Technology Plan FY 2013-2016

Saluda County School District

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Dr. David Mathis, Superintendent

Schools

Saluda Primary, Corey Burns
Saluda Elementary, Marcie Enlow
Hollywood Elementary, Tammie Shore
Saluda Middle, Lori Corley
Saluda High, Dr. Harvey Livingston

Prepared by:
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March 30, 2013

Certification

This Technology Plan has been reviewed and submitted on behalf of Saluda County School District.

Signatures:

Director of Information Technology:

Name: Joye W. Taylor

Signature: Joye W. Taylor

Date: 3-30-13

Superintendent:

Name: David M. Mathis

Signature: David M. Mathis

Date: 3-30-13

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This plan has been reviewed and certified by the South Carolina State School District or Library. This certification will be effective for the term of this plan, but not to exceed three years.

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District Profile

	Mar 2013	Mar 2014	Mar 2015	Mar 2016
Number of schools in the district	5			
Number of students enrolled in district schools	2188			
Percentage of students eligible for free and reduced lunches	74%			
Percentage of students in English as a Second Language (ESL)	22%			
Dropout Rate	2.7% for 2012			
Graduation Rate	81.4% for 2012			
District E-rate discount	84%			

Executive Summary

In 1999, Saluda School District One (SSD1) formed the first Technology Plan of the District. The number one goal for that year was to fund a position to install our infrastructure. Our subsequent goals were designed to see that the entire district was wired and district WAN created.

In 2007, the State Department assisted districts across the state in acquiring more bandwidth. When that project was finished, SSD1 had a 100 Mbps backbone for the connections between school sites. The district also moved up from a 1.5 Mbps T1 line to a 10 Mbps Ethernet connection for Internet access. In 2012, the State Department increased the district's bandwidth to 100 Mbps for Internet access.

Also in 2012, the district replaced all network switches to build the necessary infrastructure for future projects such as wireless and Voice over IP (VoIP). In 2013, SSD1 installed wireless access points throughout the entire district to prepare for mobile devices. The district will purchase some devices to be used on site by students and will also allow students to bring in their own devices to use for instructional purposes. The district is also planning to install VoIP.

The Saluda School District One Technology Plan 2013-2016 is aligned very closely to the structure of the state technology plan. Under this plan, the five dimensions are addressed, with goals for each.

Technology Dimension I: Learners and Their Environment

SSD1 will use data and research-proven strategies to provide an environment for students to be technology literate by the end of eighth grade and raise the academic challenge and performance of each student while expanding educational opportunities.

Technology Dimension II: Professional Capacity

SSD1 will ensure quality personnel in all positions by providing curriculum development and professional development to increase the competency of all educators so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

Technology Dimension III: Instructional Capacity

SSD1 will maintain a student-centered environment that supports student achievement by using current data and research-based technologies in all the instructional settings.

Technology Dimension IV: Community Connections

SSD1 will raise student achievement and enhance educational programs by using technology to enhance internal and external communications to better inform, engage and involve parent, community, and business groups.

Technology Dimension V: Support Capacity

Improve student achievement through effective use of Instructional Technology and academic administrative systems, and to improve operational efficiency of the district through application of business systems. Effectively manage and further develop financial resources while promoting classroom modernization will be key components of the support capacity for technology at SSD1.

SSD1 will study the ISTE standards and use technology in our classrooms to enhance instruction. The district realizes that adequate support and professional development are key components in the success of our technology plan.

We wish to thank the dedicated school district staff and community members who have contributed to development of this plan. They are:

Dr. David Mathis - Superintendent
Dr. Shawn Clark - Director of Curriculum and Instruction
Jon Carpenter - Director of Finance and Operations
Joye Taylor - Director of Information Technology
Daniel Taylor - Network Administrator
Jennifer Mason - Computer Technician
Melissa Gilliland - Finance Coordinator
Jill Altman - Library Media Specialist, Saluda Primary School
Betsy Painter - Library Media Specialist, Saluda Elementary School
Susan Frye - Library Media Specialist, Hollywood Elementary School
Alayna Sanders - Library Media Specialist, Saluda Middle School
Deborah Bailey - Library Media Specialist, Saluda High School
Charlotte Wall - 2nd Gr Teacher
Jeannie Winn - 4K Teacher
Savannah Myers - ESOL Teacher
Kim Shealy - 2nd Gr Teacher
Kelli Taylor - 7th Gr Math Teacher
Susan Charicker - 8th Gr Math Teacher
Lori Corley - Middle School Principal
Johanna Bodenhamer - Business Lab Teacher
Kelly Minick - 12th Gr English
Paul Johnson - Biology Teacher
Dr. Harvey Livingston - High School Principal
Corey Mitchell - Adult Ed and Alternative School Teacher
Jimmy Crawford - Adult Ed and Alternative School Administrator
Donald Hancock - Saluda County Council Chairman
Abena Minick - Parent

District Focus

District Vision Statement:

The vision of Saluda County Schools is to become an exemplary district in which every student graduates equipped to succeed in work and life in a globally competitive world.

District Mission Statement:

Educate all students by providing a rigorous and relevant curriculum with supportive programs.

District Belief Statements:

As a District, we believe:

- all students can learn given appropriate learning opportunities.
- parental involvement and support are essential for continuous growth and quality of life.
- high expectations for administrators, teachers, parents, and students promote academic growth and appropriate behavior.
- education is the shared responsibility of home, school, and community.
- students and staff learn and work best in a safe, orderly, and supportive environment.
- students must have a responsibility to be active partners in the learning process.
- the needs of the students must be the primary factor in all decision making.

Technology Vision

The Board of Trustees and Superintendent believe that technology is a fundamental element of preparing students for college and workforce readiness in the 21st Century. We will create a technology-rich environment that is collaborative and supports creativity, innovation, and lifelong learning.

Technology will be applied in the district to enhance:

- **Equity** - to level the playing field and to prepare all children for the workplace by ensuring equitable access to technology for all students and teachers.
- **Student Achievement** - to provide student access to curriculum, teacher access to instructional tools and aids, and administrator access to timely data that will guide them to make good decisions regarding programs and initiatives that affect the instruction of children.
- **Connectedness** - to build coherence and to improve communication within SSD1; to use technology to connect programs and support staff to children who have special needs; to connect the schools with the parents and the community.
- **Efficient and Effective Operations** - to capitalize on opportunities to ensure that the right systems and technology are in place while minimizing costs to improve educational outcomes.
- **Culture Change** - to make technology a part of the way work is done; to be part of the employee selection process and a requirement for retention; to provide on-going professional development on the use of the technologies we implement.
- **Innovation** - to identify and utilize emerging technologies to transform teaching and learning to enhance student achievement.
- **Integration** - to integrate technology into the curriculum to improve instruction, engage students, and make learning more interactive.
- **Safety** - to educate students on the safe and ethical use of technology.

Technology Dimension I

Learners and Their Environment

Goal:

Raise the academic challenge and performance of each student while expanding educational opportunities.

SSD1 will use data and research-proven strategies to provide an environment for students to be technology literate by the end of eighth grade and raise the academic challenge and performance of each student while expanding educational opportunities.

A. Snapshot of Current Technology Use in District

Technology plays a significant role in SSD1's pursuit that every child receives a high quality education and is prepared for the 21st Century workforce.

SSD1 educators, parents, and community members have made significant progress in realizing the vision that the seamless integration of technology into all subject areas will raise the academic achievement of all students.

- SSD1 has adopted the standards developed by the International Society for Technology in Education (ISTE) National Educational Technology Standards for Teachers (NETS-T) and National Educational Technology Standards for Students (NETS-S) http://www.iste.org
- SSD1 has implemented an instructional model that integrates technology as a tool to help teachers and administrators work together to coordinate a standards-based educational program within and across all grade levels and content areas.
- Parental involvement and partnerships are encouraged through district and school web pages, automated phone messages, parent portal system, and other resources to provide information about school events, classroom activities, homework help, and course content.
- Teachers have the following items in their classrooms as part of the SSD1 Standard Classroom Setup: 1 teacher desktop, SMART Interactive Whiteboard (all elementary classrooms and Math classrooms in middle and high), SMART Airliners in middle and high school classrooms, mounted projectors, document cameras (Hue), and access to a monochrome network printer.
- Every student will have access to communication tools that allow them to collaborate with classmates and teachers.

- SSD1's instructional model drives effective technology integration through the strategic alignment of professional development activities and curriculum standards.
- Students who face challenges ranging from learning disabilities to significant physical disabilities have equitable access to assistive technologies via the Office of Exceptional Children.
- SSD1 has plans to purchase mobile device labs that classroom teachers can checkout to provide flexibility for the learning environment.
- Students and staff have access to a variety of software around the district. Microsoft Office, My Big Campus, Edmodo, Rosetta Stone, Study Island, and Adobe Suite are a few of the offerings. To see a complete list of software used in the district, see ?????

Objectives and Strategies to Reach Goal

Objectives	Strategies
Students will engage in authentic learning activities aligned with Common Core State Standards that integrate ISTE technology standards.	1 The district will provide tools to facilitate communication and collaboration. 2 Use National Educational Technology Standards for Students (ISTE NETS). 3 Revise SSD1 technology policies and procedures to ensure alignment, equity, and support for student achievement. 4 Develop technology enhanced learning resources, including real world project-based technology learning activities. 5 Provide students the opportunity to participate in non-traditional instruction in order to accommodate all student needs.

Implementation of Action Steps

Ref. Number	Strategies	Action Steps	Funding Considerations	Evaluation of Objectives
1-1.1	The district will provide tools to facilitate communication and collaboration	District will create Google Apps for Education accounts for all students and staff	PD Funds for training staff on Google Apps for Education	Number of teachers and students utilizing Google Apps. Evaluate test scores.
1-1.2	The district will provide tools to facilitate communication and collaboration	Revise as needed and implement the Standard Classroom Setup every 5 years.	General Funds	Standard Classroom Setup plan revised and in place

1-1.3	The district will provide tools to facilitate communication and collaboration	Pending Board approval, create and implement blended plan for 1:1 and BYOD learning initiative K-12. Update and revise plan and upgrade devices as needed.	General Funds and Title I to begin 2-year pilot with plans to implement district-wide pending Board approval	Updated blended 1:1 and BYOD learning plan. Number of district owned mobile devices. Evaluate test scores.
1-1.4	The district will provide tools to facilitate communication and collaboration	Upgrade District provided computer labs every 5 years to facilitate student learning and benchmarking of student achievement.	CATE, Title I and General Funds	Designated labs updated every 5 years
1-2.1	Use National Educational Technology Standards for Students (ISTE NETS)	Schools will provide professional development for staff so that they are versed in the student technology standards.	PD Funds for trainers	Number of technology professional development opportunities integrating ISTE NETS offered at each school.
1.2.2	Use National Educational Technology Standards for Students (ISTE NETS)	Students will engage in authentic learning activities that are aligned with state standards and that integrate technology into the content.	PD Funds	Evaluate test scores. Classroom observations.
1-3.1	Revise SSD1 technology policies and procedures to ensure alignment, equity, and support for student achievement	District will analyze technology policies and administrative rules.	General Fund	Date on policies
1-4.1	Develop technology enhanced learning resources, including real world project-based technology learning activities.	Standardize professional development courses to incorporate State Common Core Standards and ISTE NETS.	PD Funds	Updated technology integration course for recertification and/or graduate credit

1-4.2	Develop technology enhanced learning resources, including real world project-based technology learning activities.	Hire Technology Instructional Coaches for each school	Grants and General Funds	Assess teacher technology proficiency and curriculum integration
1-5.1	Provide students the opportunity to participate in non-traditional instruction in order to accommodate all student needs.	Provide access to online courses	Free through SC Virtual School	Number of students successfully completing online courses
1-5.2	Provide students the opportunity to participate in non-traditional instruction in order to accommodate all student needs.	Provide access to a credit recovery system	General Funds	Number of students successfully completing credit recovery

Outcomes

Ref. Number	Actions	Evaluation	Mar 2014	Mar 2015	Mar 2016
1-1.1	District will create Google Apps for Education accounts for all students and staff	Number of teachers and students utilizing Google Apps. Evaluate test scores.			
1-1.2	Continue to revise as needed and implement the Standard Classroom Setup every 5 years.	Standard Classroom Setup plan revised and in place			
1-1.3	Pending Board approval, create and implement blended plan for 1:1 and BYOD learning initiative K-12. Update and revise plan and upgrade devices as needed.	Updated blended 1:1 and BYOD learning plan. Number of district owned mobile devices. Evaluate test scores.			

1-1.4	Upgrade District provided computer labs every 5 years to facilitate student learning and benchmarking of student achievement.	Designated labs updated every 5 years			
1-2.1	Schools will provide professional development for staff so that they are versed in the student technology standards.	Number of technology professional development opportunities integrating ISTE NETS offered at each school.			
1.2.2	Students will engage in authentic learning activities that are aligned with state standards and that integrate technology into the content.	Evaluate test scores. Classroom observations.			
1-3.1	District will analyze technology policies and administrative rules.	Date on policies			
1-4.1	Standardize professional development courses to incorporate State Common Core Standards and ISTE NETS.	Updated technology integration course for recertification and/or graduate credit			
1-4.2	Hire Technology Instructional Coaches for each school	Assess teacher technology proficiency and curriculum integration			
1-5.1	Provide students the opportunity to participate in non-traditional instruction in order to accommodate all student needs.	Number of students successfully completing online courses			

1-5.2	Provide students the opportunity to participate in non-traditional instruction in order to accommodate all student needs.	Number of students successfully completing credit recovery			

Technology Dimension II

Professional Capacity

Goal:

Ensure quality personnel in all positions.

SSD1 will provide curriculum development and professional development to increase the competency of all SSD1 staff so that research-proven strategies and the effective integration of educational technology can be used to increase student engagement and achievement.

A. Snapshot of Current Technology Use in District

Saluda County Schools will become committed to ensuring that all teachers are technology proficient. In order to integrate technology into the classroom, teachers must understand technology integration as well as be able to perform the steps necessary to use the technology required.

Teachers have the option as to what courses they take based on their experience level with technology. Throughout the year, teachers have access to workshops and professional development days that foster technology integration.

Objectives and Strategies to Reach Goal

Objectives	Strategies
Provide teachers with technology courses that focus on classroom integration and build on technology skills.	1 The district will find ways to offer graduate level courses for teachers to earn initial proficiency in technology. 2 The schools will develop technology professional development plans. 3 The schools will provide ongoing workshops in technology. 4 Teachers will demonstrate technology integration skills in the classroom.

Implementation of Action Steps

Ref. Number	Strategies	Action Steps	Funding Considerations	Evaluation of Objectives
2-1.1	The district will find ways to offer graduate level courses for teachers to earn initial proficiency in technology	District will partner with other resources to offer graduate courses	PD Funds	Number of teachers successfully passing graduate level technology courses.
2-2.1	The schools will develop technology professional development plans.	IT staff will provide support as needed to assist schools in creating a school technology plan.	Ideas brought forth in plans	Review and evaluation of the school technology plan by IT and District personnel
2-3.1	The schools will provide ongoing workshops in technology.	Continue to revise as needed and implement the Standard Classroom Setup every 5 years.	General Funds	Standard Classroom Setup plan revised and in place
2-4.1	Teachers will demonstrate technology integration skills in the classroom	Designate a district Instructional Technology Coach to train teachers on technology integration	General Funds, Title I	Review and evaluation of lesson plans to ensure the integration of technology.

Outcomes

Ref. Number	Actions	Evaluation	Mar 2014	Mar 2015	Mar 2016
2-1.1	The district will find ways to offer graduate level courses for teachers to earn initial proficiency in technology	Number of teachers successfully passing graduate level technology courses.			
2-2.1	The schools will develop technology professional development plans.	Review and evaluation of the school technology plan by IT and District personnel			

2-3.1	The schools will provide ongoing workshops in technology.	Standard Classroom Setup plan revised and in place			
2-4.1	Teachers will demonstrate technology integration skills in the classroom	Review and evaluation of lesson plans to ensure the integration of technology.			

Technology Dimension III

Instructional Capacity

Goal:

Raise the academic challenge and performance of each student while expanding educational opportunities.

SSD1 will use current and emerging technology to create learner-centered instructional environments that increase academic achievement.

A. Snapshot of Current Technology Use in District

Currently all elementary classrooms and some middle and high classrooms have interactive white boards. Almost every classroom has a mounted projector. Some classrooms have a wireless slate. Every teacher has access to at least one student response system. When used appropriately, the student's role changes from passive learner to active learner. Engaged students are more likely to retain information and learn material than students who are passively participating in classroom instruction. Teachers who utilize these devices on a regular basis will better be able to adapt their instruction to meet the needs of all their students.

Objectives and Strategies to Reach Goal

Objectives	Strategies
Provide technology integration throughout the curriculum to improve instruction, engagement and achievement.	1 Teachers will use resources to plan lessons that integrate technology. 2 Teachers will use the interactive white board as a venue to engage students in the learning process. 3 Teachers will use student response systems when available and appropriate to gather data on student understanding and learning 4 Teachers will analyze formal and informal assessment results to plan instruction. 5 Teachers will use web 2.0 tools to engage students, foster collaboration and use problem solving skills to accomplish curriculum objectives. 6 Teachers will use technology tools built into technology proficiency workshops and courses to engage students in the learning process.

Implementation of Action Steps

Ref. Number	Strategies	Action Steps	Funding Considerations	Evaluation of Objectives
3-1.1	Teachers will use resources to plan lessons that integrate technology	Update curriculum web resources for teachers.		Review and evaluation of lesson plans to ensure the integration of technology.
3-1.2	Teachers will use resources to plan lessons that integrate technology	Teachers will collaborate with the Instructional Technology Coach to align ISTE Standards and resources with Common Core Standards	Funding for Instructional Tech Coaches	Review and evaluation of lesson plans to ensure the integration of technology.
3-2.1	Teachers will use the interactive white board as a venue to engage students in the learning process	Provide teachers with resources and training to effectively use interactive whiteboards in the classroom.	PD Funds	Observation of student engagement and interaction with the boards.
3-3.1	Teachers will use student response systems when available and appropriate to gather	Provide teachers with instruction and technology to integrate systems in classroom instruction.	PD Funds	Observation of student engagement and interaction with the response systems.
3-4.1	Teachers will analyze formal and informal assessment results to plan instruction	Provide teachers with the tools and resources necessary to make decisions about instruction		Student test scores.
3-5.1	Teachers will use web 2.0 tools to engage students, foster collaboration and use problem solving skills to accomplish curriculum objectives	Provide teachers with access to web 2.0 tools and resources necessary to ingrate web 2.0 tools into the curriculum.		Review and evaluation of lesson plans. Classroom observations.
3-6.1	Teachers will use technology tools built into technology	Provide teachers with tools to check-out through the library		Number of devices checked out and teacher lesson

	proficiency workshops and courses to engage students in the learning process			plans.
3-6.2	Teachers will use technology tools built into technology proficiency workshops and courses to engage students in the learning process	Provide an Instructional Technology Coach to support technology integration, including assistive technology, across all curricular programs and areas	Funding for Instructional Tech Coaches	Number of assistive technology aids and adaptive devices
3-6.3	Teachers will use technology tools built into technology proficiency workshops and courses to engage students in the learning process	Create 1:1 and BYOD learning environment in which each student has a personal computing device in order to evaluate the impact and feasibility of expanding the program.	General Funds and Title I	Number of district owned devices and percentage of students using BYOD privilege. Student test scores.

Outcomes

Ref. Number	Actions	Evaluation	Mar 2014	Mar 2015	Mar 2016
3-1.1	Teachers will use resources to plan lessons that integrate technology	Review and evaluation of lesson plans to ensure the integration of technology.			
3-1.2	Teachers will use resources to plan lessons that integrate technology	Review and evaluation of lesson plans to ensure the integration of technology.			
3-2.1	Teachers will use the interactive white board as a venue to engage students in the learning process	Observation of student engagement and interaction with the boards.			
3-3.1	Teachers will use student response systems when available and appropriate to gather	Observation of student engagement and interaction with the response systems.			

3-4.1	Teachers will analyze formal and informal assessment results to plan instruction	Student test scores.			
3-5.1	Teachers will use web 2.0 tools to engage students, foster collaboration and use problem solving skills to accomplish curriculum objectives	Review and evaluation of lesson plans. Classroom observations.			
3-6.1	Teachers will use technology tools built into technology proficiency workshops and courses to engage students in the learning process	Number of devices checked out and teacher lesson plans.			
3-6.2	Teachers will use technology tools built into technology proficiency workshops and courses to engage students in the learning process	Number of assistive technology aids and adaptive devices			
3-6.3	Teachers will use technology tools built into technology proficiency workshops and courses to engage students in the learning process	Number of district owned devices and percentage of students using BYOD privilege. Student test scores.			

Technology Dimension IV

Community Connections

Goal:

Communicate Effectively both Internally and Externally

SSD1 will elevate achievement overall, close the achievement gap, and raise the graduation rate by using technology to enhance internal and external communications and to better inform, engage and empower students, parents, community leaders, and businesses.

A. Snapshot of Current Technology Use in District

Communication must happen between multiple stakeholders in order for students to be successful. All teachers are currently required to maintain an up-to-date teacher website. Aside from teacher websites, teachers communicate with parents through email. Some teachers post assignment, projects, and deadlines on their website or an online learning platform for students and parents to have access to throughout the year.

Parents also have access to grades online using the district's Parent Portal. Grades are available 24 hours a day. Parents may also choose to have grade reports emailed directly to them. Schools also send home progress reports and report cards throughout the school year. The implementation of PowerSchool has provided parents the ability to see daily grades thus increasing communication between the classroom teacher and parents.

School websites also help keep parents informed about events and activities at the school. These websites often have information about the school including report card data, special programs, faculty lists, and school statistics.

All schools in the district also have access to AlertNow which is a telephone notification system. This system is utilized by schools to send out important information to parents about parent conferences, PTA Meetings, etc.

Objectives and Strategies to Reach Goal

Objectives	Strategies
Provide the resources and knowledge necessary for teachers to communicate effectively with parents and the community, while encouraging, recognizing, and motivating students, teachers, and staff.	1 Teachers will maintain and update websites on a weekly basis. 2 Teachers will post assignments online for students and parents. 3 Teachers will use electronic grade books to communicate student achievement with parents.

	4 Teachers will use web 2.0 tools to communicate with parents and students. 5 Expand social media tools to deliver timely messages and engage and inform the public and staff. 6 Create news shows that communicate key district goals/priorities for parents and offer the latest high-priority news and information that parents need to know. 7 Move from hard copy forms to creation and distribution of electronic forms. 8 Expand the usage of the PowerSchool Parent Portal.

Implementation of Action Steps

Ref. Number	Strategies	Action Steps	Funding Considerations	Evaluation of Objectives
4-1.1	Teachers will maintain and update websites on a weekly basis	Provide workshops on teacher websites.	PD Funds	Review of teacher websites for up-to-date material.
4-2.1	Teachers will post assignments online for students and parents	Provide workshops on incorporating Google Apps into teacher websites.	PD Funds	Review of teacher websites for up-to-date assignments posted online.
4-3.1	Teachers will use electronic grade books to communicate student achievement with parents	Provide access and instruction to an electronic grade book.	PD Funds	Weekly updates in electronic grade book.
4-4.1	Teachers will use web 2.0 tools to communicate with parents and students	Provide workshops on web 2.0 tools.	PD Funds	Increased number of teachers using web 2.0 tools for communication and instruction.
4-5.1	Expand social media tools to deliver timely messages and engage and inform the public and staff	Explore, implement, and market the use of social media tools.	General Fund	Increased number of teachers using professional social media.

4-6.1	Create news shows that communicate key district goals/priorities for parents and offer the latest high-priority news and information that parents need to know	Produce and make available video recordings of the district's goals and achievements.	General Fund	Number of productions made available to the public.
4-7.1	Move from hard copy forms to creation and distribution of electronic forms	Decrease the amount of paper involved in daily district tasks and in community outreach. Use digital formats.	General Fund	Decreased amount of paper purchased each year.
4-7.2	Move from hard copy forms to creation and distribution of electronic forms	Explore and implement digital signatures for forms.	General Fund	Decreased amount of paper purchased each year.
4-8.1	Expand the usage of the PowerSchool Parent Portal	Market the parent portal and provide training to parents.		Increased number of parent accounts.

Outcomes

Ref. Number	Actions	Evaluation	Mar 2014	Mar 2015	Mar 2016
4-1.1	Teachers will maintain and update websites on a weekly basis	Review of teacher websites for up-to-date material.			
4-2.1	Teachers will post assignments online for students and parents	Review of teacher websites for up-to-date assignments posted online.			
4-3.1	Teachers will use electronic grade books to communicate student achievement with parents	Weekly updates in electronic grade book.			
4-4.1	Teachers will use web 2.0 tools to communicate with parents and students	Increased number of teachers using web 2.0 tools for communication and instruction.			

4-5.1	Expand social media tools to deliver timely messages and engage and inform the public and staff	Increased number of teachers using professional social media.			
4-6.1	Create news shows that communicate key district goals/priorities for parents and offer the latest high-priority news and information that parents need to know	Number of productions made available to the public.			
4-7.1	Move from hard copy forms to creation and distribution of electronic forms	Decreased amount of paper purchased each year.			
4-7.2	Move from hard copy forms to creation and distribution of electronic forms	Decreased amount of paper purchased each year.			
4-8.1	Expand the usage of the PowerSchool Parent Portal	Increased number of parent accounts.			

Technology Dimension V

Support Capacity

Goal:

Effectively Manage and Further Develop Financial Resources while Maximizing Operational Efficiency

SSD1 will provide information and high performing technology systems and services that empower our customers to focus on student learning and achievement while also supporting business functions.

Information systems are used to directly support instruction in such areas as:

- Student learning and instruction
- Grade, attendance, and discipline
- Testing

Information systems also support all activities that indirectly support instruction such as:

- Student health
- Finance
- Employee benefits
- Human resources
- Maintenance and operations
- Transportation
- Food Service
- Research
- Communications to parents and the community
- Crisis planning and response
- Business continuity

A. Snapshot of Current Technology Use in District

Wide Area Network – With the proliferation of web based applications, VOIP, distance learning, wireless, and other web based resources the increased demand for bandwidth will eventually push the district infrastructure to its limits. Currently, all district locations are connected via 100 Mbps fiber optic Metro-Ethernet for Internet service provided by South Carolina State Department.

Local Area Network – Currently, all district locations are interconnected via 100 Mbps fiber optic Metro-Ethernet. Individual sites also benefit from a 1 GB backbone infrastructure since the district recently upgraded all of its switches.

Wireless Network – Currently, all district locations have wireless access points with sufficient coverage to support a 1:1 program.

Printers - Managing the printing needs in a district with 8 locations can be a daunting task as well as expensive. In light of this challenge, the district has or will provide a copier/multifunction device based on student population counts. The only cost to the district is the price per page monthly bill that covers the cost of the machine, toner, and service.

Computers – SSD1 currently has over 850 computers and ?? laptops in offices, classrooms, labs, and library learning commons.

Servers – SSD1 currently has a total of 44 servers, of which 12 are physical and the other 32 are virtual.

VOIP - The district plans to install Voice over IP (VOIP) telephones in all sites as well as continue to use analog telephones lines that are used for faxes, emergency backup lines, and security/fire systems.

Information Technology Staff – The department is currently staffed by the IT Director, a Network Administrator, and a Computer Technician.

Our help desk responds to over 1000 requests each year. Since 2007-08, the number of help requests has nearly quadrupled even though the department has only grown by one additional position during that same time period.

The number of servers has grown from 13 to 44 over the past 5 years and the number of desktops has grown by 100.

SSD1 has also recently installed a wireless network that will need to be managed.

In addition, the district is planning to invest in mobile devices next year.

The increasing hardware, software, and security measures needed by the technology department will necessitate an increase in the staffing to help manage all the equipment, training, and repair.

Objectives and Strategies to Reach Goal

Objectives	Strategies
Ensure that schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communications, data collection and distribution, and distance learning.	1 Monitor and request increased bandwidth as needed. 2 Create and implement a disaster recovery plan. 3 Update backup hardware and software. 4 Monitor email system. 5 Monitor and replace servers as needed. 6 Monitor and replace UPS systems. 7 Upgrade district PCs to Windows 7 OS.

	8 Monitor and update switches as needed. 9 Monitor wireless bandwidth usage and access points. 10 Investigate VoIP solutions to reduce traditional telephone lines. 11 Monitor and upgrade firewall. 12 Monitor and upgrade content filter. 13 Monitor and upgrade anti-virus as needed. 14 Investigate encryption of critical hard drives and databases. 15 Increase remote support. 16 Provide professional development opportunities for software/hardware development and management. 17 Increase security monitoring and measures. 18 Monitor and upgrade security cameras as needed. 19 Create student Google accounts. 20 Monitor, maintain, and upgrade SIS as needed. 21 Evaluate and install all Windows updates. 22 Upgrade all PCs to Microsoft Office 2010 23 Evaluate and select mobile device management software

Implementation of Action Steps

Ref. Number	Strategies	Action Steps	Funding Considerations	Evaluation of Objectives
5-1.1	Monitor and request increased bandwidth as needed	Petition SC state department for increased bandwidth as needed for online testing and additional web-based applications	Currently none for bandwidth, but sufficient tech staff to monitor	Increased bandwidth
5-2.1	Create and implement a disaster recovery plan	Hire consultant to evaluate network and assist in the development of a disaster recovery plan.	$3000	Creation of a disaster recovery plan
5-3.1	Update backup hardware and software	Replace backup server with additional space and update software.	$10,000	New server with increased capacity and reduction of backup times.

5-4.1	Monitor email system	Monitor uptime, manage accounts, and resolve problems quickly.	Currently none for email, but sufficient tech staff to monitor and fix problems	Maintain a 99% uptime for email.
5-5.1	Monitor and replace servers as needed	Replace aging servers.	$15,000	New servers configured and functioning
5-6.1	Monitor and replace UPS systems	Replace aging UPS systems or batteries in each data closet as needed	$1300	UPS system or battery replaced
5-7.1	Upgrade district PCs to Windows 7 OS	Upgrade all district PCs to Windows 7 Operating System	$14,000 Part of EES agreement	Number of PCs running Windows 7
5-8.1	Monitor and update switches as needed	Replace switches and routers as needed	Currently none for switches, but sufficient tech staff to monitor and fix problems	Equipment installed and functioning
5-9.1	Monitor wireless bandwidth usage and access points (APs)	Monitor and add additional APs as needed to sustain 1:1 and BYOD	Currently none for APs, but sufficient tech staff to monitor and fix problems	Number of APs and bandwidth usage reports
5-10.1	Investigate VoIP solutions to reduce traditional telephone lines	Upgrade current telephone system	No budget can be determined at this time Erate Funds	New equipment installed and functioning
5-11.1	Monitor and upgrade firewall	Replace existing firewall with packet shaping capability	$10,000	New equipment installed and functioning
5-12.1	Monitor and upgrade content filter	Replace content filter with new appliance	$7500	New equipment installed and functioning
5-13.1	Monitor and upgrade anti-virus as needed	Monitor for security threats and add additional licenses as needed	Currently none as part of 3 yr	Software installed and functioning

			contract, but sufficient tech staff to monitor and fix problems	
5-14.1	Investigate encryption of critical hard drives and databases	Encrypt data that contains personally identifiable information	No budget can be determined at this time	Data encrypted
5-15.1	Increase remote support	Increase use of remote support to reduce mileage costs	Currently none, but sufficient tech staff fix problems	Number of support tickets closed using remote support
5-16.1	Provide professional development opportunities for software/hardware development and management	Send tech staff to professional development to keep up with new management techniques for new and existing hardware and software	$6500	Number of PD trainings attended
5-17.1	Increase security monitoring and measures	Check CIO reports daily	Currently none, but sufficient tech staff to monitor and fix problems	Number of daily reports examined
5-18.1	Monitor and upgrade security cameras as needed	Upgrade analog camera system to an IP system	No budget can be determined at this time	Number of IP cameras
5-19.1	Create student Google accounts	Hire consultant to integrate SIS with Google	$1000	Creation of student accounts
5-20.1	Monitor, maintain, and upgrade SIS as needed	Hire a full time District PowerSchool data person to manage report cards, grade book questions, data requests, and state reports	No budget can be determined at this time	Filled position
5-21.1	Evaluate and install all Windows updates	Push Windows updates on all PCs and servers and train staff to shutdown and install the updates regularly	Currently none, but sufficient tech staff to monitor and push updates	Windows updates on servers and PCs

5-22.1	Upgrade all PCs to Microsoft Office 2010	Upgrade all district PCs to Microsoft Office 2010	$14,000 Part of EES agreement	Number of PCs running Office 2010
5-23.1	Evaluate and select mobile device management (MDM) software	Evaluate and select an MDM solution to manage mobile devices used in district	No budget can be determined at this time	Evaluation and selection of MDM

Outcomes

Ref. Number	Actions	Evaluation	Mar 2014	Mar 2015	Mar 2016
5-1.1	Monitor and request increased bandwidth as needed	Increased bandwidth			
5-2.1	Create and implement a disaster recovery plan	Creation of a disaster recovery plan			
5-3.1	Update backup hardware and software	New server with increased capacity and reduction of backup times.			
5-4.1	Monitor email system for uptime and satisfactory functionality	Maintain a 99% uptime for email.			
5-5.1	Monitor and replace servers as needed	New servers configured and functioning			
5-6.1	Monitor and replace UPS systems	UPS system or battery replaced			
5-7.1	Upgrade district PCs to Windows 7 OS	Number of PCs running Windows 7			
5-8.1	Monitor and update switches as needed	Equipment installed and functioning			
5-9.1	Monitor wireless bandwidth usage and access points	Number of APs and bandwidth usage reports			
5-10.1	Investigate VoIP solutions to reduce traditional telephone lines	New equipment installed and functioning			

5-11.1	Monitor and upgrade firewall	New equipment installed and functioning			
5-12.1	Monitor and upgrade content filter	New equipment installed and functioning			
5-13.1	Monitor and upgrade anti-virus as needed	Software installed and functioning			
5-14.1	Investigate encryption of critical hard drives and databases	Data encrypted			
5-15.1	Increase remote support	Number of support tickets closed using remote support			
5-16.1	Provide professional development opportunities for software/hardware development and management	Number of PD trainings attended			
5-17.1	Increase security monitoring and measures	Number of daily reports examined			
5-18.1	Monitor and upgrade security cameras as needed	Number of IP cameras			
5-19.1	Create and monitor student Google accounts	Creation of student accounts			
5-20.1	Monitor, maintain, and upgrade SIS as needed	Filled position			
5-21.1	Evaluate and install all Windows updates	Windows updates on servers and PCs			
5-22.1	Upgrade all PCs to Microsoft Office 2010	Number of PCs running Office 2010			
5-23.1	Evaluate and select mobile device management (MDM) software	Evaluation and selection of MDM			

Hardware Inventory

	Mar 2013	Mar 2014	Mar 2015	Mar 2016
Number of workstations	800			
Number of laptops	72			
Number of physical servers	12			
Number of virtual servers	32			
Number of district provided student mobile devices	30			
Number of wireless access points	125			
Internet bandwidth	100 Mbps			
Bandwidth between schools	100 Mbps			
Number of VoIP handsets	5			

Staff Survey Questions

	Mar 2013	Mar 2014	Mar 2015	Mar 2016
Percentage of teachers posting assignments online	30% 32 of 107 respondents			
Percentage of teachers incorporating multimedia projects (podcasts, video production, etc)	16% 13 of 81 responses			
Percentage of classrooms using BYOD for instruction	23% 24 of 105 respondents 7% sometimes 15% rarely 76% never			
Percentage of teachers using professional social media for instruction (Facebook, Twitter, Youtube edu)	6% 5 of 85 responses			
Percentage of teachers using a separate professional account rather than personal social media account	9% 4 of 47 responses			
Percentage of teachers with high speed Internet access at home	90% 93 of 103 responses			
Percentage of students with high speed Internet access at home	Will ask at registration			
Percentage of teachers and/or students that touch or write on the SMART board	83% 79 of 95 respondents 56% daily 20% sometimes 7% rarely			

Percentage of SMART boards that respond to touch or writing correctly consistently	54% 45 of 83 responses Most of the time and is fairly accurate 46% 38 of 83 responses Not accurate or does not work			

Budget

Technology Budget 2013-14	
Salaries and Benefits for Department	$161,721.85
Data Processing Services	$35,000.00
Travel	$7,000.00
Software and Supplies	$50,000
General Supplies	$3,000
Hardware	$100,000

The budget may be adjusted upon approval from the school board in 2013.

Network Diagram

Due to security reasons, the network diagram will not be posted.

Internet Use Policy

We are in the process of updating our policies to include information about social media and using personal devices.

Policy

USE OF TECHNOLOGY RESOURCES IN INSTRUCTION

Code **IJNDB** *Issued* **1/13**

Purpose: To establish the board's vision and the basic structure for the use of technology resources in instruction.

Responsibilities and acceptable use

As members of a networked community, users have specific responsibilities with regard to the efficient, ethical and legal utilization of computer devices and networked and Internet resources and must strictly adhere to the following guidelines and conditions of use.

Security

Security on any technology system is a high priority.

Users are responsible for the proper use of accounts issued to them such as email, Internet or access to software and must not provide or display their passwords and login information to anyone, nor leave an application open when unattended.

Users should change their passwords regularly and make efforts to use passwords that are unique and not easily guessed.

Users are responsible for all activity under their account.

Attempts to compromise the security, integrity or functionality of the system, or possession of tools while on school or district property designed to do so, is a violation of this policy. This includes, but is not limited to, the following.

- intentional uploading or creation of computer viruses
- deletion or alteration of other user files or applications
- removing protection to gain access to restricted areas
- unauthorized blocking of access to information, applications or areas of the network

Downloading, printing or uploading files to a computer, the server or any electronic devices by student users must be approved by a teacher and must be related to schoolwork.

It is a federal offense to break into any security system. Financial and legal consequences of such actions are the responsibility of the user.

If a user feels he/she has identified a security problem on the network, the user must notify a network system administrator. The user will not demonstrate the problem to other users.

Any user identified as a security risk may be subject to severe restriction of, or cancellation of, privileges.

It is a violation of this policy to introduce or attach any software or hardware to technology used in Saluda County School District which is not owned by the district or specifically authorized by the system administrator at the school or district level.

No modification to any hardware or software owned or managed by the district may be made without specific authorization by the system administrator at the school or district level.

System resources

System resources are limited and are intended to support the educational objectives of the district.

The use of technology systems must be consistent with, and support, educational objectives. Therefore, activity on the network such as Internet sites accessed, communications via email, listservs, forums or chat rooms must support the district's instructional goals.

File storage capacity is limited. Users should regularly review and delete unnecessary files, email messages and voicemail messages.

Users should make a conscientious effort to conserve district resources. Use of high bandwidth resources such as video conferencing, online music or streaming video must be related to educational goals and authorized by the system administrator at the school or district level.

Users are responsible for backing up copies of documents that are important to their jobs. The district will not be responsible for loss of data.

Using email to send chain letters, advertisements, personal and/or political notices, or engaging in "spamming" (sending an annoying or unnecessary message to large numbers of people) is in violation of this policy.

Education, supervision and monitoring

It will be the responsibility of all members of district staff to educate, supervise and monitor appropriate usage of the online computer network and access to the Internet in accordance with this policy, the Children's Internet Protection Act, the Neighborhood Children's Internet Protection Act and the Protecting Children in the 21st Century Act.

Disabling protection measures

Procedures for the disabling or otherwise modifying any technology protection measures will be the responsibility of the director of technology or designated representatives.

Off-campus conduct

Students, parents/legal guardians, teachers and staff members should be aware that the district may take disciplinary actions for conduct initiated and/or created off-campus involving the inappropriate use of the Internet or web-based resources if such conduct poses a threat or substantially interferes with or disrupts the work and discipline of the schools, including discipline for student harassment and bullying.

Training

The director of technology or designated representatives will provide age-appropriate training for students who use the district's Internet facilities.

The training provided will be designed to promote the district's commitment to the following.

- The standards and acceptable use of Internet services as set forth in the district's Internet safety policy.
- Student safety with regard to the following.
  -safety on the Internet

  -appropriate behavior while on online, on social networking web sites and in chat rooms

  -cyberbullying awareness and response.

- Compliance with the E-rate requirements of the Children's Internet Protection Act ("CIPA").
- Following receipt of this training, the student will acknowledge that he/she received the training, understood it, and will follow the provisions of the district's acceptable use policies.

Reporting

District and school computer technicians who are working with a computer and come across sexually explicit images of children must report this to local law enforcement and the district office. The report must include the name and address of the owner or person in possession of the computer.

General rules and guidelines

The use of the Internet is a privilege, not a right, and inappropriate use will result in cancellation of Internet privileges. All staff and students must abide by the generally accepted rules of network-etiquette, including the following.

- Be polite. Do not be abusive in messages to others. Always use appropriate language. Profanity, vulgarities or other inappropriate language is prohibited. Illegal activities are strictly forbidden.
- Never reveal your personal address or phone number or that of others.
- Note that electronic mail is not guaranteed to be private. Employees who operate the system have access to all mail. Messages relating to or in support of illegal or inappropriate activities will be reported to the appropriate authorities.
- Do not disrupt, harass or annoy other users.
- All communications and information accessible via the network should be assumed to be private property. Always cite all quotes, references and sources.
- Never access inappropriate or restricted information such as pornography or other obscene materials, or other information not directly related to the educational purpose for which access is being provided. Restricted information includes the following.

- obscene, libelous, indecent, vulgar, profane or lewd materials

- advertisements for products or services not permitted to minors by law

- insulting, fighting and harassing words

- other materials which may cause a substantial disruption of the academic environment

Vandalism also is prohibited and will result in cancellation of privileges. Vandalism includes any malicious attempt to harm or destroy data of another user and includes, but is not limited to, the uploading or creation of computer viruses.

All users should use the Internet only for research and academic reasons; non-academic uses are prohibited. Using the system for financial or commercial gain is prohibited.

Always follow the instructions of the supervising staff members.

Availability of access

The district will make access to the district's electronic communications system, including the Internet, available to students and employees exclusively for instructional and administrative purposes and in accordance with administrative rules.

All users will be required to acknowledge receipt and understanding of all administrative rules governing use of the system and will agree in writing to comply with rules and guidelines. Noncompliance with applicable administrative rules will result in disciplinary action consistent with district policies and administrative rules. Violations of law may result in criminal prosecutions as well as disciplinary action by the district.

System access

Access to the district's electronic communication system will be governed as follows.

With the approval of the principal or division/departmental supervisor or his/her designee, users will be granted appropriate access to the district's system.

- Any system users identified as having violated district, campus and/or division/department system acceptable use guidelines will be subject to disciplinary action consistent with district policies and administrative rules.

The school level system coordinator (principal)

The system coordinator (principal) for the electronic communication system will do the following.

- Be responsible for disseminating and enforcing applicable district policies and acceptable use guidelines for the district's system.
- Ensure that all users of the district's system complete and sign an annual agreement to abide by district policies and administrative rules regarding such use. All such agreements will be kept on file by the personnel director.
- Ensure that all employees supervising students who use the district's system provide training emphasizing the appropriate uses of these resources.
- Be authorized to monitor or examine all system activities deemed appropriate to ensure proper use of the system.

- Be authorized to set limits for disk utilization on the system, as needed or as directed from district level technology staff.

Consequences

Violation of any of the conditions of this acceptable use policy may be cause for disciplinary action which may include the suspension of accounts for investigation, revocation of system privileges, termination of contract or employment or suspension from school. Inappropriate conduct or misuse of district technology systems may be subject to restitution for costs associated with hardware, software and system restoration.

Warranty

Saluda County School District makes no warranties of any kind, whether expressed or implied, for the service it is providing. The district will not be responsible for any damages users suffer. This includes loss of data resulting in delays, non-deliveries, misdirected deliveries or service interruptions caused by system upgrade or repair, its own negligence or user errors or omissions. Use of any information obtained via the Internet is at the user's own risk. The district specifically denies any responsibility for the accuracy or quality of information obtained through its services.

The guidelines and conditions outlined in this policy in no way limit the district's prerogative to manage its technology systems as it sees fit or restrict its authority to take any actions it deems necessary to adequately supervise, protect and, if necessary, discipline its users. The district reserves the right to revise this policy at any time, and all revisions will take effect immediately as per district governance.

Adopted 3/00; Revised 3/16/09, 1/28/13

Legal references:

A. Federal law:

1. 47 USC Section 254(h) - Children's Internet Protection Act.
2. The Digital Millennium Copyright Act of 1998, Section 512 - Limitations on liability relating to material online.

B. S.C. Code of Laws, 1976, as amended:
1. Section 10-1-205 - Computers in public libraries; regulation of Internet access.
2. Section 16-3-850 - Encountering child pornography while processing film or working on a computer.
3. Section 16-15-305 - Disseminating, procuring or promoting obscenity unlawful; definitions; penalties; obscene material designated contraband.
4. Section 59-19-90 - General powers and duties of school trustees.

C. Court cases:
1. Purdham v. Fairfax Co. Sch. Bd., 637 F.3d 421,427 (4th Cir. 201)