

**ATTACHMENT 1**  
**NJ Department of Education**  
**District/Nonpublic School/ Charter School**  
**Three-Year Educational Technology Plan Checklist**

To comply with the E-Rate program, complete the components associated with the unshaded boxes in the REQ'D BY E-RATE column. Completion of other components are recommended but not required. Submission procedures found here: [Three-Year Educational Technology Plan Checklist Submission Procedure: 2013-2016](#)

This Document in: PDF | Microsoft Word

**DIRECTIONS:** Place a check  in the unshaded COMPLETED column when the TASK has been completed.

TASK	Completed	
	Req'd by E-Rate	Not req'd E-Rate
<b>DATE:</b> Provide your educational technology plan's creation date (the date when the technology plan first contained all of the required elements in sufficient detail to support the products and services requested on the Form 470). ( <a href="http://www.usac.org/sl/applicants/step01/default.aspx">http://www.usac.org/sl/applicants/step01/default.aspx</a> )  Tech Plan creation date: <u>04/15/2013</u>	✓	

**DIRECTIONS:**

- Answers to questions regarding e-rate compliance: [http://www.usac.org/res/documents/sl/pdf/handouts/TechPlan\\_QuestionsToConsider.pdf](http://www.usac.org/res/documents/sl/pdf/handouts/TechPlan_QuestionsToConsider.pdf)
- Address the numbered items below in a separate District/Nonpublic School/Charter School educational technology plan document.
- Indicate in the PAGE # column, the page number where the corresponding information is found.
- For purposes of this document, "educators" are defined as school staff who teach children, including librarians and media specialists.
- Sample table templates are provided (see links embedded in this document) to assist in the development of the educational technology plan. Please use these table templates unless information is already in a digital form.

	Indicate in the unshaded spaces the page number where the corresponding information is found	
<a href="#">Inventory Sample Table</a>	Req'd by E-Rate	Not req'd by E-Rate
<b>TECHNOLOGY INVENTORY: (please see attached narrative)</b> 1. Describe the technology inventory <u>needed to improve</u> student academic achievement in the 2013-2014 school year that informs the basis for the Form 470. Include in the description the internal connections and basic maintenance <i>for 12 months of the e-rate funded year</i> , such as the following areas: a) Technology equipment including assistive technologies b) Networking capacity c) Filtering method d) Software used for curricular support and filtering e) Technology maintenance and support f) Telecommunications equipment and services g) Other services  <b>NOTE:</b> If this plan is intended to be used for three years of E-Rate funding, provide anticipated inventory information for all three years. See Inventory Sample Table. Definitions of items eligible for e-rate discounts: <a href="http://www.usac.org/sl/applicants/beforeyoubegin/eligible-services/default.aspx">http://www.usac.org/sl/applicants/beforeyoubegin/eligible-services/default.aspx</a>	Table 5-6  Narrative 7-9	
<b>NEEDS ASSESSMENT:</b> 2. Describe the needs assessment process that was used to identify the necessary telecommunication services, hardware, software, and other services to improve education.	10	

	Indicate in the unshaded spaces the page number where the corresponding information is found	
	Req'd by E-Rate	Not req'd by E-Rate
<p><b>THREE-YEAR GOALS:</b></p> <p>3. List clear goals for 2013-2016 that address district needs. There must be strong connections between the proposed physical infrastructure (bandwidth, cabling, electrical systems, networks) and goals. Include goals for using telecommunications and technology that support 21<sup>st</sup> century learning communities.</p> <p>E-Rate requirements: <a href="http://www.ecfr.gov">www.ecfr.gov</a></p>	11-16	
<p><b>THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLE:</b> <u>Implementation Activity Sample Table</u></p> <p>4. Describe the realistic implementation strategies to improve education. Include in the description the timeline, person responsible and documentation (or evidence) that will prove the activity occurred. Address only 'a' and 'b' below to meet e-rate requirements. Address all areas below to continue planning for a technology-rich learning environment.</p> <ul style="list-style-type: none"> <li>a. telecommunications,</li> <li>b. information technology,</li> <li>c. educational technology (including assistive technologies), and</li> <li>d. student technology readiness in preparation for online testing in 2014-2015.</li> </ul>	11-16	
<p><b>PROFESSIONAL DEVELOPMENT STRATEGIES: Professional Development Sample Table</b></p> <p>5. Professional development strategies should ensure that staff (teachers, school library media personnel and administrators) knows how to effectively use the technologies described in this plan to improve education, and will continue to support identified needs through 2016. <i>Address only 'a' below to meet e-rate requirements. Address all areas below to continue planning for a technology-rich learning environment.</i></p> <p>Describe the planned professional development strategies by addressing each of the following questions:</p> <ul style="list-style-type: none"> <li>a) How will ongoing, sustained professional development be provided to all educators, (including administrators) that increases effective use of technology in all learning environments, models 21<sup>st</sup> century skills, and demonstrate learning experiences through global outreach and collaboration in the classroom or library media center?</li> <li>b) What professional development opportunities, resources and support (online or in person) exist for technical staff?</li> <li>c) How will professional development be provided to educators on the application of assistive technologies to support educating all students?</li> </ul>	17-20	
<p><b>EVALUATION PLAN: Evaluation Plan Sample Table</b></p> <p>6. Describe the evaluation process that enables the progress and effectiveness of goals to be monitored.</p>	21-22	
<p>7. Describe the process to make mid-course corrections in response to new developments and opportunities as they arise.</p>	22	
<p><b>FUNDING PLAN (July 2013 – June 2014): Funding Plan Sample Table</b></p> <p>8. Provide the anticipated costs for 2013-2014 by source of funds (federal, state, local and other) and include expenses such as hardware/software, digital curricula including <u>NIMAS</u> compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan. Allow specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.</p>		23-25

**NJ Department of Education District/Nonpublic School/ Charter School  
Three-Year Educational Technology Plan Checklist  
Review Procedures for District/Nonpublic School/ Charter School Educational Technology Plan**

**Educational Technology Plan Review and Approval:**

The County Office of Education will set the timeline for review, submission and approval of district and Charter School educational technology plans. The County Office of Education will complete an online form by June 15<sup>th</sup> indicating the districts and Charter Schools with approved educational technology plans. Nonpublic School Educational Technology Plans may be reviewed and letters issued by the Certified Technology Plan approvers found on the Universal Service Administrative Company web site: <http://www.sl.universalservice.org/reference/tech/default.asp>.

**Notification of Approval:**

The NJDOE's Office of Educational Technology will send a notification of approval to the Chief School Officers of the approved districts and Charter Schools. Nonpublic School Educational Technology Plan approvals are not listed on the NJDOE website. Therefore, their approval letters do not have to be submitted to the NJDOE.

**Posting your plan:**

The NJDOE's Office of Educational Technology suggests that school districts, nonpublic schools and Charter Schools post the approved educational technology plan on their web site.

**For Assistance:**

To answer questions or concerns, contact the district or Charter School's County Office of Education (contact information found at <http://www.state.nj.us/education/counties>) or e-mail the NJDOE's Office of Educational Technology at [edtech@doe.state.nj.us](mailto:edtech@doe.state.nj.us) .

**District/Nonpublic School/ Charter School**  
**Three-Year Educational Technology Plan Checklist**  
 The use of this table is optional and is provided as a convenience.

## Stakeholder Table

<b>Stakeholder Table</b>		
<b>Title</b>	<b>Name</b>	<b>Signature</b>
Superintendent	Dr. David Browne	
Assistant Superintendent	Ms. Jennifer Fano	
Principal	Mr. Mario Rodas	
Technology Coordinator	Mr. Richard Walsh Ms. Pati Rorrer Mr. Albie Garcia	
Curriculum Director/Curriculum Committee Member	Ms. Jennifer Cusmano-King  Mr. Michael Cascione	
Teacher	Ms. N. Caceres	
Special Education Teacher Supervisor	Mr. R. Koroski	
Library Media Specialist	Ms. Michele Savvides	
Guidance Director	Mr. Charles Dimiceli	
Parent	Mr. Derrick Davenport	
Community Member	Ms. Manisha Patel	

**District/Nonpublic School/ Charter School  
Three-Year Educational Technology Plan Checklist**

## Section 1 Inventory Table

The table below may be used to describe the district, nonpublic or charter school's technology inventory used to improve student academic achievement. The use of this table is optional and is provided as a convenience.

<b>Three-Year Educational Technology Plan Inventory Table</b>			
<b>Area of Need</b>	<b>Describe for erate funded year 1 2013-2014</b>	<b>Describe for erate funded year 2 2014-2015</b>	<b>Describe for erate funded year 3 2015-2016</b>
1a) Technology Equipment including assistive technologies. <i>(See Page 7-9 for Narrative)</i>	BYOD and tablet devices for adaptive or assistive technologies, SAFE system communicator pendants; intellikeys (alternative keyboard); audio/video enhancement devices (headphones/microphones); touchpad devices; enhanced keyboards; NAO robotics for Autistic children; Smart tables; responders; APPS	<i>Microsoft Surface</i> rehabilitative diagnostic and interventions applications; other technologies that are used to increase, maintain, or improve the capabilities of a child with disabilities; use of classroom responders; PARCC related components	Same as year 1 and 2
1b) Networking Capacity <i>(See Page 7-9 for Narrative)</i>	Increase capacity from existing from 100mb/sec to 1000mb/sec (1 gb); new network wireless controllers and access points; Increasing and monitoring wireless utilization through new wireless controller hardware	Replacing every access point on the network with a higher-capacity access point; 802-11a/g adaptability.  Replacing limited existing wireless network controller with new unit	Install monitoring equipment for maintenance of bandwidth
1c) Filtering Method <i>(See Page 7-9 for Narrative)</i>	Replacing existing <i>Cymphonix Network Analyzer with Barracuda Web Firewall</i>	Update all subscriptions for outsourced blacklists and whitelists;	Maintain subscriptions and service contracts for equipment

Area of Need	Describe for erate funded year 1 2013-2014	Describe for erate funded year 2 2014-2015	Describe for erate funded year 3 2015-2016
1d) Software used for curricular support and filtering (See Page 7-9 for Narrative)	<i>Rosetta Stone World Languages; Blackboard Learn; Vernier LabQuest; CAD systems; STEM through Follett Destiny Circulation, Card Cataloging, and eBook manager and BYOD, AutoCad/AutoSketch; Bridgebuilder; Scholastic Reading Counts; Study Island; Everyday Math Games; maintain CIPA compliancy via Barracuda</i>	<i>Microsoft Systems Service Manager for automatic rollout and upgrading; maintain CIPA (Childhood Internet Protection Act) compliancy and safety and security</i>	Monitor white papers and keep abreast of current trends in technology; maintain CIPA compliancy
1e) Technical Support and maintenance (See Pages 7-9 for Narrative)	<i>ITDirect (Schooldude)</i>	<i>Microsoft System Center help-desk software</i>	Continuation of year 1 and year 2
1f) Tele-communications equipment and services (See Pages 7-9 for Narrative)	Switching from <i>Verizon</i> to <i>Optimum Lightpath</i> for advanced speed and support, and installation of campus underground fiber optic network	Year 2 of 3 year <i>Optimum Lightpath</i> subscription to high speed internet and networking; maintenance of underground fiber network	Year 3 of 3 year <i>Optimum Lightpath</i> subscription to high speed internet and networking; maintenance of underground fiber network
1g) Other Services: (See Pages 7-9 for Narrative)	Merging into a <i>Microsoft Deployment Tools</i> system and rollout of software; Migrating to <i>Casper</i> for Mac systems; Maintaining <i>Barracuda</i> subscriptions; maintaining Microsoft " <i>Forefront</i> " antivirus system	Maintaining <i>Barracuda</i> subscriptions; maintaining Microsoft " <i>Forefront</i> " antivirus system	Maintaining <i>Barracuda</i> subscriptions; maintaining Microsoft " <i>Forefront</i> " antivirus system

## Narrative Accompanying the Inventory Table

### TECHNOLOGY INVENTORY:

1. Describe the technology inventory needed to improve student academic achievement in the 2013-2014 school year that informs the basis for the Form 470. Include in the description the internal connections and basic maintenance *for 12 months of the e-rate funded year*, such as the following areas:
  - a) Technology equipment including assistive technologies
  - b) Networking capacity
  - c) Filtering method
  - d) Software used for curricular support and filtering
  - e) Technology maintenance and support
  - f) Telecommunications equipment and services
  - g) Other services
  
- a) The technology inventory needed to improve student academic achievement 2013-2014 includes major areas of improvement in the following areas:
  1. Technology equipment including assistive technologies: By providing a strong infrastructure and means of providing access to the network and internet, we provide access to students bringing their own adaptive devices and district provided devices that they use and are most comfortable with. We provide a means for users who have difficulty using their keyboard or mouse to enter data into the computer. We also will provide devices to those students who do not have their own devices. Specific examples would be:
    - adaptive keyboards, intellikeys (alternative keyboard), on-screen keyboards, trackballs, joysticks, voice recognition devices such as microphone/headphone devices to provide feedback to the student and *Frontline* and *Safari Audio Enhancement* systems to assist in auditory recognition;
    - Possibility of NAO robotics for Autistic children; by programing and assisting with non-judgmental feedback for interaction with the child
  2. Smart tables for tactile input and curricular collaboration, and responders utilizing interactive response systems combine handheld wireless remotes (or clickers) with a receiver and powerful assessment software. Teachers can gauge student understanding with immediate feedback, and adjust their teaching accordingly to be assured that all students in the classroom are following the lesson and participating.
  3. APPS: by using the apple volume licensing/purchasing program we provide a method of obtaining district owned APPs for students and individual or for classroom collaborative usage.
  
- b) Networking capacity
 

The Randolph Township Schools recognize that in order to use streamed curricular content, that a robust infrastructure and backbone is necessary and that adequate bandwidth is available to accomplish the goal of providing a curriculum content delivery system. In order to ensure this adequate infrastructure, we are upgrading our network to include a partial fiber-optic backbone that will increase our capabilities from 100mb/sec to 1000mb/sec (or 1gb/sec.). This increase in speed and capacity necessitates changing the associated equipment. We will be changing or modifying all switches, wireless controllers, and wireless access points throughout the district. We will change over our infrastructure using this equipment to provide a single, campus-wide distribution mechanism or wide-area network.

This robust infrastructure is also required to comply with PARCC, *the Partnership for Assessment of Readiness of College and Careers*, and is assessed through the PARCC Readiness tool submitted through the 12-13 school year. This will ensure the facilitation of student academic achievement.

c) Filtering method

Randolph Township Schools has been fully compliant with CIPA (The Children's Internet Protection Act) required for erate funding and for protection for our students.

In order to maintain our lead in the protection of our students it is necessary to change our method of filtration to a more advanced system. We have budgeted for (and submitted for erate funding of 40%) a new filtering system to provide filtering yet unobtrusively affect bandwidth. This system utilizes a subscription based 'black-list' of sites and keywords that either block or quarantine suspect harmful, illegal, or inappropriate sites or queries.

d) Software used for curricular support and filtering

In the arena of curricular support, the Randolph Township Schools utilizes several internet based interactive streamed content providers and software to improve student academic achievement:

- *Rosetta Stone World Languages*: World Language instruction and interactive feedback is accomplished grades 2-12, (with emphasis on ESL and intermediate language areas). Assessments provide advancement and achievement levels and allows the student to proceed at their own pace.
- *Blackboard Learn*: This virtual leaning environment and course management system is web-based and allows the student/teacher interaction from either the classroom or home environment.
- *Vernier LabQuest*: interfaces that allow sensors and probes to gather and analyze scientific data in the classroom or in the field. Such measurements as pressure, temperature, salinity, acidity, and the like are recorded for further utilization and analysis.
- *AutoCad*: replaces the drafting table as a means of engineering structures and components in a virtual environment.
- STEM initiatives through *Follett Destiny* and BYOD: Through the "Bring Your Own Device" and by integrating with our library ebook system, the Randolph Schools philosophy is to provide ebooks that align with STEM and CORE content.
- *Scholastic Reading Counts*: encourages the student to increase achievement in reading comprehension through reading practices and assessments.
- *Study Island*: a standards-based assessment, instruction, and test preparation e-learning program.
- *SOLO* is a literacy suite of assistive technology accommodations, including a text reader, graphic organizer, talking word processor, word prediction.
- Kurzweil literacy software, which is research-based assistive technology software providing individuals, schools and districts with access to texts and curriculum. The software aligns to both to NJ State and national standards and the solutions are comprehensive, easily deployable and can be customized to meet the individual needs of all those who struggle with literacy. Both *Solo* and *Kurzweil* software suites are used K-12 in or Special Education classrooms. These programs give students the ability to work individually on their areas of weakness and helps them to strengthen their literacy skills.
- *Everyday Math*: This software provides K-5 students with programs that use interactive learning to support and enrich the learning process. Students and parents can extend learning beyond the school day with this web based program. Skills are reinforced in this application, and memorization is reduced. EM was developed by the University of Chicago School Mathematics Project to help all children learn more mathematics and become lifelong mathematical thinkers, learners, and problem solvers. This software assists teachers in identifying lessons and activities on which to focus on to meet the Common Core Standards.
- Standardized Test Preparation Software. Current products offer rigorous content built from the New Jersey Core Curriculum Content Standards and the Common Core State Standards to prepare



students for NJASK and HSPA. These programs support the learning process and build off of student enthusiasm for technology with engaging interactive lessons and activities. Students can work through the web based program at their own pace, or they can be guided by the teacher. With dynamic content, students do not memorize the answers, but they learn and apply the concepts.

e) Technology maintenance and support:

Randolph Township Schools has used a product "SchoolDude-ITDirect" which is cloud-based software for the operations of school district support systems including technology. We have outgrown this product and for the 13-14 school year are migrating to rSchool Today, which allows for a more enhanced school-based system for tracking repairs, Athletics/Activities scheduling, school-age childcare, and more.

Through the systems daily activity reports, needs are assessed and chronic conditions identified for remediation or trending analysis. Student academic achievement is improved by providing operational work-platforms and tools needed by the student to utilize the curriculum content areas.

f) Telecommunications equipment and services:

Randolph Township Schools is changing internet service providers (effective August 2013) we are switching from Verizon to Optimum Lightpath for advanced speed and support and installation of a campus underground fiber optic network. The Randolph Township Schools recognize that in order to use streamed content, that a robust infrastructure and backbone is necessary and that adequate bandwidth is available to accomplish the goal of providing a curriculum content delivery system. In order to ensure this adequate infrastructure, we are upgrading our network to include a partial fiber-optic backbone that will increase our capabilities from 100mb/sec to 1000mb/sec (or 1gb/sec.). This increase in speed and capacity necessitates changing the associated equipment. We will be changing or modifying all switches, wireless controllers, and wireless access points throughout the district. We will change over our infrastructure using this equipment to provide a single, campus-wide distribution mechanism or wide-area network.

This robust infrastructure is also required by PARCC, *the Partnership for Assessment of Readiness of College and Careers*, and is assessed through the PARCC Readiness tool submitted through the 12-13 school year, will ensure the enhancement of student academic achievement.

g) Other services:

- Recognizing that technology changes and adapts, the Randolph Township Schools constantly searches for the very best in products and services that enhance the learning processes needed to improve student academic achievement. We are merging into a *Microsoft Deployment Tools System* and rollout of associated software to provide more than adequate and enhanced curriculum delivery systems.
- We will also be migrating to *Casper* for Mac systems to provide adequate and enhanced curriculum delivery systems.
- We will be maintaining Barracuda firewall and web filtering subscriptions; maintaining *Microsoft Forefront* antivirus systems for safety and security.

## **Section 2 – Needs Assessment**

- 2. NEEDS ASSESSMENT:** Describe the needs assessment process that was used to identify the necessary telecommunication services, hardware, software, and other services to improve education.

A variety of needs assessment tools were used to determine areas of concentrations and needs. Each tool, used separately, is inadequate to provide a clear picture of technological integration needs and the impact of technology into the curriculum.

1. Inventory: several inventories are conducted and the results analyzed as to:
  - a. Age
  - b. Processor
  - c. Speed
  - d. Capacities
  - e. Network integration
  - f. Curricular versus administrative usage
  - g. PARCC readiness compliance
  
2. PARCC Readiness Survey: making online readiness a reality is to assess the current status of our infrastructure, technology and Internet connectivity at both a state and local level. As part of this process, districts and New Jersey testing sites must update and maintain the information for each school in PARCC's Technology Readiness Tool (TRT). Every district and New Jersey testing site is required to supply contact information for a PARCC Coordinator and PARCC IT Contact in the NJDOE CDS (County District School) system. We have completed the readiness assessment and inventories.
3. Bandwidth capacity monitors: to ensure adequate throughput for curriculum delivery and to improve education, monitoring tools are used to measure day-to-day changes and long term trending.
4. Tools for special curricular needs such as proper headphones and microphones for audio curricula (Rosetta Stone Language learning) and for those with hearing impairments.
5. Website online survey: via our website, [www.rtnj.org](http://www.rtnj.org), an assessment for handhelds, tablets and ebook readers was conducted to ensure that donations from groups outside the purchasing protocols were inventoried and either met or did not meet the PARCC Readiness criteria.
6. Storage capacity: all storage mechanisms, either physical or virtual, are monitored for input/outputs speed, utilization, and storage capacities.
7. Product limitations (wireless): all devices are tested to ensure compliance, safety, and accessibility.

**District/Nonpublic School/ Charter School  
Three-Year Educational Technology Plan Checklist**

## Three-Year Goals and Implementation Activity Table

Strategies and activities that relate to the district, nonpublic or charter school's goals and objectives may be completed on the sample implementation table. If the goals and objectives were numbered in the THREE-YEAR GOALS section of this checklist, use corresponding numbers in the table below. The use of this table is optional and is provided as a convenience.

<b>Three-Year Technology Implementation Activity Table</b>				
<b>District Goal and Objective</b>	<b>Strategy/Activity</b>	<b>Timeline</b>	<b>Person Responsible</b>	<b>Documentation</b>
1) Technology Equipment including assistive technologies <i>(See Pages 7-9 for Narrative)</i>	Investigate and experiment with adaptive technology by using vendor sample products, attend adaptive webinars, and using the experiences of other school districts	continuing	Special Education Supervisor; Technology Director; STEM Supervisors	Written reviews; written evaluations of technology related devices supplied by vendors and examined at user group meetings
2) Networking Capacity <i>(See Pages 7-9 for Narrative)</i>	a) Installation of underground fiber-optic lines connecting the High School, Middle School, the Technology Center, Central Office, and Center Grove School	March 23 through August 15 2013	Technology Director; Town Planner, Township of Randolph	Arial maps with underground pathways; <i>Optimum Lightpath</i> Agreements; Township Agreement
	b) Connecting and testing of fiber-optic line to new routers and switches at the High School, Middle School, the Technology Center, Central Office, and Center Grove School	July 23 through August 15 2013	Technology Director	As built network diagrams and 'Run Book'; Project Management timelines
	d) Internet: <i>Barracuda Web Filter</i> to replace legacy equipment	July 30 2013	Technology Director	Daily alerts; Monthly system generated reports
	e) <i>Microsoft System Center</i> including <i>Frontline/Forefront</i>	July 2013	Technology Director	Daily alerts; Monthly system generated reports

District Goal and Objective	Strategy/Activity	Timeline	Person Responsible	Documentation
<p>4) Software used for curricular support and filtering (See Pages 7-9 for Narrative)</p>	<p>a) Utilize <i>Rosetta Stone</i> to prepare students to succeed in a globalized world via multimedia user experience</p> <p>b) <i>Blackboard Learn</i> which is a virtual learning and course management system and web-based server software which features convenient course management, customizable open architecture, and scalable design that allows integration with student information systems and authentication protocols</p>	<p>On-going</p> <p>On-going</p>	<p>World Languages Supervisor; Technology Director</p> <p>Administrators and Supervisors</p>	<p>Evaluations; software driven progress indicators</p>
	<p>c) <i>Vernier LabQuest</i>, a standalone interface used to collect sensor data with its built-in graphing and analysis application. The large, high-resolution touch screen makes it easy and intuitive to collect, analyze, and share data from experiments. Its wireless connectivity encourages collaboration and personalized learning. With the use of an additional <i>LabQuest</i> software component it can also be used as a computer interface using and additional software component for advanced analysis.</p>	<p>On-going</p>	<p>STEM Supervisors</p>	<p>Software inventory; curriculum; evaluations</p>
	<p>d) <i>AutoCAD</i>: a software application for computer aided design (CAD) and drafting. The software supports both 2D and 3D formats.</p>	<p>On-going</p>	<p>STEM Supervisors</p>	<p>Software inventory; Curriculum; evaluations</p>

	<p>e) <i>MicroStation</i>: an information modeling environment for architecture and engineering. It provides <u>interaction</u> with 3D models and 2D designs to confidently drawings, 3D pdf documents and 3D plots. Its data and analysis capabilities enable <u>performance simulation</u> of designs.</p>	On-going	STEM Supervisors	Software inventory; Curriculum; evaluations
Common Core State Math Standards	<p>Work with Professional Development providers to design workshops to support the implementation of the Common Core State Math Standards. These workshops will necessarily incorporate the use of technology in the classroom to support using the new Mathematical Practices.</p> <p>Workshop content will be expected to be used by all attendees to design lesson plans meeting the Common Core State Math Standards Mathematical Practices. It is also intended to implement a Wiki based resource/lesson/project sharing tool</p>	On-going	STEM Supervisors	Software inventory; Curriculum; evaluations
Next Generation Science Standards	<p>Work with Professional Development providers to design workshops to support the implementation of the Next Generation Science Standards. These workshops will necessarily incorporate the use of technology in the classroom to support.</p>	On-going	STEM Supervisors	Software inventory; Curriculum; evaluations

	Workshop content will be expected to be used by all attendees to design lesson plans meeting the Common Core State Math Standards Mathematical Practices. It is also intended to implement a Wiki based incorporating the new Science and Engineering Practices.			
	STEM and CORE eBooks through Destiny media circulation program, various vendors and Follett STEM and CORE eBooks through Destiny media circulation program, various vendors and Follett Shelf. Expand e-book holdings to reflect and support the curriculum, focusing on non-fiction as well as fiction units of study with unlimited accessibility, enabling synchronous group approach. Introduce Sub-Text app or similar apps for annotating e-books.	On-going	STEM Supervisors; Administrators; Supervisors; Library Media Specialists	Ebook catalog and electronic index; Software inventory; Curriculum; evaluations
	<i>Project Gutenberg eBooks</i> , and other venues for grade level appropriate online or downloadable books.	On-going	STEM Supervisors; Administrators; Supervisors; Library Media Specialists	Catalog; eBook holdings; Software inventory; Curriculum; evaluations
	Electronic text book creation such as <i>I-Book</i> to assist in digital media sharing across the curriculum and can be modified to the needs of the learner.	Ongoing	STEM Supervisors; Administrators; Supervisors; Library Media Specialists	Catalog, STEM; Software inventory; Curriculum; evaluations
	<i>Bridge building software</i> : This software provides tools to model, test, and optimize a steel highway bridge, based on realistic specifications, constraints,	On-going	STEM Supervisors; Administrators; Supervisors; Library Media Specialists	STEM; Software inventory; Curriculum; evaluations

	and performance criteria. It introduces students to engineering through an authentic, hands-on design experience.			
	<i>Trimble Sketch Up</i> software is used as an introduction to computer aided design (CAD). It provides basic techniques applied in CAD programs.	On-going	STEM CORE	STEM; Software inventory; Curriculum; evaluations
	LEGO <i>Mindstorms NXT</i> software provides the written commands to communicate with the robots. It is used to introduce robotics through a relationship between programming and robots.	On-going	STEM CORE	Software inventory; Curriculum; evaluations
<b>District Goal and Objective</b>	<b>Strategy/Activity</b>	<b>Timeline</b>	<b>Person Responsible</b>	<b>Documentation</b>
	<i>Study Island</i> : Study Island offers rigorous content built from the New Jersey Core Curriculum Content Standards and Common Core Standards to prepare for the NJASK. Study Island supports the learning process and builds off of your students' enthusiasm for technology with engaging, interactive lessons and activities. Students can work through the web-based program at their own pace, or teachers can guide students through the program. And with dynamic content, students don't memorize the answers, they learn the topics.	On-going	Supervisors and building administration	Software inventory; Curriculum; evaluations; evaluative rubrics from individualized instruction
5) Technical Support and maintenance (See Pages 7-9)	<i>Microsoft Help Desk System Center: Microsoft System Center 2012</i> is a comprehensive IT	July 2013 and on-going	Technology Director	Daily, weekly, monthly analysis and reports

<i>for Narrative)</i>	infrastructure, virtualization, and cloud management platform. With <i>System Center 2012</i> , you can more easily and efficiently manage your applications and services across multiple hypervisors as well as across public, hosted, and private cloud infrastructures			
6) Tele-communications equipment and services <i>(See Pages 7-9 for Narrative)</i>	Switching from <i>Verizon</i> to <i>Optimum Lightpath</i> for advanced speed and support and installation of campus underground fiber optic network	July 2013 and on-going	Technology Director	Project Management and weekly summaries with peer review



District Goal and Objective	Strategy/Activity	Timeline	Person Responsible	Documentation
7) Other Services: (See Pages 7-9 for Narrative)	Merging into a <i>Microsoft Deployment Tools</i> system and rollout of software; Migrating to " <i>Casper</i> " for Mac systems;	July 2013 and on-going	Technology Director	Project Management and weekly summaries with peer review
	Maintaining <i>Barracuda</i> subscriptions; maintaining Microsoft "Forefront" antivirus system	July 2013 and on-going	Technology Director	Project Management and weekly summaries with peer review

**District/Nonpublic School/ Charter School  
Three-Year Educational Technology Plan Checklist  
Professional Development Table**

Professional development detail is needed for the first school year of the educational technology plan. The use of this table is optional and is provided as a convenience.

<b>Educators' Proficiency/ Identified Need</b>	<b>Ongoing, sustained, high-quality professional development planned</b>	<b>Support</b>
<p>Each year the district distributes and analyzes survey data from staff members about their technology needs. In addition to the survey results we monitor our instructional needs through informal discussions and formal meeting topics associated with instructional technology. The district is currently exploring the expansion of digital access to books to supplement and/or replace tradition textbooks. Access to digital resources directly supports the district's Bring Your Own Device (BYOD) initiative, which formally began in September 2012. The Policy Committee of the Board of Education reviewed and revised the acceptable use policy to align with staff and students using a variety of devices.</p>	<p>The district is committed to delivering ongoing, sustained, high-quality professional development. Through district funding, and supported by grant funding, the district will work with a professional development company to have a technology integration expert and former teacher in the district one day per week throughout the entire school year. The format of the professional development will include, but not be limited to, group presentations, demonstration lessons, model lessons with students, review of current trends and best practices, and collaborative discussions through professional learning communities. In addition to this comprehensive and collaborative approach to supporting and training staff in the area of technology integration listed above, the district will also continue to support professional development directly led by district colleagues. Through "Randolph Academy" staff propose to teach courses as a means to share their expertise with colleagues. This in-house professional development approach has increased in popularity and will continue to be a venue for staff to share best and next practices.</p>	<p>Additional support for professional development will be supported through professional learning communities and additional early release days built into the 2013 – 2014 school calendar to provide staff with additional time during the school year to continue professional growth. Grade level and department meetings will continue to provide an opportunity to share instructional technology strategies being used for instruction, management, data analysis, and evaluation.</p>

<p>To further support the BYOD initiative, we have identified the need to provide additional professional development focused on designing and facilitating lessons that encourage and support student use of technology.</p>		
<p>Common Core State Math Standards</p>	<p>Work with Professional Development providers to design workshops to support the implementation of the Common Core State Math Standards. These workshops will necessarily incorporate the use of technology in the classroom to support incorporating the new Mathematical Practices.</p>	<p>Workshop content will be expected to be used by all attendees to design lesson plans meeting the Common Core State Math Standards Mathematical Practices. It is also intended to implement a Wiki based resource/lesson/project sharing tool.</p>
<p>Next Generation Science Standards</p>	<p>Work with Professional Development providers to design workshops to support the implementation of the Next Generation Science Standards. These workshops will necessarily incorporate the use of technology in the classroom to support incorporating the new Science and Engineering Practices.</p>	<p>Workshop content will be expected to be used by all attendees to design lesson plans meeting the Common Core State Math Standards Mathematical Practices. It is also intended to implement a Wiki based resource/lesson/project sharing tool.</p>

**b) What professional development opportunities, resources and support (online or in person) exist for technical staff?**

1) Safari Montage Curriculum Integration tools:

Curriculum integration tool “SAFARI Montage” which provides K-12 school districts with a comprehensive solution for their digital media distribution and visual instruction needs. The full suite of integrated products gives educators and administrators a single interface for accessing all visual resources from inside the school district intranet or from home. The SAFARI Montage Video-On-Demand and Digital Media Management enterprise solution is designed to cut costs for school districts by utilizing intelligent digital media delivery, while facilitating visual instruction and learning in the classroom. SAFARI Montage servers come preloaded with educational video titles tied to the curriculum from the video publishers including Schlessinger Media, PBS, The History Channel, National Geographic, Scholastic, Disney Education, BBC, and more.

In addition, with SAFARI Montage CreationStation, school districts have the ability to easily upload and manage their own digital video and other content, and to disseminate it to all classrooms throughout the district. With the introduction of its new Pathways SM module – the road to the future of classroom communications – SAFARI Montage now gives districts the ability to control, manage and schedule classroom and district devices. The Pathways SM module is a powerful new addition to the SAFARI Montage suite of products, which forms a total enterprise solution that provides System Administrators with the tools to manage all of their digital media intelligently throughout the district while improving teaching, learning and achievement for 21st-century students.

Specific training involved a two day instructor lead hands-on training session for 3 technical staff members. This training involved the creation of teacher pages, loading on-demand videos to specific teacher pages, and practice uploading/downloading of the videos. Also included were instructional sessions on using the ‘decoder’ to convert analog video into digital video and supply video streaming to classrooms.

2) Network appliance integration and training hands-on training

Technology Staff attended advanced training on network appliances involving:

- a. Security
- b. Safety
- c. Wireless network devices
- d. Server and switch management
- e. BYOD seminars

3) Webinars:

Technical and other staff is encouraged to participate in professional development via advanced training webinars. On-line video courseware was used for advanced training in specific areas required by NJDOE.

- NJDOE webinars concerning NJSMART, DONET , NJHOMEROOM which insure proper district compliance with standards set by the state and county education departments
- Advanced training by hardware manufacturers and software developers to program and diagnose technical issues (TechNet, Tech Republic, Cisco, Microsoft, Apple, CBT Nuggets, and other sources such as YouTube, Google

4) Advanced Technical Support:

- Genesis student information system on new features and remedial activities

- Bradford Campus Manager for wireless access control systems and BYOD initiative.
- IP Security for Access control systems including magnetic card readers, IP Video cameras and DVR (digital video recorders) via Speco Corp. and Alarm Communications Technologies Corp.
- Self-Directed Training using multimedia systems.
- Off-site professional development via users groups, consortiums (NJECC, NJSBA, ASBO, ASCD)

**District/Nonpublic School/ Charter School  
Three-Year Educational Technology Plan Checklist  
Evaluation Plan Table**

The evaluation narrative must include how telecommunications services, hardware, software and other services will improve education. Telecommunications services are leased, tariffed, contracted, or month-to-month services that are used to communicate information electronically between sites. The services **MUST** be provided by an eligible Telecommunications Service Provider. Examples of Telecommunications Services for E-Rate include T-1 lines, basic telephone service, and ISDN. Broadcast services (such as over-the-air radio and television) and cable TV are not considered Telecommunications Services.

The burden of proof for any federal inquiry lies with the district, and they should be able to support their process with methodology and documentation.

**Educational Technology Plan Evaluation Narrative**

**Describe the process to regularly evaluate how...**

*a. Telecommunication services, hardware, software and other services are improving education.*

- Evaluation includes daily, weekly, and monthly statistical analysis of the effective use of telecommunications services via reports and graphical displays of administrator, teacher, and student usage of the systems.
- Hardware services are monitored and daily reports by network tools that query individual devices to ascertain system processes and system utilization, additional systems and monitors systems that monitor antivirus remediation, and suspect events.
- Software services are monitored for utilization, bandwidth impact, and 'lag' times.

In these specific areas we ensure the proper curricular tools are available and are performing to improve education.

*b. Effective integration of technology is enabling students to meet challenging state academic standards.*

Effective integration of technology means that our systems are adequate or exceed the demands placed on them. The PARCC readiness tool is an assessment tool that provides districts with technical information, and provide planning and implementation guidance in coordination with the existing efforts around the PARCC and *Smarter Balanced Technology Readiness Tool*. The document provides minimum and recommended specifications for computer hardware, input devices, and security requirements; and suggests recommended levels of bandwidth that will support schools instructional and assessment needs. It does not yet set minimum bandwidth specifications. Schools, districts, and states can use these guidelines to determine the eligibility of existing computers as test-taking devices for the 2014-215 PARCC assessments.

Through the budgetary process, through careful planning and observation f technology inventories, we can assure that we will meet the challenges of the state academic standards.

*c. The LEA is meeting the identified goals in the educational technology plan.*

By meeting and using measurable goals and objectives in this document and through the budgetary formation process, we can ensure that we will deliver what we aspire to. Planning and funding are keys to the successful integration of technology into the curriculum.

**District/Nonpublic School/ Charter School  
Three-Year Educational Technology Plan Checklist  
Funding Plan Table**

Complete this table to indicate the funding source of anticipated costs of technologies to ensure that students have access to technology. The use of this table is optional and is provided as a convenience.

<b>Three-Year Educational Technology Plan Anticipated Funding Table (First Year)</b>					
<b>ITEM</b>	<b>DESCRIPTION OF ITEM TO BE PURCHASED</b>	<b>FEDERAL FUNDING</b>	<b>STATE FUNDING</b>	<b>LOCAL FUNDING</b>	<b>MISC. (e.g. Donations, Grants)</b>
Digital curricula (see NIMAS)					
Print media needed to achieve goals					
Technology Equipment	<ul style="list-style-type: none"> <li>• Backup Storage Maintenance Renewal</li> <li>• Barracuda Spam &amp; Virus Firewall</li> <li>• Barracuda Web Filter</li> <li>• Bradford Campus ManagerGold support (BYOD)</li> <li>• Cisco Switches/Routers SmartNet Renewal</li> <li>• Complete backup systems for district</li> <li>• Edulog Transportation System</li> <li>• Frontline- Aesop Substitute</li> <li>• Genesis - Student Accounting</li> <li>• ipMonitor software Expansion &amp; Renewal</li> <li>• Livestream broadcasting</li> <li>• Logisoft -Sophos Anti-Virus</li> <li>• Microsoft EA (software agreements)</li> </ul>	\$69,000		\$103,000	
Network	<i>Optimum Lightpath</i> internet and WAN access	\$74,000		\$111,000	
Capacity	100mb/sec to 1000mb/sec (1gb)			Included in above network item	
Filtering	Barracuda Web Filter	\$9,000		\$14,000	



Software	<ul style="list-style-type: none"> <li>• Complete backup systems for district</li> <li>• Edulog</li> <li>• Extel Communications</li> <li>• Frontline- Aesop</li> <li>• Genesis - Student Accounting</li> <li>• ipMonitor software Expansion &amp; Renewal</li> <li>• Livestream broadcasting</li> <li>• Logisoft -Sophos Anti-Virus</li> <li>• Microsoft EA (software agreements)</li> <li>• Oracle 1 year support (Genesis Requirement)</li> <li>• School Dude ITDirect</li> <li>• Server Warranty Extensions</li> <li>• Systems 3000</li> <li>• UPS/FedEx</li> <li>• WiSM Wireless Services Module Upgrade</li> <li>• Autodesk</li> <li>• Blackboard</li> <li>• Blackboard Connect 5</li> <li>• Brain Pop and Brain Pop Jr.</li> <li>• Destiny Library Systems</li> <li>• Discovery Education</li> <li>• Everyday Math Games K-5</li> </ul>	\$94,000		\$38,000	
Maintenance	<ul style="list-style-type: none"> <li>• Server Warranty Extensions</li> <li>• Backup Storage Maintenance Renewal</li> <li>• Barracuda Spam &amp; Virus Firewall</li> <li>• Barracuda Web Filter</li> <li>• Bradford Campus ManagerGold support (BYOD)</li> <li>• Cisco Switches/Routers SmartNet Renewal</li> <li>• Complete backup systems for district</li> <li>• Frontline- Aesop</li> <li>• Genesis - Student Accounting</li> <li>• IND</li> <li>• IP Monitor software Expansion &amp; Renewal</li> <li>• Livestream broadcasting</li> <li>• Microsoft (software agreements)</li> <li>• Oracle 1 year support</li> </ul>	\$323,000		\$323,000	

	<ul style="list-style-type: none"> <li>• School Dude ITDirect</li> <li>• Server Warranty Extensions</li> <li>• Systems 3000</li> <li>• WiSM Wireless Services Module Upgrade</li> <li>• High School Server Replacements</li> <li>• Middle School Server Replacements</li> <li>• Offsite backup storage solution</li> <li>• Replacement of oldest 400 computers districtwide</li> <li>• Replacement stock computers, printers, iPads etc.</li> <li>• Shared Storage Device for failover servers</li> <li>• Software Managing for Mac</li> </ul>				
Upgrades	<i>(Included in the above)</i>				
Policy and Plans	AUP Regulation ( Acceptable Use Agreement) “Board Policies and Regulations” via District website, Blackboard, Schoolboard.net				
Other services					