

We envision an environment for Greenwich Township Schools that integrates technology into the everyday lives and education of our staff and students to facilitate learning, problem solving, and communication. This integration will include the schools, administrative offices, the community, and ultimately the world. The technical environment should be easily and equitably accessible, upgradable, and adaptable.

As a result of the proposed technology plan, students will be able to easily make the transition to high school, college, or the workforce with the skills necessary to be successful. The ability of our students to use technology for research and problem solving will enable them to be life-long learners and flexible to adjust to the changing demands of the real world.

Technology continues to be a priority for the district, as acquiring technology skills will play an increasing role in determining student success in the near future. The district strives to meet the requirements set by the Common Core Curriculum Standards and the New Jersey Core Curriculum Standards.

Technology Plan Creation Date: April 15, 2013

**STAKEHOLDERS**

Title	Name	Signature
Superintendent	Maria Eppolite	
Principal	Nichole Hutnik	
Technology Coordinator	Nancy Morera	
Curriculum Director/Curriculum Committee Member	Stephanie Snyder	
Teacher	Nichole Bracken	
Special Education Teacher	Susan Oberman	
Library Media Specialist	Michele Bond	
Guidance	Leala Gonzales	
Parent	Mary Beth Green	

**INVENTORY NEEDED TO IMPROVE STUDENT ACADEMIC ACHIEVEMENT IN THE 2013-2014 SCHOOL YEAR**

Area of Need	2013-2014	2014-2015	2015-2016
<i>Technology Equipment including assistive technologies</i>	<ul style="list-style-type: none"> <li>▪ Desktop, laptop and tablets to allow students and staff access to management, productivity, creativity, and information tools and resources.</li> <li>▪ Replace outdated PCs in Greenwich School computer lab to increase efficiency and meet PARCC requirements.</li> <li>▪ Purchase mobile lab for Greenwich School to increase student access to digital tools and prepare for PARCC.</li> <li>▪ Upgrade obsolete workstations in media centers and classrooms to increase student access to digital tools.</li> <li>▪ Continue server upgrades as needed to ensure reliable server and internet access.</li> <li>▪ Improve wireless accessibility to accommodate increased traffic.</li> <li>▪ Acquire additional headsets to meet learning and assessment needs.</li> <li>▪ Adaptive technologies and devices as needed for IEP considerations.</li> <li>▪ Digital cameras to allow students and staff to document school activities and enhance learning.</li> <li>▪ Acquire accessories to convert iPad to professional video studio to support flipped classroom instruction as well as creative projects by students.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Upgrade or replace obsolete workstations to increase efficiency.</li> <li>▪ Acquire additional mobile labs or consider Bring Your Own Device policy to increase student access to digital tools.</li> <li>▪ Continue server upgrades as needed.</li> <li>▪ Acquire additional headsets to meet learning and assessment needs.</li> <li>▪ Adaptive technologies and devices as needed for IEP considerations.</li> <li>▪ Purchase additional digital cameras for student use.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Upgrade or replace obsolete workstations.</li> <li>▪ Continue server upgrades as needed.</li> <li>▪ Adaptive technologies and devices as needed for IEP considerations.</li> </ul>
<i>Networking Capacity</i>	<ul style="list-style-type: none"> <li>▪ Replace router to accommodate increase in internet bandwidth.</li> <li>▪ Improve wireless network to better accommodate existing and future workload.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to monitor usage and bandwidth, adjustments as necessary.</li> <li>▪ Meet requirements of NJ statewide assessments.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to monitor usage and bandwidth, adjustments as necessary.</li> <li>▪ Meet requirements of NJ statewide assessments.</li> </ul>
<i>Filtering Method</i>	<ul style="list-style-type: none"> <li>▪ Dan’s Guardian, CIPA compliant web filter.</li> <li>▪ Antivirus software.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dan’s Guardian, CIPA compliant web filter</li> <li>▪ Antivirus software.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dan’s Guardian, CIPA compliant web filter</li> <li>▪ Antivirus software.</li> </ul>

Area of Need	2013-2014	2014-2015	2015-2016
<i>Software used for curricular support and filtering</i>	<ul style="list-style-type: none"> <li>▪ Digital textbooks where possible and appropriate.</li> <li>▪ Use class wiki pages or sites as digital planner and hub of grade level and/or subject specific resources for students.</li> <li>▪ Wikispaces as a medium for teachers to share information with students, as well as a potential digital classroom.</li> <li>▪ Media, Ebook and subscription database accessibility via EBSCO, Pebble Go, TumbleBooks, Mackin VIA, Discovery Education, Flocabulary, BrainPop to provide students and staff access to quality and reliable information for teaching, reading, research, and information seeking.</li> <li>▪ TypingClub (or similar application) to help students learn to master the keyboard.</li> <li>▪ OPALS library management to assist in managing and promoting Media Center holdings.</li> <li>▪ MS Office subscription and Google Apps for Education for students and staff.</li> <li>▪ Digital assessment tools to prepare students for digital testing environment.</li> <li>▪ Additional iPad apps as needed to meet classroom and student learning needs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Digital textbooks.</li> <li>▪ Wikispaces.</li> <li>▪ Continued media, ebook, and subscription database access; specific resources evaluated annually depending on need and availability.</li> <li>▪ TypingClub, or alternative keyboarding instruction software.</li> <li>▪ OPALS library management.</li> <li>▪ MS Office and Google Apps for Education.</li> <li>▪ Digital assessment tools.</li> <li>▪ Additional iPad apps as needed.</li> <li>▪ Online course and virtual school software.</li> <li>▪ Software as required by NJ statewide assessments.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Digital textbooks.</li> <li>▪ Wikispaces.</li> <li>▪ Continued media, ebook, and subscription database access; specific resources evaluated annually depending on need and availability.</li> <li>▪ TypingClub, or alternative keyboarding instruction software.</li> <li>▪ MS Office and Google Apps for Education.</li> <li>▪ OPALS library management.</li> <li>▪ Digital assessment tools.</li> <li>▪ Additional iPad apps as needed.</li> <li>▪ Online course and virtual school software.</li> <li>▪ Software as required by NJ statewide assessments.</li> </ul>
<i>Technical Support and maintenance</i>	<ul style="list-style-type: none"> <li>▪ Continue use of in-house consulting support to ensure quick, efficient, and reliable access to tools and resources.</li> <li>▪ Continue outside support services as needed.</li> <li>▪ Warranty support as applicable by hardware contracts.</li> <li>▪ Software support through providers as needed.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue use of in-house consulting support.</li> <li>▪ Continue outside support services as needed.</li> <li>▪ Warranty support as applicable by hardware contracts.</li> <li>▪ Software support through providers as needed.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue use of in-house consulting support.</li> <li>▪ Continue outside support services as needed.</li> <li>▪ Warranty support as applicable by hardware contracts.</li> <li>▪ Software support through providers as needed.</li> </ul>

Area of Need	2013-2014	2014-2015	2015-2016
<i>Telecommunications equipment and services</i>	<ul style="list-style-type: none"> <li>▪ Increased high speed internet access bandwidth to accommodate administrative needs, communication and information sharing, student learning, classroom needs and to meet PARCC requirements.</li> <li>▪ Convert to VOIP phone system as a cost saving measure.</li> </ul>	<ul style="list-style-type: none"> <li>▪ High speed internet access, evaluate for increased curriculum use and NJ statewide assessment requirements.</li> <li>▪ Continue current phone system, evaluate annually.</li> </ul>	<ul style="list-style-type: none"> <li>▪ High speed internet access, evaluate for increased curriculum use and NJ statewide assessment requirements.</li> <li>▪ Continue current phone system, evaluate annually.</li> </ul>
<i>Other Services:</i>	<ul style="list-style-type: none"> <li>▪ Genesis student management to track student progress and communicate with families.</li> <li>▪ IEP Planner Plus to manage and track information and communication regarding students with special needs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Genesis student management.</li> <li>▪ IEP Planner Plus.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Genesis student management.</li> <li>▪ IEP Planner Plus.</li> </ul>

## NEEDS ASSESSMENT

We implemented a thorough analysis to identify the necessary telecommunication services, hardware, software, and other services to improve education. The process included:

- review of the 2010-2013 district technology plan
- departmental self-assessment
- inventory review
- individual staff and team meeting interviews
- PARCC digital assessment requirements
- staff technology survey – self assessment
- student technology survey, grades 6-8 – self assessment
- student learning survey, grades 5-8
- feedback from administration obtained through classroom walkthroughs and lesson plans when evaluated for technology integration and 21<sup>st</sup> Century skills

After reviewing the results, 7 areas of need became clear:

1. Students and staff are unanimous in their frustration regarding the current server and internet speed. Administrative and classroom activities depend on a reliable and fast connection to the internet, which is currently not consistently available. The anticipated increase in classroom use coupled with the requirements for PARCC make network and internet bandwidth a high priority.
2. More devices are needed to fully and seamlessly integrate technology into everyday classroom activities. The middle school recently purchased 3 laptop carts and replaced the outdated PC lab, alleviating the pressure at that school. The elementary school’s single computer lab schedule is often booked with classes, led by both the Media Specialist and classroom teachers. Additional laptops and BYOD were both offered as possible solutions.
3. Students need continued instruction and practice in using digital tools and resources that promote effective, efficient and ethical use. While technology is infused into all classroom settings, both teachers and students have indicated that stand-alone basic technology instruction is beneficial. Specifically, teachers appreciate that students are able to more quickly apply basic technology skills to benefit core area learning.

4. It is also clear that staff need to be supported in their technology learning and instruction. The technology skills of the teaching staff varies widely: some need basic instruction, others need guidance in infusing technology into existing plans, and others need assistance in utilizing newer tools and resources. Teachers learned a great deal from the previous year's Technology Boost workshops and would like to see future offerings. Teachers would also like the opportunity to have more time to meet and plan with the Media Specialist.
5. The use of IEP Planner Plus has been useful in tracking and planning of student IEPs. As available technologies frequently changes, the Child Study Team, with support from the Technology Coordinator and Media Specialist, must continue to identify and make use of tools and resources that allow all students to engage with information and learning tools at their personal level.
6. Preparation for PARCC is a major concern for the district, from both technical and instructional viewpoints. The technical specifications require that we upgrade the existing high speed internet access, as well as the server and infrastructure. To ensure that we are able to successfully complete the assessments within the allotted time frame, we will need more devices. We will also need to better prepare students for the digital assessment environment by exposing them to e-tests on a regular basis. Finally, early elementary students will need to learn type.
7. The district continues its effort to "go green" and reduce costs by making use of digital communication methods whenever possible and appropriate. While the vast majority of the learning community utilizes the existing communication channels, there is still area for improvement.

### THREE-YEAR GOALS

In direct response to the needs assessment results, we have identified 7 primary goals for 2013-2016:

1. Improve wireless network and internet speed to increase access and productivity.
2. Increase the number of devices available to students to facilitate access and productivity
3. Students will demonstrate proficiency in using educational technology and information literacy skills to enhance learning, develop critical thinking skills, develop collaborative skills and promote creativity.
4. Faculty will participate in professional development to improve their ability to incorporate educational technology in their teaching to enhance student achievement.
5. Students and staff will have equitable access to technology equipment - desktop, projection, portable, and others yet to be defined - and software in all learning environments. This includes access to technologies with universal design features or other design modifications that assure access for students with educational disabilities.
6. Prepare district schools for compliance with administering the Partnership for Assessment of Readiness for College and Careers (PARCC) assessment in 2015.
7. Use technology to effectively communicate with all stakeholders.

**THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLE**

District Goal & Objective	Strategy/Activity	Timeline	Person Responsible	Documentation
1	Acquire materials and schedule time to complete the tasks.	2013	Technology Coordinator	Inventory of equipment.
2	Determine specific needs, acquire quotes, budget accordingly.	2013-2016	Superintendent, Technology Coordinator, Media Specialist	Inventory of equipment.
3	Class activities will regularly incorporate computer and other device use, productivity software, age and content appropriate online activities, and other digital experiences.	2013-2016	All teachers	Teacher lesson plans. Student portfolios.
4	District provided professional development by way of in-person workshops, small group learning, online tutorials, step by step guides, and other means. Access to vendor training and quality online webinars related to specific tools.	2013-2106	Administration, Professional Development Committee, Media Specialist, Reading Specialists, Mentor Teachers	Workshop feedback. Teacher lesson plans.
5	Administration, Child Study Team, and Technology Coordinator will utilize the budget process to ensure equitable access to equipment and resources.	2013-2016	Administration, Director of Special Education, Child Study Team, Media Specialist, Technology Coordinator	Compliance to IEPs, 504s and other educational plans. Inventory of equipment and software.
6	Purchase additional software and hardware that meets the needs of the PARCC assessment standards.	2013-2016	Administration, Technology Coordinator, PARCC IT Contact	Successful completion of PARCC within timelines established by NJDOE.
7	Continue to use and improve upon existing tools such as the district site, school wikis, social media presence, and school notification systems. Evaluate new communication methods as they become available and feasible.	2013-2016	Administration, Technology Coordinator, Media Specialist, All Teachers	Visit statistics to district site, wikis, and digital presence. Parent and community response to digital notifications.

**PROFESSIONAL DEVELOPMENT STRATEGIES**

Greenwich Township educators will continue to participate in sustained, ongoing professional development opportunities that are based on the New Jersey Core Curriculum Content Standards, Common Core State Standards, 21<sup>st</sup> Century Skills, NJ Department of Education Professional Standards for Teachers and School Leaders, ISTE NETS-T, and ISTE NETS-A. District based learning will include regular access to just in time support, full day workshops, faculty meetings and grade level or departmental team meetings. Educators will also have opportunity to access additional professional development through professional organizations and associations, product vendors, and other reputable sources.

District technical staff have the opportunity to attend professional conferences, workshops, online webinars, as well as monthly county Technology Coordinator meetings and workshops. Outside technical support has been contracted to assist and collaborate.

Professional development will incorporate current research, methods, and strategies that promote and support learner-centered strategies that address the diverse needs of all students.

Educators' Proficiency/ Identified Need	Ongoing, sustained, high-quality professional development planned	Support
Educators and students will have ready access to and proficiency in use of digital tools and resources.	Professional Learning Meetings, team meetings, individual support as needed	Administration, Media Specialist, Reading Specialists
Educators and students will have a firm understanding of digital citizenship and safety concepts.	Professional Learning Meetings, team meetings	Administration, Media Specialist
Educators will incorporate hands on student technology use and interaction into their daily lesson plans.	Team meetings, individual support as needed	Administration, Media Specialist, Reading Specialists
Educators will utilize appropriate assistive technologies to support educating all students.	Professional Learning Meetings, team meetings, individual support as needed	Administration, Child Study Team, Reading Specialists, Media Specialist
Educators will create and maintain wiki or web pages to disseminate important class information.	Professional Learning Meetings, team meetings, individual support as needed	Media Specialist will facilitate workshops and just in time support.

**EVALUATION PLAN**

The Greenwich Township School District will continue to provide teachers with the infrastructure, equipment, and knowledge required to successfully integrate technology into ongoing classroom activities. A review of lesson plans and student projects will be used to monitor the effectiveness of said integration. Connectivity speed and condition of equipment will be monitored regularly to ensure ease of technology integration.

The appropriate use of technology requires constant re-evaluation of current practices. The need for mid-course correction will be identified through teacher feedback, monitoring of developing technologies, and maintaining open communication throughout the district to ensure students and staff have access to the most appropriate technology, tools and resources.

<b>Describe the process to regularly evaluate how...</b>	
<i>a. Telecommunication services, hardware, software and other services are improving education.</i>	<p>Consultation with district administrators and educators in assuring that technology needs regarding hardware, software, and network capacity are continually addressed.</p> <p>Annual technology survey to help assess the district use of technology as it relates to planning, instruction, student projects, and administration.</p>
<i>b. Effective integration of technology is enabling students to meet challenging state academic standards.</i>	<p>Instructional evidence in the form of student work and assessment products and performance.</p> <p>Inclusion of 21<sup>st</sup> century standards as well as NJCCS Technology components in core area lesson plans.</p>
<i>c. The LEA is meeting the identified goals in the educational technology plan.</i>	<p>The Superintendent along with building Principals will monitor and assess ongoing professional development in the area of educational technology.</p> <p>Building principals will also evaluate teacher use of technology through formal and informal observations and review of instructional lesson plans.</p>

**FUNDING PLAN (JULY 2013 – JUNE 2014)**

ITEM	DESCRIPTION OF ITEM TO BE PURCHASED	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see <a href="#">NIMAS</a> )	Digital textbooks Digital media, Ebook and Subscription database subscriptions			✓	
Print media				✓	
Technology Equipment	Replace GS computer lab Purchase laptops, cart Desktops, laptops, servers, interactive boards and accessories, projectors, ink/toner			✓	
Network	Improve wireless network			✓	✓
Capacity	Upgrade internet bandwidth			✓	
Filtering	Filtering software			✓	
Software	Antivirus, Microsoft School agreement, Digital assessment tools			✓	
Maintenance	Warranty and preventive maintenance supplies			✓	
Upgrades	RAM upgrades for computers in classrooms			✓	
Policy and Plans				✓	
Other services	Genesis, IEP Planner, Web site hosting			✓	