SAYREVILLE PUBLIC SCHOOLS

Sayreville, New Jersey

District Technology Plan
July 1, 2013 – June 30, 2016

Board of Education Members

Michael Macagnone, President
Kevin Ciak, Vice President
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Administration

Dr. Frank Alfano, Superintendent
Marilyn Zeichner-Shediack, Assistant Superintendent
Emidio D'Andrea, Business Administrator/Board Secretary

I. Stakeholders

Name	Title	Signature
Kevin Ciak	School Board Member	
Helen Bruno-Raccuia	School Board Member/Parent	
Marilyn Zeichner-Shediack	Assistant Superintendent	
Stacey Maher	Principal	
Clare Goscienski	Subject Supervisor	
Justin Fiory	Elementary Principal	
	Director of Special Education	
Sandra Paul	Director of Technology	
Lori Pacansky	Elementary School Technology Teacher	
Barbara DeSantis	In-Class Support Technology Teacher	
Pam Gunter	Elementary School Librarian	
Eric Glock-Molloy	High School Vice Principal	
Greg Jegou	Middle School Vice Principal	
Kathryn Llera	Middle School Librarian	

II. Executive Summary

Sayreville's Technology Mission Statement

Our students will successfully meet the requirements of living, learning and working in a changing, information-based world. Through the establishment of electronic communities, schools will effectively enhance the learning of curriculum content; involve students as real researchers solving real problems; and stimulate knowledge production.

I. Sayreville's Technology Vision Statement

1. We envision Sayreville creating technology-rich learning environments in which students become:

- Self-directed, lifelong learners who use appropriate technology to access information and reach goals.
- Complex thinkers who can: (1) identify, analyze, integrate, and apply information to solve complex, authentic problems; (2) utilize multiple frames of reference; and (3) think flexibly.
- Cooperative, efficient, self-directed workers connected to worldwide networks.
- Effective communicators who use technology to navigate through information and communicate in a variety of different ways.
- Creative and innovative producers who: (1) create original, high quality output; (2) make informed decisions and take informed action; and (3) use appropriate, up to date technology to function in a technology-oriented society.

In short, we envision our graduates being able to:

- Access, analyze, apply, and create information.
- Effectively communicate the knowledge they acquire.

2. We envision our schools being transformed into learning centers at which:

- Appropriate technology resources are found in the places where instruction occurs.
- Technology is integrated into everyday instruction processes.
- Technology resources are accessible for students, teachers, administrators, and parents.
- Students have live, interactive adventures around the country and around the world without leaving the classroom.
- Students have live interaction with content matter specialists and field experts in every discipline.
- Students will explore and experience events, which could not normally take place in a traditional classroom setting, through appropriate simulation technologies and software.
- Technology will help to address the individual needs of all students, regardless of their individual abilities.
- Students will have opportunities to receive hands-on training.
- Media centers are stocked with multimedia tools for classroom use (videos, modern media formats, software, etc.) that will enable students and teachers to experience varied and multiple ways of learning.

• There is an adequate supply of technology tools that increases human productivity, promotes creativity, and extends the ability to communicate ideas, concepts, and feelings.
• Students will have the availability of increased course offerings in Video Production, Computer Programming and other technology-based fields.
• Sayreville will have video teleconferencing capability within the district and with other equipped districts, institutions of higher education and other sources of video teleconferencing opportunities via broadband access.

3. We envision a day when our teachers will have access to:

• Databases of resource materials, accessible from both school and home.
• Media centers with access to web-based media tools that will allow them and their students to experience varied and multiple ways of learning.

4. Finally, we hope that our leaders plan for the future guided by the beliefs that:

• The need for technology will be driven by curricular concerns, not technology for technology's sake.
• The primary use of technology in education is to meet the needs of all learners, whatever their abilities.
• Strategic planning will be an ongoing process by which Sayreville creates and sustains its vision for the appropriate use of technology in our schools.
• The implementation of this plan will require the commitment of substantial human and financial resources.
• There is an on-going need to review emerging technology as appropriate to the K-12 environment.
• Central to the success of any educational plan is on-going, sustained staff development.

Technology Inventory:

1. The technology inventory needed to improve student academic achievement through 2013 including but not limited to:

- **Present Technology equipment**

	SWMHS	SMS	SUES	ES
Current PCs	**475**	**416**	**346**	**379**
Current Laptops/Dell minis	**161**	**143**	**101**	**204**
Current Multimedia Projectors	**50**	**40**	**23**	**106**
Current Electronic Whiteboards	**44**	**31**	**23**	**106**
Current Video Conference Equipment	**2**	**1**	**1**	**1**
Current district mobile devices	**60**	**53**	**120**	**40**
Current Document Cameras	**5**	**2**	**2**	**61**
Current WiFi access	**YES**	**YES**	**YES**	**YES**

- **Future Technology equipment**

  Over the past two years, the district has upgraded in the infrastructure of the WAN and LAN to improve online access for all district stakeholder. The connectivity has increased from 10 MB between building to 10 GB and Internet access was 45 MB and is now 100 MB. The district also invested in having Wifi access in each building to provide for the future implementation of BYOD/BYOD services. At present there is a pilot of the BYOD services in the HS, and all teachers and administrators have BYOD access. The BYOD pilot is to increase access to technology and online services for teachers and students during instructional time. The use of BYOD is a on a volunteer basis for both teachers and students. Teachers and students are not penalized if it was no allowed in the class or the student not bringing a device to school. All district mobile devices can access the district wireless systems for instructional/learning purposes. Included was guest access to the district that is available upon request.

  The 2013-2014 school year, the district is purchasing 13 carts of 30 iPads to be dispersed as requested by the principals and subject supervisors of the district. There will also be an additional purchase of SmartBoards for the SUES, MS and the HS. At present all elementary classrooms have a SmartBoard. To be compliant for the PARCC state online testing beginning September 2014, the district is in the process of purchasing Google Chrome Books. These Chrome Books will be used for both the testing and for integration of technology in the Common Core Standards adopted by the district. Additional peripheral devices such as microphones and headsets will

also be purchase for the ELA requirements of the PARCC testing. The additional end-user devices will lead to a possible 1-1 within certain grade levels in the district beginning at 3rd grade.

- ***Assistive Technology***

The district integrates assistive technology devices into the network to accommodate needs by providing the correct technology required for each student's needs. Presently some of the technology purchased includes software such as ZoomText, Intellitools, ClosePro, Boardmaker, etc., and hardware such as laptops, SmartBoards, wireless access points, Clickers, iPads, iPod touches, Nooks, etc. SOLO is being integrated for students in the district in the PACE, Achieve Program and Credit Recovery classes. A number of amplified systems (Front Row) for the classrooms were installed during the school year but there is a need to increase the number of units in each building for students with special needs.

- **Software used for curricular support and filtering (Classrooms and Library/Media Centers)**

Software Title	**PK**	**K-3**	**4-5**	**6-8**	**9-12**
Adobe Acrobat Reader	X	X	X	X	X
Adobe Master Collection				X	X
A-Tech software and Electronic Boards					X
AutoDesk CAD					X
Biology Simulation and Virtual Labs					X
Final Cut Pro				X	X
Finale				X	X
Froguts				X	X
Geometer's SketchPad				X	X
iMovie		X			X
KidPix Studio Deluxe			X	X	
Kidspiration/Inspiration		X	X	X	X
Math Town		X		X	X
Microsoft Paint	X	X	X		
Microsoft Office 2010 Suite	X	X	X	X	X
PrintShop	X	X	X	X	
Read 180			X		
TurnItIn				X	X
Type To Learn		X	X	X	
Video Blender				X	
WYNN Reader				X	
Zoomtext		X	X	X	

Including Administrative offices and Library/Media Centers

Microsoft SQL
Comalex
Solarwinds-Engineers Edition
SMARTS Personnel & Budget Programs
Mandarin
SpamKiller
Microsoft Office 2010 Suite
VersaTrans
Microsoft Sharepoint
Solo Suite
Microsoft Forefront Protection 2010 for Sharepoint
Microsoft Visual Studio .Net
New Jersey State Reporting Code (NJSRC)
Symantec Endpoint Protection
Microsoft Exchange 2007
vmWare vCenter
Symantec Mail Security for Exchange
PowerSchool/PowerTeacher
Microsoft Threat Management Gateway

On-Line Resources – below is a list of present online services

ABCTeach.com
Brainpop.com
EnchantedLearning.com
Gaggle.net
Google Tools
Discovery Education
Animoto
Extranormal
StoryBird
Webspiration
Wordle
Learnia.com
Bookflix.com
Math Coach
Artsonia.com
Quia.com
Study Island
TeacherWeb.com
IEP Direct
WritingRoadmap.com
Voicethread
PhotoPeach
Bubbl.us
MakeBeliefsComix
SpellingCity.com
AhaMath
Aleks.com

The HS has added additional courses using Apex Learning for AP Statistics and AP Physics in the 2012-2013 school year. In the 2013-2014 school year, the HS plans to expand the number of courses with Apex Learning and offer to students courses for graduation requirements and for credit recovery. Due to PARCC online assessments in September 2014, the elementary principals and librarians have suggested the use of an online program for keyboarding/typing skills from 3rd grade to 12th grade students.

- ***Technology maintenance/recycling policy and plans:***

Technology in the district is maintained primarily by the district technical staff members and with state contracted vendors. All technical equipment is replaced whenever resources are available. The district maintains a line item in the budget for the leasing of technology equipment. This is renewed yearly. Older equipment is recycled to a local recycling plant.

The technology department presently replaces a computer lab in SWMHS and SMS annually. These computers are then moved to teachers' classrooms as needed. When

equipment cannot be repaired it is stored and scavenged for parts to repair other computers in the buildings. After all the usable parts are removed, the equipment is removed from the school campuses and recycled by a local recycling company. Audio/visual equipment and printers are also recycled. The Board of Education approves the disposal of equipment before it leaves the school district to be recycled. PCs should be replaced or recycled every three years to provide appropriate technology required for the Common Core Content Standards. At present, the purchasing of technology equipment is done through a 3 year lease and the plan is to continue this lease to facilitate the needs of the district.

- ***Telecommunications equipment and services:***

Lightpath is our current Internet Service Provider at 100 MB, and also provides network integration for a point-to-point fiber optic system between our school buildings at 10GB per building. The district has adopted a Voice-Over-IP (VOIP) for the phone system using the available equipment in the classrooms and offices thought Lightpath. Fax, burglary, fire and long distance services are provided by Xtel. A Nortel Norstar phone system provides telephone integration with voice mail for SWMHS, SMS, WES, TES, SES, AES and EES. District cellular service is provided by Verizon Wireless. All classrooms have the ability to call 911 in an emergency. Presently the SWMHS daily announcements are available on the Intranet for teachers.

- ***Technical support:***

Four district technicians, one network administrator and the Director of Technology provide support for all technical services of the district. The district purchases a subscription for Dell Premier Service which allows our technicians to access Dell Level II service personnel thus expediting service calls and the technical staff is investigating the Apple Care+ services for all Apple OS devices. Two of the technicians have completed level 1 Apple technical support and one technician is MCSE certified and another is Network/Security Certified. The technical staff should be expanded to a minimum of 1 technician per building. For future training one technical staff member should be CISCO certified, MCSA certified, and/or HP printer certified. School level Web Assistants, Media Specialists, the district Technology Integration Teacher and the Secretary for the Technology Department provide level one support (helpdesk) whenever possible for software and hardware issues. To provide adequate technical support for students and teachers in preparation for the state PARCC online exams, there should be an increase of at least one Technology Integration Teacher per district school level. This would be an additional three teachers for the technology department. An online system, IT Direct, is used by everyone that need technical assistance including access to websites, password issues, computer repairs, etc.

- ***Facilities Infrastructure:***

The current wide area network (WAN) connectivity configuration connects at the school building to/from the HS is presently at 10GB. The SWMHS connects to the Internet at 100MB presently. The Lightpath direct access originates at the Sayreville

War Memorial High School via a Cisco Catalyst 6500 router. Each district building is connected to the network by a 3750X Cisco router/switches.

For future growth of the district and an increase in online resources for students, teachers and administrators, the connectivity to the Internet should be increased to an additional 350MB to have a total of 1 GB bandwidth. This increase in bandwidth will support all students, staff and administrators using the Internet simultaneously throughout the school day. The SWMHS, TES and AES have broadcasting abilities within their buildings using an analog coaxial cabling system. The Student Information System, PowerSchool/PowerTeacher is now accessible via the Internet. BlackBoard Connect is for communications from the administration, to the parents and staff of the Sayreville community.

- ***Filtering method***

A Cisco ASA5540 Firewall provides firewall protection, so that all students and teachers can access safe online resources and a WFR 550 from Trustwave appliances provide mandated CIPA filtering. In the WFR 550 from Trustwave appliance, a white list and black list of websites are monitored by one of the technical staff members. The Network Administrator can also block or allow emails entering the district. Symantec Enterprise Edition provides anti-virus capability for the end-user devices in the district.

- ***Other services:***

- Increase the number of SmartBoards located in the SUES, MS and HS building to provide an interactive learning environment.
- Increase the number of schools that have internal broadcasting capabilities.
- The use of Indentimetrics for student identification purposes for food services, library and attendance.
- Expand food services to electronically track free/reduce lunch to the elementary buildings.
- Continue and expand technology professional development for teachers and administrators.
- Expand the use of assistive technology for students to provide for differentiated instruction.
- Develop podcasts by students to expand access to their core content curriculum.
- Increase the use of blogging for communication between students, teachers, administrators, and parents.
- Develop a 1-to-1 program for the students in the district.
- Increase online resources to provide anytime, anywhere learning access for the students.

2. Needs Assessment

Determine the current educational environment and barriers by describing how:

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

Staff access to technology to facilitate its integration is done in each individual building. Each media center has electronic equipment that can be checked out and used by any teacher as needed to incorporate technology within their curricula. This includes and is not limited to wireless laptop carts with 20 or more laptops/minis each, digital cameras, electronic whiteboards, multimedia projection devices, digital camcorders, TVs, VCR players, DVD players, CD and audio tape players. Each teacher has at least one PC per classroom where he/she has access to email, Internet and PowerTeacher for grading and attendance purposes. The PC in the classroom is connected to an AverMedia unit via s-video to a TV mounted on the wall in the room. The teacher has the ability to display anything from his/her computer to the television. The faculty rooms have one PC where teachers have access to email, Internet, PowerSchool/PowerTeacher where they can view student scheduling, demographical information and enter student grades.

The age of the PCs located in some of the computer labs are an issue because students are unable to create many multimedia projects and global collaboration as required of the NJCCS Technology Literacy Standards and the new Common Core Standards. There are very few student computers located in the individual classrooms, therefore the integration of technology is usually a planned lesson to use the computer lab or the media center. Some of the computer labs and the laptop carts do not have enough devices to provide one device per child for a class over 20 students. The PCs in the computer labs and the Media Centers/Libraries were changed to OptiPlex 790s in 2011. The DELL laptops are E5550s and there are DELL Minis 5150 in the HS and the elementary buildings. These wireless devices were purchased in 2011. Many of the special education/inclusion classrooms have electronic whiteboards.

The televisions located in the classrooms are 27 inches and therefore it can be difficult for students in the back of the classroom to see the display. Also, when Cablevision changed the Cable TV signal to digital, none of the existing TVs can broadcast the cable channels. There is a need to change the televisions in the classrooms to a digital display and to begin change from an analog to digital video signal. Financial resources to purchase up to date technology equipment and to expand bandwidth are an issue due to budget restraints.

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

Student access to technology is provided via computer labs and wireless laptops. In the technology courses, students have access to digital cameras and digital camcorders to complete different assignments. In some of the classrooms in the SUES, there is a student computer in the classroom where a student can sit and work on different assignments which lends to differentiated instruction in the classroom. There are no student computers in SWMHS, SMS, AES, EES, TES, WES, or SES.

In preparation for implementation of the Common Core and the PARCC online assessments, the district will be investing in the purchase of more end user devices such as iPads and Chromebooks. These devices will be available during the school year for students to use in their classrooms for everyday instructional

purposes. With the purchase of these devices will be the beginning of a 1-1 pilot program for students in the district. The plan is to begin with the 1-1 program at the 3rd grade level.

iii. the needs of staff are evaluated

The needs of the staff are assessed annually through a survey conducted by the Local Professional Development Committee. As teachers create different projects for assessments, the teachers or building principal will contact the technology department to request technology that could be used by the students to complete their projects. These needs are then evaluated and discussed in the technology department where they try to accommodate the teachers, as much as possible, with constraints related to the age of the PCs, available end user devices and peripherals, technical staff skill sets and funding availability.

iv. the needs of students are evaluated

The needs of the students are evaluated by the teachers, administrative observations and students' requests of the media specialists/librarians of the buildings. Special Education students are assessed by the CST, their classroom teacher or an outside assessor.

III. Three-Year Goals and Objectives

Goal 1: Learning for the 21st Century

All students and teachers in an equitable manner will routinely utilize technology as basic tools to enhance learning in all areas of the curriculum, to develop critical thinking skills, to research information, to communicate and interact with students and resources beyond the district boundaries, to develop the habits of mind needed for continuous learning in the information age, and to achieve the Common Core Curriculum Standards.
"Equitable" refers to equal access to technology for all grades.

A review of the educational program provides illustrations of the integration of technology into every area of the curriculum K-12. The plan provides for continued sustained support and development of appropriate uses of technology (including distance/blended learning) throughout the Common Core Standards. Increased emphasis on the development of research, analysis and synthesis skills supports a focus on the development of the library/media centers as informational/resource hubs in each school.

Objective #1 – Learning for the Twenty-First Century

Technology is routinely used as a basic tool by all teachers and students to enhance learning in all areas of the curriculum, to develop higher order thinking skills, to research information, to communicate and interact with students through distance/blended learning, to prepare students for lifelong learning in the information age, and to achieve the requirements of the Common Core Curriculum Standards and the Career, College Readiness Standards.

1.1 Integration of Technology into Common Core Curriculum

Activities: The plan provides for continued systematic support and development of appropriate uses of technology (including distance/blended learning and other online resources) throughout the Common Core Curriculum Standards. Increased emphasis on the development of research, analysis and synthesis skills supports a focus on the development of the library/media centers as informational hubs in each school.

- Continue to systematically support technology throughout the district in each area of the curriculum and increase the level of technical and instructional support to schools and staff.
- Continue to create awareness and support among building administrators of the need to support technology planning and implementation in their school.
- Continue to create awareness and support for social media among building principals for collaboration and communications to all school stakeholders.
- Continue to incorporate the appropriate use of technology (including distance/blended learning) in curriculum development and guides, textbook reviews, assessment development, and staff development in content areas.
- Continue to increase the use of Web 2.0 Tools and other online resources in the instructional process.

1.2 Career Education and Consumer, Family, and Life Skills

Activities*:*

- Continue to review and revise technology proficiencies at each grade level.
- Continue to review and revise instruction based on the ever-increasing knowledge of students in the area of technology.
- Continue to review and revise performance-based assessments developed at specific grade levels to insure that students have the requisite technology skills. Students who do not possess basic skills in technology by the end of fifth grade should be required to take appropriate course(s) at the 6-12 level and demonstrate competency.
- Increase the number of technology industry standard certificated courses for HS students.
- Increase STEM (Science, Technology, Engineering and Mathematics) devices for all grade levels in the district.

1.3 Library/Media Centers

Activities:

- Continue to develop the potential of the library/media centers to enhance learning throughout the curriculum through additions to the technology resources, both online or offline for each individual school.
- Continue with the instruction of Digital Citizenship including CyberBullying, Internet Safety, Using Social Media, Copyright, etc. within the library curriculum.
- Continue with the preparation of the NJ Technology Literacy Skills within the library curriculum.
- Continue with the use of research technology and materials to enhance the research, analysis, synthesis skills for students.

Goal 2: Adequacy of Educational Resources

The district's 5950 students and 768 staff members have access to networked computers in classrooms, 28 computer labs, 23 carts of laptops, several SmartBoards, 150 iPads, 10 iPod touches and 101 Nooks.

All schools have fully operational home/school voice communication systems. The plan provides for expanded access to school-based technology resources. The plan ensures that all new construction and renovations make adequate provision for current and future technology.

Objective #2 – Adequate Educational Resources

Technology will continue to develop and provide new and expanded opportunities to enhance learning. Hardware and software must be compatible with the planned uses. A schedule for upgrading and/or replacing computers, peripheral devices and networking equipment continues to be implemented. Frequently technology replaced in one location can serve useful purposes in another setting. However, the life of specific technologies is limited by instructional use, increased maintenance costs, and unavailability of replacements.

2.1 Technology resources are equally available when needed and networks allow easy communication and shared resources among schools, while students and staff have access to county, state, national, and international distance learning activities.

Activities:

- Use and increase the selection of software tools available to students and staff.
- Continue to acquire and upgrade significant curriculum- resources (both online and offline) appropriate for classroom use.
- Continue to replace end-user devices as scheduled through the upgrade/replacement program.
- Continue to provide every classroom with one teacher station consisting of a networked multimedia computer, a television, a VCR, and a PC to TV connection.
- The Video Production Studio will continue to upgrade and enhance technological capabilities.
- Increase the number of mobile devices for students and teachers to use in the classroom.
- Increase the number of peripheral devices to provide collaboration and global communications as required for the Common Core Standards.
- Increase the number of students taking online courses for HS graduation requirements, credit recovery and for summer school.
- Continue with pilot for Flipped Learning in the Science Department.
- Expand the BYOD/BYOT program within the district.

2.2 Technology allows for daily communication with parents and the community.

Activities:

- Expand the use of teacher websites and school websites.
- Increase student and community access to training in technology through the adult education program and extended building hours.
- Continue to create awareness and support for social media among building principals for communications to parent and community members.
- Continue with the use of Blackboard Connect to notify parents of absences, different events or emergencies within the schools.
- Continue with the use of the district website to communicate to parents and community members.
- Continue with the use of the district email system to communicate to all district stakeholders.

2.3 New construction and renovations of existing schools will incorporate the use of emerging technologies to support the approved curriculum.

Activities:

- All future plans and budgets for retrofitting, renovation and new construction of buildings will include simultaneous networking for voice, video, and data distribution and provide adequate space in classrooms, library/media centers, laboratories, and teacher and administrative work space to accommodate technology as required by state code (NJAC 5:23 and NJAC 6:22). (2.3.a)

Goal 3: Staff Development

Sayreville has had a long-term commitment to staff development. The plan provides for the support of sustained staff development in all aspects of technology for teachers, administrators, and support staff. The Middlesex County Educational Technology Training Center, Rutgers University, NJPSA, district staff development programs and in-district technology workshops are integral parts of our future plans for staff development.

Objective #3 – Staff Development

Technology means little unless teachers/administrators a) value technology as a tool to enhance current and future learning, b) know how to use and are comfortable in using the diverse technologies, and c) know how to integrate technology into their own instruction to enhance learning. Administrators must also be trained, value technology and be capable of supporting staff. In planning for staff development, the need for knowledge and access become inseparable.

3.1 Instructional staff is knowledgeable and informed about technological tools and values their use in the educational process.

Activities:

- Continue to plan, adequately fund, and evaluate a comprehensive technology staff development program that is designed to meet the needs of administrators, teachers and support staff in conjunction with the annual staff survey and recommendations of the district Professional Development Committee.
- Continue to budget for substitutes for teachers on professional days to increase opportunities for staff to gain expertise in technology areas; Provide voluntary after school workshops and courses for staff, as well as summer staff development workshops for professional development hours. Make it possible for teachers to visit classrooms of technology-using teachers and work with these teachers using peer-coaching.
- Continue to provide all administrative users with training in administrative software applications in preparation for the new state teacher evaluation requirements and as the needs of the district expand.
- Continue to provide regular training for support staff in technology applications utilized on the job.
- Provide an on-going program of training for the Technology Department staff in the implementation and function of existing, new and emerging technologies.
- Use NCLB Title II funding to pay stipends for highly qualified and technologically proficient teachers to serve as peer coaches in a sustained program of professional development as it relates to the application of the technology standards as a tool to improve pupil performance.
- Continue to provide access to online webinars, conferences and workshops for instructional staff to develop various formative assessments and analyze the resultant student data to drive daily instruction.
- All instructional staff will attend training for the integration of technology within their subject area and the use of NJ Technology Literacy Skills in preparation and implementation of the state online assessments as of September 2014.

3.2 As new technologies emerge and applications are developed, staff enthusiastically examine their potential to shape and enhance the learning/teaching environment.

Activities:

- Continue to encourage staff to attend technology-related professional development activities which focus on the implementation of the Common Core Curriculum Content Standards and the PARCC online assessments.
- Continue to encourage staff, supervisors and administrators to research and recommend content-related websites that present and evaluate new technology related to various content areas.
- Continue to evaluate staff on their ability to utilize and integrate technology into their instructional program.
- Continue to recognize the achievements of staff in the effective use of technology, training of other staff, and planning for future technology.

3.3 Staff has ready access to technology at home and at school.

Activities:

- Continue to provide offsite access for teachers to their grades and files in the district.
- Continue with the use of student online locker system for teachers to give out assignments and instructional material.

- Continue with the use of online resources for teachers to develop online and project based assessments for students.
- Continue with the use of online resources for teachers to enhance lesson plans, classroom activities and continued life-long learning.
- Continue with the use of the NETS-T technology standards for teachers in the district.

Goal 4: Integrated Information Technology Network

In order to fully recognize the potential of technology to meet instructional goals, resources must be shared among and accessible to students, staff, and where appropriate, the parents and community.

Objective #4 – Information Processing Network

A solid communications network, responsive administrative applications and an effective support system are vital elements in a technology-rich environment. The administrative computer systems must support financial, personnel, student data management, state and federal reporting, Web 2.0 Tools, online resources, and Internet activities to name just a few.

4.1 An integrated video, voice, and data network allows transparent access within and among schools, administration offices, county, state, national, and global resources to enhance instruction for all students and increase the effectiveness and efficiency of the administration.

Activities:

- Continue to assure that current technology is reflected in the development of curriculum.
- Continue to assure that technology is reflected in the review/recommendations for instructional materials and the Common Core.
- Continue to assure that technology is reflected in assessment strategies.
- Continue to assure that technology is reflected in a sustained program of staff development.

4.2 Ready access to information and appropriate processing software will enhance instruction for all students and increase administrative effectiveness and efficiency.

Activities:

- Continue to provide ready access to administrative systems anytime, anywhere.
- Continue to create awareness among building administrators of the need to support technology planning and implementation.

VI. Three Year Implementation Activity Tables (June 2013 – July 2016)

Applications of technology have been integrated into every area of the curriculum to enhance instruction. Many technology resources are used throughout current courses including online resources and Web 2.0 Tools. At this time, 100% of the classrooms have a computer with Internet connectivity. Many students have access to computers at home and use them on a daily basis for study purposes. However, we must remain cognizant of the fact that may not all students have access in their homes, so we ensure equity of access within the schools. Therefore there will be a need to implement a 1-1 pilot for the school district to prepare for the PARCC online testing in 2014. The district continues to work with outside agencies, educational institutions and the county to assess emerging technologies. With the use of Web 2.0 Tools, iPads and apps students in grades 1-12 now have access to the most innovative multimedia diagnostic and instructional software programs.

V. THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLE:

THREE YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 1: LEARNING FOR THE 21ST CENTURY

Technology is routinely used as a basic tool by all teachers and students to enhance learning in all areas of the curriculum, to develop higher order thinking skills, to research information, to communicate and interact with students through distance/blended learning, to prepare students for lifelong learning in the information age, and to achieve the requirements of the Common Core Curriculum Standards and the Career, College Readiness Standards.

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
1.1.	Principals Supervisors Technology Staff	Documented use in curricula	X	X	X
1.1.	Central Office Administration	Meeting minutes Agendas	X	X	X
1.1.	Supervisors Central/School Administration	Agendas Meeting Minutes	X	X	X

1.1	Principals/Supervisors Curriculum Committees	Proficiencies Lesson plan analysis Curriculum guides Assessments	X	X	X
1.2	Supervisors Librarians Technology Teachers	Proficiencies	X	X	X
1.2	Supervisors Librarians Technology Teachers	Technology literacy rubric	X	X	X
1.2	Supervisors Librarians Technology Teachers	Performance assessments	X	X	X
1.3	Supervisors Librarians	Samples of integrated projects	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 2:
Adequate Educational Resources

2.1 **Technology resources are equally available when needed and networks allow easy communication and shared resources among schools, and students and staff have access to county, state, national, and international distance learning activities.**

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
2.1	Technology Staff Director of Technology Director of Curriculum and Instruction Supervisors	Software Directory/Online Services	X	X	X

2.1	Technology Staff Director of Technology Director of Curriculum and Instruction Supervisors	Directory Online Services/Resources Apex Learning	X	X	X
2.1	Board of Education Director of Technology Administration Technology Staff	Inventory Records	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 2:
Adequate Educational Resources

2.2 **Technology allows for daily communication with parents and the community; and technology resources are shared with adult education programs.**

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
2.2	Board of Education Administration	District Budget District Website BlackBoard Connect	X	X	X`
2.2	Board of Education	District Budget	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 2:
Adequate Educational Resources

2.3 **New construction and renovations of existing schools will incorporate the use of emerging technologies to support the approved curriculum.**

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
2.3.a	Board of Education Superintendent Director of Technology Architect	Renovation Plans Board Reports	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 3:
STAFF DEVELOPMENT

3.1 Staff is knowledgeable and can use technological tools and applications and value their use in the educational process.

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
3.1	Board of Education Superintendent Asst. Superintendents District PD Committee	Allocation of funds Annual Staff PD Survey Evaluation Reports	X	X	X

3.1	Asst. Superintendent Director of Technology	Records of use	X	X	X
3.1	Board of Education Superintendent	Budget Records	X	X	X
3.1	Asst. Superintendent Administrators SIS Manager	Budgets Records of offerings	X	X	X
3.1	Asst. Superintendent District PD Committee	Records of offerings and attendance	X	X	X
3.1	Asst. Superintendent Director of Technology Technology Staff	Records of offerings and attendance	X	X	X
3.1	Asst. Superintendent Supervisors Principals	NCLB Title II Budget	X	X	X
3.1	Asst. Superintendent Supervisors Principals Technology Staff	Lesson Plan analysis Performance Assessments	X	X	X
3.1	Director of Technology	Records of offerings and attendance	X	X	X

3.1	Asst. Superintendent Mentor Teachers	Records of attendance Evaluation Reports	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 3:
STAFF DEVELOPMENT

3.2 As new technologies emerge and applications are developed, staff enthusiastically examine their potential to shape and enhance the learning/teaching environment.

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
3.2	Administrators Supervisors Asst. Superintendent Local PD Committee Director of Technology	Records of offerings and attendance	X	X	X
3.2	Supervisors Administrators Librarians Director of Technology	Documented use in curricula	X	X	X
3.2	Supervisors Principals Asst. Superintendent Superintendent	Performance assessments	X	X	X

3.2	Supervisors Administrators Asst. Superintendent Superintendent Director of Technology	Documented use in curricula Samples of projects Lesson Plans analysis	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 3:
STAFF DEVELOPMENT

3.3 Staff has ready access to district resources.

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
3.3	Teachers Librarians Supervisors Director of Technology	Documented use in curriculum	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
June 2013 – July 2016

OBJECTIVE 4:
Integrated Information Processing Network

4.1 **An integrated video, voice, and data network allows transparent access within and among schools/administration building, the internet, county, state, national and global resources to enhance instruction for all students and increase the effectiveness and efficiency of administration and management.**

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
4.1	Assistant Superintendent Supervisors Teachers Writing Curriculum	Curriculum	X	X	X
4.1	Supervisors Teachers	Supervisor's Request for Materials	X	X	X
4.1	Principals Supervisors Teachers	Assessment documents	X	X	X
4.1	Assistant Superintendent Director of Technology Professional Development Committee	List of Professional Development offerings	X	X	X

THREE-YEAR IMPLEMENTATION PLAN
July 2013 – June 2016

OBJECTIVE 4:
Integrated Information Processing Network

4.2 Ready access to information and appropriate processing software will enhance instruction for all students and increase administrative effectiveness and efficiency.

ACTIVITY	PERSON(S) RESPONSIBLE	EVALUATION	IMPLEMENTATION YEAR		
			1	2	3
4.2	Director of Technology Technology Staff	Technology work order system	X	X	X

X = continuing activity

V. Professional Development Strategies

A. Describe the planned professional development activities for teachers, administrators, and school library media personnel that include:

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

Administrative Professional Development that is ongoing and sustained:

a. District administrators will continue annual Legal One training sessions provided by NJPSA and required by the NJDOE. Technology legal issues are addressed in sessions.
b. District administrators will continue to attend a Summer Retreat Program that includes current and future use of district technology to facilitate data driven decision making.
c. The Assistant Superintendent and members of her staff will continue to attend NJDOE training sessions dealing with the following electronic report submissions: ASSA, Fall Survey, EWEG, EVVRS, NJ School Report Card, NJSMART, Title IA, IIA, and IIIAapplication and final reports.

d. The Director of Special Services and her staff will continue to attend training sessions in current and new forms of assistive technology for use by students with disabilities.
e. District supervisors will continue to participate in grant programs that involve the implementation of technology to enhance pupil performance.

High school administrators will continue to explore technology programs to implement Option 2 alternatives and credit recovery programs for the district.

1b. How ongoing, sustained professional development for all staff will be provided that furthers the effective use of technology, models 21st century skills and demonstrates global outreach and collaboration in the classroom or library media center.

Professional Development for all staff:

a. The district will continue to offer after school technology training sessions for all teachers and district staff.
b. Teachers may freely select two funded professional days per year to pursue 21st century and technology skills.
c. Teachers may be reimbursed for graduate credits according to their contract for courses which deal with technology.
d. School based PLCs may freely select technology and/or 21st century skills as their topics for the year.
e. Library/Media Specialists meet monthly with the Director of Technology to discuss and improve their technology usage and that which is provided for students and teachers.

All appropriate staff will receive training in Study Island and Read 180 relative to program updates, especially those for Special Education students.

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

Technical staff has access to online training and/or training centers opportunities and resources necessary to support and expand all aspects of district technology which are approved by the Superintendent or his designee. This includes but is not limited to certification courses, specialized training, infrastructure workshops, and program upgrades.

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

a. The Director of Special Services and the Director of Technology consistently seek out and attend conferences related to assistive

technology and a diverse array are currently in use in the district, especially in Special Education classrooms.

b. Once purchased, the Technology Integration teacher and classroom teachers receive ongoing and sustained training in their use in classrooms.

c. The Technology Integration Teacher also works with students and teachers in Special Education and regular education classrooms on an ongoing basis.

Educators' Proficiency/ Identified Need	**Ongoing, sustained, high-quality professional development planned for 2013-2016**	**Support**
Teachers need to employ a greater degree of differentiated instruction through the use of technology in the classroom setting in all curricular areas.	In-district and out-of-district training in differentiating instruction with appropriate technology will be provided through Title IIA funding. Priority will be given to those teachers who have SmartBoards or assistive technology currently in their classrooms.	The Technology Integration teacher will work with teachers and students in classrooms following training sessions to assist in implementation. Title IIA funding available so that teachers may attend technology workshops on self-selected professional days allowed by contract.
Teachers must develop a greater level of proficiency in using the PowerTeacher gradebook so that we will be able to open a Parent Portal which will allow parents to view student assignments, grading and attendance information.	Each school's PowerSchool turn-key teachers will continue to receive in-district training from the SIS. Turn-key teachers will then work with the teachers in their buildings to increase proficiency levels.	Teachers will be provided with the following opportunities for PowerTeacher training by turn-key teachers: in-district workshops, department meeting training sessions, faculty meeting training sessions, and 1-to-1 training, as needed.
Administrators and supervisors need to continue to explore ways to implement Option 2 and online credit recovery programs.	Administrators and supervisors will be given school business days to attend workshops related to the two related areas.	The Director of Special Services, high school administrators and subject specific supervisors will be provided with opportunities to visit successful existing programs and make recommendations to the Superintendent.
The Math Business Department supervisor and teachers need to continue to research possible course offerings to expand our	The supervisor and appropriate teachers will be given school business days to attend workshops related to new 21st century course	The Director of Technology will continue to provide assistance to the supervisor and teachers about qualifying programs.

Career and Technical Education Programs.	offerings that compliment and expand our current program.	

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

a. The district will continue to offer after school technology training sessions for all teachers and district staff through the Sayreville Technology Academy which is funded by NCLB Title IIA and addresses 21st century skills for students and staff.
b. As long as NCLB Title IIA funds are provided, the district will continue to offer technology out-of-district training through Rutgers, NJPSA, any other venue appropriate for training teachers on the integration of technology.
c. Teachers will continue to be reimbursed for selected technology professional days that have administrative approval and are covered by contract language.
d. Teachers will be reimbursed, in accordance with contract language, for approved graduate credits for technology courses.
e. School based PLCs may freely select technology and/or 21st century skills as their topics for the year. One Staff Development Day and three half days are currently provided.
f. Library Media Specialists will continue to meet monthly with the Director of Technology to discuss and improve their technology usage and that which is provided for students and teachers.
g. All appropriate staff will continue to receive training in Study Island and Read 180 relative to program updates, especially those for Special Education students.
h. Training will be provided for all teachers using assistive technology in their classrooms.
i. The district will continue to use the Technology Integration teacher to work with students and staff in expanding the integration of technology in all subject areas and at all grade levels.
j. The Director of Technology and her staff will continue to be trained in ways to ensure infrastructure support of current and future technology demands.

VI. Evaluation Plan

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

1. integrating technology into curricula and instruction
Through observations, Professional Improvement Plans, Professional Growth

Plans, and workshops evaluations.

2. enabling students to meet challenging state academic standards
Through standardized test scores in comparison to class grades, NJASK, Study Island, Read 180 and other state standardized assessments.

3. developing life-long learning skills
Student grades determine the success in which they are meeting the Common Core Curriculum Content Standards. State test scores, when compared with student grades, further confirm the effectiveness of the delivered curriculum in meeting state and national proficiencies.

VIII. Funding Plan (July 2013-2014)

Funding for the Sayreville District Technology Plan is provided by federal, state and local finding. Professional development for integration of technology for the district is provided through Title IID.

Account number	Description	Amount
11-000-252-320-91	Professional Expenses (Equipment warranty, Website hosting, etc.)	$152, 038.00
11-000-252-340-91	Purchased Technical Services (Software renewal, Switch warranties, bandwidth capacity costs, etc.)	$187, 546.00
11-000-252-600-91	Supplies (Technology equipment, maintenance equipment, etc.)	$30, 000.00
11-190-100-320-91	Technology Licenses/Software (Software renewals, student/teacher online resources, Online courses, etc.)	$371, 716.00
11-190-100-440-91	Equipment Lease (for network infrastructure equipment and end user devices, etc.)	$569, 719.00
11-190-100-610-91	General Supply/Technology (end-user devices, iPads, laptops, instructional equipment, etc.)	$575, 000.00
12-000-100-732-91	Tech Plan-Non-Instructional (technology infrastructure	$7, 000.00

	equipment, etc.)	