Allamuchy Township School District

2013-2016

Technology Master Plan

Created March 8, 2013

Executive Summary

Mission Statement and Vision

The Allamuchy School District believes that the integration of technology in all phases of teaching and learning is a vital element of students' future success. The primary use of technology in education for kindergarten through eighth grade is to assist in meeting the learners' individual developmental needs. Therefore, we are committed to providing age appropriate levels of technology use to effectively address the needs of all students. Technology will assist district professionals in their efforts to ensure an opportunity for all students to develop the basic requisite skills and knowledge needed to reach the highest level of achievement possible for each individual. As students' capabilities expand so will their ability to access and use local and global information sources, problem solving and decision-making tools, and additional technology-based learning opportunities.

The administration and staff will use technology to provide for the efficient and effective management of, and access to, administrative and student data. Technology will also be used to enhance school/community relations by providing and improving access to information about the school and students, as well as enhancing the productivity of staff and providing a more directed and focused learning experience for the students.

We believe that opportunities for expanded learning drive the need for new technologies. On-going staff development is paramount to accomplishing our technological goals. Strategic planning is the process by which we will create and sustain a vision for an overall technology plan. We recognize that successful implementation of the plan requires regular commitment of human and financial resources. Inasmuch as funding for education, in general, and for technology, specifically, is very limited, we pledge to strive toward a cost-effective balance between efficiency and need.

Technology Equipment Inventory

1. **Networking Capacity and Infrastructure needs to be addressed as a priority.**
    - Between 2011-2013 we saw the need to replace numerous pieces of equipment including; switches, servers, battery backups, fiber optic runs and the Sonic Wall, but there are still many pieces that need upgrading, including, but not limited to: 4 switches, fiber connectors, an additional server, an alternative connection to the T1 connection between the 2 schools to improve speed and efficiency. We hope to accomplish much of this by the opening of the 2013-2014 school year, and plan to buy an additional server before 2014-2015. Because the network has crashed repeatedly this year, we see a clear need for the additional equipment necessary to maintain the speed, reliability, and integrity of our network.
    - We plan to increase network capacity to 100MB by the end of 2014 to fully support all students, teachers, and staff without delay when using network resources.
    - In late 2012 the district started experiencing problems with DHCP and shortage of available IP addresses, and this issue needs to be corrected as soon as possible. Despite reducing the lease period, we have had to delete leases to phones and other non-school devices on a daily basis. We are hiring an outside firm to handle this project. We look to institute three levels of DHCP authentication: wired devices; wireless devices; and guest access to our network before the school year begins in 2013-2014.
2. **Technology equipment needs upgrading**
    - 90% of our laptops are at the end of their lifespan and need replacement. These new units are necessary to continue our technology initiatives with students and staff. Many teachers are experiencing so many problems that they are looking for other resources to complete expected curriculum tasks –at home or on their own devices (phones and tablets). This causes the district tech staff additional problems helping to integrate and maintain the staff's personal equipment.

- Desktop computers are 8 plus years old. Although we have upgraded RAM and these systems are all running XP Pro SP3, they will not be reliable enough to be sufficient for the online PARCC testing. They are best used as thin clients due to the rapid change of application requirements. We are proposing to use these computers in a computer lab setting at the Mountain Villa Primary School, where none of the classes will be participating in standardized online testing. We are budgeting for 30 computers to replace these old machines in the Allamuchy Township School (Grades 2-8) computer lab, where the students will be using them for PARCC online testing.
- Several of our original Dell projectors for the SmartBoards are in need of replacement due to age. Despite changing bulbs, the picture is no longer as sharp as needed on some of the brighter days. We are looking to replace three projectors a year with new equipment to better serve the needs of our teachers and students.
- Allamuchy Township School District integrates assistive technology on an individualized basis in accordance with student needs. Special keyboards, portable word processing devices, specialized software such as Kurzweil Reader and Smart Notebook are in use at all levels of instruction, but need to be upgraded or replaced. The Phonic Ear system is working and used daily in both schools, but needs to be updated and recalibrated. Hopefully, this will be done over the summer of 2013, but may have to be pushed off until later.
- By the school year 2015-2016 we purpose to purchase additional SmartBoards for all classrooms that do not have one. This would give every teacher the tools to seamlessly integrate technology into every student's learning experience.

3. Filtering Method / Cyber Safety

- In 2011-2012 we purchased a new Sonic Wall for secure firewall and Internet filtering that enables us to update filtered sites automatically as updates become available. We will continue to purchase support for firmware upgrades to our Sonic Wall to allow our students and staff safe access to the district network resources.

- Acceptable Use Policy (AUP) (see Addendum #1) -- Although we have a permission system in place, we do not post any individual pictures of students on our website. Our students use e-mail only for special projects under direct teacher supervision and do not have their own email accounts, Board Policy # 2360 Use of Technology
- Students are educated about online safety during an instructional unit in grades K-5. This unit emphasizes acceptable use and possible dangers of improper internet use. All K-8 students and parents must sign an Online Agreement (*see Addendum #2*) as a prerequisite to using the Internet. All students are educated in responsible and ethical computing practices. The District is vigilant about Cyber-bullying and students are made aware that the consequences of such action will be swiftly dealt with by teachers and administration.
- Resources regarding online safety are provided to parents through distribution of handouts (student handbook, district newsletter "Paw Prints' and on our website). Specialized presentations /informational sessions are provided and presented to the community members as needed. In 2013-2016 we will continue to have the NJ State police come annually to present their Cyber-Safety program for the students and the community.

4. Software for Curricular Support and Filtering

- We will continue to purchase and use the Sonic Wall and its filtering software to allow our students safe access to network resources.
- Through the 2013-2016 time frame, we will continue our annual contracts for online educational services for teachers and students: *Discovery Systems (United Streaming); Study Island; Learnia; Successmaker; AR – Math and Reading*. These programs give our teachers and students anytime access to great learning experiences and prepare our students for future online PARCC testing.
- We will continue to use our Real time web-based software for student data services. This software keeps daily reports, and

gives teachers, administrators, and staff a longitudinal view of students' progress throughout the years.

- We will continue to use *ClassLink* thin client to give every student access to the latest software despite limitations of computer equipment.
- In 2011 the district switched over to using *Destiny Library Software*, an information technology resource that allows students and staff to access the library resources through any workstation with a supported web browser, through the school's network and the Internet, 24/7, and we will continue to use this powerful library management tool through 2016.

5. Technology Maintenance and Support

- Due to severe budgetary constraints, our technology support has been limited to our in-house Technology Teacher and Coordinator with some additional monthly assistance provided by an outside consultant, and repair work help, as necessary. We have had more than our share of problems the past few months, and the district is now looking for permanent solutions. After a thorough analysis of our network infrastructure, we will implement the necessary upgrades and repairs. Once that job completed, we will continue to work with a consultant to help out monthly and plan for future growth. Ideally, we would like to hire a part-time in-house technician to take care of day-to-day issues before 2016.

6. Telecommunications equipment and Services

- During 2012 the district replaced our former telecommunications provider with Optimum Online, and we have been happy with the resulting cost savings and service. During the next year we would like to find a better means of connecting our two school buildings with data and voice. We are presently using a T1 line, but are experiencing some time delays. We are looking into alternative connection possibilities, and hope to implement a faster solution before the end of 2014.
- During 2011 the District switched over all email services to Google Apps for Education with Postini spam filtering and archiving services. Google Apps is free for educational institutions and our only cost is for archiving. This product has

been very easy to implement and use. Every staff member has a Google account that allows all personnel to receive and send email wherever they are. According to our 2013 Tech survey, 95% of all staff uses email regularly for communication to administrators, staff, and parents. We will continue to use Google Mail for our email, and in 2013-2014 we plan on expanding the usage to include other Google Apps, such as Google Docs, Calendar, etc. The ease of managing Google Mail enables us to add student accounts for special projects and remove them when the project is finished.

7. Obsolescence Policy

Obsolete computers and equipment will be phased out during a 5-6 year replacement period as the budget allows. Equipment is considered to be obsolete when it was manufactured prior to the last three generations of processors and/or can no longer process the necessary curricula applications. Older machines may continue to have use in certain grade levels or curricular areas past this period. Before discarding, all feasible uses, including parts cannibalization, will be explored. The District uses the Warren County Recycling Center to dispose of obsolete equipment and the equipment is removed from our active insurance inventory.

8. Professional Development

a. As denoted by our assessment survey, 90% of our teachers and staff are at an Intermediate level or better on technological competency. We will continue to support new technologies by providing professional development opportunities at the school and encouraging the staff to attend outside workshops and seminars.

9. Technology Inventory: Three Year Technology Inventory Needed 2013-2016			
Area of Need	**2013-2014**	**2014-2015**	**2015-2016**
Technology Equipment	30 Desktop computers for Computer Lab at ATS	Replace server 40 new laptops for Teachers and Staff	25 Desktop computers for an additional lab at ATS 20 new Laptops for teachers
	2 Interactive Whiteboards for Mountain Villa	2 Interactive Whiteboard ATS	2 Interactive Whiteboards for ATS
	3 ceiling mounted projectors	3 ceiling mounted projectors	3 ceiling mounted projectors
	Infrastructure hubs, switches, cables	Maintain Infrastructure and service contracts	Maintain Infrastructure and service contracts
Software used for curricular support	Web based Subscriptions according to curriculum requirements / software upgrades in prep for PARCC	Web based Subscriptions according to curriculum requirements / software upgrades	Web based Subscriptions according to curriculum requirements / Software upgrades
Telecommunications Services	Change the T1 Line between schools	Increase Speed on the network with rewiring / Revisit telecommunications provider	Maintain infrastructure
Technical Support	Increase IT position to 3 days per month	Increase IT position to 1 day per week	Increase IT position to 2 days per week

Area of Need	2013-2014	2014-2015	2015-2016
Facilities	Electrical/server maintenance and upgrades	Electrical/server maintenance and upgrades	Electrical/server maintenance and upgrades
Technology Repair	Maintain an outside resource for more complicated repairs and configuration problems	Maintain an outside resource for more complicated repairs and configuration problems	Maintain an outside resource for more complicated repairs and configuration problems
Other Services	Reinstate the Student Technology Assistants Program for grades 7-8.	Maintain the Student Technology Assistants program for grades 7-8.	Maintain the Student Technology Assistants program for grades 7-8. Extend program to 6th grade.

Needs Assessment

1. A Staff Technology Needs Assessment was conducted via an electronic survey in March 2013 to access the staff's current level of computer expertise and use of technology in current teaching practices. There have also been many active discussions at faculty and board committee meetings about the necessity for much needed improvements to our infrastructure.

- **A majority of the staff utilizes technology:**
  - To access online resources relevant to the curriculum
  - To maintain student records
  - To email (communicate with students, parents, and colleagues)
  - To use presentation software for instruction
  - To produce materials for use with students
  - To assess and remediate student academic levels to meet state standards.
  - To help students with special needs to meet academic success with assistive technology.
- **Teacher Staff Technology Proficiency**

  As indicated in the survey, 10% of the teaching staff is at a beginner level of technology proficiency; 47% are at an intermediate level; and 43% of the teachers have attained an expert level of technology proficiency. 96% of our teachers and staff feel capable of teaching their peers at least one aspect of technology use (Realtime, PowerPoint, Word Processing, searching the Internet, etc,).
- **Current educational environment and barriers**
  - Homeroom teachers have a laptop computer to facilitate learning, to access student records, and for email communication with office, colleagues, and parents. General Ed classrooms in grades K-8 and two Special Needs classrooms are equipped with a projector and SmartBoard with the latest drivers and software, however, several of the original projectors need replacement due to age. We have a few laptops that can be utilized for student learning, but these are older machines and very slow and many are often out for servicing. There is one computer lab with 26 computers for student use. In the library, we have a bank of computers for general use for students and staff. One of the carts with 20 computers was brought over to the Mountain Villa Primary School for general computer classes. Staff members have found it difficult to reserve the computer lab due to scheduling conflicts, which is problematic since technology is such a major part of our recently revised curriculums. Over the past 2 years, the district has been the recipient of another local district's leftover equipment, which we have configured the use of a thin client called *ClassLink*. *ClassLink* has enabled us to use the latest programs on older slower machines, affording students

and teachers who have not been able to get scheduled time in the computer lab access to technology. However this is not enough, as older equipment brings its own compatibility and repair issues. The staff has expressed concern and frustration with the lack of working and/or available computers in the school and an aging infrastructure that often makes the Internet inaccessible at a time when so many of our resources are dependent upon it. They also expressed that a lack of time to learn, practice and plan present a barrier in integrating technology in the classroom due to the amount of time they need to plan for standardized testing.

- In 2011-2012, we were the lucky recipients of a Smart Response System that we are still trying to implement into the educational process, but time restraints, here again, have again have kept us from full implementation.
- Students have access to technology through instructional use and activities created by teachers. Additional access to computers is provided through the use of the computer lab, library computers, Danas, and AlphaSmarts, although the latter are rarely used due to the inconveniences of downloading. Barriers for student access are the dwindling number of computers available for on-demand learning activities and opportunities in the classroom. Where we once had two rolling carts for student use, we are down to none. The computer lab computers are fully scheduled throughout the day, but many times there are one or more computers down for repair. Due to the age, lack of speed and inability to meet requirements of newer applications, it is a prime objective to replace this lab as soon as possible .
- The technology needs of the staff are evaluated through the use of surveys, checklists, and through teacher requests and inquires. The latest online survey was conducted in March 2013.
- The needs of students are evaluated by district developed assessments tools, the 8th Grade Assessment test (Learning.com), and daily benchmarks based on state standards and classroom observation.
- Professional development has addressed the staffs' and students' needs by providing on and off-site opportunities for enhancement of technology integration skills.
- Administrators have been provided professional development opportunities through participation in technology education leadership programs.
- Since the demise of the Warren County ETTC in 2007, sustained professional development has been more difficult to get locally and much more expensive for the District. In 2010-2013, professional development workshops have been provided through district in-service days, the annual countywide-in-

service day, after-school mini-workshops, and individual help as per teacher requests.
- Allamuchy Township's administrators have advanced proficiency using many different kinds of technology. Our superintendent taught technology in his former school district and we presently have an interim principal who is very open to using and improving technology.
- Realizing that the teaching staff needs more than professional development, the District has hired a part-time technology consultant to help the Technology Coordinator and Teacher maintain computer equipment and help teachers integrate and infuse technology into their curriculum.
- Additional support for staff to apply what was learned at professional development workshops is limited due to time and scheduling with the technology teacher and technology consultant.

2. **The needs of the district to improve academic achievement for all Students are:**
   - Get the infrastructure at both schools up to present day specifications and speed.
   - Purchasing enough laptop computers to replace aging or obsolete computers still in service.
   - Purchasing new desktop computers for the computer lab at the Allamuchy Township School
   - Establishing a computer lab at the Mountain Villa Primary School.
   - Scheduling computer times for student use of Lab
   - Scheduled time for teachers to plan, collaborate and implement new technologies
   - Increased onsite professional development opportunities
   - Increase computer technician hours for more timely maintenance and troubleshooting.

3. **Priority of needs**
   - The infrastructure is paramount importance, especially with online assessment in the next few years.
   - All of the other needs in item two have equal priority based upon our staff needs assessment.

Three-Year Goals and Objectives

A. History & Evaluation

Goals from 2010-2013 Plan

The district acknowledges the four State Goals designed to lead technological literacy for students. Based on key identified priorities of communities, the workforce, educators and parents, the goals are as follows:

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

Evaluation of Goals

Based on current resources, teachers are encouraged and continue to receive support and training in integrating technology into instruction both in their classrooms as well as in a lab setting in order to achieve the Core Curriculum Content Standards. We have continued to provide a high-speed secure Internet and LAN connection to accommodate web based learning and communication between the district and the community. On top of this, we now have wireless access points throughout both buildings to enable teacher and student learning through many different types of devices. We now have several online learning opportunities where

students can access learning through the web wherever they are (*Study Island, Successmaker, AR Math and Reading* and *Learnia*). Teachers can access *Discovery Learning* to supplement classroom learning and our website contains many valuable links for teacher online learning and classroom instruction.

Through the support of the Allamuchy Township Board of Education, funds are committed to acquire new technologies annually that will enhance learning opportunities for our students. The following outcomes /benefits have been linked to our technology initiatives:

- All students and teachers have access to information technology in their classrooms.
- Our computers are integrated into classrooms for instructional purposes through the use of SmartBoards technology, laptop computers, Ipads, and the Student Response System. All regular education classrooms are outfitted with a Phonic Ear Sound Enhancement System, a great teacher tool for all students, especially students with disabilities.
- We have a 27 seat computer lab at the Allamuchy Township School, and have 18 laptops and IMAcs at the Mountain Villa Primary School.
- We have held community/parent educational opportunities over the last 3 years and maintain a viable and vibrant website (www.aes.k12.nj.us) that is a conduit for parent – school information and has links to great information for students, teachers, parents, and community. An Internet Safety Night for the community, sponsored by the NJ State Police, is scheduled annually.
- Administrators have access to technology with a laptop or desktop for personal use, a secure login to network resources, Internet access, and an email address. A Smartboard and projector are available for BOE and other public meetings. In an on-going effort to cut down on paperwork, office and administrative communication to the staff is handled through emails.
- By graduation, our students have completed several digital stories that include oral and pictorial components and are completed in many different curriculum areas and grade levels. These stories have been used as a learning tool for teachers at conferences across the state and nationally
- All students Pre-K to 8 are given training in areas of educational computing. Appropriate skills have been developed

for each grade level to infuse technology into the curriculum and meet the Federal Technology Standards and New Jersey Core Curriculum Content Standards. (See Addendum 2,3)

- The telecommunication (phone system) system was transferred from Verizon lines to Optimum Online (Cablevision), affording the District an efficient system at a significant cost-savings.

B. Goals and Objectives for 2013-2016

- Continue to foster a positive learning environment that encourages the use of technology as instructional, problem solving and productive. Whenever possible, use technology to advance higher level thinking skills. Provide direction and support for the successful and appropriate integration of technology-based education into curriculum.
- Foster an environment where, through the use of technology, positive changes occur in the manner in which teaching and learning takes place. The teaching role should create a greater emphasis on teacher as facilitator. Student motivation and learning should be enhanced through technology.
- Provide a comprehensive program of in-service and support of district personnel for the integration if technology into the curriculum.
- Provide appropriate resources to effectively support the management and delivery of services.

In 2013-2016, we will:

- Assure our stakeholders that, in our increasingly mobile society, we will align our goals and objectives to closely correspond with state and national objectives in order to meet the needs of all students.
- Effectively choose new software purchases
- Keep our Microsoft Office software updated to latest versions to keep the home to school connection as smooth as possible
- Upgrade Internet browser to latest versions as needed
- Upgrade utility software and firmware to the latest versions (i.e. Adobe Reader, Shockwave, Java, Adobe Flash, SmartBoard Notebook)

- Foster an environment where, through the use of technology, positive changes occur in the manner in which teaching and learning takes place. The teaching role should create greater emphasis on teacher as facilitator. Student motivation and learning should be enhanced through technology.
- Continue to subscribe to web-based programs that foster learning, such as *Study Island, Successmaker, Learnia,* and *Discovery Learning* and allow anytime access for students and/ or teaching staff. These software programs will give our students valuable online experiences to help them succeed in PARCC online assessment testing.
- Encourage collaborative teaching and learning situations.
- Train the staff in use of the Smart Response system to enhance learning and engage all learners.
- Purchase Smart Boards for supplemental learning classrooms (Art, Music, Spanish, Computer Lab)
- Provide a comprehensive program of in-service and support of district personnel for the cross-curricular technology infusion.
- Provide appropriate financial resources for the selection and acquisition of new equipment and software in order to effectively support the management and delivery of service.
    - Update our infrastructure with bandwidth and equipment to more than meet all present network specifications before the end of 2014.
    - With the loss of enough computers to fill our rolling carts, the District is looking to upgrade the Computer Lab at ATS with the hopes of adding an additional lab at the school by the 2015-2016 school year. With the older computers in the present lab, we are going to set up a computer lab at the Mountain Villa School for the 2013-2014 school year.
    - Set up a replacement policy that more closely reflects the changing specifications timeline, to ease the constant threat of network and equipment failure.
    - Keep Sonic Wall up to date with service and firmware to assure our staff and students have a safe access to online resources.
    - Continue online backup system subscription (Mozy Pro)
    - Add an additional server to our infrastructure and decommission obsolete servers by 2014-2015.
    - Investigate and implement a more efficient and less costly alternative to the present T1 line between the Primary and the Elementary schools and look to implement it by the end of 2014.

Implementation Activity Table 2013-2016

	Technology Implementation Activity Table			
District Goal and Objective	**Strategy/ Activity**	**Timeline**	**Person Responsible**	**Documentation**
1	Make a blueprint of our network to see how the pieces come together to update and replace aging infrastructure/ Research alternative to TI line between schools	Summer 2013	Superintendent/ Technology Coordinator/ Technology Consultant	Written Report/ Board Minutes
2	Replace and upgrade infrastructure for better efficiency and reliability/ Implement new telecommunication strategies	2013-2014	Technology Coordinator/ Technology Consultant	School Budget Board Minutes
3	Purchase 30 new computers for an updated computer lab at ATS in prep for PARCC/ Move older computers to lab at MV	Fall 2013	Technology Coordinator	School Budget Board minutes
4	Purchase 40 new laptops for teachers and staff to increase speed and productivity	Fall 2014	Technology Coordinator	School Budget Board Minutes
5	Purchase 30 new computers for an additional computer lab at ATS to facilitate PARCC online testing	Fall 2015	Technology Coordinator	School Budget Board Minutes
6	Purchase interactive 2 whiteboards per year and provide appropriate training and refresher training	2013-2016	Administration Technology Coordinator	Board Minutes In-service sign-in sheets

7	Purchase 3 new ceiling projectors each year to replace aging projectors to enhance SmartBoard efficacy	2013-2016	Technology Coordinator	School Budget Board Minutes
8	Dialogue with Neighboring districts for feasibility of shared Technology services	2013-2016	Superintendent	Board Minutes
9	Work with administration to arrange schedule to allow for technology training and implementation	2013-2016	Principal	Master Schedules and training Schedules
10	Upgrade and calibrate Phonic Ear System in all classrooms, an assistive technology that enhances learning for all students	2013-2014	Technology Coordinator/ Administration	School budget
11	Facilitate regular technology committee meetings throughout the year to oversee tech plan implementation	2013-2016	Principal	List of Committee members and dates of meetings
12	Put feelers out to local businesses for technology equipment donations	2013-2016	Board Technology Committee	Committee minutes
13	Research and apply for local, state, and federal grant opportunities	2013-2016	Superintendent/ Staff	List of grants
14	Create a system to research, develop, and implement new enrichment opportunities Research online real-time data project sites such as CEISE Institute out of Stevens Institute of Technology/ Continue support and training for the Dynasty Library system	2013-2016	Technology Coordinator/ Librarian/Curriculum Coordinator Classroom Teachers	School Budget Projects

Funding Plan 2013-2016

The Allamuchy Township Board of Education recognizes and appreciates the value of a fully equipped and integrated technology program for its students and staff. To that end, the Board will strive to fund the initiatives previously delineated under the Implementation Activity table by dedicating adequate funds from the following sources as the budget allows.

- Local tax levy
- State aid sources
- No Child Left Behind Funds
- REAP and other federal grant sources
- Various other discretionary grant sources as available
- Shared purchasing with neighboring districts as developed and if feasible
- E-Rate savings/ rebates

Three-Year Technology Plan Anticipated Funding Plan 2013-2016				
ITEM	**FEDERAL FUNDING**	**STATE FUNDING**	**LOCAL FUNDING**	**MISC. (e.g. Donations, Grants)**
Digital curricula	**X**	**X**	**X**	**X**
Print media needed to achieve goals	**X**	**X**	**X**	
Technology Equipment	**X**	**X**	**X**	**X**

ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (DONATIONS, GRANTS)
Network	X	X	X	X
Capacity		X	X	
Filtering		X	X	
Software			X	X
Maintenance			X	
Upgrades	X	X	X	
Policy and Plans			X	
Professional Development	X		X	X
Other services			X	X

The Allamuchy Township Board of Education pledges to meet the requirements of CIPA and other legislation designed to protect children.

Professional Development for 2013-2016

Educators' proficiency/Identified from Needs Assessment Survey March 2013	Ongoing, sustained, high quality professional development planned for 2013-2016	Support
Utilization of Interactive SmartBoards as a teaching and learning tool to support differentiated instruction cross-curricula	Coordinate in-house training with Professional Development Committee. Training will include software instruction and the use of other related resources	All machines will have Interactive SmartBoards and updated software installed to allow for practice. The Technology Coordinator will facilitate continued development of skills. The Master Schedule will allow time for training and collaboration
Math and Science teachers have identified a need to know more about graphing calculators in preparation for state testing	Identify workshops and seminars that will not only teach the skills, but hone in on learning activities that can be integrated with the science and math curriculum	Technology Coordinator Curriculum Coordinator
Smart Response System training that will enhance active learning in the classroom	In-house training sessions/ observation opportunities/ out-of-district workshops	Scheduling will be set up to facilitate training needs. Support from the Technology Coordinator
Teachers will continue to participate in professional development activities that support technology integration and will model best practices for learning and collaboration	Providing staff with online training and networking opportunities with other professionals in their field. The Allamuchy Website (www.aes.k12.nj.us) has many valuable links to information and professional development resources. Our online library system gives our students and staff limitless opportunities to find the information they will need for teaching, learning, and collaboration.	Funding from the board of Education. Support from the Technology Coordinator with scheduling support from Administration

Evaluation Plan

The district will continue to provide a secure high speed Internet connection (T-1 or better), updated hardware and software. This will enable teachers and students to have access to information, which supports and enhances learning, to meet the demands of a global society.

Technology Evaluation Plan 2013-2016	
a. Telecommunication services, hardware, software and other services are improving education.	1. Keep a log of computer troubleshooting incidents 2. Monitor computer lab usage 3. Review lesson plans 4. Faculty and staff discussions 5. Monitor parent use of website and school communication resources, such as our electronic newsletter and parent list-serves 6. Administrative evaluation
b. Integrating technology effectively into the classroom	1. Monitor lab usage 2. Review Lesson Plans 3. Logging Professional Development Hours 4. Scheduled meetings with appropriate staff 5. Evaluation survey
c. Enabling students to meet challenging state academic standards in preparation for PARCC online testing	1. Analyze student standardized test scores pre-PARCC testing 2. Incorporate digital assessment tools 3. Continue subscriptions to online learning programs and monitor student achievement 4. Develop district technology rubric 5. Review current curriculum assessments 6. Review Federal technology standards 7. Review State Technology Standards to meet 8.1 and 8.2. 8. Continually upgrade and evaluate technology curriculum.

d. Developing life-long learning skills	1. Classroom observations 2. Review lesson plans to ensure they promote problem solving 3. Evaluation of students' digital portfolios to include evidence of the ability to access, organize, synthesize, process and present information.
e. Our district is meeting the identified goals in the educational technology plan	1. Administrative review 2. Tech committee review 3. Testing results 4. Technology assessment survey for faculty and staff mid-year and annually 5. Improved infrastructure reliability

Allamuchy Township School District will continually monitor all of the above and will effect changes to this plan accordingly.

Addendum 1

Allamuchy Township School

Acceptable Use Rules for Students

We are pleased to offer students of the Allamuchy Township School access to the district network and the Internet. To gain access to the Internet and network services, all students must obtain parental permission and must sigh and return the consent form.

Access to the Internet will enable students to explore thousands of libraries and databases. Families should be warned that some material accessible via the Internet may contain items that are illegal, defamatory, inaccurate or potentially offensive to some people. While our intent is to make Internet access available to further educational goals and objectives, students may find ways to access other materials as well. We believe that the benefits to students from access to the Internet, in the form of information resources and opportunities for collaboration, exceed any disadvantages. But ultimately, parents and guardians are responsible for setting and conveying the standards that their children should follow when using media and information sources.

Students are responsible for good behavior on school computer networks just as they are in a classroom or a school hallway. Communications on the network are often public in nature. General school rules for behavior and communications apply.

The network is provided for students to conduct research and communicate with others. Within reason, freedom of speech and access to information will be honored. During school, teachers will guide students toward appropriate materials. Access to network services is given to students who agree to act in a considerate and responsible manner. Parent permission is required. Access is a privilege – not a right. Access entails responsibility.

Individual users of the district computer networks are responsible for their behavior and communications over those networks. It is presumed that users will comply with district standards and will honor the agreements they have signed.

Network storage areas may be treated like school lockers. Network administrators may review files and communications to maintain system integrity and insure that users are using the system responsibly. Users should not expect that files stored on district servers will always be private.

As outlined in Board policy and procedures on student rights and responsibilities, the following are not permitted:

- Sending or displaying offensive messages or pictures
- Using obscene, crude , or vulgar language
- Harassing, insulting, or attacking others
- Damaging computers, computer systems or computer networks
- Violating copyright laws
- Using another's password
- Trespassing in another's folders, work or files
- Intentionally wasting limited resources

Sanctions:

- Violations may result in a loss of access
- Additional disciplinary action may be determined at the school and will be, law consistent with existing practice regarding inappropriate language or behavior.
- When applicable, law enforcement agencies may be involved

Internet/Web Publishing Consent Form

Pursuant to state and federal law, the Allamuchy Township School district will not release any personally identifiable information without prior consent from parent or guardian. Personally identifiable information includes student names and grade levels, photo images, location and times of field trips, and awards and honors. Although the global accessibility of the internet brings with it some inherent dangers, we as a school district would like to celebrate your child and his/her work. The law requires that we ask for permission to post any information about your child.

Please choose one of the options below and sign this form. You may rescind this permission at any time by sending a letter to the technical director and such rescission will take effect imm4ediately upon receipt by the school.

A____ I/we grant permission for a photo image that includes my child without any other personal identifiers to be published on the school website.

B_____ I/we grant permission for a photo image of my child along with his/her name to be posted to the school website.

C____ I/we grant permission for a photo image of my child along with his/her name and grade level to be published on the school website.

D_____ You may not publish a photo image or any other personal information about my child on the school website.

Student name: (please print)_____ Grade: _____

Parent / Guardian: (please print)_____

Parent / Guardian Signature: _____

Relationship to Student:_____ Date: _____

Addendum 2

Student Skills and Activities per Grade Level

Pre-School Handicapped—Mouse control and beginning keyboard skills (recognizing numbers, letters, Enter key, space bar, and arrow keys on the keyboard); introduce paint software and primary pre-reading and math programs.

***Sample Projects*: Number Booklet, *KidPix* Stamp pages**

Kindergarten—Review parts of the computer system; mouse control and keyboard skills; primary software to develop pre-reading and math skills; introduce word processing and graphics software; practice using paint tools, introduce typing skills using *Type to Learn Jr.*

***Sample Projects*: Shape and color Book: Name Poem**

First Grade—Introduce word processing and use of the toolbars in *Microsoft Word.* Students will be able to type journal entries, that were previously written in class, on the computer and print out their work, reinforce typing with *Type to Learn Jr*.

***Sample Projects:* Picture Sentences; Shape Poems; Nametag key rings; Family Stories; Animals on the Internet**

Second Grade—Review word processing skills using the toolbars to: change font and point size, change color, and change alignment (left to center, center to left); continue keyboarding lessons; practice typing poems; use level appropriate software to develop reading, math, and problem solving skills; use paint tools to draw pictures and illustrate maps, Begin keyboarding skills using *Type to Learn 3*

***Sample Projects*: Shape Poems; Dinosaur stories; Illustrated stories; Internet dinosaur search; Island mapping project**

Third Grade—Continued practice of keyboarding skills, practice word processing skills while typing a short story written in class; use level appropriate software to develop problem solving skills, continue keyboarding skills using *Type to Learn 3*

***Sample Projects*: Illustrated stories: Dana paragraphs; Guided internet searches: Graphs; State Brochure**

Fourth Grade—Practice word processing and keyboarding; stressing the need to use two hands and proper posture when keyboarding; Use *Type to Learn 3* on the Fourth Grade classroom computers for practice during the week; introduce spreadsheets and graphing programs; interactive Internet activities

Sample Projects: Graphs; Spreadsheets; Acrostic Poems; PowerPoint Heritage project

Fifth Grade—Introduce electronic databases in conjunction with a science unit; students set up fields, adjust the layout, and save their work to give them time to research information; continue keyboarding skills and work processing practice; refine Internet searches, reinforce typing skills

***Sample Projects: Brochure;* PowerPoint Slide show (cultures); Spreadsheets/ graphs; Digital Story**

Sixth Grade—Continue developing spreadsheet skills; working with various formulas to simplify computation; develop techniques to enhance PowerPoint presentations, reinforce typing skills; using digital media for stories and reports

***Sample Projects:* Dr. Seuss Poster; Math spreadsheet/graph; Grammar slideshow**

Seventh Grade—Continued practice on data base reporting; refine Internet research strategies; continue to develop word processing skills; digital stories and reports

***Sample Projects:* Travel Brochure; Trip Planning; Solar system/ space PowerPoint**

Eighth Grade— Students fine tune Internet, word processing, database, and spreadsheet/graphing skills; use various computer tools and creativity to illustrate and report; digital stories and presentations

***Sample Projects:* Washington DC project; Rube Goldberg Machine design project**

Addendum 3

National Computer Standards

The National Educational Technology Standards (NETS) are the standards for learning, teaching, and leading in the digital age and are widely recognized and adopted worldwide. The family of National Educational Technology Standards — NETS for Students (NETS•S), NETS for Teachers (NETS•T), NETS for Administrators (NETS•A), – work together to transform education.

NETS for Students

1. **Creativity and Innovation**

   Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

   a. Apply existing knowledge to generate new ideas, products, or processes
   b. Create original works as a means of personal or group expression
   c. Use models and simulations to explore complex systems and issues
   d. Identify trends and forecast possibilities

2. **Communication and Collaboration**

   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

   a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
   b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
   c. Develop cultural understanding and global awareness by engaging with learners of other cultures
   d. Contribute to project teams to produce original works or solve problems

3. **Research and Information Fluency**

   Students apply digital tools to gather, evaluate, and use information.

   a. Plan strategies to guide inquiry
   b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media

c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
d. Process data and report results

4. **Critical Thinking, Problem Solving, and Decision Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

a. Identify and define authentic problems and significant questions for investigation
b. Plan and manage activities to develop a solution or complete a project
c. Collect and analyze data to identify solutions and/or make informed decisions
d. Use multiple processes and diverse perspectives to explore alternative solutions

5. **Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

a. Advocate and practice safe, legal, and responsible use of information and technology
b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
c. Demonstrate personal responsibility for lifelong learning
d. Exhibit leadership for digital citizenship

6. **Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems, and operations.

a. Understand and use technology systems
b. Select and use applications effectively and productively
c. Troubleshoot systems and applications
d. Transfer current knowledge to learning of new technologies

NJ DOE Technology Standards

Standard 8.1 Educational Technology

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

A. Technology Operations and Concepts
B. Creativity and Innovation
C. Communication and Collaboration
D. Digital Citizenship
E. Research and Information Literacy
F. Critical Thinking, Problem Solving, and Decision Making

Standard 8.2 Technology Education, Engineering and Design

All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.

A. Nature of Technology: Creativity and Innovation
B. Design: Critical Thinking, Problem Solving, and Decision Making
C. Technological Citizenship, Ethics and Society
D. Research and Information Fluency
E. Communication and Collaboration
F. Resources for a technological world
G. The Designed World