>    | <b>\$ 1,468,000</b> |
|   |                     |
| <b>Technology Personnel</b>               | <b>11 FTE</b>       |

Cherry Hill Public Schools  
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**Below is a projected budget for Fiscal Year 2009 – 2010**

| <b>Projected Budget for 2009 - 2010</b>   |                     |
|---|---------------------|
| <b>Lease Purchase (Multinstr) Tech</b>    | <b>\$ 1,009,000</b> |
|   |                     |
| <b>Telephone Voice (GenSupport)</b>       | <b>\$ 22,000</b>    |
|   |                     |
| <b>Technology Supplies</b>                | <b>\$ 30,000</b>    |
|   |                     |
| <b>Purchase Tech Service (Technology)</b> | <b>\$ 597,000</b>   |
|   |                     |
| <b>Travel (Technology) InState</b>        | <b>\$ 3,000</b>     |
|   |                     |
| <b>Other Technology Purchases</b>         | <b>\$ 28,000</b>    |
|   |                     |
| <b>Projected 2008-2009 Grand Total</b>    | <b>\$ 1,689,000</b> |
|   |                     |
| <b>Technology Personnel</b>               | <b>11 FTE</b>       |

## **B Sources of Funding**

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

Throughout the school year, the CHPS technology department is constantly in search of additional grants & other programs to provide alternate sources of funding for technology programs. The majority of funding for Cherry Hill School District is provided through a combination of State and Local funds.

The district applies for E-RATE funds every year for all telecommunications services. For year 2006 – 2007, the district was awarded \$183,957.22 in E-RATE funds.

There is currently one grant available for Cherry Hill's use. It is a NCLB Title IId EZ-Tech Grant. This grant is used to purchase additional technology services and to provide professional development for our staff.

Additionally, Title I funds are used to support technology initiatives at designated Title I schools.

## **C Letter of Board Approval**

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

**Please refer to Appendix 6 for letter of board approval.**

**Please refer to Appendix 7 for 2007-2008 approved budget**

## **VII Professional Development**

### **A Provide the name and title of the person responsible for coordinating the professional development activities noted in this plan.**

The following are responsible for coordinating the professional development activities:

- Dr. Maureen Reusche, Assistant Superintendent of Curriculum, Instruction, Assessment & Professional Development
- Dr. Lisa Mulhall, K–12 Language Arts Supervisor
- Tony Trongone, K–12 Math Supervisor

### **B Describe the planned professional development activities for teachers, administrators, and school library media personnel that include:**

1. How teachers and library media personnel have access to educational technology in their instructional areas (such as using desktops, mobile laptop and wireless units, PDAs).

All staff members and media specialists have access to at least one computer in their classroom that can be utilized for instruction. Each building has at least three rolling computer labs. Both high schools have at least three SMARTBoards, each mounted in math and science classrooms. In addition to the equipment, a variety of online subscription databases and information resources such as United Streaming are available for classroom use.

2. How administrators have access to technology in their workplace (such as using desktops, mobile laptop and wireless units, PDAs).

All administrators have access to either a desktop or laptop computer in their workplace. Each administrator also has access to his / her network account at any building throughout the district to access network resources outside of their normal workplace. Further, administrators who are members of the Cherry Hill Association of School Administrators (CHASA) have access to a special fund that allows them to purchase technology for their use inside and outside of the district. More often than not, these monies are used to purchase laptops and PDAs to be used with existing infrastructure. The technology department consults with administrative staff on their technology needs to ensure that newly

acquired devices such as a Blackberry or other PDAs will be able to integrate with the districts existing resources and services.

3. How ongoing, sustained professional development for all administrators will be provided to further the effective use of technology in the classroom or library media center.

Throughout the school year professional development opportunities for administrators are available through many avenues, including district staff led workshops and one-on-one consultative training. Additionally the Camden County ETTC and NJ EIRC are local resources that are available to administrators to further their knowledge on the effective use of technology.

Specific training on equipment, such as the SMARTBoards, are handled by the K-12 Math Supervisor. He conducts professional development workshops for administrators in SMART technology and Cognitive Tutor.

4. How ongoing, sustained professional development for all staff will be provided to further the effective use of technology in the classroom or library media center.

Through the district's professional development website, a variety of professional development opportunities outside of the normal school day are advertised to staff. Throughout the school year teachers also are offered and participate in technology specific professional development as part of their required in-service days. In the past year in-services have been provided to staff on topics such as setting up and using e-boards, and using Chancery SMS, the districts student information system.

In addition all new teachers in the district are required to participate in 40 hours of professional development. Many classes focusing on technology are offered to staff to fulfill their first year requirement.

A variety of professional development activities will be provided by the schools' Library Media Specialist. Trainings have included the use of online subscription databases and the development of project based units that incorporate information and technology literacy.

The following math curriculum-specific trainings will be provided to district teaching staff:

- All secondary staff involved with mathematical instruction will receive professional development in the use of Graphing Calculators – both handheld and with the TI-navigator

- All teachers will receive professional development in the use of SMART Technology in the classroom - via K-12 Math Supervisor, Math Coaches and MS Math Colleague Teacher.
- All secondary staff involved with mathematical instruction will receive professional development in the use of Geometers Sketchpad.
- All secondary staff involved with mathematical instruction will receive professional development in the use of Cognitive Tutor for at-risk students

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

The majority of professional development is gained through hands-on work with instruction from management and via training acquired personally by staff members. When district funding is available, additional online and in person training is attended by district technical staff. Currently, the CHPS technical team attends workshops and seminars when offered by district technical partners. A library of technical resources is available to technical staff members for additional training. The district technical staff also works as a team to share their knowledge with the other staff members on a variety of topics.

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

The professional development for assistive technology is handled by the Child Study Team for CHPS. The instruction is provided by one of the following methods:

- After school workshops
- Professional development day workshops
- Small group training via a Child Study team member.
- One-on-One instructional training from a Child Study team member.
- Group instruction with contractors for specific assistive technology.

**C Ongoing Professional Development 2007-2008**

*Based on educators' proficiency and the identified needs for professional development, describe only the ongoing, sustained, high-quality professional development opportunities planned for 2007-2008 as it relates to the infusion of technology into the curricular process. Include a description of in-class support such as coaching that is used to ensure effective use of technology to improve learning. Also, include a description of the involvement of all partners associated with professional development for the district.*

| 2007-2008 Planned Professional Development              | Support Needed   |
|---|--|
| <b>Classroom Software Training – IE Cognitive Tutor</b> |  |
| Math Software Training                                  | <ul style="list-style-type: none"> <li>▪ District math coaches are available at schools for in class support, teacher collaborative time and staff meetings</li> </ul>   |
| Cognitive Tutor Training                                | <ul style="list-style-type: none"> <li>▪ On-site training provided by a Carnegie Learning trainer in Algebra I, Geometry, Algebra II</li> <li>▪ Online “WebEx” style trainings available to staff for Math Prep</li> </ul>   |
| E-Board Training  | <ul style="list-style-type: none"> <li>▪ Voluntary after schools workshops offered throughout the year</li> <li>▪ Training as part of new teacher orientation</li> <li>▪ Trained in-building resource to answer questions</li> <li>▪ Example/Model Eboards setup from administration and colleague teachers stocked with resources for use by staff</li> </ul> |
| Read 180  | <ul style="list-style-type: none"> <li>▪ On-site training provided by a Scholastic trainer on using Read 180</li> </ul>  |
| <b>Microsoft Office Application Training</b>            |  |
| Overview of Microsoft Office                            | <ul style="list-style-type: none"> <li>▪ Voluntary after schools workshops offered throughout the year</li> <li>• The technology Eboard contains resources on the Microsoft Office Suite, and will contain examples from these lessons for reference</li> </ul>  |
| Microsoft Excel for Teachers                            | <ul style="list-style-type: none"> <li>▪ Voluntary after schools workshops offered throughout the year</li> </ul>  |

Cherry Hill Public Schools  
2007-2010 Technology Plan

| 2007-2008 Planned Professional Development                   | Support Needed   |
|--|--|
|  | <ul style="list-style-type: none"> <li>▪ The technology Eboard contains resources on Excel, and will contain examples from these lessons for reference</li> <li>▪ Examples of grade books using excel will also be posted on the technology Eboard</li> </ul>  |
| <b>Basic Computer Use</b>                                    |  |
| Computing 101 – Basic computer use and troubleshooting       | <ul style="list-style-type: none"> <li>▪ Voluntary after schools workshops offered throughout the year</li> <li>▪ Included in this workshop would be a basic introduction of using technology such as laptops and overhead projectors in a classroom</li> <li>▪ Build a troubleshooting “checklist” that is discussed in this course. Make it available to staff to use first before entering a service request</li> <li>▪ Technology Ed assistants are available to assist with in-class problems</li> <li>▪ Computer technicians &amp; technology staff available for Q&amp;As at scheduled times to answer district technology related questions</li> </ul> |
| <b>Specific Classroom Hardware Training - IE SMARTboards</b> |  |
| SmartBoard Training  | <ul style="list-style-type: none"> <li>▪ After school training from In-House staff on use of SmartBoard</li> <li>▪ Faculty/Department meeting demonstrations &amp; model lessons</li> </ul>  |
| Graphing Calculator Training                                 | <ul style="list-style-type: none"> <li>▪ CBL, CBR &amp; TI-Navigator training for use in science classes as well as math.</li> </ul>   |

In many cases in-district staff are utilized to train on a variety of topics. When district funding allows, professional development partners are utilized to send staff to workshops or to bring experts into the district either in person or via web-conferencing. The following professional development partners and resources are just a few resources that are available to our staff.

### **Vendor Partners**

- Read 180 - Scholastic Software - <http://www.scholastic.com/>
- SmartBoard – Smart Technologies - <http://smarttech.com/>
- Carnegie Learning - <http://www.carnegielearning.com/>

### **Professional Development Partners**

- Camden County ETTC - <http://www.ccts-ettc.org/>
- NJ EIRC - <http://www.eirc.org/>
- CP of New Jersey – <http://www.cpodnj.com/>
- Technology for Education - <http://www.tfeinc.com/>

|  |
|--|
| <b>D Identify the financial and time resources to keep staff current in learning about new technologies.</b> |
|--|

Many resources throughout the district are available to keep our staff updated on technology. Some of these resources include:

- Time allocated at in-service trainings with a technology topic
- A portion of district funds budgeted for professional development are used to provide technology training.
- A professional learning community, as part of the district curriculum management cycle, will have in-house topic experts on technology who will share their knowledge with other members of the learning community.
- Through the district's Evergreen technology replacement program, the technology needs of the district are evaluated on an annual basis. With the constant evolution of technology form factors, the Evergreen program allows us to bring educationally proven new technologies into our schools. With these new technologies, professional development is always required to acquaint our staff with the new pieces of equipment.

In addition the Cherry Hill Public schools are continuously seeking grant money for the implementation of innovative educational ideas targeted to technology. Professional development will be required to implement any new grant funded initiative.

**E Project professional development activities that will continue to support identified needs through 2010, including all partners.**

The Cherry Hill Public Schools envision the use of technology increasing within our classrooms and offices over the next three years of this plan. As Microsoft and other software vendors revise and upgrade their software, a variety of workshops on the new features of this software will need to be offered. (IE- using the Office 2007 “Ribbon” toolbar) Office staff members will continue to be trained on expanding their use of technology to increase efficiency. All teaching staff members throughout the district will need to participate in a variety of technical and instructional workshops to assist them with integrating new and expanded technology and curricular initiatives into their classrooms.

## VIII Evaluation Plan

*Describe the process and accountability measures that are used to regularly evaluate the extent to which goals, objectives, activities, resources and services are effective in:*

1. Integrating technology into curricula and instruction
2. Enabling students to meet challenging state academic standards, developing life-long learning skills

Over the term of this plan, the district will constantly evaluate the items that are addressed in this plan to ensure continuous improvement in both the educational program offered to students and the business efficiency of our district. To evaluate the programs identified in this plan, a multi-tiered approach will be taken to ensure that:

1. The opinions and needs of all district stakeholders are consulted to ensure improvement of programs and services.
2. The curricular needs of the district are the primary force driving technology acquisitions and services.
3. Sufficient resources are allocated to provide the technology services prescribed by district curriculum and state standards.
4. Data regarding outcomes of programs addressed in this plan, such as NCLB 8<sup>th</sup> grade technological literacy, is collected and analyzed.

To ensure that the district is effective in *integrating technology into curricula and instruction*, the district will, over the course of this plan:

- Implement a Curriculum Development & Alignment System. The components of the system will involve: a review of current programs, researching the best materials and curricula, professionally developing teachers effectively, implementing, supporting, and evaluating effectiveness. The system also incorporates an analysis of student assessment data for the purpose of informing curricula.
- Develop curriculum maps which will include essential questions as well as the content and skills to focus on for each period of time (e.g., month, marking period). A key component addressed in each curricular map is how technology will be integrated into the learning opportunities for our students.
- Survey staff to ensure that they are comfortable with the technology that is available to them, and that the necessary training and support is provided.

To ensure that the district is effective in *enabling students to meet challenging state academic standards and developing life-long learning skills*, the district will:

- Integrate technology into classroom activities from Kindergarten thru 12<sup>th</sup> grade
- Expose students to a variety of technology tools and equipment such as laptops and video conferencing throughout their time in our district
- Ensure that students are developing technology skills such as using online resources to locate information and using technology to communicate with others
- Teach and model the safe, legal and ethical use of technology
- Acquire and implement technologies to complement and assist the work of our teaching staff in meeting the needs of challenging district and state academic standards

Three primary groups will evaluate the district technology plan:

**1) The District Technology Planning Committee.**

The District Technology Plan for 2007 – 2010 provides the district a vehicle to identify the technology and curriculum needs of students and staff. To ensure the accomplishment of the plan's goals, and to ensure accountability, the district will create a *Technology Planning Committee*. This committee will be comprised of the technology stakeholders throughout the district, including assistant superintendents, core content supervisors, media specialists, child study personnel, classroom teachers from each school level, and community members. Technology Department staff will chair this committee.

The primary responsibilities of this committee will be to:

- Analyze the current status of technology in the district and ensure that both the administrative and teaching staff have adequate access to technology.
- Ensure the incorporation of the most current technology and assistive teaching devices, such as SMARTBoards, into curriculum.
- Evaluate the needs of teaching staff and provide recommendations on how to integrate technology into current and future lessons.
- Ensure the district is providing sufficient training on technology.
- Review new technology initiatives.
- Review students' "Online Portfolio" to identify the current strengths of the inclusion of technology into the curriculum. Provide recommendations for any identified needs of the integration of technology into the classroom instruction.
- Review, on a bi-yearly basis, the effectiveness of the district technology plan and adjust the plan accordingly.

## **2) The District Curriculum Steering Committee**

On a semi-annual basis, the curriculum stakeholders within the district will meet with the technology department to:

- Evaluate the integration of technology into classrooms by teaching staff and identify areas for improvement.
- Review the technical needs of the district Curriculum Management system and ensure that new needs are being met.
- Review state technology curriculum standards and their implementation throughout the district.
- Review current technology hardware that is available to support the curricular needs of the district.
- Review current software technologies that are available to support the curricular needs of the district.
- Evaluate the professional development needs of our staff and ensure that areas of improvement in technology are being addressed.
- Gather and evaluate data regarding student use of technology to ensure that the district is meeting the technology needs of our students.

## **3) The District Technology Department**

This review will ensure that the technical needs of the district are being met.

Items that will be evaluated in this review are:

- Internal network and external internet usage and barriers.
- Technical support response times.
- Analysis of technical support tickets by staff to identify trends.
- Analysis of network equipment to identify improvements that can be made.
- Identifying and prioritizing technology budgetary requirements.

### **Evaluation Summary**

Technology is constantly evolving. In the course of three years, changes in technology hardware, software and applications will require the district to continuously evaluate and improve the programs that are offered to our students. Outside of our schools, our students are constantly exposed to a variety of technologies; therefore, the educational programs and technology equipment within our district must be adapted to reflect their comfort with technology and the expectation that technology will be available to enhance learning. Additionally, technology will continue to be a tool to improve the efficiency of our district operations, and to ensure that we are effectively communicating with our community using the multitude of communication media that are available today and in the future. Just as technology equipment will change, the contents of this plan must be reviewed and updated regularly to ensure that technology is not only acquired, but infused in the every day operations of our district.



Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 1

Acceptable Use Policy

# **BOARD OF EDUCATION**

Cherry Hill, New Jersey

**POLICY 6142.12**

## **ACCEPTABLE USE OF THE INTERNET**

The Cherry Hill Board of Education believes that Internet users are expected to use the district Internet as an educational resource.

### **Student Expectations in the use of the Internet**

- ❖ Students shall not access material that is obscene, pornographic, child pornography, “harmful to minors” or otherwise inappropriate for educational uses.
- ❖ Students shall not engage in “hacking” or attempts to otherwise compromise system security. Students shall not access any system file without authorization.
- ❖ Students shall not engage in any illegal activities on the Internet.
- ❖ Students shall only use district electronic mail, chat rooms, and other forms of direct electronic communications for school-related purposes.
- ❖ Students shall not disclose personal information, such as name, school, address, and telephone number outside of the school network.

Any violation of school policy and rules may result in loss of school-provided access to the Internet. Additional disciplinary action may be determined in keeping with existing procedures and practices regarding inappropriate language or behavior. When and where applicable, law enforcement agencies may be involved.

### **Staff Expectations in the use of the Internet**

- ❖ Faculty/Staff shall not access material that is obscene, pornographic, child pornography, “harmful to minors” or otherwise inappropriate for educational uses.
- ❖ Faculty/Staff shall not engage in “hacking” or attempts to otherwise compromise system security and system files.
- ❖ Faculty/Staff shall not engage in any illegal activities on the Internet.
- ❖ Faculty/Staff shall only use district electronic mail, chat rooms, and other forms of direct electronic communications for school-related purposes.
- ❖ Faculty/Staff shall not disclose personal information, such as name, school, address, and telephone number outside of the school network.

In conjunction with this policy, the Cherry Hill Board of Education uses technology protection measures that have filtering and blocking capability. The technology protection measure that blocks or filters Internet access may be disabled by district or building faculty/staff for bona fide research purposes by an adult.

(over)

## **Policy 6142.11: ACCEPTABLE USE OF THE INTERNET**

**Page 2 of 2**

A Cherry Hill School District technology staff member may override the technology protection measure that blocks or filters Internet access for a student to access a site with legitimate educational value that is wrongly blocked by the technology protection measure that blocks or filters Internet access.

School Building staff and/or faculty will have the ability to monitor students' use of the Internet, through either direct supervision, or by monitoring Internet use history, to ensure enforcement of the policy.

Any violation of school policy and rules may result in loss of school-provided access to the Internet. Additional disciplinary action may be determined in keeping with existing procedures and practices regarding inappropriate language or behavior. When and where applicable, law enforcement agencies may be involved.

*Legal References: None as yet*

Approved: 8/28/01

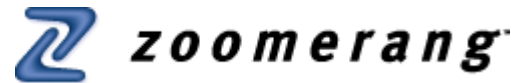


Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 2

Teacher Tech Plan Survey  
2007-2010 Results

# Teacher Technology Self-Assessment - 2007



## Results Overview

Date: 4/2/2007 10:42 AM PST

Responses: Completes

Filter: No filter applied

| 1. What grade level(s) do you teach? |  |     |     |
|--------------------------------------|--|-----|-----|
| Grades Pre-K - 5                     |  | 217 | 49% |
| Grades 6 - 8                         |  | 103 | 23% |
| Grades 9 - 12                        |  | 127 | 29% |

## 2. Technology Operations and Concepts.

Please select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

| Top number is the count of respondents selecting the option.<br>Bottom % is percent of the total respondents selecting the option. | Not at all | Minimally  | Confidently | Able to teach others |
|--|------------|------------|-------------|----------------------|
| Create a newsletter with graphics and text in columns using a word processor.  | 60<br>14%  | 153<br>35% | 130<br>29%  | 98<br>22%            |
| Creating charts and graphs of numerical data using a spreadsheet.  | 62<br>14%  | 193<br>44% | 117<br>27%  | 69<br>16%            |
| Calculate students' grades using a spreadsheet.  | 92<br>21%  | 136<br>31% | 121<br>28%  | 89<br>20%            |
| Search the Internet for information to make choices of hardware and software.  | 46<br>10%  | 131<br>30% | 159<br>36%  | 103<br>23%           |
| Create my own web pages to be accessed by my students as part of a lesson.   | 150<br>34% | 136<br>31% | 89<br>20%   | 67<br>15%            |
| Use presentation software such as PowerPoint to create a multimedia presentation.  | 81<br>18%  | 126<br>29% | 112<br>25%  | 121<br>28%           |
| Capture images using a digital camera or scanner and transfer them to a computer.  | 83<br>19%  | 104<br>24% | 114<br>26%  | 140<br>32%           |
| Apply basic troubleshooting strategies with a computer that is not working properly.   | 90<br>20%  | 177<br>40% | 118<br>27%  | 55<br>12%            |
| Save and access files to your school's network from your classroom.  | 29<br>7%   | 71<br>16%  | 158<br>36%  | 183<br>41%           |

### 3. Designing Learning Environments and Experiences

Please Select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

| Top number is the count of respondents selecting the option.<br>Bottom % is percent of the total respondents selecting the option.              | Not at all | Minimally  | Confidently | Able to teach others |
|---|------------|------------|-------------|----------------------|
| Design a lesson in which students search electronic media (CDs or the Internet) for information in content areas                                | 48<br>11%  | 117<br>27% | 172<br>39%  | 101<br>23%           |
| Design an assignment in which students evaluate the accuracy, relevance, appropriateness, and bias of electronic information.                   | 97<br>22%  | 166<br>38% | 125<br>29%  | 50<br>11%            |
| Design a lesson in which students use presentation or desktop publishing software to share knowledge, expertise, and artifacts with classmates. | 100<br>23% | 148<br>34% | 130<br>30%  | 58<br>13%            |
| Design a lesson in which students create web pages to share their reports or writings outside the classroom.                                    | 203<br>46% | 141<br>32% | 55<br>13%   | 38<br>9%             |
| Use technology to adapt a lesson for students with special needs.   | 106<br>24% | 160<br>37% | 130<br>30%  | 40<br>9%             |

### 4. Teaching, Learning, and the Curriculum

Please list the topics that you are comfortable sharing with others.

| Top number is the count of respondents selecting the option.<br>Bottom % is percent of the total respondents selecting the option. | Not at all | Minimally  | Confidently | Able to teach others |
|--|------------|------------|-------------|----------------------|
| Teach a lesson in which students use electronic images or sound to communicate ideas, personal experience and stories.             | 95<br>22%  | 180<br>41% | 117<br>27%  | 45<br>10%            |
| Adapt to teaching environments that range from one-computer classrooms to networked computer labs.                                 | 106<br>24% | 126<br>29% | 163<br>37%  | 41<br>9%             |
| Teach lessons in which students take responsibility for their own learning in online environments.                                 | 81<br>19%  | 150<br>34% | 148<br>34%  | 57<br>13%            |
| Teach students to  |            |            |             |                      |

|  |            |            |            |           |
|--|------------|------------|------------|-----------|
| create digital portfolios of their learning using media such as PowerPoint or the web.   | 159<br>37% | 149<br>34% | 81<br>19%  | 45<br>10% |
| Teach a lesson that meets district and state standards and benchmarks as well as ISTE Nation Educational Technology Standards. | 130<br>31% | 143<br>34% | 125<br>29% | 28<br>7%  |

### 5. Assessment and Evaluation

Please select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

| Top number is the count of respondents selecting the option.<br>Bottom % is percent of the total respondents selecting the option. | Not at all | Minimally  | Confidently | Able to teach others |
|--|------------|------------|-------------|----------------------|
| Use technology to communicate evidence of student learning to students, parents, and the community.                                | 62<br>14%  | 134<br>31% | 181<br>41%  | 62<br>14%            |
| Use students' test results from computer-based assessments to evaluate student learning from software.                             | 121<br>28% | 165<br>38% | 119<br>27%  | 32<br>7%             |
| Guide students in applying rubrics to assess the product and reports they create with technology.                                  | 102<br>23% | 133<br>30% | 151<br>34%  | 52<br>12%            |
| Evaluate artifacts by your students using electronic media (Digital portfolios, writing, video, online tests, etc.)                | 132<br>31% | 152<br>35% | 114<br>26%  | 34<br>8%             |

### 6. Productivity and Professional Practice

Please select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

| Top number is the count of respondents selecting the option.<br>Bottom % is percent of the total respondents selecting the option.    | Not at all | Minimally  | Confidently | Able to teach others |
|---|------------|------------|-------------|----------------------|
| Communicate with other teachers using email, discussion lists or chat rooms to improve your understanding of technology and teaching. | 6<br>1%    | 62<br>14%  | 212<br>48%  | 158<br>36%           |
| Learn to use software applications on your own from online help and Web-based tutorials.  | 30<br>7%   | 138<br>32% | 189<br>43%  | 80<br>18%            |







|   |           |            |            |            |
|---|-----------|------------|------------|------------|
| Evaluate and select educational software to help students meet content standards. | 55<br>13% | 135<br>31% | 195<br>45% | 49<br>11%  |
| Access the Web and email from your home.  | 8<br>2%   | 10<br>2%   | 147<br>34% | 272<br>62% |

### 7. Social, Ethical and Human Issues

Please select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

| Top number is the count of respondents selecting the option.<br>Bottom % is percent of the total respondents selecting the option. | Not at all | Minimally  | Confidently | Able to teach others |
|--|------------|------------|-------------|----------------------|
| Use Internet resources to integrate treatment of multicultural and gender issues into curriculum.                                  | 56<br>13%  | 136<br>31% | 184<br>42%  | 59<br>14%            |
| Teach students legal and ethical aspects of copyright issues regarding digital media and software.                                 | 84<br>19%  | 150<br>35% | 152<br>35%  | 47<br>11%            |
| Explain your school's policies on Internet use to students and their parents.  | 37<br>9%   | 140<br>32% | 185<br>43%  | 71<br>16%            |
| Develop lessons and procedures to ensure equitable access to computers for all students.   | 52<br>12%  | 132<br>31% | 200<br>46%  | 48<br>11%            |
| Protect privacy and security when publishing students' writing or images on the Web.   | 102<br>24% | 135<br>32% | 138<br>32%  | 50<br>12%            |

### 8. What Professional Development courses would you be interested in taking if offered by the Cherry Hill Technology Department?

|   |   |     |     |
|---|---|-----|-----|
| Computing 101 - Basic use of the computer                           |  | 44  | 15% |
| Microsoft Office for Beginners                                      |  | 107 | 37% |
| Introduction to Chancery - Cherry Hill's Student Information System |  | 76  | 26% |
| Understanding the Internet  |  | 82  | 28% |
| Managing your Inbox, Calendar and more - CHCLC Email                |  | 141 | 48% |
| File and Folder management - Saving and backing up your documents   |  | 192 | 66% |

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Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 3

Teacher Tech Plan Survey  
2007-2010

## Teacher Technology Self-Assessment 2007

---

1

What grade level(s) do you teach?

- Grades Pre-K - 5
- Grades 6 - 8
- Grades 9 - 12



Survey Page 1

---

## Teacher Technology Self-Assessment 2007

---

2

### Technology Operations and Concepts.

Please select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

| 1          | 2         | 3           | 4                    |
|------------|-----------|-------------|----------------------|
| Not at all | Minimally | Confidently | Able to teach others |

---

Create a newsletter with graphics and text in columns using a word processor.

1       2       3       4

---

Creating charts and graphs of numerical data using a spreadsheet.

1       2       3       4

---

Calculate students' grades using a spreadsheet.

1       2       3       4

---

Search the Internet for information to make choices of hardware and software.

1 2 3 4

Create my own web pages to be accessed by my students as part of a lesson.

1 2 3 4

Use presentation software such as PowerPoint to create a multimedia presentation.

1 2 3 4

Capture images using a digital camera or scanner and transfer them to a computer.

1 2 3 4

Apply basic troubleshooting strategies with a computer that is not working properly.

1 2 3 4

Save and access files to your school's network from your classroom.

1 2 3 4



Survey Page 2

## Teacher Technology Self-Assessment 2007

3

### Designing Learning Environments and Experiences

Please Select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

1 2 3 4  
Not at all Minimally Confidently Able to teach others

Design a lesson in which students search electronic media (CDs or the Internet) for information in content areas

1 2 3 4

Design an assignment in which students evaluate the accuracy,

relevance, appropriateness, and bias of electronic information.

1 2 3 4

Design a lesson in which students use presentation or desktop publishing software to share knowledge, expertise, and artifacts with classmates.

1 2 3 4

Design a lesson in which students create web pages to share their reports or writings outside the classroom.

1 2 3 4

Use technology to adapt a lesson for students with special needs.

1 2 3 4



Survey Page 3

## Teacher Technology Self-Assessment 2007

4

### Teaching, Learning, and the Curriculum

Please list the topics that you are comfortable sharing with others.

1 2 3 4  
Not at all Minimally Confidently Able to teach others

Teach a lesson in which students use electronic images or sound to communicate ideas, personal experience and stories.

1 2 3 4

Adapt to teaching environments that range from one-computer classrooms to networked computer labs.

1 2 3 4

Teach lessons in which students take responsibility for their own learning in online environments.

1 2 3 4

---

Teach students to create digital portfolios of their learning using media such as PowerPoint or the web.

---

Teach a lesson that meets district and state standards and benchmarks as well as ISTE Nation Educational Technology Standards.



Survey Page 4

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## Teacher Technology Self-Assessment 2007

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5

### Assessment and Evaluation

Please select one of the choices that best estimates your skill or knowledge level about each of the technology related indicators.

1

Not at all

2

Minimally

3

Confidently

4

Able to teach others

---

Use technology to communicate evidence of student learning to students, parents, and the community.

---

Use students' test results from computer-based assessments to evaluate student learning from software.

---

Guide students in applying rubrics to assess the product and reports they create with technology.

---

Evaluate artifacts by your students using electronic media (Digital portfolios, writing, video, online tests, etc.)



knowledge level about each of the technology related indicators.

1                      2                      3                      4  
Not at all            Minimally            Confidently        Able to teach others

---

Use Internet resources to integrate treatment of multicultural and gender issues into curriculum.

1                       2                       3                       4

---

Teach students legal and ethical aspects of copyright issues regarding digital media and software.

1                       2                       3                       4

---

Explain your school's policies on Internet use to students and their parents.

1                       2                       3                       4

---

Develop lessons and procedures to ensure equitable access to computers for all students.

1                       2                       3                       4

---

Protect privacy and security when publishing students' writing or images on the Web.

1                       2                       3                       4



Survey Page 7

---

## Teacher Technology Self-Assessment 2007

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8

What Professional Development courses would you be interested in taking if offered by the Cherry Hill Technology Department?

- Computing 101 - Basic use of the computer
- Microsoft Office for Beginners

- Introduction to Chancery - Cherry Hill's Student Information System
- Understanding the Internet
- Managing your Inbox, Calendar and more - CHCLC Email
- File and Folder management - Saving and backing up your documents



Survey Page 8

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## Teacher Technology Self-Assessment 2007

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9

Your comments are important to us. Please feel free to add any suggestion that you might have in regards to **PROFESSIONAL DEVELOPMENT** and technology.



Survey Page 9

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Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 4

Student Tech Plan Survey  
2007-2010

## Student Technology Self Assessment 2007

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### Student Technology Self-Evaluation

Thank you for taking the time to complete this survey on your technology knowledge. Your input is important for us to be able to continuously improve the technology that our students use.

Below, please check the highest level that describes what you can do at the present time.

---

1

#### Do you use technology responsibly?

- I take care of the equipment I use and leave it in a condition ready to be used by the next person.
  - I understand and follow school rules concerning harassment, language, passwords, privacy, copyright, appropriate use and citation of resources, etc.
  - I model responsible use and teach others how to be responsible users.
- 

2

#### Basic Computer Use

- I do not use a computer.
  - I log on, log off, use and close programs on my own.
  - I open programs from icons and the Start Menu and use more than one program at the same time.
  - I learn new programs and discover additional program features on my own.
- 

3

#### File Management

- I do not save any documents that I create using the computer.

- I select, open, and save documents on different drives.
  - I create my own folders to keep files organized and know how to identify the date and size of each file and folder.
  - I use the school network effectively by moving between drives.
- 

4

**Word Processing** - Example: *Microsoft Word*

- I do not use a word processor.
  - I use a word processor for basic writing tasks.
  - I use word processor tools (font style, spell check, grammar check) to edit my work.
  - I use a word processor to edit, compare or improve my previous drafts and publish a final document.
- 

5

**Graphics**

- I do not use graphics.
  - I create pictures with painting and drawing programs.
  - I insert my own graphics and clip art, citing my sources, when necessary.
  - I select and modify graphics (example: digital photos, scanned drawings) in order to make a point or illustrate what I have learned.
- 

6

**Desktop Publishing** - Example: *Microsoft Publisher*

- I do not use a publishing program.
- I use templates or wizards to create a published document.

- I create original publications from a blank page combining design elements such as columns, clip art, tables, word art, and captions.
  - I design original publications that communicate to others what I have learned.
- 

7

**Spreadsheets** - Example: *Microsoft Excel*

- I do not use a spreadsheet.
  - I enter data and use formulas in a spreadsheet.
  - I choose and create charts and graphs to make sense of spreadsheet information.
  - I explain my information using well-labeled and effective charts and graphs.
- 

8

**Research & Information-Searching**

- I do not use electronic sources to find information.
  - I locate information in electronic sources (Internet, CDs, etc.).
  - I select, gather, and use information from multiple electronic sources to answer a question.
  - I analyze, evaluate, and communicate the information I've gathered and credit the sources I've used.
- 

9

**Use of the Internet**

- I do not use the Internet.
- I visit school-selected Internet sites and use navigation buttons to move between pages.
- I use various search engines to efficiently locate information on my research question.

- I evaluate and select Internet information that is reliable, accurate, and appropriate to my research question.
- 

10

**Presentations Using Technology**

- I do not use technology for presentations.
- I use templates to create technology presentations (PowerPoint, web pages).
- I start with a blank presentation, then add text, pictures, and sound to create original presentations.
- I create original presentations that are well organized, and use them to effectively share information to persuade an audience.



Survey Page 1

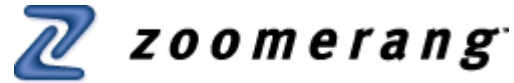


Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 5

Student Tech Plan Survey  
2007-2010 Results

# Student Technology Self Assessment - 2007



## Results Overview

Date: 4/2/2007 10:43 AM PST

Responses: Completes

Filter: No filter applied

**Student Technology Self-Evaluation** Thank you for taking the time to complete this survey on your technology knowledge. Your input is important for us to be able to continuously improve the technology that our students use.  
Below, please check the highest level that describes what you can do at the present time.

### 1. Do you use technology responsibly?


|  |  |     |     |
|--|--|-----|-----|
| I take care of the equipment I use and leave it in a condition ready to be used by the next person.  |  | 433 | 77% |
| I understand and follow school rules concerning harassment, language, passwords, privacy, copyright, appropriate use and citation of resources, etc. |  | 303 | 54% |
| I model responsible use and teach others how to be responsible users.  |  | 202 | 36% |

### 2. Basic Computer Use





|   |  |     |     |
|---|--|-----|-----|
| I do not use a computer.  |  | 7   | 1%  |
| I log on, log off, use and close programs on my own.  |  | 294 | 53% |
| I open programs from icons and the Start Menu and use more than one program at the same time. |  | 354 | 63% |
| I learn new programs and discover additional program features on my own.                      |  | 284 | 51% |

### 3. File Management





|   |  |     |     |
|---|--|-----|-----|
| I do not save any documents that I create using the computer.   |  | 31  | 6%  |
| I select, open, and save documents on different drives.   |  | 229 | 41% |
| I create my own folders to keep files organized and know how to identify the date and size of each file and |  | 391 | 71% |

|  |   |     |     |
|--|---|-----|-----|
| folder.  |   |     |     |
| I use the school network effectively by moving between drives. |  | 165 | 30% |





#### 4. Word Processing - Example: Microsoft Word

|   |   |     |     |
|---|---|-----|-----|
| I do not use a word processor.  |  | 19  | 3%  |
| I use a word processor for basic writing tasks.   |  | 279 | 50% |
| I use word processor tools (font style, spell check, grammar check) to edit my work.                |  | 349 | 63% |
| I use a word processor to edit, compare or improve my previous drafts and publish a final document. |  | 311 | 56% |

#### 5. Graphics




|  |   |     |     |
|--|---|-----|-----|
| I do not use graphics.   |    | 65  | 12% |
| I create pictures with painting and drawing programs.  |    | 229 | 41% |
| I insert my own graphics and clip art, citing my sources, when necessary.  |  | 349 | 63% |
| I select and modify graphics (example: digital photos, scanned drawings) in order to make a point or illustrate what I have learned. |  | 242 | 43% |

#### 6. Desktop Publishing - Example: Microsoft Publisher





|   |   |     |     |
|---|---|-----|-----|
| I do not use a publishing program.  |  | 241 | 44% |
| I use templates or wizards to create a published document.  |  | 143 | 26% |
| I create original publications from a blank page combining design elements such as columns, clip art, tables, word art, and captions. |  | 225 | 41% |
| I design original publications that communicate to others what I have learned.  |  | 128 | 23% |

#### 7. Spreadsheets - Example: Microsoft Excel





|                             |   |     |     |
|-----------------------------|---|-----|-----|
| I do not use a spreadsheet. |  | 131 | 24% |
|-----------------------------|---|-----|-----|

|   |   |     |     |
|---|---|-----|-----|
| I enter data and use formulas in a spreadsheet.                                 |  | 258 | 46% |
| I choose and create charts and graphs to make sense of spreadsheet information. |  | 259 | 47% |
| I explain my information using well-labeled and effective charts and graphs.    |  | 215 | 39% |




### 8. Research & Information-Searching

|  |  |     |     |
|--|--|-----|-----|
| I do not use electronic sources to find information.   |   | 29  | 5%  |
| I locate information in electronic sources (Internet, CDs, etc.).                                    |   | 308 | 55% |
| I select, gather, and use information from multiple electronic sources to answer a question.         |   | 356 | 64% |
| I analyze, evaluate, and communicate the information I've gathered and credit the sources I've used. |  | 253 | 46% |

### 9. Use of the Internet

|   |   |     |     |
|---|---|-----|-----|
| I do not use the Internet.  |  | 12  | 2%  |
| I visit school-selected Internet sites and use navigation buttons to move between pages.                        |  | 235 | 42% |
| I use various search engines to efficiently locate information on my research question.                         |  | 368 | 67% |
| I evaluate and select Internet information that is reliable, accurate, and appropriate to my research question. |  | 345 | 62% |

### 10. Presentations Using Technology

|   |   |     |     |
|---|---|-----|-----|
| I do not use technology for presentations.                                  |  | 75  | 13% |
| I use templates to create technology presentations (PowerPoint, web pages). |  | 243 | 43% |
| I start with a blank presentation, then add text, pictures, and             |  | 345 | 62% |

|   |   |     |     |
|---|---|-----|-----|
| sound to create original presentations.   |   |     |     |
| I create original presentations that are well organized, and use them to effectively share information to persuade an audience. |  | 275 | 49% |

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Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 6

Letter of Board Approval



CHERRY HILL PUBLIC SCHOOLS  
Cherry Hill, New Jersey

**ACTION AGENDA**  
**May 22, 2007**

**A. CURRICULUM & INSTRUCTION**

**ITEM 1. APPROVAL OF TECHNOLOGY PLAN 2007-2010**


**RECOMMENDATION:**

It is recommended that the Technology Plan 2007-2010 be approved as submitted.

Motion Mrs. Giaccio Second Mr. Russo Vote Ayes - 7 No - 2\*

\*Dr. Hartman and Mr. Trentacoste voted in the negative.

This is to certify that the above is a true and correct copy of the recommendation adopted by the Cherry Hill Township Board of Education at its regular meeting held on May 22, 2007.

  
Interim Assistant Superintendent  
Business/Board Secretary

  
Notary Public

CECILIA ROSADO  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires May 3, 2011



Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 7

First Year Budget



BUDGET COMPARISON REPORT  
2005-2006 TO 2007-2008

| LOCATION NAME                  | BUDGET ID                    | SUBJECT                                     | BUDGET DESCRIPTION                     | 2005-2006<br>ACTUAL EXPND | 2006-2007<br>ADJUSTED BDGT | 2007-2008<br>PROPOSED BDGT | 2006-2007<br>FTE | 2007-2008<br>FTE | 2007-2008 JUSTIFICATION   |
|--------------------------------|------------------------------|---|--|---------------------------|----------------------------|----------------------------|------------------|------------------|---|
| MIS INSTRUCTIONAL              | 11-190-100-5956-92-1270-0000 | MULTICURRICULAR INSTRUCTIONAL               | Lease Purchase (MultiInstr) Tech       |                           | 1,135,489.00               | 1,176,600.00               |                  |                  | Loan payments for Chancery SMS, Evergreen I & II, and school level servers.   |
|                                |                              | <b>MULTICURRICULAR INSTRUCTIONAL Total</b>  |  | 0.00                      | 1,135,489.00               | 1,176,600.00               | 0.00             | 0.00             |   |
| MIS INSTRUCTIONAL              | 11-000-230-5301-92-2300-0000 | SUPPORT SERVICES GENERAL ADMIN              | Telephone Voice (GenSupport)           |                           | 15,600.00                  | 19,500.00                  |                  |                  | Nextel monthly services, Eboard (teacher websites) yearly fee.  |
|                                |                              | <b>SUPPORT SERVICES GENERAL ADMIN Total</b> |  | 0.00                      | 15,600.00                  | 19,500.00                  | 0.00             | 0.00             |   |
| MIS INSTRUCTIONAL              | 11-000-252-5959-92-2520-0000 | TECHNOLOGY                                  | Misc Purchase Services (Technology)    | 22,860.00                 |                            | 0.00                       |                  |                  |   |
| MIS INSTRUCTIONAL              | 11-000-252-6115-92-2520-0000 | TECHNOLOGY                                  | Paper/Special Forms (Technology)       | 48,386.65                 | 7,000.00                   | 40,000.00                  |                  |                  | On-going purchases of technology supplies and parts needed for maintenance to keep computers running (e.g., cables, tools, connectors, hard drives etc.) Also includes a system for archiving email to comply with new federal requirements                   |
| MIS INSTRUCTIONAL              | 11-000-252-3402-92-2520-0000 | TECHNOLOGY                                  | Purchase Tech Service (Technology)     | 248,961.36                | 561,827.00                 | 556,172.00                 |                  |                  | Fiber charges from Comcast, Membership to Camnet, Chancery Annual Maintenance Renewal, Internet Filtering, Anti-virus software renewal, Microsoft License school agreement for entire district, Keystone annual renewal, Keystone Fusion Licenses, Keystone I |
| MIS INSTRUCTIONAL              | 11-000-252-1049-92-2520-0000 | TECHNOLOGY                                  | Salary Other Prof (Technology)         | 483,489.92                | 360,661.99                 | 351,210.00                 | 8.00             | 8.00             | Salaries for Technology Staff   |
| MIS INSTRUCTIONAL              | 11-000-252-3202-92-2520-0000 | TECHNOLOGY                                  | Staff Training (Technology)            | 300.00                    |                            | 0.00                       |                  |                  |   |
| MIS INSTRUCTIONAL              | 11-000-252-5801-92-2520-0000 | TECHNOLOGY                                  | Travel (Technology) InState            |                           | 3,000.00                   | 3,000.00                   |                  |                  | Mileage Reimbursement for travel within district.   |
|                                |                              | <b>TECHNOLOGY Total</b>                     |  | 803,997.93                | 932,488.99                 | 950,382.00                 | 8.00             | 8.00             |   |
| MIS INSTRUCTIONAL              | 12-000-290-7321-92-2900-0000 | BUSINESS AND SUPPORT SERVICES               | Non-Instruct Equipment (BusinessOther) | 8,309.00                  |                            | 0.00                       |                  |                  |   |
| <b>MIS INSTRUCTIONAL Total</b> |                              | <b>BUSINESS AND SUPPORT SERVICES Total</b>  |  | 812,306.93                | 2,083,577.99               | 2,146,482.00               | 8.00             | 8.00             |   |
|                                |                              |   |  | 8,309.00                  | 0.00                       | 0.00                       | 0.00             | 0.00             |   |



Cherry Hill Public Schools  
2007-2010 Technology Plan

Appendix 8

CHPS Technology Timeline



## CHPS Technology Timeline

| 2002/2003  | 2003/2004  | 2004/2005   | 2005/2006  | 2006/2007 |
|--|--|---|--|-----------|
| <b>Computers / Infrastructure</b>  |  |   |  |           |
| Pentium 1, 2, 3 computers<br><br>Multiple brands & configurations of computers making service and support difficult & inefficient<br><br>Barton AAL(Anytime Anywhere Learning) laptop pilot of mobile computer labs begins | <b>Evergreen I</b><br>524 P4 Desktops<br>86 Printers<br>732 Laptops<br>Wireless access in all school libraries | <b>Evergreen II</b><br>339 P4 Desktops<br>156 Printers<br>400 Laptops |  |           |
| Mixture of Windows 95, 98, NT, 2000 and XP as desktop operating systems  |  |   | Standard platform of Windows 2000 & XP as desktop operating systems  |           |
| 100Mb fiber network connections- at Malberg Administration, Middle & High Schools, all Other schools on 350Kbs cable modems  | All schools connected to 100Mb fiber network - allowing centralized servers and network resources              |   |  |           |
| District computers connected via 10 mb network hubs.   |  |   | District computers connected via upgraded 100 mb network switches, allowing faster access to network resources |           |

|  |   |  |   |  |
|--|---|--|---|--|
| <b>Operational Services</b>  |   |  |   |  |
| Technology RFS (Request For Service) done on paper forms and collected at each building  | <i>Online Technology RFS System</i> implemented at all schools, improving technical support response times  |  | Web-based technology equipment inventory system implemented   |  |
|  | District website redesigned   | Introduction of <i>Staff Center</i> on district website, a site with shortcuts to district services for district staff                               | Video messages from Superintendent posted on district website | Maintenance "RFS" & Online professional development registration systems added to district website   |
| Files stored on hard drives of individual computers  |   | New servers added for "H drives" to allow staff to save files to a centralized & backed up network storage location                                  | "H drive" network file storage available to all staff         |  |
| District <i>Microsoft Exchange</i> email server & email accounts for all district staff  | Online classroom & board room reservations for Malberg Administration building added to Exchange server   | Exchange server upgraded to <i>Exchange 2003</i> , enabling additional email features and improving email performance                                |   | <i>Barracuda SPAM firewall</i> added to decrease the amount of SPAM received in district email boxes |
| UNIX based finance system, running on old hardware   |   |  | New finance system running on Windows based servers           |  |
| Malberg Tech Lab - 25 desktop workstations   | Malberg Tech Lab is a "wireless lab" contains 24 laptops, and a ceiling mounted projector, which allows for flexible use of this training classroom |  |   |  |
| Unable to update cable 19 message board outside of CH West building  |   |  | Cable 19 message board upgraded to allow remote updates       |  |
| Print jobs delivered to district print shop by hand  | Xerox copier/scanners installed at all schools allowing network-based printing  | Xerox copier/scanners used to send print jobs electronically to the district printshop   | Xerox copier/scanners used to scan documents to Email (PDF)   |  |
| In-House photo ID systems to take new pictures and print replacement IDs   |   |  |   |  |
| <i>Microsoft Active Directory</i> implemented allowing centralized management of district accounts, passwords and security permissions |   |  |   |  |
|  |   | New phone systems installed that utilize VOIP (Voice Over IP) for calls between secondary schools  |   |  |
|  |   | New transportation server for <i>EduLog</i> transportation software  |   |  |
|  |   | New file server at Malberg Administration Building increasing the speed and amount of network file storage available to central administration users |   |  |
|  |   | New server for math curriculum software implemented  |   |  |
|  |   | <i>Windows Remote Assistance</i> used for technical support, allowing district technicians to remotely troubleshoot problems on district computers,  |   |  |

### CHPS Technology Timeline

| 2002/2003  | 2003/2004  | 2004/2005   | 2005/2006   | 2006/2007   |
|--|--|---|---|---|
| <b>Chancery SMS</b>  |  |   |   |   |
| UNIX based Student Information system with a maximum of 40 simultaneous users. A client software application must be installed to access the system. | Chancery SMS implementation begins - Web based student information system, capable of serving hundreds of simultaneous users | Chancery SMS is rolled out in all schools   | SMS Teacher Gradebook Piloted   | <i>K12 Planet Pilot Program</i> - Home-School Portal allowing parent access to grades and attendance                    |
| Middle School & High School report cards printed on special dot-matrix printers and pre-printed forms  |  | Middle School & High School Report cards printed using laser printers and copy proof security paper   |   |   |
|  | Electronic High School Scheduling implemented in Chancery SMS  |   |   | High School course recommendations entered by teachers into Chancery SMS to improve efficiency of HS Scheduling process |
|  |  | Enhanced State reporting added to the Chancery SMS software package                                   |   | NJSMART Data Extracts from Chancery SMS sent to the state data warehouse  |
| Daily attendance written on paper then entered into student information system by clerks in each school office                                       |  | Teachers enter attendance directly into the student information system from their classroom computers | Attendance reports are enhanced to provide more information as requested by schools |   |
|  |  | Manual Data Imports from Project Special to Chancery SMS for State and District reporting             |   | Automated data exchange between Project Special & Chancery SMS increases efficiency of state and local reporting        |

|   |   |  |  |  |
|---|---|--|--|--|
| <b>Student Services</b>   |   |  |  |  |
| No connection between libraries at the schools  |   | <i>Pinpoint</i> - Centralized web based Library catalog system which aggregates all school libraries in the district   |  |  |
|   | Video Conferencing via ISDN phone lines | Video Conferencing done via the Internet and via the CamNet ISDN bridge, lowering the cost of video conferencing   |  |  |
|   |   | <i>United Streaming</i> - online video library implemented at Middle & High Schools  |  |  |
| Teacher websites on CHlive district web server, requiring use of Frontpage editing software |   | <i>eBoards</i> - Teacher websites that require no additional software or programming knowledge - piloted   | <i>eBoards</i> - Teacher websites - rolled out to all teaching staff |  |
| Food Service database and POS (Point of Sale) cash registers piloted at CH East             |   | Food Service database and POS (Point of Sale) cash registers implemented at all schools, allowing parents to add money to student lunch accounts and improved reporting of school lunch data |  |  |
| No district file storage available for students   |   | New servers added for "H drives" to allow students to save files to a centralized & backed up network storage location   | "H drive" network file storage available to all students             |  |