

TECHNOLOGY PLAN 2013 to 2015



Developed by the Smithfield Public School's Technology Team

SMITHFIELD PUBLIC SCHOOLS
Smithfield, Rhode Island
www.smithfield-ps.org

SMITHFIELD SCHOOL COMMITTEE

Virginia Harnois, Chair
Joan LaFauci, Vice Chair
Richard Iannitelli, Secretary
Al LaGreca
Brenden T. Oates

SMITHFIELD DISTRICT ADMINISTRATION

Robert O'Brien, Superintendent of Schools
Bridget Morisseau, Assistant Superintendent of Schools
Craig Levis, Special Education Director
Lisa Cournoyer, Business Director
John Obiurka, Buildings & Grounds Director
Edward Hill, Director of Technology

SMITHFIELD TECHNOLOGY TEAM

Edward Hill
Daniel Kelley
Laurie Ratigan
Laurie Sullivan
Cathy Pleau
Laurie Beauvais
Bridget Morisseau
Charles Thomas
Ed Apts

June 2012

SMITHFIELD PUBLIC SCHOOLS

Smithfield, Rhode Island

SMITHFIELD PUBLIC SCHOOLS MISSION STATEMENT

The mission of the Smithfield Public School District is to provide an adaptive and challenging learning environment that meets the needs of students in an emerging global community, and prepares them for excellence in education and workplace, while cultivating integrity, responsibility and a sustained passion for continued learning.

SMITHFIELD PUBLIC SCHOOLS OBJECTIVES

- All students will achieve academic proficiency;
- All students will graduate;
- All students will excel in endeavors of their choice;
- All students will demonstrate integrity, good citizenship and good character;
and
- All students will embrace life-long learning.

SMITHFIELD PUBLIC SCHOOLS

Smithfield, Rhode Island

SMITHFIELD PUBLIC SCHOOLS TECHNOLOGY VISION

The Smithfield Public School District actively strives to prepare children so they have every opportunity to succeed in the future they select for themselves. As an educational system we must provide students with access to suitable technology as well as develop the technical skills and understanding necessary to succeed in a global economy. Setting high educational standards includes the technical skills that students must have to utilize the appropriate technology as they create, access information, analyze data and successfully communicate outcomes.

The Smithfield School District continues to implement new technologies that have proven to improve learning in addition to increasing student achievement. The district strives to meet and exceed the national average ratio of 3.8 students to 1 *instructional computer* while maintaining full Internet access from all classrooms. Upgrades to the district's technological infrastructure, both wired and wireless, continue in order to improve building connectivity and provide students with greater access to online resources.

While the practice of using technology to improve student achievement is the district's priority, the district has embraced the use of technology outside of the classroom including communication (email, web sites, etc.), financial reporting and student information. Improvements to the district's technology infrastructure continue to support the daily use of technology simply as a "way of doing business". The Strategic Plan for the Smithfield Public Schools addresses technology as a means to integrate current and emerging technologies to promote teaching and learning excellence, curricula programs and communication.

OBJECTIVES

The District adopted the **National Educational Technology Standards for Students** from the **International Society for Technology Education (ISTE)**, as the framework and guideline for Technology in the Smithfield Public Schools. These standards include:

- Basic operations and concepts
- Social, ethical and human issues
- Technology productivity tools
- Technology communication tools
- Technology research tools
- Technology problem-solving and decision-making tools.

The Technology Team added Professional Development (Objective 7) as an essential component of this Plan.

OBJECTIVE ONE: *Basic operations and concepts*

Graduates and employees of the Smithfield Public Schools will

- Demonstrate a sound understanding of the nature and operation of technology systems through access to technology systems that are up-to-date and properly configured and maintained for maximum efficiency of use
- Demonstrate proficiency in use of technology as defined by the district, RIDE and RIMEA guidelines.
- Have access to new technologies proven to be both cost effective and of educational benefit.

Current	Recommended
Internet access continues to be available in all learning areas.	Improve network infrastructure to allow for wireless access points in every classroom room and improve connectivity with current switch technology
An “end of life” hardware replacement cycle for the district continues to be implemented.	Continue to replace hardware that is of limited use, utilizes outdated chip technology and will not support Windows 7
The use of “thin client” technology at the high school has been implemented with some success.	Investigate the current configuration of thin client computers being used at the high school with the intent to expand their use.
Computer use continues to be limited in some areas by network infrastructure (drops/room, switches, etc.) and the number of computers per learning area.	Continue to purchase display hardware (e.g., LCD projector, Interactive LCD televisions, ELMOS, LCD televisions, etc.) for the middle school classrooms and elementary libraries.
Improvements to the network infrastructure continue to be implemented using current network hardware (switches) that can be managed for optimal performance.	Modify non-teaching duties at secondary levels to include knowledgeable supervision of technology access areas
Outdated servers have been replaced in all buildings and virtualized when possible.	The district’s Director of Technology position should be maintained as well as the two technician positions that service the schools’ technology.
Computer projection hardware and ELMOS have been purchased for the high school for use with the Electronic Portfolio program.	Purchase educational software licenses for all schools to increase technology integration into the curriculum
Software in some subjects and grade levels is inadequate to support the inclusion of the technology strand in curriculum areas.	Standardize the number of computers in the elementary libraries using virtual desktop technology
Lack of “open computer access time” limits whole class access to technology resources in some schools.	

OBJECTIVE ONE: Basic operations and concepts (continued)

Graduates and employees of the Smithfield Public Schools will

- Demonstrate a sound understanding of the nature and operation of technology systems through access to technology systems that are up-to-date and properly configured and maintained for maximum efficiency of use
- Demonstrate proficiency in use of technology as defined by RIDE and RIMEA guidelines.
- Have access to new technologies proven to be both cost effective and of educational benefit.

Current	Recommended
Computers provided for faculty use in the high school's media have been utilized.	Replace administrator's laptops that are out of date
A computer lab that can accommodate a full class of students continues to see high use at the high school.	Continue to install protective wiring racks at the elementary and middle schools.
A summer maintenance schedule for all classroom technology has been implemented.	Re-instate the Technology Coordinators at all schools to serve as resources for building hardware issues.
Wiring at the elementary schools and the administration building has been protected with enclosed wiring racks.	Purchase iPads for designated teachers willing to volunteer for summer training.
District administrators continue to use and share knowledge on iPad use.	Investigate and purchase a mobile management solution for iPads and other wireless devices
There are no full time, building level personnel to "troubleshoot" technology hardware issues.	Investigate and purchase tablet technology for use by teachers in specialized areas requiring specific applications.
Basic wireless technology is being implemented throughout the high school, the administration building and McCabe Elementary School. There is wireless access in the administrative areas in all schools.	Expand the availability of robust wireless access in all buildings and purchase the necessary hardware to manage a wireless "bring your own device" solution.
All teaching areas in all buildings now have wiring for wireless access points.	Continue to purchase extra laptops that are configured for the high school laptop carts that can temporarily replace non-functioning units.
Two laptop carts, each with 30 computers, have been successfully implemented at the high school.	Investigate the use of managed print services to reduce current printing costs.

OBJECTIVE ONE: Basic operations and concepts (continued)

Graduates and employees of the Smithfield Public Schools will

- Demonstrate a sound understanding of the nature and operation of technology systems through access to technology systems that are up-to-date and properly configured and maintained for maximum efficiency of use
- Demonstrate proficiency in use of technology as defined by RIDE and RIMEA guidelines.
- Have access to new technologies proven to be both cost effective and of educational benefit.

Current	Recommended
<p>OSHEAN continues to maintain and support the district's firewall.</p> <p>Bandwidth for Internet access in all buildings has been increased to 24 mb.</p> <p>The speed of the telecommunications lines between buildings is 150 mb for the high school, 70 mb for the middle school and 50 mb for the elementary schools and administrative building.</p> <p>Computer re-imaging technology (Altiris) continues to be utilized at the high school and middle school.</p> <p>Desktop virtualization (N-Computing) has been utilized to construct a 30 seat computer lab at one of the elementary schools.</p> <p>The capacity of the district wide back-up system has been increased.</p> <p>New Internet filtering (M86 Technology) has been successfully utilized that allows for differentiated filtering by user.</p> <p>Direct fiber connection has been made to the statewide fiber ring at the high school as part of the state's BTOP Beacon 2.0 initiative.</p> <p>Server virtualization continues to be successfully implemented at the high school to reduce the number of servers utilized by the district and decrease the district's power consumption.</p>	<p>Continue to monitor the new firewall configuration that has increased bandwidth between buildings as to how it impacts video streaming, live data feeds, transfer of large amounts of data, etc.</p> <p>Continue to request an increase in the bandwidth for Internet access in all buildings and the telecommunications lines between buildings</p> <p>Investigate and implement computer re-imaging technology (Altiris) across the district to help maintain computers</p> <p>Implement hardware/software that will act as a network management tool to monitor the new hardware in the infrastructure to ensure network security</p> <p>Continue to investigate Internet filtering and monitoring solutions to meet CIPA guidelines.</p> <p>Provide specific technologies, when appropriate, as requested by teachers for classroom use in all schools.</p> <p>Modify the current infrastructure at Smithfield High School, McCabe Elementary and Gallagher Middle School to maximize efficiency with the installation of a fiber optic cable that has been installed between the buildings.</p>

OBJECTIVE ONE: Basic operations and concepts (continued)

Graduates and employees of the Smithfield Public Schools will

- Demonstrate a sound understanding of the nature and operation of technology systems through access to technology systems that are up-to-date and properly configured and maintained for maximum efficiency of use
- Demonstrate proficiency in use of technology as defined by RIDE and RIMEA guidelines.
- Have access to new technologies proven to be both cost effective and of educational benefit.

<p>LCD televisions and ELMOS have been installed and utilized in all classrooms for grades 3, 4 and 5 across the district.</p> <p>Capitol Technology funding for has been maintained at the previous year's level for the 2012 – 2013 school year.</p> <p>Computers being used for remedial math support at the high school have been placed in an adequate location.</p> <p>The Technology staff has reviewed all of the material from RIDE on becoming "PARCC ready".</p> <p>The district has completed the first round of the PARCC assessment inventory to determine PARCC readiness in terms of having an adequate number of computers in all schools to be used for the online PARCC testing in the 2014 – 2015 school year.</p> <p>The Technology Director has provided options to all of the building principals for discussion in terms of meeting PARCC readiness by 2014 – 2015.</p>	<p>Upgrade computers to the Windows 7 operating system across the district wherever possible.</p> <p>Replace older CRT style monitors in all schools with energy efficient LCD monitors.</p> <p>The district should start to purchase computers for the PARCC testing during this budget cycle as it may take more than one year to become fully compliant.</p>
---	---

OBJECTIVE TWO: Social, ethical and human issues

Graduates and employees of the Smithfield Public Schools will:

- Understand the ethical, cultural and societal issues related to technology
- Practice safe and responsible use of technology systems, information, and software
- Develop positive attitudes toward technology, which support lifelong learning, collaboration, personal pursuits, and productivity

Current	Recommended
<p>Acceptable Use Policy (AUP) for staff and students is outdated and needs revision.</p>	<p>Evaluate rewrite all existing policies related to technology and create a comprehensive policy manual (AUP) that is reviewed and updated annually.</p>
<p>Staff and students model existing AUP, ethical computing practices and safe computing guidelines.</p>	<p>Ensure dissemination of the AUP manual (and any revisions) to all employees and ensure acknowledgement of AUP by all employees upon hiring.</p>
<p>Creation and implementation of a district-wide network security policy that applies to personal laptop and tablet use.</p>	<p>Disseminate student relevant sections of the AUP to all students/parents and ensure acknowledgement.</p>
<p>Formal Internet Safety programs continue to be implemented in all grades.</p>	<p>Continue to purchase and implement Internet safety programs (I-Safe) at all schools to be in compliance with E-Rate regulations/CIPA guidelines.</p>
<p>Internet content filtering is done at the district level and is regulated by user role but in accordance with CIPA guidelines.</p>	<p>Develop and implement a district-wide policy that applies to wireless internet access and security for personal devices being used in the buildings.</p>
<p>District has current site licenses for all software and copyright laws are practiced and enforced.</p>	<p>Continue district funding as needed to maintain site licenses that meet all software and copyright laws.</p>
<p>The district's technology budget continues to fund site licenses, Internet costs and web-based services being used by the district.</p>	<p>Continue to educate staff as to the dangers of email SPAM in regards to the integrity of the district's computer network</p>
<p>A web-based technology and maintenance work order system, blood borne pathogens training, employment search service, emergency call and teacher/staff substitute systems continue to be successfully utilized in all buildings.</p>	
<p>Students at the eighth grade level continue to demonstrate high levels of proficiency when tested by RIDE on Technology Skills and Knowledge.</p>	

OBJECTIVE THREE: *Technology Productivity Tools*

Graduates and employees of the Smithfield Public Schools will:

- Use technology to enhance learning, increase productivity and promote creativity
- Use productivity tools to collaborate in constructing technology-enhanced models, preparing publications and producing other creative works

<i>Current</i>	<i>Recommended</i>
<p>Assisted Technology continues to be made available for IDEA students as determined by the IEP.</p>	<p>Continue to provide on-going training in the student information system (SIS) to faculty, staff and administrators as new components are developed or released.</p>
<p><i>Infinite Campus</i> continues to be successfully used as the district's Student Information System (SIS).</p>	<p>Continue to customize <i>Infinite Campus</i> to improve teacher and administrator use of the system.</p>
<p>Faculty, staff and administrators continue to be trained on new or advanced features of <i>Infinite Campus</i>.</p>	<p>Continue to integrate <i>Infinite Campus</i> to improve teacher and administrator use of the system.</p>
<p>The district's Data Manager has successfully worked with staff, teachers and administrators to move forward in their use of our SIS system.</p>	<p>Implement the Special Education components of <i>Infinite Campus</i> and electronic IEP's in the fall of 2012.</p>
<p>The district's Data Manager has successfully provided all required state reports and has automated data exports to RIDE on a daily basis as mandated by RIDE.</p>	<p>Coordinate current student test data with curriculum development through the use of the student information system.</p>
<p><i>Infinite Campus</i> continues to be customized to meet the needs of the district and integrated with other district databases by the Data Manager.</p>	<p>Provide on-going training in the upgraded fiscal management system to staff and administrators.</p>
<p>The fiscal management system (Phoenix) continues to be successfully used.</p>	<p>Purchase/upgrade software licenses based on the current computer/server operating system as necessary.</p>
<p>Curricula development includes the integration of technology at all levels.</p>	<p>Continue to incorporate a technology strand into all curriculum development.</p>
<p>All technology purchases are using district generated specifications and approved by the Technology Director prior to purchase.</p>	<p>Continue to Include the Director of Technology in all discussions regarding technology purchases, donations, building renovations and new building designs.</p>

OBJECTIVE THREE: *Technology Productivity Tools (continued)*

Graduates and employees of the Smithfield Public Schools will:

- Use technology to enhance learning, increase productivity and promote creativity
- Use productivity tools to collaborate in constructing technology-enhanced models, preparing publications and producing other creative works

<p>Teachers in all of the elementary schools continued to use a web-based assessment program (AimsWeb) to monitor student progress in reading.</p> <p>AimsWeb Behavior assessment program was implemented at one elementary school on a “trial basis” during the 2011 – 2012 school year.</p> <p>A web-based technology assessment program (NWEA) has been successfully implemented at the high school to identify students in need of academic intervention in the areas of math, ELA and science.</p> <p>The NWEA program was expanded to the middle school for the 2011 – 2012 school year.</p> <p>A web-based math assessment and tutorial program (Study Island) was used at the high school for students in Numeracy classes.</p> <p>Computer based technology has been successfully integrated into the high and middle schools’ music curricula.</p> <p>New software has been successfully adopted by the CADD classes at the high school.</p> <p>Yearbooks, newspapers and building newsletters use appropriate technology.</p> <p>There is an outdated system of inventory for technology being used in the district.</p> <p>An electronic portfolio system was utilized at the high school.</p>	<p>Continue to support existing web-based student assessment programs such as AimsWeb, NWEA and Study Island that are successfully being used in the schools.</p> <p>Discuss the future use of the AimsWeb Behavior Assessment program for elementary schools.</p> <p>Continue to improve the technology being utilized by the secondary music teachers.</p> <p>Continue to support the technologies used by schools in non-academic areas such as newspapers and yearbooks.</p> <p>Continue to support licensing the software being used by the high school’s CADD classes.</p> <p>Purchase and implement a bar-coded inventory system that will track computer hardware.</p> <p>Continue to provide support for the electronic portfolio system being used by the high school and provide increased access to the necessary hardware and increased training for teachers and students.</p> <p>Implement the action steps to meet the Technology Goal of the new district Strategic Plan.</p>
--	--

OBJECTIVE FOUR: *Technology Communication Tool*

Graduates and employees of the Smithfield Public Schools will:

- Use telecommunications to collaborate, publish and interact with peers, experts and other audiences
- Use a variety of media formats to communicate information and ideas effectively to multiple audiences

<i>Current</i>	<i>Recommended</i>
<p>Notifications to all staff from district and building administration continue to be electronic via email.</p>	<p>Continue to provide teachers and staff with email accounts.</p>
<p>Email archiving, to conform to current legal expectations, continues being done.</p>	<p>Staff development should be provided to all district staff in the proper use of email in terms of HIPA and FERPA regulations and in the current changes to the law in terms of archiving email.</p>
<p>The email server continues to be monitored on a regular basis to prevent problems.</p>	<p>Offer training to individuals and teams as necessary to maintain and improve school web pages.</p>
<p>Off site access to district email continues to be available to all staff via the district's web site.</p>	<p>Standardize and post all district forms (in PDF and/or WORD format) with appropriate links on each school's web site.</p>
<p>The district continues to provide virus protection and SPAM filtering for all incoming email to the district.</p>	<p>Monitor and regularly report web site activity at the district and school levels.</p>
<p>The district is now locally hosting and maintaining web pages for both the district and each school.</p>	<p>Continue to post the High School's Program of Study on the web page but develop the means to use online technology to help students create a "four year plan" of classes they would like to take.</p>
<p>School newsletters, handbooks, forms and other standardized information are available on some of the school's web pages.</p>	
<p>The food service manager has access to the district web page and posts monthly menus for all schools.</p>	
<p>A new virus protection software (Forefront) is being used across the district.</p>	

OBJECTIVE FOUR: *Technology Communication Tool (continued)*

Graduates and employees of the Smithfield Public Schools will:

- Use telecommunications to collaborate, publish and interact with peers, experts and other audiences
- Use a variety of media formats to communicate information and ideas effectively to multiple audiences

Current	Recommended
<p>The district's Strategic Plan, Technology Plan, Literacy Plan, Mission Statement, Profiles and other information are available on the district web site and updated as necessary.</p>	<p>Investigate the expansion of audio and video broadcasts from oceanographic research vessels to other schools within the district.</p>
<p>Easy access to teacher hosted web pages is provided through school web sites.</p>	<p>Offer more training and curricula integration for teachers (Jason Project) on the use of hardware connected to live audio and video broadcasts from the oceanographic research vessels</p>
<p>The high school's Program of Study is available on the High School's web page.</p>	<p>Improve infrastructure to support video-conferencing and video streaming at all schools.</p>
<p>Hardware was successfully implemented at the middle school to view video broadcasts from oceanographic research vessels.</p>	<p>Provide video-streaming professional development district wide.</p>
<p>The district continues to support the technology that connects Smithfield High School with live data, audio and video broadcasts directly from ships conducting oceanographic exploration.</p>	<p>Implement Google Apps for Education at all schools and provide professional development for teachers to utilize this free service.</p>
<p>Video-conferencing (web-based) is used on a limited basis at the high school and the middle school.</p>	<p>Implement the Parent Portal of <i>Infinite Campus</i> at all schools so parents can immediately see if their child is present or absent from school.</p>
<p>Video-streaming is used extensively at the high school, middle school and elementary schools.</p>	
<p>The current absent policy has been aligned with the absence codes recommended by RIDE and utilizes <i>Infinite Campus</i> software to monitor student absence and notify parents of extended absence from school</p>	

OBJECTIVE FOUR: *Technology Communication Tool (continued)*

Graduates and employees of the Smithfield Public Schools will:

- Use telecommunications to collaborate, publish and interact with peers, experts and other audiences
- Use a variety of media formats to communicate information and ideas effectively to multiple audiences

Current	Recommended
<p>All teachers at the high school continue to use grade recording and calculating software that is built into the <i>Infinite Campus</i>.</p>	<p>Continue district implementation, through the use of <i>Infinite Campus</i>, systems to provide a uniform grade recording and calculating system that is consistent for all teachers at a specific grade level (elementary, middle or high school) and will make the student grades securely accessible to both students and parents via a secure Internet portal.</p>
<p>Some teachers at the middle school use grade recording and calculating software that is beyond the control of the school district.</p>	<p>Continue district implementation of a student information system that improves communications with parents by enabling teachers to voluntarily post class assignments on a secure Internet portal.</p>
<p>Many teachers are using email to communicate with parents.</p>	<p>Continue district implementation of a student information system that improves communications with parents by enabling students and parents to securely create un-official transcripts on an “as-needed” basis (progress monitoring, career research, educational research, etc.) via a secure Internet portal.</p>
<p>“List Serves” continue to facilitate communication between teachers, building administrators and district administrators throughout the school district</p>	<p>Investigate a way to turn control of building “list serves” over to the building principals or their designee.</p>
<p>The district has successfully used an on-line job search and interview process service called <i>School Spring</i>.</p>	<p>Continue to support web-based services currently being used by the district.</p>
<p>The district continues to use an emergency broadcast system that will call and email parents and staff in case of an emergency called <i>Alert Now</i></p>	<p>Establish additional formal technology outreach programs with local businesses and higher education in the area.</p>
<p>The district uses an on-line service (<i>Global Compliance</i>) to meet OSHA requirements regarding the staff training in Blood Borne Pathogens</p>	
<p>Technology partnerships with Bryant University, the University of Rhode Island, the Northwest District School Consortium and the Northern Rhode Island Collaborative continue to be successful.</p>	

OBJECTIVE FIVE: <i>Technology research tool</i>
--

Graduates and employees of the Smithfield Public Schools will:

- Use technology to locate, evaluate and collect information from a variety of sources
- Use technology tools to process data and report results
- Evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks

<i>Current</i>	<i>Recommended</i>
Cooperative Library Access Network (CLAN) is available at all of the schools.	Increase funding to access to electronic research databases at all schools.
Access to public library catalogs continue via the web.	Search for a funding source for stand-alone research software that is grade appropriate.
Students in Grades 4-12 practice evaluation of Internet sources/resources based on established criteria.	Continue to Include a technology strand (e.g. Internet research, other computer skills, etc.) in all curricula.
The use of extensive on-line research tools is limited due to funding issues.	Expand the use of the information received through the live audio/video/data broadcasts from the oceanographic research vessels in terms of student based research through the access of real time data.
A technology research strand (e.g. Internet research, other computer skills, etc.) is included in all new revisions of curricula.	Continue to support RILINK's services to the schools for both cataloging books and providing web access materials.
All schools now utilize the web based Follett book cataloging services of RILINK.	Finalize a district plan to implement RIDE's IMS system (online curricula, student data, assessments, Rtl, student early warning, teacher PD, etc.) once it becomes fully functional.
The high school continues to use Gale Subscriptions as an online research resource available to all students.	Start to upload the district's curriculum into the IMS system as soon as possible.
The middle school and elementary schools use online resources to provide book summaries to students.	Train teachers to upload model lessons into the IMS system once it becomes fully functional.
The middle school uses a web based service for students that provides easy access to appropriate web sites during research.	Inventory existing computer systems to make sure they are compatible with the IMS system and that all teachers have easy access to such computers.
RIDE is currently revising their data warehouse project, now called the IMS, as part of the <i>Race To The Top</i> grant.	
The Assistant Superintendent, Director of Technology, Data Manager and some teachers have attended training sessions on RIDE's new IMS system.	

OBJECTIVE SIX: *Technology problem-solving and decision-making*

Graduates and employees of the Smithfield Public Schools will:

- Use technology resources for solving problems and making informed decisions
- Employ technology in the development of strategies for solving problems in the real world

Current	Recommended
Students use teacher created tools to evaluate data.	Continue to develop teacher created tools to evaluate data.
Students are encouraged to purchase and use graphing calculators at the High School.	Encourage students to create and/or research other tools that might help them in data analysis.
The high school math department successfully uses upgraded graphing calculators for appropriate classes.	Continue to encourage students to purchase and use graphing calculators and appropriate resource materials.
New Computer Aided Drafting and Design (CADD) software is currently being used at the high school.	Provide staff development for all teachers to help them better use graphing calculators in the various disciplines.
New computers, iPads, cameras and software are being used by the Art department at the high school to create “stop action” videos.	Continue to support the purchase of current Computer Aided Drafting and Design software at the high school.
The use of technology in classes for problem-solving and decision making is fragmented and not system wide due to the lack of appropriate software	Provide on-going funding to purchase software applications needed for problem-solving and making informed decisions.
Students in the district utilize career awareness software, via the web, that is provided free of charge by the state.	Continue district implementation of a student information system that provides data analysis tools for teachers and administrators to drive all curricula changes and decision making.
The district’s Data Manager has successfully loaded student assessment data into <i>Infinite Campus</i> so it is available to all teachers.	Continue to provide training to teachers on the use of <i>Infinite Campus</i> to view program information on students.
The district’s Data Manager has created fields in Infinite Campus to hold data on student participation in programs to overcome learning difficulties.	

OBJECTIVE SEVEN: *On-going professional development of staff*

This objective is based on the national Educational Technology Standards for Teachers Profile

Smithfield administrators and faculty through professional development shall:

- Demonstrate a sound understanding of the nature and operation of technology;
- Demonstrate proficiency in the use of common input/output devices, solve routine hardware/software problems, make informed decisions about use of technology in their classrooms;
- Use technology tools and information resources to increase productivity, promote creativity and facilitate academic learning;
- Use content-specific tools to support learning and research;
- Use technology resources to facilitate higher order and complex thinking skills;
- Collaborate in constructing technology-enhanced models, preparing publications and producing other creative works;
- Use technology to locate, evaluate and collect information from a variety of sources;
- Use technology tools to process data and report results;
- Use technology in the development of strategies for solving problems;
- Use technology tools and resources for managing and communicating information;
- Use a variety of media and formats;
- Understand the appropriate legal, ethical, cultural and societal issues related to the use of technology, and;
- Exhibit positive attitudes toward technology use that support life-long learning, collaboration, personal pursuits and productivity;

<i>Current</i>	<i>Recommended</i>
<p>Professional development has been provided to individuals and schools by the Director of Technology and Data Manager upon request.</p> <p>RIDE and RISTE and the Northwest School Consortium provide specific technology training and informational seminars that are available to Smithfield administrators, teachers and staff.</p> <p>New staff to the district receive a Technology Orientation packet and brief introduction to the district's infrastructure.</p> <p>Teachers and staff receive training on pertinent software use and current technology topics during the professional development days.</p>	<p>Develop, distribute and evaluate a technology needs assessment for the faculty, staff and administration</p> <p>Continue on-going training for the district's two Technology Technicians, the Director of Technology and the district's Data Manager.</p> <p>Provide on-going and appropriate training for faculty, administrators and staff in the use of <i>Infinite Campus</i></p> <p>Design and offer specific software (Word, Excel, etc.) training for all teachers and staff through the Professional Development Academy and the District Mentor Program</p> <p>Establish a training protocol for teachers on RIDE's new IMS system that follows the district's IMS implementation plan.</p>

Smithfield School Technology Inventory – June 2012

Building	Number of Servers	Number of Desktop Computers
High School	6 <small>(15 are virtualized on 2 physical servers)</small>	335
Middle School	1	201
McCabe Elementary	1	51
LaPerche Elementary	1	54
Old County Road Elementary	1	65
Winsor Elementary	1	38
Administration Building	2	19
Greenville House	0	2
Totals	12	765

Building	Number of Laptops/iPads
High School	78/6
Middle School	6/2
McCabe Elementary	8/1
LaPerche Elementary	4/1
Old County Road Elementary	4/1
Winsor Elementary	16/1
Special Education Staff/Students	18/4
Administration Building	7/26
Totals	141/42

2013 Technology Capital Expenditure Budget

Item	Estimated Price	Rationale
Computers w/monitors for the elementary, middle and high schools to use for PARCC testing in the 2014 – 2015 school year and for general classroom use for the rest of the school year.	\$90,000.00	The PARCC testing is completely online and all schools will require an adequate number of computers to meet the needs of the test. RIDE has not provided the final guidelines as to the specifications needed for the testing. RIDE has awarded a bid to CDWG to provide a variety of computers but the results of the bid have also not been released.
Replace existing CRT computer monitors with LCD computer monitors	\$10,000.00	CRT Monitors have higher power usage, more than 200% to an LCD of equivalent size.
Replace the high school's language lab and upgrade the current software.	\$50,000.00	The high school language lab is out of date and the upgraded software will not run on the existing computers. The use of refurbished computers/monitors will help keep the cost down.
50 iPad2s with Apple Care Warranty for a trial program with teachers	\$25,000.00	Teachers will attend a voluntary training program during the summer of 2012 to learn how to use the iPad2 and develop lessons for project based learning in their classrooms using the iPad2.
Volume Purchasing Vouchers to provide applications for the iPad2	\$2,500.00	Teachers will research appropriate "Apps" for their grade levels and subjects.
5 Network laser printers	\$2,000.00	Replace older laser printers in offices.
Mobile management system for iPads (100) being used in the district	\$1,000.00	This will keep the iPads updated and properly configured.
5 External 1 TB back-up units	\$500.00	To be used by technicians for moving and storing data from computers
2 Enclosed wire racks for the elementary schools	\$2,000.00	Secure wiring and patch panels in elementary schools as part of Infrastructure Improvement Plan
1 patch panels (24 port) for an elementary school	\$250.00	Replace current patch panels in elementary schools as part of Infrastructure Improvement Plan
Barcode scanner, printer and software to implement an inventory system of computers, monitors, switches, printers etc.	\$8,000.00	Portable system that can be downloaded on to a computer for more accurate records of the district's technology resources.
500 RJ-45 patch cables of varying lengths	\$500.00	Replace existing cables used to connect patch panels and switches

2013 Technology Capital Expenditure Budget (continued)

Provide software site licensing for all schools to support the use of technology within the curricula	\$7,500.00	Work with building administrators and teachers to find, evaluate and purchase appropriate software for classroom use.
Furniture and wiring for Room 216 at the high school	\$1,000.00	To increase the size of the upstairs computer room to handle a full class
Classroom specific technology as requested by schools in their budgets	\$10,000.00	Requested items include: ELMOS, Classroom Response Systems (clickers), LCD Projectors, etc.
8 LCD Televisions/ mounts for the middle school	\$5,600.00	For classroom use in the middle school
Furniture and wiring for Computer lab at William Winsor Elementary	\$1,000.00	Create a single room with a classroom set of computers/laptops.
4 LCD Televisions/ mounts for the elementary libraries	\$2800.00	For use with classes in the libraries
3 Laptop computers (refurbished)	\$1200.00	To be used at the high school to replace computers out of service in the laptop carts
Repair/maintenance/support of district hardware	\$15,000.00	Maintain existing computers and monitor/manage email/backup systems
Uninterrupted Power Supply for the servers at Admin Building	\$3,000.00	Keep servers running in case of power outage
TOTAL	\$238,850.00	

2013 Technology State Funding Expenditure Budget

Item	Estimated Price	Rationale
175 Access Points	\$200,000.00	Provide robust wireless connectivity in all classrooms in all buildings
Installation of Access Points	\$20,000.00	
8 Layer 3 Switches	\$75,000.00	Connect wireless access points to network
4 High speed fiber optic connectors (BIC) for use at the high school, McCabe elementary school and Gallagher middle school.	\$20,000.00	To connect new fiber to building networks
BYOD monitoring solution (hardware, software and installation)	\$50,000.00	Allows non-school computers/devices to use the school's network and Internet access
TOTAL	\$365,000.00	

Three Year Infrastructure Improvement Plan

Year/ Building	2010 - 2011 (revised 6/2011)	2011 - 2012 (revised 6/2012)	2012 - 2013 (revised 6/2012)
SHS	<ul style="list-style-type: none"> • Add patch panel to second floor wiring closet (DONE) • Install 16 wireless access points and controller (DONE) • Install software to automate the back-up of virtualized servers (DONE) 	<ul style="list-style-type: none"> • Configure and install 2 new virtual servers (DONE) • Upgrade and increase the number of wireless access points (DONE) • Wire all classrooms for wireless access points (DONE) • Increase the capacity of the back-up system (DONE) • Rewire server room to be on the back-up generator (DONE) 	<ul style="list-style-type: none"> • Install switch to new fiber connection • Install and connect wireless access points • Install new switches for access points • Install/upgrade wireless control system • Install BYOD/monitoring/security solution
GMS	<ul style="list-style-type: none"> • Replace one server • Upgrade the server OS • Install wireless access point for office area (DONE) 	<ul style="list-style-type: none"> • Replace one server/OS (DONE) • Replace wiring rack (DONE) • Wire all classrooms for wireless access points (DONE) 	<ul style="list-style-type: none"> • Install and connect wireless access points • Install switch to new fiber connection • Install new switches for access points • Install/upgrade wireless control system
AAM	<ul style="list-style-type: none"> • Replace one unmanaged switch in each wiring closet with a managed switch (1 DONE) • Install wire enclosure • Replace existing wireless access point (DONE) 	<ul style="list-style-type: none"> • Replace one unmanaged switch in each wiring closet with a managed switch (DONE) • Replace server/OS (DONE) • Install wireless access points in building and connect to controller at SHS (DONE) • Wire all classrooms for wireless access points (DONE) • Install wire enclosure 	<ul style="list-style-type: none"> • Install wire enclosure • Install and connect wireless access points • Install switch to new fiber connection • Install new switches for access points • Install/upgrade wireless control system
WW	<ul style="list-style-type: none"> • Replace one unmanaged switch in each wiring closet with a managed switch (1 DONE) • Install wire enclosure & patch panel • Replace existing wireless access point (DONE) 	<ul style="list-style-type: none"> • Replace one unmanaged switch in each wiring closet with a managed switch (DONE) • Replace server/OS (DONE) • Wire all classrooms for wireless access points (DONE) • Install wire enclosure & patch panel 	<ul style="list-style-type: none"> • Install wire enclosure & patch panel • Install and connect wireless access points • Install new switches for access points • Install/upgrade wireless control system

OCR	<ul style="list-style-type: none"> • Install wire enclosure & patch panel • Replace existing wireless access point (DONE) 	<ul style="list-style-type: none"> • Install wire enclosure & patch panel (DONE) • Replace server/OS (DONE) • Wire all classrooms for wireless access points (DONE) 	<ul style="list-style-type: none"> • Install and connect wireless access points • Install new switches for access points • Install/upgrade wireless control system
RCL	<ul style="list-style-type: none"> • Install wire enclosure • Replace existing wireless access point (DONE) 	<ul style="list-style-type: none"> • Install wire enclosure (DONE) • Replace server/OS (DONE) • Wire all classrooms for wireless access points (DONE) 	<ul style="list-style-type: none"> • Install and connect wireless access points • Install new switches for access points • Install/upgrade wireless control system
ADMIN	<ul style="list-style-type: none"> • Replace one server/OS • Replace existing wireless access point (DONE) 	<ul style="list-style-type: none"> • Replace server/OS (DONE) • Install new wiring rack (DONE) • Move existing switch/patch panel (DONE) 	<ul style="list-style-type: none"> • Install UPS in wiring rack • Install/upgrade wireless control system • Install BYOD/monitoring/security solution