



# Spartanburg School District Two Technology Plan 2014 - 2018

(Revised 10/31/2016)

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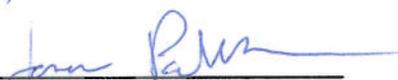
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## District Profile

**Spartanburg County School District Two** is a premier, growing Upstate South Carolina school district tucked in a picturesque and tranquil area of the Piedmont lying in the shadow of the Blue Ridge Foothills. Encompassing the city of Chesnee, the community of Boiling Springs, and the intervening rural regions (approximately 135 square miles in the northern portion of Spartanburg County from I-85 to the North Carolina state line), the district has 58,300 residents and a student population of 10,050.

The family-oriented area offers abundant opportunities for educational, recreational, spiritual, and cultural growth. Its schools boast impressive academics, outstanding arts and sports programs, dedicated faculty and staff, a supportive community and administration, and capable students. District Two has eight elementary schools, one intermediate school, three middle schools, one ninth-grade academy, and two high schools; Swofford Career Center is shared with neighboring Spartanburg School District One.

Spartanburg Two's student population includes 1,304 English Language Learners (ELL). Of the 1,304, 1,089 are served by our English Speakers of Other Languages teachers. Spartanburg Two's 2016 graduation rate is 87.8, with a goal of reaching 90% by 2019. The student dropout rate is 2.9%. Of the student population, 50.7% of our students qualify for free and reduced lunches.

## Executive Summary

The Educational Rate (e-Rate) Program was instituted under the Telecommunications Act of 1996 to expand Internet and telecommunication connectivity to the schools and libraries. Spartanburg School District Two's Technology Plan 2014-2018 is designed to meet the requirements established by the Education Oversight Committee; compliance with the FCC rules regarding e-rate discount claims and the Teacher Technology Proficiency Proviso. The South Carolina Department of Education is certified by the Division of USAC to approve technology plans for participation in the Universal service Program.

Successful technology plans align overall district service improvement objectives with the following five criteria. To qualify as an approved Technology Plan for a Universal Service Program discount, the plan must meet these criteria. There must be connection between the physical infrastructure of the information technology and the plan for professional development, curriculum reform, and District service improvements.

1. The plan establishes clear goals and a realistic strategy for using telecommunications and information technology to improve education or library services.
2. The plan has a professional development strategy to ensure that staff knows how to use the new technologies to improve education.
3. The plan includes an assessment of the telecommunications services, hardware, software, and other services that will be needed to improve education.

4. The plan provides for a sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy for improved education.
5. The plan includes an evaluation process that enables the district and its schools to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.

To ensure the effective and efficient use of the funding provided by the General Assembly in Part IA Section 1XI.A.1 for school technology in the classroom and internet access, the State Department of Education shall approve district technology plans that specifically address and incorporate certified staff technology competency standards and local school districts must require certified staff to demonstrate proficiency in these standards as part of each teacher's Professional Development plan. Evidence that districts are meeting the requirement is prerequisite to expenditure of a district's technology funds.

The National Education Technology Plan presents five goals with recommendations for states and districts. Spartanburg School District Two's Technology Plan 2014 - 2018 is additionally designed based on the five essential dimensions addressed in the National Plan. Our goal is to improve our graduation rate by 2018 and reduce our dropouts by offering students the maximum choices to a quality education that fits their individual needs. By setting goals that focus on innovative best practices, we hope student opportunities will be limitless, borderless, and instantaneous. The Learning Powered by Technology Dimensions are addressed in this transformational technology plan. The technology focus dimensions are:

1. Learning
2. Assessment
3. Teaching
4. Infrastructure
5. Productivity

This plan is correlated with state and federal legislation and uses goals-based, measurable activities. In aligning this plan to the National Technology Plan 2010, the five core technology dimensions are addressed.

## Five Core Technology Focus Dimensions and Goals

### **Technology Dimension 1: Learning**

**Goal:** All learners will have engaging and empowering learning experiences both in and outside of school that prepare them to be active, creative, knowledgeable, and ethical participants in our globally networked society.

## **Technology Dimension 2: Assessment**

**Goal:** Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement.

## **Technology Dimension 3: Teaching**

**Goal:** Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learners.

## **Technology Dimension 4: Infrastructure**

**Goal:** All students and educators will have access to a comprehensive infrastructure for learning when and where they need it.

## **Technology Dimension 5: Productivity**

**Goal:** Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff.

Each of these dimensions is followed by recommended implementation strategies and considerations that reflect aspects of the particular core dimension. Included in this plan are benchmarks that will enable progress validation on an annual basis. This will ensure accountability, increased access, and funding strategies that address our goals.

### **Revision Note**

The Revised edition takes into account adoption of the South Carolina College- and Career-Ready Standards as well as implementation of our EXCEL 1-to-1 learning initiative.

# District Needs Assessment

In order to complete in our global society, Spartanburg Two realizes that we must be in a continuous improvement mode. We realize that we must apply the advanced technologies to our personal and professional lives to our entire educational system so that student learning can be improved. Effective practices, the use of data and information must be used for continuous improvement.

## TECHNOLOGY NEEDS

- Community technology education
- Information about community technology needs especially from the business community
- Enhancement of student technology literacy to meet the 21<sup>st</sup> Century skills
- Technology curriculum guides need to be a work in progress with a progression of skill from grade to grade
- Appropriate and equitable technology tools for all students
- Guidance from the district office for the purchase of appropriate technology tools is needed at the school level
- Additional access to computers for technology skill enhancement and research
- Relevant, ability leveled and grade leveled tiered staff development for new devices and integrating technology so that technology is redefining and allowing for the creation of new tasks and not substituting with no functional change
- Staff Development for administrative support staff
- Classrooms need access to appropriate communication tools to connect with each other and the outside world in a safe way.
- Maintain a robust infrastructure that can handle technology use and 21<sup>st</sup> Century technology lessons
- Adequate technology support

## TECHNOLOGY INVENTORY

Instructional Computers & Laptops	4554
Interactive White Boards	423
Computer Labs	52
Projectors	558
Polling Device Sets	232
Slates	193
Document Readers	174
Graphing Calculators	773
Digital Cameras	85
Student iPads	8700
Teacher and Staff iPads	630
Scanners	77
Apple TVS	451

## NEEDS SUMMARY

We have challenged ourselves to improve learning with modern technology to create engaging, relevant and personalized learning experiences for all learners. Since the beginning of this five-year plan, the district has provided all 3rd through 12th grade students with individually issued iPad Mini 2s. In addition, all content area teachers have been issued an iPad to supplement their teacher classroom computers. We have concentrated existing mobile devices in K-2 classrooms on a shared basis. All students and teachers now have regular access to devices for teaching and learning.

We are still fine tuning the use of tools, processes, and procedures to strengthen the daily use of iPads to change learning. We have recently added Apple Classroom to address classroom management of devices and will continue to address teachers' needs to feel more comfortable teaching in a one-to-one classroom. In addition, we are continuing to support digital tools like Canvas, Mastery Connect, TenMarks, and DiscoveryEd Techbook in order to better meet student and teacher needs in the classroom.

We have increased support capacity by splitting the previous position of Director of Instructional Technology into two positions: Director of Testing and Accountability and Director of Instructional Technology, allowing deeper and sustained focus on the growing responsibilities in each of those areas. The district has added a full time district instructional technology specialist with a focus on elementary. One school-based instructional technology specialist and a part-time instructional technology specialist also support efforts throughout the district. Additionally, the district added a technology and testing-focused administrative assistant and two techs to support the increasing needs of one-to-one learning.

Our next steps are to continue to focus on pedagogical change to best meet students' needs, utilizing strategies such as differentiation, small-group guided instruction, blended learning, and project-based learning. Our teachers engage in Teaching and Learning Teams (TLTs) to reflect on student outcomes and improve instruction with the goal to meet every student's needs. We are also providing ongoing professional development on these strategies and the technologies that support them.

## Network Status

Spartanburg School District Two's data network has at the core a Brocade FastIron SX1600 Routing Switch to provide a unified communications network. At the edge we have 14 Brocade Turbolrons that are hardware-based Layer 3 Routing Switches that provides resiliency, performance and security for converged applications. The Turbolron provides connections for gigabit Ethernet aggregation as well as Gigabit Ethernet connectivity. Remote sites are connected using ASE circuits. The district has a 2.5 Gigabit trunk circuit connected into the cloud on the private side of the network. The remote sites are also connected with a 1 GIG trunk into the cloud. The public side is connected to the internet at a data rate of 1 Gbps. In one instance a router feeds three locations connected with fiber optics. The LAN side of the network has approximately 112 Brocade switches each operating at Gigabit full duplex to the desktop and a Gigabit backbone. The private side of the network is protected with a Fortigate 3700D appliance with subscription services running in HA mode for active content filtering of Internet sites.

### Network, Hardware, and District Solutions

- A wide area network that provide internet, intranet, email, and web site service to all schools in the district.
- Metro-E Gigabit circuit to District office and Gigabit Metro-E circuits to each school.
- A Fortinet 3700D firewall in operation with Windows 2012R2 network running sites.
- 4,000+ internet capable computers
- Two full-time district systems administrator, database administrator and four full-time technicians.
- A district webpage with links, online course registration, and communication capabilities between teachers and students.
- Each school has its own webpage.
- Developed shared network drives for all administrators, teachers, and students to use for collaboration and information exchange.
- Computer labs are in all schools.
- School Messenger is available to all schools for more accurate and timely communication with parents.
- District Phone System Upgrade to provide all schools with phone access for safety reasons and better communication.

# District Vision and Mission Statement

## Core Principle: Students First

### Mission Statement

Our mission is to prepare our students for tomorrow's world by providing effective and innovative educational practices in a safe and supportive environment.

### Vision

**Unlock the full potential of every student.** In pursuit of this vision, our schools are committed to . . .

- inspiring life-long learners,
- progressing technologically,
- motivating students and staff,
- fostering a student-centered culture,
- teaching life skills necessary for success,
- cultivating responsible citizens,
- providing a safe, equitable learning environment,
- welcoming parent and community involvement, and
- improving continually.

### Beliefs

- All students can learn.
- Education is everyone's responsibility.
- Everyone is unique and has value.
- Learning is a life-long process.
- A safe and supportive environment nurtures growth.
- Individuals must be prepared for a global society.
- Decisions must be based on what is best for all students.
- Education is a joint school, family, and community venture.

### Learner Expectations

We expect students to become:

- self-directed learners
- adept users of technology
- innovative problem solvers
- competent in foundational skills
- quality producers and performers
- confident and effective collaborators and communicators
- contributing citizens able to succeed in a changing society

### Technology Mission Statement

The technology mission of Spartanburg School District Two is to provide all students and the educational community, the opportunity to receive a high quality education that prepares them to succeed in a rapidly changing technological society.

### Standards

In addition to technology-related content standards, Spartanburg 2 utilizes the International Society for Technology in Education (ISTE) Standards for students and staff.  
<http://www.iste.org/standards/standards>

# Technology Budget Plan

ITEM	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Hardware</b>						
Infrastructure	180,000	80,000	80,000	80,000	80,000	80,000
iPads (Mobile devices)						
Laptops	250000	250000	250,000	250,000	150,000	150,000
LCD Projectors	25,000	25,000	25,000	25,000	25,000	25,000
Computer labs	100,000	60,000	60,000	60,000	60,000	60,000
Distance Learning	50,000	25,000	25,000	25,000	25,000	25,000
Upgrades/Replacements	200,000	200,000	200,000	200,000	200,000	200,000
Servers	80,000	80,000	80,000	80,000	80,000	80,000
<b>Software/Renewals</b>						
Upgrades	0	100,000	100,000	100,000	100,000	100,000
Assessment tools	97,000	100,000	100,000	100,000	100,000	100,000
Remediation PLATO/READ 180, etc.	50,000	50,000	50,000	50,000	50,000	50,000
Enhancements	4,000	4,000	15,000	15,000	15,000	15,000
Destiny Library Manager	15000	15000	15000	15,000	15,000	15,000
<b>Professional Development</b>						
Courses	15,000	15,000	15,000	15,000	15,000	15,000
Workshops	3000	3000	3,000	3,000	3,000	3,000
Technology trainers	3000	3000	3,000	3,000	3,000	3,000
Online Learning	5,000	5,000	5,000	5000	5000	5000
Software/App Training	1500	1500	1500	1500	1500	1500
<b>Budget Requested</b>	<b>\$1,098,500</b>	<b>\$1,041,500</b>	<b>\$1,052,500</b>	<b>\$952,600</b>	<b>\$952,500</b>	<b>\$952,500</b>

## Evaluation Procedures

In order to ensure that the technology plan is updated and reflects the changing needs of the district, the plan will be subject to a formal review annually. This review will include an update of current hardware and software status as well as analysis of software usage. An internal one year planning horizon will serve to refine the three-year plan for both future growth and professional development needs.

In addition to the formal reviews, updates will be incorporated into the plan as needed resulting from significant changes that may occur in any of the three dimensions (hardware, software, professional development). Newly available grant monies or systems requirements as communicated by external agencies are examples of circumstances that would require interim changes.

## Technology Dimension 1: Learning

### Engage and Empower

Goals	Strategies
1.1 Revise, create, and adopt standards and learning objectives for all content areas that reflect 21 <sup>st</sup> century expertise and the power of technology to improve learning.	Adopt the Common Core State Standards for ELA, Math, and Literacy in Social Studies, Science and Technology
1.2 Develop and adopt learning resources that use technology to embody design principles from the learning sciences.	Create and use lessons, activities, and assessments in which students use a variety of technological tools to complete authentic tasks
1.3 Develop and adopt learning resources that exploit the flexibility and power of technology to reach all learners anytime and anywhere.	Develop technology-enhanced learning activities aligned with SC College- and Career-Ready and 21 <sup>st</sup> century skills in core content areas.
1.4 Use advances in the learning sciences and technology to enhance STEM learning and develop, adopt, and evaluate new methodologies with the potential to enable all learners to excel in STEM.	Integrate STEM related programs into all areas of the curriculum.

## IMPLEMENTATION

### ACTION LIST

- Rewrite curriculum guides in all core subjects to align with the SC College- and Career-Ready and 21<sup>st</sup> century skills
- Develop a technology curriculum guide with plans to update as new resources become available.
- Using iTunes University, publish curriculum guides as eBooks
- Provide Apple training for all instructional coaches in order for them to be proficient in 21<sup>st</sup> century tools and skills.
- Provide a technology coordinator for secondary to provide additional assistance to schools as they move toward 21<sup>st</sup> century expertise.
- Provide the technology tools in all schools that will enhance and promote learning in the 21<sup>st</sup> Century.
- Increase project-based learning and provide staff development for teachers in this area.
- Create assessments that align to Common Core State Standards.

- Develop strategies for assessing student capabilities with 21<sup>st</sup> century skills in all grades.
- Conduct surveys of educators, students, and parents to ensure that the use of technology is perceived as effective in enhancing student learning.
- STEM

## FUNDING CONSIDERATIONS

Budget provided for equipment to include iPads, staff development, Apple App procurement as needed and technology coordinator to provide additional assistance to schools as they move toward 21<sup>st</sup> century expertise

## EVALUATION

Goals (Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report)	Outcomes (Action list items achieved)			
	March 2015	March 2016	March 2017	March 2018
1.1 Revise, create, and adopt standards and learning objectives for all content areas that reflect 21 <sup>st</sup> century expertise and the power of technology to improve learning  <i>(Adopt the Common Core State Standards for ELA, Math, and Literacy in Social Studies, Science and Technology)</i>		Adopted State Standards  and utilizing ISTE Standards as appropriate		

<p>1.2 Develop and adopt learning resources that use technology to embody design principles from the learning sciences.</p> <p><i>(Create and use lessons, activities, and assessments in which students use a variety of technological tools to complete authentic tasks)</i></p>	<p>adopted a variety of subscription software tools; adopted Canvas LMS for creation and sharing of content; web-based tools promoted</p>	<p>Vetted iOS app catalog with over 380 apps, Mastery Connect used for benchmark testing</p>		
<p>1.3 Develop and adopt learning resources that exploit the flexibility and power of technology to reach all learners anytime and anywhere</p> <p><i>(Develop technology-enhanced learning activities aligned with state standards and 21<sup>st</sup> century skills in core content areas.)</i></p>	<p>variety of subscription software tools; Canvas LMS for creation and sharing of content; web-based tools promoted</p>	<p>Vetted iOS app catalog with over 380 apps, Mastery Connect used for benchmark testing</p>		
<p>1.4 Use advances in the learning sciences and technology to enhance STEM learning and develop, adopt, and evaluate new methodologies with the potential to enable all learners to excel in STEM.</p> <p><i>(Integrate STEM related programs into all areas of the curriculum.)</i></p>		<p>Sharing STEM successes with all teachers</p>		

## SUMMARY

We have made great strides in providing resources and strategies to our teachers and students, anchored by our 1-to-1 iPad distribution and adoption of several core softwares to support learning. Yearly walk-through observations by district administration routinely note more engaged students and

effective technology use in the classroom. In addition, core curriculum has been rewritten to include appropriate technology use and suggested resources and tools.

We will continue to grow as a professional community to best use technology for learning. This growth includes seeking better ways to incorporate STEM ideas throughout our content areas.

## Technology Dimension 2: Assessment

### Measure What Matters

Goals	Strategies
<p>2.0 Assessment</p> <p>Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement.</p>	<p>2.1 Design, develop, and adopt assessments that give students, educators, and other stakeholders timely and actionable feedback about student learning to improve achievement and instructional practices.</p>
	<p>2.2 Build the capacity of educators and educational institutions to use technology to improve assessment materials and processes for both formative and summative uses.</p>
	<p>2.3 Use assessment prep software where games are used to engage and motivate learners and to assess complex skills and performances embedded in standards.</p>
	<p>2.4 Revise practices, policies, and regulations to ensure privacy and information protection while enabling a model of assessments that includes ongoing student learning data gathering and sharing for continuous improvement.</p>

## IMPLEMENTATION

### ACTION LIST

#### DISTRICT

- Continue to monitor and adjust filtering regulations according to the federal, state and local standards.
- Offer staff development on new and current technologies.
- Continue to monitor security measures as it pertains to student and staff data which is protected by HIPPA and FERPA laws.

#### SCHOOLS

- Teachers and staff will continue to develop student formative assessments utilizing the use of technology in content areas.

- Schools will use test data services (NWEA, TestView)
- Schools will provide training in programs such as NWEA, TestView, and Study Island for teachers.
- Schools will use assessments more closely linked to SC College- and Career-Ready performance tasks with use of technology such as MAP, Study Island and Smarter Balance.
- Schools will reward and motivate student performance in Study Island test prep software with educational gaming.
- Teachers and students will use data collectively from NWEA, Study Island, Smarter Balance, and Ed Plan to drive instruction.
- Teach Internet Safety in all classrooms at all ages.

## FUNDING CONSIDERATIONS

### DISTRICT

- Provide funds for addition of a technology facility at the District Office to promote continued staff development and collaboration of technology within the district.
- Provide funds for staff development leaders to share innovative ways to use technology as a form of assessment.
- Continue to pay for assessments like MAP that give results that can drive instruction.
- Continue to pay for Study Island type softwares so students will have test prep opportunities.

### SCHOOLS

- Schools will use formative and summative test results to drive instruction and instructional decisions.
- Teachers and staff will abide by the regulations of FERPA and HIPPA laws.

## EVALUATION

Goals (Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report)	Outcomes (Action list items achieved)			
	March 2015	March 2016	March 2017	March 2018
2.1 Design, develop, and adopt assessments that give students, educators, and other stakeholders timely and actionable feedback about student learning to		The district has provided a variety of software that allow teachers and students to get immediate and actionable feedback on		

<p>improve achievement and instructional practices.</p> <p>(Teachers and staff will continue to develop student formative assessments utilizing the use of technology in content areas.</p> <p>Schools will use test data services (NWEA, TestView)  Schools will provide training in programs such as NWEA, TestView, and Study Island for teachers.  Schools will use assessments more closely linked to SC College- and Career- Ready Standards performance tasks with use of technology such as MAP, Study Island and Smarter Balance.  Teachers and students will use data collectively from NWEA, Study Island, Smarter Balance, and Ed Plan to drive instruction.)</p>		<p>student achievement.</p>		
<p>2.2 Build the capacity of educators and educational institutions to use technology to improve assessment materials and processes for both formative and summative uses.</p> <p><i>(Offer staff development on new and current technologies that improves process for both formative and summative uses.)</i></p>	<p>Added tools like Canvas and Google Forms that allow teachers to create digital formative assessments that provide quick feedback.</p>	<p>Added Case21 Benchmarks and MasteryConnect assessment tools for benchmarks and formative assessments.</p>		
<p>2.3 Use assessment prep software where games are</p>		<p>Assessment prep software</p>		

<p>used to engage and motivate learners and to assess complex skills and performances embedded in standards.</p> <p><i>(Schools will reward and motivate student performance in Study Island test prep software with educational gaming.)</i></p>		<p>in place for all grade levels; game-based focused more at elementary level. iOS apps for content practice also available for many content areas.</p>		
<p>2.4 Revise practices, policies, and regulations to ensure privacy and information protection while enabling a model of assessments that includes ongoing student learning data gathering and sharing for continuous improvement.</p> <p><i>(The district will continue to monitor and adjust filtering regulations according to the federal, state and local standards.</i></p> <p><i>Continue to monitor security measures as it pertains to student and staff data which is protected by HIPPA and FERPA laws.</i></p> <p><i>Teach Internet Safety in all classrooms at all ages.)</i></p>	<p>Created individual usernames and passwords for all student users. Moved away from a universally accessible shared network folder to emphasizing individually accessed Google Drive and Office 365 folders, allowing greater security, protection, and privacy of student work.</p>			

## SUMMARY

In addition to providing individual devices, we have adopted software like TenMarks and USATestPrep provide ongoing formative assessment and adapt to student needs. We have added other digital assessment tools, like Mastery Connect and Canvas, to provide a variety of ways for teachers and students to assess learning. In 2016, we have implemented Teaching and Learning Teams (TLTs) to reflect and analyze our practices, ensuring we are making the best instructional decisions for students.

## Technology Dimension 3: Teaching

### Prepare and Connect

Goals	Strategies
<p>3.0 Teaching Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learners.</p>	<p>3.1 Through budget allocations teachers and schools will have increased access to technology that connects teachers and schools to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learning.</p>
	<p>3.2 Design, develop, and adopt technology-based content, resources, and online learning communities that create opportunities for educators to collaborate for more effective teaching.</p>
	<p>3.3 As a leader in effective technology integration, Spartanburg Two will inspire and attract new people into the profession, and encourage our best educators to continue teaching.</p>
	<p>3.4 Learning experiences powered by technology will help close the gap between students' and educators' fluencies with technology and promote and enable technology use in ways that improve learning, assessment, and instructional practices.</p>
	<p>3.5 Transform the preparation and professional learning of educators and education leaders by leveraging technology to create personal learning networks.</p>
	<p>3.6 Use technology to provide access to the most effective teaching and learning resources, especially where they are not otherwise available, and to provide more options for all learners at all levels.</p>
	<p>3.7 Develop a teaching force skilled in effective technology integration.</p>

## IMPLEMENTATION

### ACTION STEPS

#### DISTRICT

- With district funds, iPads will be purchased for core teachers so they can access curriculum in iTunes University. iPads will enable teachers to access data, content, and resources to enable and inspire more effective teaching for all learning. The curriculum in iTunes University will be developed by district curriculum teams, and facilitated by our lead teachers and instructional coaches. Technology-based content will be developed and interwoven into the curriculum accessed by Spartanburg Two teachers in iTunes University. The district will continue to explore technological avenues such as TED, Kahn Academy, Teaching Channel, and Study Island.
- The Curriculum Integration Specialist will collaborate and encourage effective teaching utilizing technology. Our Technology Cohort will continue to develop and inspire teachers to incorporate technology.
- Spartanburg Two will develop a five-year plan that includes a budget for increased access for students and teachers. Through professional development, Spartanburg Two will develop educational professionals who are comfortable accessing the latest tools available.

#### SCHOOLS

- Schools will use allocated funds to provide teachers with technology tools for instruction. Schools will empower teachers to use the technology provided for enhanced learning to close the digital divide between teachers and students.
- Schools will encourage teachers to be leaders in technology-driven instruction. Schools will monitor and promote BYOT so technology can be used for effective learning.

### FUNDING CONSIDERATIONS

#### DISTRICT

- Finance will annually set aside funds for technology tools that enhance student learning and teacher effectiveness.

#### SCHOOLS

- Schools will provide teachers with technology tools that enhance learning and teacher effectiveness.

## EVALUATION

Goals (Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report)	Outcomes (Action list items achieved)			
	March 2015	March 2016	March 2017	March 2018
<p>3.1 Through budget allocations teachers and schools will have increased access to technology that connects teachers and schools to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learning.</p> <p>(Curriculum will be developed, maintained and posted to iTunes University.</p> <p>iPads will be purchased for core teachers so they can access curriculum in iTunes University.</p> <p>iPads will enable teachers to access data, content, and resources to enable and inspire more effective teaching for all learning.</p> <p>The curriculum in iTunes University will be developed by district curriculum teams, and facilitated by our lead teachers and instructional coaches.</p> <p>Technology-based content will be developed and interwoven into the curriculum accessed by Spartanburg Two teachers in iTunes University.)</p>	EXCEL 1-to-1 implemented.			
3.2 Design, develop, and adopt technology-based content, resources, and online learning	District adopted Google Apps,		TLTs utilize Google Sites, Google Drive, and Edivate to	

<p>communities that create opportunities for educators to collaborate for more effective teaching.</p> <p>(Technology-based content will be developed and interwoven into the curriculum accessed by Spartanburg Two teachers in iTunes University. Opportunities for educators to collaborate for more effective teaching will be a result of the curriculum guides accessible by all teachers anytime and anywhere they can connect to iTunes University. The district will continue to explore technological avenues such as TED, Kahn Academy, Teaching Channel, and Study Island.)</p>	<p>Canvas, and Edviate, tools which assist in teacher collaboration.</p>		<p>collaborate easily. Video conferencing tools used for teachers in different schools to collaborate.</p>	
<p>3.3 As a leader in effective technology integration, Spartanburg Two will inspire and attract new people into the profession, and encourage our best educators to continue teaching.</p> <p>(The Curriculum Integration Specialist will collaborate and encourage effective teaching utilizing technology. Our Technology Cohort will continue to develop and inspire teachers to incorporate technology.)</p>		<p>Many of our teachers have presented at regional and state conferences on using technology for teaching and professional development.</p>		
<p>3.4 Learning experiences powered by technology will help close the gap between students' and educators' fluencies with technology and promote and enable technology use in ways that improve learning, assessment, and instructional practices.</p>		<p>Technology use by students and staff has increased dramatically. We are analyzing data to determine</p>		

<p><i>(The increased use of technology in instruction will help close the gap between students' and educators' fluencies with technology and promote and enable technology use in ways that improve learning, assessment and instructional practices. iTunes University and the increased access to technology will help promote this goal.)</i></p>		<p>what practices are effective and what are not.</p>		
<p>3.5 Transform the preparation and professional learning of educators and education leaders by leveraging technology to create career-long personal learning networks within and across schools, pre-service preparation and in-service educational institutions, and professional organizations.</p>		<p>Spartanburg 2 has a growing community of Twitter users using school-based chats and a district #sp2chat</p>		
<p>3.6 Use technology to provide access to the most effective teaching and learning resources, especially where they are not otherwise available, and to provide more options for all learners at all levels.</p> <p><i>(Spartanburg Two will develop a five-year plan that includes a budget for increased access for students and teachers. Through professional development, Spartanburg Two will develop educational professionals who are comfortable accessing the latest tools available.)</i></p>	<p>Student and teacher access to tools, information, texts, and other resources has increased dramatically with 1-to-1 device deployment.</p>			
<p>3.7 Develop a teaching force skilled in effective technology integration.</p> <p><i>(Opportunities for educators to collaborate for more effective teaching will be a result of the curriculum guides accessible by all teachers anytime and anywhere</i></p>		<p>While we will always be developing skills to use technology effectively, we have made</p>		

<i>they can connect to iTunes University.)</i>		significant strides in the number of teachers at the mastery level of tech proficiency. Most teachers use technology on a daily basis.		
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## SUMMARY

Spartanburg 2 has provided most staff members with a mobile device and a variety of software and apps for teaching, learning, and professional development. Of note, we have adopted Edivate as a Learning Management System (LMS) for teaching training and growth. In Edivate, we have delivered several PD courses and created professional learning groups to collaborate on PD needs. We also encourage the use of social media resources, like Twitter, to enhance personal learning networks. We host monthly Twitter chats (#sp2chat) on a variety of education related topics.

To support teachers, we have created a teacher resource site that includes information and tutorials about important educational technology resources and concepts. ([tinurl.com/s2exceltr](http://tinurl.com/s2exceltr))

Almost 100% of our teachers have met Mastery Level proficiency expectations for state license renewal.

## Technology Dimension 4: Infrastructure

### Access and Enable

Goals	Strategies
<p>4.0 Infrastructure All students and educators will have access to a comprehensive infrastructure for learning when and where they need it.</p>	<p>4.1 Ensure that students and educators have adequate broadband access to the Internet and adequate wireless connectivity both inside and outside school.</p>
	<p>4.2 Ensure that every student and educator has at least one Internet access device and software and resources for research, communication, multimedia content creation, and collaboration for use in school.</p>
	<p>4.3 Leverage open educational resources to promote innovative and creative opportunities for all learners and accelerate the development and adoption of new open technology-based learning tools and courses.</p>
	<p>4.4 Build a local education agency capacity for evolving an infrastructure for learning.</p>
	<p>4.5 Support meaningful use of educational and information technology in districts by establishing definitions, goals, and metrics.</p>

## IMPLEMENTATION

### ACTION STEPS

1. Spartanburg Two will ensure students and educators have broadband access to the Internet and adequate wireless connectivity. Spart2 will continually upgrade their broadband access and wireless connectivity as needed by its users. The Technology Coordinator will monitor the connectivity and adjust as appropriately needed.
2. Spartanburg SD2 will develop a five-year plan for purchasing devices such as laptops, iPads, etc. to increase access to devices for students, teachers and staff. Spartanburg

Two will develop a BYOT policy for students owning devices that can be used in the classroom for instructional purposes.

3. Spartanburg Two will support the use of open educational resources to promote innovative and creative opportunities for all learners. Such open educational resources are digital textbooks, digital libraries, tutoring systems, simulations, audio/video capture/edit, blogs, wikis, instructional courses, and student information systems.
4. Spartanburg Two will build a system with the capacity for evolving an infrastructure for learning. Spartanburg Two's goal is to create a learning community throughout our system that uses technology tools for research and learning anytime, anywhere.
5. Through the use of curriculum guides in iTunes U, instructional coaches and lead teachers, instructional initiatives which are shared throughout our system, Spartanburg Two develops standards for student learning. These standards for content and student-learning data enable the collecting and sharing of resources. All stakeholders analyze data to improve decision making at all levels of our educational system.
6. Spartanburg Two financial department uses data to enable data-driven decisions for continuous improvement at all levels of our system.

## FUNDING CONSIDERATIONS

### DISTRICT

- Through the Technology Coordinator's budget, connectivity will be monitored and adjusted as appropriately needed.
- Spartanburg Two will set aside annual funds for increased access to technology for students and staff.

## EVALUATION

Goals (Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report)	Outcomes (Action list items achieved)			
	March 2015	March 2016	March 2017	March 2018
4.1 Ensure that students and educators have adequate broadband access to the Internet and adequate wireless connectivity both inside and outside school.	All students have access to broadband wifi at school.	Exploring options to add wifi on busses and provide mobile access at home for students		

<p>(Spartanburg Two will ensure students and educators have broadband access to the Internet and adequate wireless connectivity. Spart2 will continually upgrade their broadband access and wireless connectivity as needed by its users. The Technology Coordinator will monitor the connectivity and adjust as appropriately needed.)</p>		<p>unable to access high-speed internet.</p>		
<p>4.2 Ensure that every student and educator has at least one Internet access device and software and resources for research, communication, multimedia content creation, and collaboration for use in and out of school. (Spartanburg SD2 will develop a five-year plan for purchasing devices such as laptops, iPads, etc. to increase access to devices for students, teachers and staff. Spartanburg Two will develop a BYOT policy for students owning devices that can be used in the classroom for instructional purposes.)</p>	<p>1-to-1 with iPad Mini 2s for 3rd-12th grade. 6th grade and up take them home. More devices added for K-2 students as well.</p>			
<p>4.3 Leverage open educational resources to promote innovative and creative opportunities for all learners and accelerate the development and adoption of new open technology-based learning tools and courses. <i>(Spartanburg Two will support the use of open educational resources to promote innovative and creative opportunities for all learners. Such open educational resources are digital textbooks, digital libraries, tutoring systems, simulations, audio/video capture/edit, blogs, wikis, instructional courses, and student information systems.)</i></p>		<p>Spartanburg 2 teachers routinely use open and free resources for content and as learning tools.</p>		

<p>4.4 Build a local education agency capacity for evolving an infrastructure for learning.</p> <p><i>(Spartanburg Two will build a system with the capacity for evolving an infrastructure for learning. Spartanburg Two’s goal is to create a learning community throughout our system that uses technology tools for research and learning anytime, anywhere.)</i></p>	<p>Adopted Edviate for professional learning; encourage independent professional learning and sharing, like Twitter chats.</p>	<p>Multiple systems in place for teachers to learn together, collaborate, and share</p>		
<p>4.5 Support “meaningful use” of educational and information technology in districts by establishing definitions, goals, and metrics.</p> <p><i>(Through the use of curriculum guides in iTunes U, instructional coaches and lead teachers, instructional initiatives which are shared throughout our system, Spartanburg Two develops standards for student learning. These standards for content and student-learning data enable the collecting and sharing of resources. All stakeholders analyze data to improve decision making at all levels of our educational system.</i></p> <p><i>Spartanburg Two financial department uses data to enable data-driven decisions for continuous improvement at all levels of our system.)</i></p>	<p>Focused on SAMR as a way to determine meaningful technology integration.</p>		<p>Instituted district-wide Teaching and Learning Teams to analyze data and change teaching practices. PD focus has support teacher use of data.</p>	

## SUMMARY

Spartanburg 2’s Technology Department has significantly increased bandwidth accessibility, insuring that all students will have adequate internet access while at school. We have adopted AirWatch as a mobile device management solution for our student iPads, allowing us also to provide a vetted app catalog of resources for students. We continue to grow to improve infrastructure both for capacity and security.

## Technology Dimension 5: Productivity

### Redesign and Transform

Objectives	Strategies
5.0 Productivity Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff.	5.1 Update infrastructure district-wide to make better use of existing technology.
	5.2 Purchase iPads for all ELA/Math/Science/Social Studies teachers so that District Curriculum Guides can be created in iTunes U, thus eliminating costs for printing and updating guides annually. Updates to the iTunes U curriculum are live so no use to reprint pages thus saving time, money and staff.
	5.3 Use iPads and other technology to disseminate Professional Development materials to teachers (eliminates printing)
	5.4 Purchase iPads for remaining Teacher staff, so that District Curriculum Guides can be created in iTunes U, thus eliminating costs for printing and updating annually.
	5.5 Continue offering Basic and Advanced iPad Graduate courses.

## IMPLEMENTATION

### ACTION STEPS

#### DISTRICT

- Update infrastructure at all locations
- Purchase iPads for teachers; phase 1—all ELA/Math teachers
- Purchase iPads for teachers; phase 2---All remaining Teacher staff
- Create district curriculum guides in iTunes University
- Using the train the trainer model with coaches, educate teachers on the many uses of iPads
- Continue offering Basic and Advanced iPad Graduate courses

- Hire a Technology Integration Specialist to improve technology use at the middle and high levels.

**SCHOOLS**

- Utilize iPads for professional development
- Conduct Professional Development on efficient use of technology to improve learning outcomes
- Use the Technology Integration Specialist to change the way students learn and help educate them to be 21<sup>st</sup> Century learners.

**FUNDING CONSIDERATIONS**

**DISTRICT**

- Provide annual funding allowance to purchase/upgrade technology for students and school technologies

**SCHOOLS**

- Allocate funds annually for technology enhancement
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**EVALUATION**

Goals <i>(Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report)</i>	Outcomes <i>(Action list items achieved)</i>			
	March 2015	March 2016	March 2017	March 2018
5.1 Update infrastructure District-wide to make better use of existing technology <i>(Update infrastructure at all locations)</i>	Wi-Fi access points assessed and updated in all buildings if needed.			
5.2. Purchase iPads for all ELA/Math teachers so that District Curriculum Guides can be created in iTunes U, thus eliminating costs for printing and updating guides annually. <i>(Purchase iPads for teachers; phase 1—all ELA/Math teachers)</i>	All teachers are provided an iPad for teaching.			

<p>5.3 Use iPads and other technology to disseminate Professional Development materials to teachers (eliminates printing)</p> <p><i>(Utilize iPads for professional development Conduct Professional Development on efficient use of technology to improve learning outcomes Use the Technology Integration Specialist to change the way students learn and help educate them to be 21<sup>st</sup> Century learners.)</i></p>		<p>Sustained effort to deliver PD and staff information digitally, including use of Docs and Google Sites to house and store information.</p>		
<p>5.4 Purchase iPads for remaining Teacher staff, so that all District Curriculum Guides can be created in iTunes U, thus eliminating costs for printing and updating annually <i>(Purchase iPads for teachers; phase 2---All remaining Teacher staff)</i></p>		<p>All content teachers have been issued an iPad.</p>		
<p>5.5 Continue offering Basic and Advanced iPad Graduate Courses <i>(Continue offering Basic and Advanced iPad Graduate courses)</i></p>	<p>Continued offering courses</p>	<p>Shifted grad courses to other focuses based on needs.</p>		

## SUMMARY

We have expanded our goal of providing teachers with devices to include providing all students in grades three through twelve with iPads and increasing the number of iPads available to K-2 students. As part of this plan, called EXCEL, we have focused on differentiation, guided instruction, blended/flipped learning, and formative assessments to transform day-to-day teaching and learning. We have begun the process of using Teaching and Learning Teams (TLTs) to reflect on and assess practices to ensure that we are using the best strategies and tools.

In addition, we have adopted the Canvas Learning Management System (LMS) to unify and streamline the learning experience.

## Cumulative Benchmarks

Every goal and objective will be reviewed each school year for progress. The technology committee chairpersons will evaluate their objective, strategies and actions for positive improvement results. Updates will include any areas in need of adjustments to meet the objectives of the plan.

To meet the five dimensions Spartanburg Two set in this plan for creating a learning environment powered and enhanced by technology, each objective must be clearly defined with strategies and actions.

Each strategy and action must define when an action is to be performed, who is responsible for the action and the expected outcome should be listed. All objectives, actions and strategies must be measurable, the method for measurement listed, and the cost by year should be listed. The critical factors are (1) implementation (2) direction and (3) accountability.

# Acknowledgements

The following contributed to the development of the 2014-2019 Technology Plan:

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Mandy Cashwell	BSE	Grade 3 Teacher	Joni Hennessy	RLMS	Parent
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