Township of Ocean School District



Three Year Technology Plan

Ocean Township, NJ 2016 - 2019

I. Stakeholders

2016 – 2019 District Technology Committee Members

Michele Cartaya,	
Social Studies Teacher	
Marion Conrad,	
Assistant Superintendent - Cu	rriculum
MaryAnn Conway,	
Parent and Help Desk Suppor	t
John Desimini,	
Teacher	
Donna Emeric,	
Librarian	
Kristin Gasser,	
Teacher	
George Glynn,	
Parent and Businessman	
Kathy Hackler,	
Librarian	
Michael Hall,	
Network Manager	
Michael Huston	
Librarian	
Karen Jardel,	
Student Data Base System Ma	nager
Ken Jannarone,	
School Business Administrato	r
Shalom Labkovski	
Math Teacher	
James Maliff,	
Assistant Principal	
Roseann McCarthy,	
Science Teacher	
Kathryn Miller,	
Director of Guidance	
Michael Palutis	
BOE member, Parent	
Elizabeth Paterno	
Teacher	
Denise Ricciardi,	
Asst. Superintendent of Specia	l Services
Patrick Sullivan,	
Supervisor of Science	
James Stefankiewicz	
Superintendent	

II. EXECUTIVE SUMMARY

Introduction

Technology has become an important part of the curriculum for all schools throughout the state and nation. Technology directly affects the way in which teachers teach and students learn; administrative and support staff also benefit from the information and communication systems designed to improve their performance and productivity. The purpose of this plan is to review previous goals, conduct a needs assessment, establish new goals, and establish a plan for the future.

Mission Statement

It is the mission of the Ocean Township School District to equip students, staff, and parents with skills that will empower them to use technology as a tool for accessing, managing, evaluating and synthesizing information in order to solve problems and to create and communicate knowledge.

Stakeholder Involvement

Once the State Department of Education set the format for the 2016-2019 Technology Plan, the Technology Committee met to review technology requests from teachers, local building Technology Integration Committees, department supervisors and administrators. Goals and objectives were established based upon the CCSS and NJCCCS as well as the newly implemented PARCC assessments. Members on the committee were selected for their interest and involvement in the existing K-12 technology program. The committee is comprised of parents, students, teachers, supervisors, administrators, board of education members, and businesspersons. Many of the residents on the committee have careers connected to the information technology industry as well as a heightened interest in technology.

2016 – 2019 Building Technology Integration Committees

Each school in the district has a building Technology Integration Committee that meets regularly with the Network Manager, Assistant Superintendent of Curriculum and Instruction, and the Student Data Base System Manager. Building level issues, technology initiatives, and relevant online resources are items of focus at such meetings. In addition to such meetings, communication occurs regularly among committee members through email and phone conferences.

III. TECHNOLOGY OVERVIEW

Ocean Township High School Network Inventory			
Equipment	Quantity		
Servers	26		
Switches	13 (1,564 Ports)		
Routers	2		
Wireless Access Points	88		
Phone Systems	1		
Telephones	85		
Multimedia Workstations	196		
Multimedia laptops	325		
Chromebooks	1,250		
Data Projectors	70		
Document Cameras	52		
Interactive Device (Mimio or SMART board)	9		
Printers	72		

Ocean Township Intermediate School Network Inventory			
Equipment	Quantity		
Servers	3		
Switches	12 (912 Ports)		
Routers	1		
Wireless Access Points	114		
Phone Systems	1		
Telephones	60		
Multimedia Workstations	175		
Multimedia laptops	277		
Chromebooks	1,186		
Data Projectors	113		
Document Cameras	94		
Interactive Device (Mimio or SMART board)	62 (39+23 with interactive capability on		
	projector)		
Wireless Projection Capability (WiDi)	1		
Printers	58		

Wayside Elementary School Network Inventory		
Equipment Quantity		
Servers	2	
Switches	5 (472 Ports)	
Routers	1	
Wireless Access Points	37	

Phone Systems	1
Telephones	23
Multimedia Workstations	69
Multimedia laptops	152
Chromebooks	312
Data Projectors	48
Document Cameras	42
Interactive Device (Mimio or SMART board)	44 (10+34 with interactive capability on projector)
SMART Tables	5
Wireless Projection Capability (WiDi)	29
Printers	30

Wanamassa Elementary School Network Inventory			
Equipment	Quantity		
Servers	5		
Switches	4 (368 Ports)		
Routers	1		
Wireless Access Points	33		
Phone Systems	1		
Telephones	20		
Multimedia Workstations	54		
Multimedia laptops	71		
Chromebooks	127		
Data Projectors	33		
Document Cameras	27		
Interactive Device (Mimio or SMART board)	15		
SMART Tables	3		
Wireless Projection Capability (WiDi)	21		
Printers	16		

Ocean Township Elementary School Network Inventory			
Equipment	Quantity		
Servers	2		
Switches	4 (392 Ports)		
Routers	1		
Wireless Access Points	37		
Phone Systems	1		
Telephones	23		
Multimedia Workstations	58		
Multimedia Laptops	116		

Chromebooks	178
Data Projectors	41
Document Cameras	33
Interactive Device (Mimio or SMART board)	17 (6+11 with interactive capability on projector)
SMART Tables	4
Wireless Projection Capability (WiDi)	31
Printers	18

Ocean Township Board of Ed Network Inventory		
Comunication		
Servers	1 (404 De 42)	
Switches	1 (104 Ports)	
Routers	1	
Wireless Access Points	5	
Phone Systems	1	
Telephones	32	
Multimedia Workstations	26	
Printers	16	

Technology Needed to Improve Student Academic Achievement Through 2019

Technology Plan Checklist for NJ School Districts/Charter Schools
(2016 - 2019)
Three Year Technology Plan Inventory Table

Area of Need	Describe for 2016-17	Describe for 2017-18	Describe for 2018-19
Technology Equipment	Chromebooks for Grades k-2,6 & 9 Enhancements of existing assistive technology as determined by student needs. Replace aging computers at the High School and Intermediate School. Video Surveillance server replacement at Wayside and Wanamassa Schools Printer server replacement Replacement of elementary library computers	Chromebooks for Grades 5, 6 & 9 Enhancements of existing assistive technology as determined by student needs. Replace High School teacher devices Video Surveillance server replacement at OTES Replacement of high school teacher computers	Chromebooks for Grades 6 & 9 Enhancements of existing assistive technology as determined by student needs. Replace elementary schools network switches. Server replacement for older servers. Replacement of older computers

Network Capacity	Evaluate and recommend changes to the network.	Replacement of high school library computers Server replacement for older servers. Replacement of older computers Evaluate and recommend changes to the network and add a redundant Internet connection for the district.	Evaluate and recommend changes to the network.
Filtering Software	Lightspeed	LightSpeed	LightSpeed
Maintenance Policy and Plans	UPS MaintenanceAdobe CCMicrosoft Suite	 UPS Maintenance Adobe CC Microsoft Suite 	 UPS Maintenance Adobe CC Microsoft Suite
Tele- communications Services	 Basic phone service Internet access Direct Internet Connections Cell Phones Website ASP 	 Basic phone service Internet access Direct Internet Connections Cell Phones Website ASP 	 Basic phone service Internet access Direct Internet Connections Cell Phones Website ASP
Technical Support	 Virus protection Backup system Software updates Library subscriptions Student Information System Network Monitoring Software Verisign Server Maintenance Managed Print Services Meru Wireless 	 Virus protection Backup system Software updates Library subscriptions Student Information System Network Monitoring Software Verisign Server Maintenance Managed Print 	 Virus protection Backup system Software updates Library subscriptions Student Information System Network Monitoring Software Verisign Server Maintenance Managed Print

		Services • Meru Wireless	Services • Meru Wireless
Facilities – infrastructure including central telephone & security systems	 Maintenance of radio, security, phone services and replace phone system Add or replace UPS in all IDFs and MDFs 	Maintenance of radio, security and phone services	Maintenance of radio, security and phone services
Other	 Evaluation of emergent technologies Move to open source options 	 Evaluation of emergent technologies Move to open source options 	 Evaluation of emergent technologies Move to open source options

Integration of Assistive Technology

The integration of assistive technology is coordinated with the child study team and is based upon the individual student's instructional plan. We are a disability advocacy organization that supplies workplace training sessions to address the needs of people with disabilities. The Internet and other means of telecommunication are used to communicate with professional organizations, training services and families of the disabled.

The School District's website is accessible to all stakeholders. Our website currently utilizes a text based content management system that allows all links and content to be translated into a screen reader with ease. Website graphics and animations that may be included on the site are for decoration only and are not used for navigation or information.

The logical and consistent method of creating, organizing and displaying information provide the optimal situation for stakeholders who need an alternate way to review the school website.

Any multimedia presentations included on the site utilize the accessibility tools that are included with the software in which the presentation was created, i.e., Microsoft PowerPoint, Adobe PDFs, Adobe Flash, etc. As long as PowerPoint presentations are created using a version later than Office 2000, they can be read using a screen reader. Adobe PDFs can be read as text using the latest free Adobe Acrobat Reader. In addition Adobe provides an html convert for those having a problem utilizing the latest reader. Flash generated content will be created using the latest accessibility tools to help keep the content accessible.

Electronic forms created using the tools included with our software generate text-based forms that can be easily navigated and completed using accessibility tools. Image maps are generally not utilized within the site due to the navigation problems they can cause with regard to accessibility.

Additionally, due to the open and extensible nature of our software, adjustments and changes can quickly be made to allow for additional navigation aids for those using screen readers. For example, if a user would like an option to skip the reading of the navigation bar, this option can be added very quickly without disrupting the layout or display of the site for other users. This flexibility allows our website to be responsive to all users.

Computer/Technology Replacement Plan

Replacement of obsolete equipment has become a significant problem in all school districts. The Technology Committee made a commitment in previous technology plans to investigate the use of various computing technologies.

We provide every 6th and 9th grade student with a new Chromebook, that they will use until graduation from the respective school. Once the 8th and 12th grade students hand them in the Chromebooks are repurposed to the k-5 students.

Teacher/Administrator Use

Full multi-media laptop computers or Surface Pros are provided to all teachers, administrators and supervisors. Mobile wireless networks with full multi-media laptops have been determined to be an effective replacement to the stationary computer lab. All three elementary schools, the Intermediate school, and the HS benefit from full wireless network and Internet connectivity. The IT department maintains all equipment.

Accessible to All

There are many areas to consider regarding the issue on accessibility. The existing Township of Ocean School District website was created by the Network Manager and is managed by a team of district employees. The accessibility standards were taken into consideration in the initial construction of the website and in all revisions/upgrades. Contact information is clearly marked. The general layout is basic but allows a visitor/user the right to control and direct their own choices and access desired information. The district's website is a work in progress as improvements and additional information is provided on an ongoing basis.

Plan for Obsolescence

When looking at a planned obsolescence program for our educational technology, our district will look to answer the following questions before making a decision to replace outdated equipment:

- How might we delay obsolescence and extend the life of our technology resources?
- What will be the process for properly destroying secure data and memory from outdated computers?
- Should old computers be sold, donated, or recycled?

Cyber Safety

Filtering Methods

Methods used to insure Children's Internet Protection Act (CIPA) Compliance

GMail for education brings together the best of both worlds, providing the blocking capabilities of a traditional e-mail system and the ease of an on-line service. GMail for education can be accessed on any computer with a web browser and an Internet connection. Students access GMail for education with an encrypted password, and read, organize, and delete their mail with a simple web interface.

LightSpeed

LightSpeed is built into a rack-mountable network appliance you install between your Internet connection and your internal network. Besides filtering your Internet connection, the software services that run on this appliance include:

- A simple web-based interface to configure the web filtering options
- An intelligent web caching service to speed up redundant web requests
- Complete web usage logging that keeps track of every Internet request
- Traffic monitoring and network management tools that graph your network traffic for analysis

2.) Acceptable Use Policy

Date Created: July, 1997 Date Edited: August, 2012

2361- ACCEPTABLE USE OF COMPUTER NETWORK/COMPUTERS AND RESOURCES

ACCEPTABLE USE OF COMPUTER NETWORK/COMPUTERS AND RESOURCES (M)

M

The Board of Education recognizes as new technologies shift the manner in which information is accessed, communicated and transferred; these changes will alter the nature of teaching and learning. Access to technology will allow pupils to explore databases, libraries, Internet sites and bulletin boards while exchanging information with individuals throughout the world. The Board supports access by pupils to these information sources but reserves the right to limit in-school use to materials appropriate for educational purposes. The Board directs the Superintendent to effect training of teaching staff members in skills appropriate to analyzing and evaluating such resources as to appropriateness for educational purposes.

The Board also recognizes technology allows pupils access to information sources that have not been pre-screened by educators using Board approved standards. The Board therefore

adopts the following standards of conduct for the use of computer networks and declares unethical, unacceptable or illegal behavior as just cause for taking disciplinary action, limiting or revoking network access privileges and/or instituting legal action.

The Board provides access to computer network/computers for educational purposes only. The Board retains the right to restrict or terminate pupil access to the computer network/computers at any time, for any reason. School district personnel will monitor network and online activity to maintain the integrity of the networks, ensure their proper use, and ensure compliance with Federal and State laws that regulate Internet safety.

Standards for Use of Computer Networks

Any individual engaging the following actions when using computer networks/computers shall be subject to discipline or legal action:

- A. Using the computer network/computers for illegal, inappropriate or obscene purposes, or in support of such activities. Illegal activities are defined as activities that violate federal, state, local laws and regulations. Inappropriate activities are defined as those that violate the intended use of the network. Obscene activities shall be defined as a violation of generally accepted social standards for use of publicly owned and operated communication vehicles.
- B. Using the computer network/computers to violate copyrights, institutional or third party copyrights, license agreements or other contracts.
- C. Using the computer network in a manner that:
 - 1. Intentionally disrupts network traffic or crashes the network:
 - 2. Degrades or disrupts equipment or system performance;
 - 3. Uses the computing resources of the school district for commercial purposes, financial gain or fraud;
 - 4. Steals data or other intellectual property;
 - 5. Gains or seeks unauthorized access to the files of others or vandalizes the data of another person;
 - 6. Gains or seeks unauthorized access to resources or entities;
 - 7. Forges electronic mail messages or uses an account owned by others;
 - 8. Invades privacy of others;

- 9. Posts anonymous messages;
- 10. Possesses any data which is a violation of this Policy; and/or
- 11. Engages in other activities that do not advance the educational purposes for which computer networks/computers are intended.

Internet Safety/Protection

As a condition for receipt of certain Federal funding, the school district shall be is in compliance with the Children's Internet Protection Act, the Neighborhood Children's Internet Protection Act, and has installed technology protection measures for all computers in the school district, including computers in media centers/libraries. The technology protection must block and/or filter material and visual depictions that are obscene as defined in section 1460 of Title 18, United States Code; are harmful to minors including any pictures, images, graphic image file or other material or visual depiction that taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion; or depicts, describes, or represents in a patently offensive way, with respect to what is suitable for minors, sexual acts or conduct; or taken as a whole, lacks serious literary, artistic, political, or scientific value for minors.

This Policy also establishes Internet safety policy and procedures in the district as required in the Neighborhood Children's Internet Protection Act. Policy 2361 addresses access by minors to inappropriate matter on the Internet and World Wide Web; the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; unauthorized access, including "hacking" and other unlawful activities by minors online; unauthorized disclosures, use, and dissemination of personal identification information regarding minors; and measures designed to restrict minors' access to materials harmful to minors.

Notwithstanding blocking and/or filtering the material and visual depictions prohibited in the Children's Internet protection Act and the Neighborhood Children's Internet Protection Act, the Board shall determine other Internet material that is inappropriate for minors.

In accordance with the provisions of the Children's Internet Protection Act, the Superintendent of Schools or designee will develop and ensure education is provided to every pupil regarding appropriate online behavior, including pupils interacting with other individuals on social networking sites and/or chat rooms, and cyber bullying awareness and response.

The Board will provide reasonable public notice and will hold one annual public hearing during a regular monthly Board meeting or during a designated special Board meeting to address and receive public community input on the Internet safety policy — Policy and Regulation 2361. Any changes in Policy and Regulation 2361 since the previous year's annual public hearing will also be discussed at a meeting following the annual public hearing.

The school district will certify on an annual basis, that the schools, including media

centers/libraries in the district, are in compliance with the Children's Internet Protection Act and the Neighborhood Children's Internet Protection Act and the school district enforces the requirements of these Acts and this Policy

Consent Requirement

No pupil shall be allowed to use the school district's computer network/computers and the Internet unless they have filed with the principal a consent form signed by the pupil and his/her parent(s) or legal guardian(s).

Violations

Individuals violating this Policy shall be subject to the consequences as indicated in Regulation No. 2361 and other appropriate discipline which includes but is not limited to:

- 1. Use of the network only under direct supervision;
- 2. Suspension of network privileges;
- 3. Revocation of network privileges;
- 4. Suspension of computer privileges;
- 5. Revocation of computer privileges;
- 6. Suspension from school;
- 7. Expulsion from school and/or
- 8. Legal action and prosecution by the authorities.

N.J.S.A. 2A:38A-3

Federal Communications Commission: Children's Internet Protection Act

Federal Communications Commission: Neighborhood Children's Internet Protection Act

ACCEPTABLE USE POLICY (AUP)

Electronic Resource and On-line Technology Guidelines and Procedures

As part of Ocean Township School District's (OTSD) commitment to the utilization of new technologies, staff members and students have been provided with access to a variety of electronic resources (i.e., but not limited to, e-mail, OTSD networked and non-networked computer systems, the Internet, and phone voice mail). In addition, the <u>Ocean Township Intermediate School</u> (TOIS) or <u>Ocean Township High School</u> allows staff members to utilize their own personal electronic devices at school. In order to maintain system integrity

and performance, to limit the threat and effect of security threats like hacking and viruses, and to ensure compliance with copyright law, end users of these resources must adhere to strict guidelines. They are provided here so that staff and the community are aware of their responsibilities. Your use of these electronic resources is a privilege, not a right.

According to the Federal Electronic Communications Privacy Act (ECPA), an employer/ organization provided computer system is the property of the employer/organization. As such, they have the right to monitor all e-mail traffic and Internet surfing on their systems. The District (and its authorized representatives) may access and monitor their electronic resources at any time for any reason, without notice. This includes the district's right to access and monitor the personal devices of staff members who have conducted activities using the OTSD system. You should not expect or treat any of these electronic resources, including but not limited to e-mail, as confidential or private. Except for authorized District personnel (and under the specific request of the Superintendent), no one is permitted to access another person's e-mail, or electronically stored files without prior consent.

The district may modify these rules at any time by publishing the modified rule(s) on the system. The signatures at the end of this document are legally binding and indicate that the parties have read the terms and conditions carefully, understand their significance, and agree to abide by established rules.

REGULATIONS AND REQUIREMENTS

- 1.) Network and Internet access is provided as a tool for conducting district business and for specific educational purposes (as stated in the various curricula). The District reserves the right to monitor, inspect, copy, review, delete, and store, at any time and without prior notice, any and all materials, files, information, software, communications, and other content that is created, transmitted, received or stored using any of its electronic resources including personal devices of staff.
 - All information created, accessed, or stored using OTSD applications, systems, and internet is the property of OTSD. Users (staff and students) do not have a right to privacy to any activity conducted using the district's electronic resources. The district and its authorized representatives can review, read, access, or otherwise monitor all activities on the district systems, or any other systems accessed by use of the OTSD system.
- 2.) OTSD allows the use of personal electronic devices (PEDs), including but not limited to PDAs, flash drives, laptops, iPod/MP# players, digital cameras, iPads/tablets, and smart phones) at OTHS provided their use conforms to the use outlined in this document. OTSD does not assume any liability for the loss or damage of these devices or their content. Users of PEDs connected to the OTSD technology resources may be held responsible for damages to those resources as the result of the transmission of mal-ware or hacking tools, regardless of intent or lack of intent. OTSD reserves the right to monitor and inspect these devices after the device has been connected to the District's network infrastructure including the internet.

3.) While most of the content available on the Internet is innocuous and much of it a valuable educational resource, some objectionable material exists. The district has and continues to take steps to block objectionable areas, but potential pitfalls remain. The district monitors all web-sites visited. It is specifically prohibited for employees and students to knowingly visit sites that feature pornography, terrorism, espionage, theft, or drugs.

Electronic resources, district or personal, are not to be used to send or receive harassing, discriminatory, threatening, or otherwise offensive content. Also prohibited is the use of the District's systems for the operation of any unauthorized commercial enterprise, product advertisement, political lobbying, or any activity prohibited by law.

- 4.) In addition to #3 above, staff may not access objectionable or illegal material on the internet using a 3G or 4G connection.
- 5.) Among uses that are considered unacceptable and constitute a violation of this policy are downloading, transmitting, importing, or storing any and all copyrighted materials (i.e. music, pictures, video, text, software) without the expressed permission from the copyright owner. Even if materials on the district's network or the Internet are not marked with the copyright symbol © you should assume that they are protected under copyright laws, unless there is clear permission on the materials to use them. Doing otherwise may violate application licensing agreements and/or copyright law.
- 6.) Only authorized district personnel are permitted to install, modify, or remove software applications, utilities, operating systems, and system configurations. Hacking tools and any software having the purpose of damaging user accounts, files, or breaching network security measures is specifically prohibited.
- 7.) Theft of district property electronic or physical, as well as any act of vandalism will result in cancellation of system privileges and other disciplinary measures in compliance with the district's discipline code. Vandalism is defined as any malicious attempt to harm or destroy data of another, the hardware, software, and files that comprise district systems, or any of the agencies or other networks that are connected to the Internet backbone. This includes, but is not limited to the intentional uploading or creation of computer viruses, worms, Trojan horses, and other mal-ware.
- 8.) Although drawing, painting and games (when it conforms to the curricular goals of that program and the district) have legitimate academic use, those activities are prohibited when done for recreational purposes. Game playing over direct-wire links or other inter-machine communications is prohibited.

DISCLAIMER The Ocean Township School District has no control over information transmitted over the Internet, including items automatically collected into news groups or e-mail items sent into or stored within this network.

Township of Ocean School District Acceptable Use Contract

I hereby acknowledge that I reviewed the Ocean Township School District Acceptable Use Policy (AUP) and procedure on district electronic resources (i.e. Internet, e-mail, and the network system) access. I hereby acknowledge that I have read and understand the policy and procedure. I agree to abide by this policy and specifically understand that a violation of this policy may lead to discipline up to and including termination. Furthermore, a violation of this policy may also be a violation of the law and subject the user to investigation and criminal or civil prosecution. Such action may lead to monetary fines and/or imprisonment.

fines and/or imprisonment.	
User Name (Please Print)	
User Signature	Date
Student ID#	Grade
PARENT/GUARDIAN	
As the parent or guardian of this student, I have read the	e Terms and Conditions for the Acceptable Use
of the electronic resources in the Ocean Township Scho	ool District. I understand that this access is
designed for educational purposes and the district has ta	aken available precautions to minimize the access
to inappropriate material. However, I also recognize that	at it is impossible for the Ocean Township School
District, district system administrators, instructors, distr	rict professional staff or district authorized
contractors to prevent access to all controversial materia	als, and I will not hold them responsible for
materials acquired through the network and Internet acc	cess provided. Further, I accept full responsibility
for supervision if and when my child's use is not in a sc	chool setting. I hereby give my permission to
allow access to the system and/or to issue an Internet ac	ecount for use by my child and certify that the
information contained on this form is correct.	
Parent/Guardian Name (Please Print)	
(Not required if studen	nt is 18 or older)
Parent/Guardian Signature	Date Date
Daytime Phone Number Ex	vening Phone Number

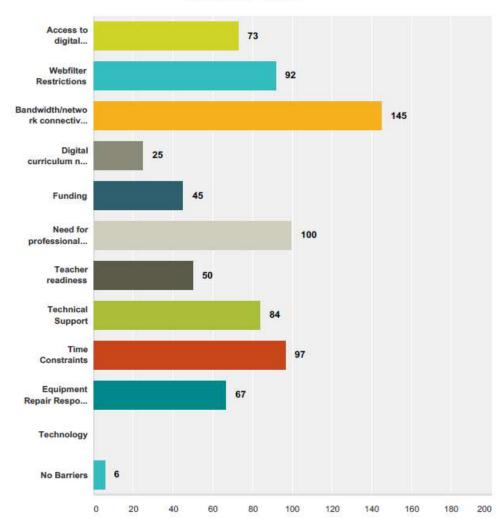
Email address _____

C. Needs Assessment

As part of the professional development plan (district and building levels), staff members are polled yearly for their preferences for professional development opportunities. Additionally, a combination of Likert-scale and open-ended response survey was developed for easy participant response and to allow for individual concerns and comments. A total of 232 responses were returned. Some of the primary barriers to using digital instructional materials were identified as bandwidth/connectivity issues, webfilter restrictions, time constraints and a need for professional development and instructional support. The greatest desire for professional development/training was with respect to the Google platform, Creativity Tools (Paint/Draw, Desktop Video, Sound Editing, Presentation) and Tool-based Software (graphic organizers, word processors, spreadsheets, databases, webpage development).

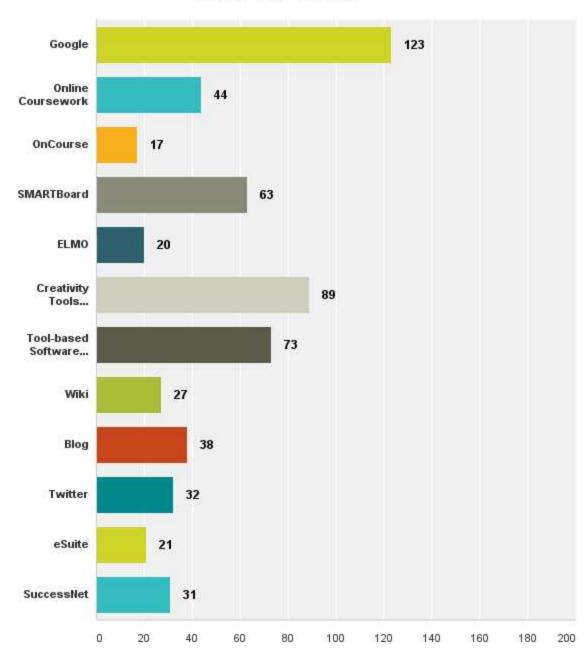
Q6 What do you perceive is the primary barrier to using digital instructional materials in your school?

Answered: 232 Skipped: 0



Q8 What technology training/additional training would you like to receive? Check all that apply.

Answered: 204 Skipped: 28



- a. Currently more staff members than ever before are integrating technology into their lessons; this is based on the frequency that NJCCCS 8.1 & 8.2 are indicated in (on-line) lesson plans. This is the direct result of the district's efforts to increase available technology, for both staff and students, as well as the increase in teachers' comfort-level and knowledge base through targeted professional development and technology purchases.
- b. Beyond the 'hard tech support' provided by the Technology Department, our district employs four Computer Lab Assistants who are versed in the use of technology. Both serve to aid students and staff in the use of district administrative software, e-mail, educational software, updating websites and providing methods for technology integration. Staff members are proficient in many Microsoft-based applications, e-mail, on-line lesson planning and grade reporting. Many others have expanded their knowledge to include mastering more advanced functions, manipulating digital media, and working on-line collaboratively.
- c. All educators are assured access to state-of-the-art multimedia technology, high-speed wireless Internet access and on-going professional development opportunities to facilitate technology integration.

Descriptors	Current Educational	Barriers
	Environment	
i. Educators are assured	Each teacher has a laptop or	Technology is constantly
access to technology to	Surface Pro and visual hookup in	changing and because of
facilitate technology	his/her classroom. Each classroom	budget constraints, it is difficult
integration across the	has wireless Internet access.	to upgrade all of our equipment
curriculum.		in a timely manner.
ii. Students often have	Each building and each media	The challenge is to keep pace
access to technology to	center (in each building) has a	with the explosion of different
support the use of 21 st	(number of) dedicated computer	technologies, the need to
century skills in their	labs.	modernize our infrastructure,
learning environment.	Additionally, the district has a	and the increasing technology
	number of mobile wireless laptop	needs of digital learners with a
	carts, Elmos and SMARTboards.	shrinking budget.
	Every classroom has a ceiling	
	mounted projector. Every student	
	in grades 3-12 has a Chromebook	
	for their use, and grades 6-12 are	
	allowed to bring the Chromebooks	
	home.	
iii. The needs of educators	Educators' needs are determined	Limited time for professional
are evaluated.	through a Needs Assessment	development and the diverse
	survey, through lesson plans and	developmental needs of our
	observations, and through	staff, coupled with shrinking
	professional dialogue.	budgets, presents challenges in
		training.
iv. The needs of students	Students' needs are assessed	Students' diverse technological
are evaluated.	through classroom grades in	skills and diverse accessibility

	technology-based classes, integrated technology activities/projects and through teacher observation.	to home technology presents challenges in instruction.
v. Past professional development addressed the educators' and students' needs for technology integration.	Educators are encouraged to attend workshops as deemed necessary for professional growth. The district has provided numerous opportunities within the district for additional professional development.	Limited time for professional development, shrinking budgets and the diverse developmental needs of our staff and students presents challenges in training.
vi. Past professional development for all administrators was provided to further support the effective use of technology in the classroom or library media center.	All administrators are encouraged to attend workshops and webinars as deemed necessary for professional growth. The district has provided numerous opportunities within the district for additional professional development.	A number of barriers exist including: lack of expertise, fear of technology, equipment availability, time, and financial constraints. Limited personnel in the tech dept. have had a great impact on technology usage.
vii. Supports were provided for educators other than professional development.	District technology staff (Technology Department, Help Desk), Computer Lab Assistants and the Network Manager provide ongoing support to encourage greater use and integration of technology.	A number of barriers exist including: lack of expertise, teaching style, equipment availability, time, and growing financial constraints. Limited personnel in the tech dept. have had a great impact on technology usage.
viii. Professional development needs and barriers related to using educational technology as part of instruction have been identified	The Brookdale Network provides opportunities for select staff to receive technology PD, and additional PD offerings are made throughout the year.	A number of barriers exist including: lack of expertise, teaching style, equipment availability, time, and growing financial constraints. Limited personnel in the tech dept. have had a great impact on technology usage.

- 2. Based on the answers given above, the needs of the district to improve academic achievement for all students through the use of technology include expanded professional development for teachers and administrators, the continued expansion of bandwidth to accommodate exponential growth of the network, increased staffing in the technology department, and more computers in the hands of students. Additional professional development in the areas of technology use, differentiated instruction, and technology integration must also be offered.
- 3. Prioritize the identified needs
 - Successful budget process
 - Hire more technology support personnel
 - Purchase of additional equipment

- o More computers for students
- o Increased bandwidth
- Provide additional professional development in the areas of technology use, differentiated instruction, and technology integration
- Provide additional time that can be devoted to professional development

IV. THREE -YEAR GOALS AND OBJECTIVES

A.) History (2010 – 2013)

The focus on technology and 21^{st} Century Skills: Communication, Collaboration and Creativity, is designed to assist students in crossing the digital divide. Ensuring that every student is technologically literate through the effective integration of technology coupled with teacher training and curriculum development is essential for establishing successful research-based instructional methods. The following goals are the 2013 - 2016 goals and their evaluation statements:

B.) Goals and Objectives for 2013 - 2016

Goal 1: Use technology to improve instruction and provide opportunities to acquire technological skills.

Evaluation:

High-speed network and Internet access is provided throughout all schools in the district.

The technology plan has been reviewed and referenced throughout its duration.

Internet access to a variety of online resources for staff, students and parents is provided 24 hours per day.

Technology information is disseminated through our website, local technology integration committee meetings and the district technology committee.

Content has been integrated with interactive and on-line technology resources across the curriculum.

Curriculum has been updated to integrate Technology Skills, 21st Century Skills, NJCCCS and CCSS.

Software purchases are aligned to curriculum needs and technology tools.

Goal 2: Implement consistent, ongoing professional development and support in order to further develop instructional staff's expertise in utilizing technology within the disciplines as a tool for improved teaching and learning.

Evaluation:

Membership in the Brookdale Technology Network affords PD opportunities.

Technology focused professional development is offered throughout the year, both in house and out of district.

ScIPs within each building and the Assistant Superintendent of Curriculum and Instruction provide professional development activities.

Current technology research-based information is disseminated regularly to the teaching staff at departmental, faculty, PLC, grade-level and other in-service meetings. Administrators receive technology training at out of district workshops.

V. GOALS 2016 - 2019

GOAL I: To support educators in their quest to enrich student learning experiences through emerging technologies.

ACTION PLAN

OBJECTIVE 1.1 Integrate content with interactive and online technology resources across the curriculum.

ACTIVITY	TIMELINE	PERSON RESPONSIBLE	DOCUMENTATION
1. Provide and support models that emphasize the use of technology in curriculum areas.	7/16 - 6/2019	Asst. Superintendent Content Area Supervisors	Meeting Agendas Electronic Resources Lesson Plans Technology Purchases
2. Schedule presentations to demonstrate new technologies and applications to content.	7/16 - 6/2019	Asst. Superintendent Content Area Supervisors ScIP	Meeting Agendas Electronic Resources Handout Materials
3. Provide PD for staff members in the area of technology	7/16 – 6/2019	Asst. Superintendent Principals ScIP	Ed. Leave Reports Building based PD
4. Plan site visits for key staff members to research effective uses of technology in program areas.	7/16 - 6/2019	Content Area Supervisors Instructional Staff	Ed. Leave Reports
5. Improve communication with Parents and community through expanded technology utilization:	7/16 – 6/2019	Superintendent Asst. Superintendent Building	Access Logs Websites

 Emergency Communications Parent Portal Ocean Website Academic and Attendance Records Teacher Websites Twitter Facebook 	Principals Content Area Supervisors Instructional Staff	

OBJECTIVE 1.2 Continue to align software, curriculum needs and appropriate technology-based tools.				
ACTIVITY	TIMELINE	PERSON RESPONSIBLE	DOCUMENTATION	
Provide instructional staff with the opportunity to view new technology resources (hardware and software).	Ongoing	Building Principals Content Area Supervisors Network Manager	Ed. Leave Reports Handout Materials Electronic Resources	
2. Review and evaluate new and existing software, online resources, multimedia resources related to curriculum.	Ongoing	Asst. Superintendent Content Area Supervisors Instructional Staff	Meeting Agendas Handout Materials Electronic Resources	
2. Provide instructional staff with the opportunity to include Internet based learning opportunities/projects as part of revised curriculum.	Ongoing	Asst. Superintendent Building Principals Content Area Supervisors	Meeting Agendas Lesson Plans Curriculum	
4. Support the development of grade level/program-based plans to infuse technology into each area.	Ongoing	Asst. Superintendent Building Principals Content Area Supervisors Instructional Staff	Meeting Agenda Handout Materials Program Plans	
5. Review, on a regular basis, current research relevant to instructional programs, learning and technology.	Ongoing	Asst. Superintendent Building Principals Content Area Supervisors Instructional Staff	Print Materials PDF downloads Meeting Agendas	
Include technology components as new curriculum materials are adopted.	Ongoing	Asst. Superintendent Building Principals Content Area Supervisors	Meeting Agendas Lesson Plans Dist. Curriculum Guides	

OBJECTIVE 1.3

Expand the district's staff development plan to include varied levels and modes of integrated technology training.

technology training.					
ACTIVITY	TIMELINE	PERSON RESPONSIBLE	DOCUMENTATION		
Identify a multifaceted approach to providing staff development.	9/16 - 6/2019	Assistant Superintendent ScIP	Meeting Agenda Handout Materials Electronic Resources Ed. Leave Reports PD Plans		
2. Survey instructional staff and identif sessions based on levels of expertise.		Asst. Superintendent ScIP	District Surveys Building Level Surveys		
3. Based on needs, offer a series of sessions including varied times and locations as well as during scheduled meeting times.	10/16 - 6/2019	Principals Content Area Supervisors ScIP	PD Sign-in Sheets Meeting Agendas		
4. Work with grade level/program area staff to determine effective curriculum—technology infusion techniques.	7/16 - 6/2019	Principals Content Area Supervisors ScIP	Meeting Agendas Lesson Plans Handout Materials Electronic Resources		
5. Encourage instructional staff to include a technology component in the professional development plans of each staff member	7/16 - 6/2019 of	Building Principals Content Area Supervisors	Meeting Agendas Lesson Plans PDP's Observations		
6. Provide training and technology support for instructional staff to increase their understanding about learning experiences that require students to use digital tools to access manage, evaluate, and synthesize information in order to create and communicate knowledge and solve problems.	9/16 - 6/2019	Principals ScIP Content Area Supervisors Computer Lab Assistants Network Manager	Meeting Agendas PD Sign-in Sheets Ed. Leave Reports Help Desk Logs		

GOAL II: DEVELOP EFFICIENT AND EFFECTIVE SYSTEMS OF TECHNOLOGICAL SUPPORT FOR STAFF MEMBERS AND STUDENTS.

OBJECTIVE 1.1 Implement effective systems of communication within the district.				
ACTIVITY	TIMELINE	PERSON RESPONSIBLE	DOCUMENTATION	
Develop, communicate and implement effective systems for addressing equipment malfunctions between staff and tech dept and students and tech dept.	9/16	Asst. Superintendent Network Manager Building Principals	System Plan Organizational Chart Meeting Agendas	

2. Create and disseminate building-based summer project timelines in coordination with Maintenance Dept.	Ongoing	Asst. Superintendent Network Manager Director of Facilities Principals	Summer Project Timeline
3. Develop a procedure for communicating technology needs, purchases and installations to staff members.	7/16 – 6/2019	Asst. Superintendent Network Manager Director of Facilities Principals Supervisors	Inventory Budget Requests Maintenance Reports Technology Dept. Reports Meeting Agendas
4. Maintain state-mandated test support.	Ongoing	Asst. Superintendent Network Manager Director of Guidance Principals	State-mandated testing schedule Tech Assignments
5. Encourage ongoing PD for tech support staff.	Ongoing	Asst. Superintendent Network Manager Business Administrator	Edleave Forms

VII. Professional Development

- A. Marion Conrad, Assistant Superintendent of Schools (Curriculum & Instruction) and each School Improvement Panel (ScIP) is responsible for coordinating the professional development activities in the Technology Plan.
- B. Planned professional development activities for teachers, administrators, and school library personnel include:
 - i. Ongoing sustained professional development for all administrators will be provided through participation in the Brookdale Technology Network, Techspo 2016-2019, and job embedded training programs. These workshops will provide administrators with a knowledge and understanding of the role of technology in promoting student learning and professional development (*NJ Professional*

Standards for School Leaders, 2.10) Administrative application programs include OnCourse Lesson Plan Management System[®], Applitrack[®], Power School[®], Administrative Observer, and AeSop[®].

- ii. Ongoing sustained professional development for all teachers will be provided through participation in the Brookdale Technology Education Network, graduate courses in instructional technology and embedded professional development during the school year. Technology education is also provided by the Rutgers University Center for Math, Science and Computer Education.
- iii. Professional development opportunities exist for technical staff. These include industry based technical training in Microsoft applications, specific software, server maintenance, Citrix applications, network management, and network security.
- iv. Professional development addressing the use of assistive technologies is provided in collaboration with the Department of Special Services. These technologies include alternative keyboards, electronic point devices, joysticks, track balls and touch screens.
- C. Sustained, focused, and high quality professional development for 2016-2019 will target the infusion of technology into the curriculum at all grade levels. Job embedded professional development will be delivered through grade level meetings, department meetings, and faculty meetings.

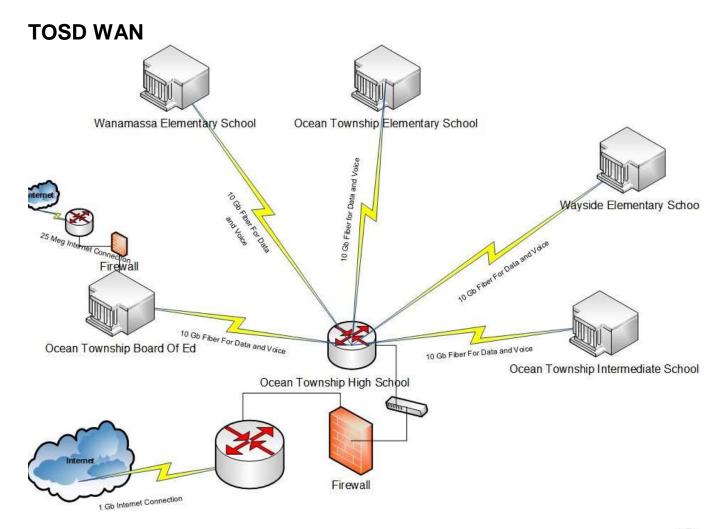
To ensure the effective use of technology to improve learning, teachers will be provided with in-class support. This critical technology support will be provided by computer lab assistants, supervisors and principals. Critical partners associated with technology professional development include the School Improvement Panels, Supervisors of Instruction, Principals, the Instructional Council, and the District Technology Committee.

D. Projected professional development activities that will support needs through 2019 include the following: Google Applications, Windows 10, Project Based Learning, Integrating STEM throughout the curriculum, and Managing Data to Drive Instruction.

VIII. EVALUATION

- 1. Teacher participation in professional development opportunities that focus on technology integration will be monitored.
- 2. Performance on state mandated assessments such as the PARCC will be analyzed. Content Area Supervisors will also monitor their departments' embedded technology progress via OnCourse reporting systems, classroom observations and lesson plan review. Finally, state and local graduation requirements will be reviewed.
- 3. Achievement through successful completion of courses such as the Intermediate School's Computer Applications courses and our Freshman Academy Instructional Technology course

Appendix A





Appendix B

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POLICY

Ocean Township Board of Education

Section: Program 2360. USE OF TECHNOLOGY Date Created: December, 1984 Date Edited: March, 2005

2360- USE OF TECHNOLOGY

The Board recognizes that the use of technology in the educational process is essential as part of the schooling experience. Technology is to be viewed as a tool to enhance the learning process among other tools that are required for teachers and students to fully explore the curriculum. In addition, technology can be used to enhance the administration of the schools and the district. In order to provide direction and meaning to the use of technology as an instructional tool, the Board directs that the Superintendent and the teaching and support staff use technology as a regular part of the learning process in every area of the curricular area.

For purposes of this policy "technology" means the use of computers and computer peripherals, communications networks, access to databases and libraries of information and the integration of audio, video, multimedia devices and media for purposes of teaching and learning.

The Superintendent in consultation with the teaching and support staff shall recommend to the Board the acquisition of appropriate technology to best implement the curricular, instructional and administrative program of the school district. The Superintendent shall prepare a technology plan for the school district which shall encompass the following:

Curricular, Instructional and Administrative Need

The technology plan shall define the curricular, instructional and administrative need for technological equipment and media for each area of instruction and shall project the need to the extent possible for a five year period.

Inservice Education

The Board shall provide opportunities to participate in inservice programs for employees on all hardware or software programs to be used in the execution of educational and administrative tasks. Inservice programs may be provided on or off site. The cost of tuition for inservice programs may be reimbursed by the Board.

Standards, Codes and References

All technology installations shall conform to the following standards, codes and references N.J.S.A. 18A, N.J.A.C. 5:23 and 6:22, BOCA National Building Code, NEMA, EIA/TIA 568 and 569 (Electronics Industry Association/Telecommunications Industry Association), LPC NFPA 78 (Lighting Protection code) IEEE 802.3 – Ethernet and 802.5 Token Ring (Institute of Electrical and Electronic Engineers), UL (Underwriter's Laboratories), ANSI (American National Standards Institute) and ADA (Americans with Disabilities Act).

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Facilities Planning

In all facilities projects involving new constructions, additions and renovations the Superintendent or designee shall insure that the plans include provisions for current and future technology needs in terms of the structural, electric/electronic, mechanical, acoustical and visual systems of the building(s). All educational specifications shall include under the description of instructional activities and implications for technology and under special features, those features required for the use of instructional technology.

Computers

The school district will provide support or maintenance agreements for specified brands of computers. All other computers purchased or donated will be subject to repair only when non-allocated funding are available and therefore may remain unrepaired until funding is available.

Computer Software Acquisition and Upgrading

The school district will only support the specified software and updates and training. Staff members shall not purchase software that has not been included on a list of specified software or has been approved by the Supervisor of Technology.

The Board will purchase upgrades to software on a periodic basis. An evaluation of upgrades shall be made by appropriate personnel and no upgrade shall be purchased without the express approval of the Supervisor of Technology.

Site Licenses

In the case, where more than one copy of a software program is required, the Supervisor of Technology shall attempt to acquire or negotiate a site license with the software developers. In the event a site license is not possible, vendors shall be sought who will provide multiple copies at a discounted cost.

Software Copyright

All employees shall strictly adhere to the copyright laws of the United States. No software shall be copied and/or distributed except in accordance with these laws. All software placed on media workstations or any network which there is public access shall be copy protected by the Supervisor of Technology who shall assure that individuals who have access to such programs shall not copy them without authorization.

Internal Communication (District)

The school district shall provide communication between schools by a variety of means including but not limited to: Backbone Media Distribution, Unshielded Twisted Pair, Coaxial Cable, and/or Fiber Optic Cable.

External Communications

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The Board encourages the use of external communications so that the schools may utilize the vast resources of external databases and communicate with other schools, external agencies and businesses throughout the world. Gateways to such communications will be supported by the school district. The use of particular gateways shall be approved by the Supervisor of Technology. The Supervisor of Technology shall be responsible for the installation of software in district owned computers and/or computer systems that prevents access to gateways and internet sites that have material considered by the Supervisor of Technology to be inappropriate for use by pupils.

Audio/Video

All audio and/or video materials shall be used in accordance with the copyright laws of the United States. Teachers, students or staff who create audio or video materials containing the voices or images of the individuals involved shall obtain proper releases from those individuals, their parents or legal guardians prior to using those materials for other than classroom or instructional use within the school.

Interactive Television

Teachers or pupils may participate in interactive television courses provided in conjunction with other educational institutions. Full credit may be obtained by pupils by participating in such courses. If the teacher involved is not the teacher of the course but rather a proctor, such assignment shall be counted as a duty rather than an instructional assignment.

Informing Parents, Legal Guardians and Interested Parties

The Superintendent or designee shall inform parents or legal guardians of computers and software purchased by the district in order that a computer purchased privately for home use may be compatible with the computer and software the pupil uses in the school setting.

Technology Coordination

The Superintendent shall appoint a district wide Coordinator of Technology to assure the technology needs of the district are met in the most efficient manner possible at the lowest costs available to meet specified needs. The position of Coordinator of Technology shall be full time.

The Director of Special Projects shall prepare a job description for the Supervisor of Technology.

Instructional Media Center/Library

The Instructional Media Center/Library shall be the division of each school responsible for coordinating the distribution and use of educational technology throughout the school. The Center shall contain the electronic media distribution system and shall make the system available throughout the school and to the external world by way of dial-in modem ports. To the extent possible, the IMC/Library shall acquire data and publications electronically to facilitate distribution and use. Teachers, students and staff shall be given the opportunity to indicate data and publication needs. All items available through the IMC/Library shall be

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cataloged electronically and are to be available through the school's computer network. To avoid duplication, all media and software purchases shall be coordinated through the IMC/Library and approved by the Supervisor of Technology and the school principal. In determining approval, the following factors shall be taken into account:

- The title of the material:
- Any recognized rating of the material (eg. Motion picture industry rating);
- The relevance to the curriculum;
- The cost of the media or software;
- The viability of the company producing the software.

Broadcast Rights and Copyrights

The Board specifically retains the Broadcast rights and copyrights to all materials created by employees of the Board as part of their responsibilities to the Board. Any financial remuneration for the use of such materials shall be retained by the Board and specifically dedicated to enhance technology used as part of the educational program.

Computer Security

The Superintendent shall develop security procedures to include, but not be limited to, the following areas:

1. Physical Security of Equipment

All computer equipment shall be maintained in a secure manner appropriate to its location.

Data Security

- Back-up procedures for system files, libraries, and data shall be practiced in a timely fashion.
- Disaster recovery plans shall be kept up-to-date at all times.
- Password protection shall be in place and updated periodically.
- Resource security shall be in place to prevent unauthorized access to system files, libraries, and data.

Employee Training

All new employees having, as part of their job responsibilities, access to computers and information systems will be trained in the proper security procedures outlined above.

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All employees having, as part of their job responsibilities, access to computers and information systems will be kept up-to-date on current security procedures for equipment and data.

Transaction Audit Trail

Appropriate procedures will be maintained in order to monitor system activity and users, as necessary.

Security Officer

The Superintendent shall designate a Computer Security Officer to monitor system security procedures.

The only exception for a pupil to bring or possess a beeper/paging device on school property or while attending school-sponsored activities on or off school property is when the pupil is an active member in good standing of a volunteer fire company or first aid, ambulance or rescue squad. The pupil must be required to respond to an emergency and a copy of the statement by the chief executive officer of the volunteer fire company or first aid, ambulance or rescue squad authorizing the possession of the beeper/paging device must be in the possession of the student at all times when the student is in possession of the beeper/paging device.

A person who discovers a student in possession of such a device in violation of this policy shall report the violation to the principal or designee, who shall confiscate the device. On the first offense, the device will be turned over to the parents or legal guardians. On the second offense, additional appropriate actions shall be taken in accordance with Regulation 5600.

Teachers will not use cellular phones at any time during classroom instruction time. Teachers may only use cellular phones before and after their contracted workday as well as during their lunch and teacher preparation times.

Use of facsimile (FAX) machines

Fax machines provide a useful means of communicating and shall be subject to the same rules that apply to the use of telephones. All incoming faxes shall be considered confidential mail. No disclosure of the contents of any fax shall be made except to the individual for whom the fax is intended. Any individual violating this confidentiality shall be subject to discipline as provided by the policies and regulations of the Board.

N.J.A.C. 6A:26-6.2 17 U.S.C. 101 et seq.

Adopted: 18 December, 1984

Revised: 17 July 1990, 19 February 2002, 19 March 2002

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