Beaufort County School District Technology Plan for 2016 – 2019

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II. District Profile

Number of Schools:

- Elementary/Early Childhood Centers: 19
- PreK-8 Academies: 2
- Middle Schools: 7
- High Schools: 7
- Career Center: 1
- Alternative Programs: 1
- Charter Schools: 1

Number of Students Enrolled: (as of December 14, 2015)

Percentage of Students Eligible for Free/Reduced Lunch: 60.18% (as of December 14, 2015)

Number of English as a Second Language (ESL) students: 17.5% (as of December 14, 2015)

Number of Dropouts: 2.1% (2015 State Report Card)

Graduation Rate: 78.7% (2015 State Report Card)

District E-Rate Discount:

- FY2015-216:
 - BCSD's shared Category 1 Discount Rate: 80%
 - School (all) Category 2 Discount Rates: 80%
- FY2016-2017:
 - BCSD's shared Category 1 Discount Rate: 80%
 - School (all) Category 2 Discount Rates: 80%

III. Executive Summary

Beaufort County School District is committed to providing the resources and support needed to create an effective 21st century learning environment for all students and educators.

A team, comprised of members from instructional services and technology services assembled to develop a comprehensive three year technology plan for Beaufort County School District.

The framework for the plan was built upon five technology dimensions, as outlined by the South Carolina Department of Education, along with a set of district goals:

Technology Dimension 1 – Learners and their environment

BCSD Goal: Beaufort County School District will facilitate high student achievement by providing optimal technology resources and tools that will be used to transform learning.

Technology Dimension 2 – Professional Capacity

BCSD Goal: Beaufort County School District will provide curriculum and professional development to increase the competency of all Beaufort County School District Employees so that research proven strategies and the effective integration of technology systems can be used to increase student achievement.

Technology Dimension 3 – Instructional Capacity

BCSD Goal: BCSD will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

Technology Dimension 4 – Community Connections

BCSD Goal: To strengthen support for public education by building and maintaining connections with the local community through the use of available technologies.

Technology Dimension 5 – Support Capacity

BCSD Goal: BCSD will expand and support technology resources to assist educators and learners in meeting the state academic standards.

Accompanying each of these goals, is a list of measurable objectives, strategies, implementation steps, funding considerations, and benchmarks that outline how each goal will be reached.

IV. District Needs Assessment

Over the past three years, Beaufort County has increased its student population by over 1200 students. With the implementation of Connect2Learn, Beaufort County School District has increased the number of mobile devices 275% since 2013 despite a decrease in technology support staff.

Technology Equipment Needs

- Data electronics refresh
- Teacher laptop refresh
- School server refresh
- School computer lab refresh
- Student mobile device refresh

Educational Technology Coaches and Systems Support Specialists are in place to provide technical and instructional support for students, teachers and staff. As we continue to add new technology, the need for continued professional development and technical support will also grow.

Technology Support Needs

- Additional Educational Technology Coaches
- Additional Network Operating Center Personnel
- Additional School System Support Specialists

Beaufort County School District Technology and Instructional Services Departments will continually assess technology needs, bandwidth, and instructional software using on-site evaluations, online surveys, technology team feedback, and constant communication with school and district level administration.

V. District Vision and Mission Statements

Mission

The Beaufort County School District, through a personalized learning approach, will prepare graduates who compete and succeed in an ever-changing global society and career marketplace.

Vision

We will work with families and our diverse community to ensure that students perform at an internationally competitive level in a learning environment that is safe, nurturing and engaging.

District Belief Statements

- Every student can learn using his or her valuable and unique talents and skills.
- Learning takes place when the physical, emotional, social and intellectual well-being of all students is assured at every level and during every transition.
- High expectations of the school community positively impact student success.
- Early childhood learning experiences form the foundation of future school success.
- Students learn best when they are engaged and provided with opportunities for problem solving and active participation.
- All students are entitled to learning experiences so that they can become competent and confident in the skills and knowledge needed to become successful and productive citizens.
- Investment, involvement and connection of all members of the school community are essential to a student's success.
- Frequent informal and formal assessment aligned to clearly defined learning objectives will provide improved student achievement.
- The collection, analysis and use of data from a variety of sources are critical to making decisions.
- Students should be prepared to compete and contribute in a changing global and multilingual society.

Beaufort County School District Vision for Instructional Technology

Beaufort County School District is dedicated to using research based strategies and advanced technology to specifically target student achievement and ensure our students are digitally literate and engaged 21st century learners. Our goal is to promote and graduate college and career ready students who are well equipped to pursue their goals and contribute as global citizens. It is our vision that learners have the opportunities and experiences needed while in school to prepare them to perform at the highest level in their chosen career paths. By providing students with technology training and tools that will enable them to be safe and ethical while they think critically and creatively, communicate effectively, and participate in problem-based and collaborative learning, we are providing them with skills they need to become productive adults and leaders in our local and global communities.

Beaufort County School District envisions a learning community where:

- Students are engaged in a challenging curriculum that uses technology as a tool to increase focus on inquiry-based, hands-on learning
- Teachers use technology to engage students and apply their skills to meet mandated academic standards
- Parents and community stakeholders are active and supportive in district initiatives
- The school district provides students and staff with access to a full range of technology resources, knowledgeable staff for support, and a learning environment that is safe, nurturing and engaging

VI. Plans for the Five Individual Technology Dimensions

Technology Dimension 1—Learners and Their Environment

A. Snapshot of Current Technology Use

Beaufort County School District is committed to providing instructional technology tools and resources to create an engaging 21st century learning environment for its students. Each Beaufort County School District classroom is equipped with a wireless access point, an interactive whiteboard and/or an interactive LCD screen, phonic ear system, a teacher laptop, and multiple student computer or mobile devices. Additionally teachers and students have access to document cameras, student response systems, digital cameras, and stationary and mobile labs.

Through Connect2Learn, BCSD provides a mobile device to all students in grades K-12, allowing students to access information, think critically, problem solve, collaborate, and create while learning to safely, ethically, and effectively utilize 21st century tools. Students in grades 3-12 are given the opportunity to continue their learning outside of the school building by taking their devices home each day.

BCSD, along with the state department, provides a wide variety of instructional software and web-based tools that support productivity, word processing, collaboration, communication, customized learning and assessment, interventions, and research.

Student, parental and community involvement is promoted through various resources. These include district, school and teacher websites, social media outlets, SchoolMessenger, and PowerSchool's Parent Portal.

Educational Technology Coaches work with faculty and staff in training, planning, modeling and teaching technology integrated lessons and activities. The Systems Support Specialists provide technical support for hardware, systems, and applications. These teams collaborate regularly to provide the most effective and efficient support to our teachers, students and staff.

BCSD provides a robust network infrastructure that includes 2 Gbps connectivity between all schools and the district office. Additionally, much of the district's core networking equipment, servers, and applications have been centralized to provide optimal service and support.

B. Overall Goal for Learners and Their Environment

SCDE Goal 1: The SCDE, the school districts, and the schools will use research-proven strategies to provide home, school, and community environments conducive to our students' achieving technological literacy by the end of the eighth grade and to raise the overall level of academic achievement in South Carolina.

BCSD Goal 1: Beaufort County School District will facilitate high student achievement by providing optimal technology resources, tools and support that will be used to transform learning.

Objectives	Strategies
	et deglee
use technology to acquire and demonstrate communication, collaboration, and engagement skills that are aligned with state standards across the curriculum and will thereby increase their level of academic achievement.	A) Facilitate student work using tools that will yield sustained, engaged learning and collaboration across the curriculum
	B) Provide a venue for students to present collaborative projects to identified audiences (i.e. school and district level academic showcases)
	C) Provide a venue for students to communicate and collaborate with teachers and peers in a safe environment
	D) Provide appropriate accommodations for students with special needs when conducting tests, including standardized tests, using technology
Objective 1.2: BCSD will promote digital literacy for all students through a variety of technologies utilized within the context of the curriculum.	A) Develop a technology skills-based checklist for students
Objective 1.3 : BCSD will provide students with a 21st century learning environment that includes, but is not limited to, mobile devices, wireless technology, web-based tools and assistive technologies that are leveraged to promote high academic achievement.	A) Establish school, home, and community learning environments that enable students to access and use technology for real world learning, problem solving, and research
	B) Provide access to software applications at remote locations such as students' homes, libraries, churches, and other public venues with wireless connectivity
	C) Provide additional educational opportunities through BCSD Virtual School taught by highly qualified teachers.
Objective 1.4: BCSD will provide all students access to a technology learning environment	A) Teach cyber safety and cyber citizenship to all students
that is ethically sound and safe.	B) Teach and demonstrate technology and Internet ethics
	C) Utilize CIPA compliant internet content filtering

Action List	D. Action Implementation Stone
Action List	D. Action Implementation Steps
 BCSD will provide up-to-date hardware and software for integration of technology into all curriculum areas. 	 Review, renew and update software as necessary by Instructional and Technology Services
 BCSD will provide instructional support for teachers to integrate technology into everyday lesson planning. 	 Conduct life cycle refreshes of district provided hardware
 BCSD will promote the use of mobile technology for learning. 	 Evaluate software and hardware requests made by schools
 BCSD will promote school technology showcases, allowing students to present their projects, products and activities developed with the use of technology tools. 	 Provide Educational Technology Coaches to all schools to assist in lesson planning and professional development Expand access to mobile technology through
 BCSD will encourage teachers to utilize class webpages and additional web-based resources to showcase student work. 	 Connect2Learn Provide social networking platforms, school and classroom websites and
 BCSD will provide and support students and staff with web-based tools for collaboration, communication and interaction online. 	learning management systems for teachers and students
 BCSD will provide access to effective, research- based assistive technologies that will support inclusion of students with disabilities. 	 Implement a safe and secure email platform for students and staff to communicate and collaborate Collaborate with Special Services to provide assistive technology support to
 BCSD will create technology continuum of learning. 	students with disabilities
BCSD will partner with community	 Implement technology skills-based checklists for students at each grade level
organizations to provide students with access to district resources and support.	 Promote the use of community resources and partnerships
 BCSD will review and consider new software that will allow students access to educational resources outside of a traditional school setting. 	 Add virtual courses for students based on interest and need
 BCSD will promote and support virtual learning opportunities. 	 Provide cyber safety and cyber citizenship resources for students, staff and parents
 BCSD will teach cyber safety and cyber citizenship to all staff and students regularly. 	through district website and school sponsored events/training
 BCSD will utilize a CIPA compliant internet content filtering system to protect students from accessing potentially harmful material 	

E. Funding Considerations

- Annual budgeting for software licensing and technology refreshes and system upgrade
- Annual budgeting for instructional software
- Additional Funding Opportunities (Grants, Special Revenue, eRate, etc.)
- Instructional and Systems Support Staff
- Professional Development
- Assistive Technology equipment and support

F. Evaluation of Objective

Objectives	Possible Data Sources to Be Used for Baseline and Ongoing Evaluation and	Outcomes (Include "action list" items achieved.)		
	End- of-Program Report	2016	2017	2018
Objective 1.1 : BCSD will ensure that students will use technology to acquire and demonstrate communication, collaboration, and engagement skills that are aligned with state standards across the curriculum and will thereby increase their level of academic achievement.	 Statewide achievement test scores MAP Scores District report cards 			
Objective 1.2: BCSD will promote digital literacy for all students through a variety of technologies utilized within the context of the curriculum.	 Attendance and Discipline Reports Technology needs assessments 			
Objective 1.3 : BCSD will provide students with a 21st century learning environment that includes, but is not limited to, mobile devices, wireless technology, web-based tools and assistive technologies that are leveraged to promote high academic achievement.	 Student projects Observations Skills-based Checklists Documented access to resources 			
Objective 1.4: BCSD will provide all students access to a technology learning environment that is ethically sound and safe.				

Technology Dimension 2—Professional Capacity

A. Snapshot of Current Technology Use

Beaufort County School District is committed to providing ongoing professional development opportunities to all district employees. BCSD utilizes research based methods to build technology workshops and trainings for teachers to choose from and register in My Learning Plan. These trainings are delivered through various platforms to allow for personalized learning—online, face-to-face, during planning times, after school, conferences, district in-service days, and Summer Institute.

Beaufort County School District's Educational Technology Coaches, Educational Technology Coordinator, iLearning Coordinator, Director of Educational Technology, Systems Support Specialists, Media Specialists, Teachers, Web Content Manager, and Data & Testing Coordinators provide technology instruction to all Beaufort County School District Employees. Additionally BCSD leverages external resources for on-site and remote training opportunities.

B. Overall Goal for Professional Capacity

SDE Goal:1 The SDE, the school district, and the schools will provide 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.

BCSD Goal 2: Beaufort County School District will provide curriculum and professional development to increase the competency of all Beaufort County School District Employees so that research proven strategies and the effective integration of technology systems can be used to increase student achievement.

C. Objectives, Strategies & Action List to Reach Goal

Objectives	Strategies
Objective 2.1 BCSD educators will achieve and demonstrate proficiency in integrating state- recommended instructional technology standards (NETS for administrators, teachers, and students) into their specific area of professional practice to increase student achievement	 A) Provide teachers with multiple tools and resources for using meaningful technology throughout the curriculum that reflects the NETS for administrators, teachers, and students. B) Provide ongoing professional development throughout the district.
Objective 2.2 BCSD will provide the schools with multidimensional technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers, and administrators.	 A) Provide access to an Educational Technology Coach at each school. B) Require Educational Technology Coaches to provide direct training, modeling, and co-teaching opportunities to teachers in their classrooms. C) Educational Technology Coaches will document trainings and reflect on their experiences. D) Encourage school level administrators to model and facilitate educational technology integration in their schools.
Objective 2.3 BCSD will collaborate in planning for professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology to enhance learning.	 A) Gather input from school technology committees and leaders. B) Provide meetings for technology professionals to collaborate and plan professional development for district staff and teachers.
Objective 2.4 BCSD will provide schools with information and training in technology integration so teachers can use research-based best-practice instructional methods throughout the curriculum.	 A) Offer professional development activities and training in a variety of ways (i.e. face-to-face, virtual, etc.) to address the technology needs of all Beaufort County educators. B) Provide a list of professional development opportunities on the My Learning Plan Web Portal at <u>www.mylearningplan.com</u> and publicize other recognized professional opportunities for educators. C) The Educational Technology Coaches organize professional development activities to meet the school schedules and day to day needs.

BCSD Technology Plan 2016-2019	
Objective 2.5 BCSD will assess the overall	A) Provide and review instructional technology
effectiveness of professional development in the area	surveys
of instructional technology standards and the impact	
of technology on student achievement.	B) Administrators will create and maintain samples that reflect and document their use of technology within their school.
	C) Teachers will create samples and collect examples of their students' work to document use of technology in their classrooms.
	D) Teachers will have their students create work that documents their use of technology in their learning.

E. Funding Considerations

- Annual budgeting for software licensing
- Additional Funding Opportunities (Grants, Special Revenue, eRate, etc.)
- Instructional and Systems Support Staff
- Professional Development from contracted vendors
- Assistive Technology training and support
- Funding for conference attendance
- Funding for technology trainers and coaches to purchase software, equipment, and materials for training purposes

F. Evaluation of Objectives

Objectives	Possible Data Sources to Be Used for Baseline and	Outcomes (Include "action list" items achieved.)		
Objectives	Ongoing Evaluation and End- of-Program Report	2016	2017	2018
Objective 2.1 BCSD educators will achieve and demonstrate proficiency in integrating state- recommended instructional technology standards (NETS for administrators, teachers, and students) into their specific area of professional practice to increase student achievement	 Statewide achievement test scores MAP Scores District report cards 			
Objective 2.2 BCSD will provide the schools with multidimensional technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers, and administrators.				
Objective 2.3 BCSD will collaborate in planning for professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology to enhance learning.	 Teacher and administrator samples Observations Skills-Based Checklists for 			
Objective 2.4 BCSD will provide schools with information and training in technology integration so teachers can use research-based best-practice instructional methods throughout the curriculum.	 Documented access to on-line resources Technology 			
Objective 2.5 BCSD will assess the overall effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement.	assessment			

Technology Dimension 3—Instructional Capacity

A. Snapshot of Current Technology Use

BCSD has one Director of Educational Technology, one Educational Technology Coordinator, one iLearning Coordinator, eight Educational Technology Coaches, and one media specialist per school to lead the integration of instructional technology. The main goal of the Instructional Technology department is to assist teachers in the integration and implementation of technology through training, shoulder-to-shoulder teaching experiences, and ongoing support.

Each classroom is equipped with a wireless access point, an interactive whiteboard with a phonic ear system, a teacher laptop, and multiple student computer or mobile devices. Additionally, teachers and students have access to document cameras, student response systems, digital cameras, and stationary and mobile labs.

All staff computers are issued with Windows and Microsoft Office 2013. Additional instructional software is provided through network servers and via the internet including communication tools, content-driven programs, and productivity applications. Examples include: Compass Learning, Edmodo, Edgenuity, Google Apps for Education, Rosetta Stone, Waterford Learning, iPad applications, BCSD Virtual School, and Blackboard Engage for district, school, and teacher websites.

As part of *Connect2Learn*, all students in kindergarten through twelfth grade have a mobile device; students in grades 3-12 have the opportunity to take their device home after school.

SDE Goal 3: The SDE, the school districts, and the schools will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

District Goal 3: BCSD will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

C. Objectives, Strategies and Action List to Reach Goal

Objectives	Strategies
Objective 3.1 BCSD will provide teachers with the technology resources and tools, including assistive technology, necessary to increase academic achievement by engaging students in active learning.	 A) Provide teachers with access to trained and knowledgeable instructional and technology support staff B) Provide teachers with access to hardware,
	software, and productivity tools C) Provide teachers with local and web-based instructional materials
Objective 3.2 BCSD will provide students with access to current and emerging technology resources that will extend their learning beyond the	A) Provide students with interactive learning environment
traditional classroom setting and schedule.	 B) Provide extended learning resources at home C) Provide student access to mobile technology at school and home
	D) Enable students access to online educational resources
Objective 3.3 BCSD will provide and support a variety of technology hardware and software for teaching and learning.	A) Establish a system to identify and select technologies that supports curricular and professional development objectives
Objective 3.4 BCSD will provide all students and staff access to a technology learning environment that is ethically sound and safe.	 A) Teach cybersafety and cybercitizenship to all students
	B) Teach and demonstrate technology and Internet ethics
	C) Utilize CIPA compliant internet content filtering solution

Action List	D. Action Implementation Steps
 BCSD will provide each school access to an Educational Technology Coach and System Support Specialists. 	 Provide staff with opportunities to participate in face-to-face and online professional development
 BCSD will continuously review emerging technology trends. 	 Provide technical support for hardware and software resources through the BCSD Technology Services Help Desk and Systems Support Specialists
 BCSD will provide staff and students with software and web-based resources to encourage interactive learning. 	 Identify and implement effective technology that will enhance classroom instruction
BCSD will provide a student email platform.	 Offer a variety of tools to create content, problem solve, and collaborate
BCSD will provide and expand extended learning resources outside the traditional classroom environment.	 Create standardized Cybersafety and Cybercitizenship lessons for staff and students across the district
 BCSD will provide student access to mobile technology. 	 Teach Cybersafety and Cybercitizenship lessons in collaboration with school administration and guidance department
 BCSD will periodically review the current process of school submitted software and 	Review and evaluate Connect2Learn processes and procedures annually
hardware requests.	Provide CIPA compliant content filtering
BCSD will provide a safe and secure learning environment for all students and staff.	

E. Funding Considerations

- Annual budgeting for software licensing
- Additional Funding Opportunities (Grants, Special Revenue, eRate, etc.)
- Annual budgeting for hardware additions, replacements and repairs
- Instructional and Systems Support Staff
- Professional Development
- Assistive Technology training and support
- · Funding for software, equipment, and materials for training purposes

Objectives	Possible Data Sources to Be Used for Baseline and Ongoing Evaluation	Outcomes (Include "action list" items achieved.)		
	and End- of-Program Report	2016	2017	2018
Objective 3.1 BCSD will provide teachers with the technology resources and tools, including assistive technology, necessary to increase academic achievement by engaging students in active learning.	 Statewide achievement test scores MAP Scores District report cards 			
Objective 3.2 BCSD will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule.	 Professional development tracking and surveys Teacher technology proficiency proviso forms 			
Objective 3.3 BCSD will provide and support a variety of technology hardware and software for teaching and learning.	 Teacher and administrator samples Observations Skills-Based Checklists for 			
Objective 3.4 BCSD will provide all students and staff access to a technology learning environment that is ethically sound and safe.	 Checklists for teachers & students Documented access to on-line resources Technology assessment 			

Technology Standards for Students

Beaufort County School District has adopted the following six principles from the International Society in Education (ISTE)¹ and utilizes these along with the student profiles to evaluate student proficiency.

1) Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a) Apply existing knowledge to generate new ideas, products, or processes.
- b) Create original works as a means of personal or group expression.
- c) Use models and simulations to explore complex systems and issues.
- d) Identify trends and forecast possibilities.

2) Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a) Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b) Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c) Develop cultural understanding and global awareness by engaging with learners of other cultures.
- d) Contribute to project teams to produce original works or solve problems.

3) Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a) Plan strategies to guide inquiry.
- b) Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c) Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d) Process data and report results.

4) Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

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- a) Identify and define authentic problems and significant questions for investigation.
- b) Plan and manage activities to develop a solution or complete a project.
- c) Collect and analyze data to identify solutions and/or make informed decisions.
- d) Use multiple processes and diverse perspectives to explore alternative solutions.

5) Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a) Advocate and practice safe, legal, and responsible use of information and technology.
- b) Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c) Demonstrate personal responsibility for lifelong learning.
- d) Exhibit leadership for digital citizenship.

6) Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a) Understand and use technology systems.
- b) Select and use applications effectively and productively.
- c) Troubleshoot systems and applications.
- d) Transfer current knowledge to learning of new technologies.

Technology Dimension 4—Community Connections

A. Snapshot of Current Technology Use

Beaufort County School District strives to build many forms of communication and partnerships with the local community. The school district communicates regularly through the district website located at www.beaufort.k12.sc.us as well as school websites to deliver current news, calendar events, announcements, awards and recognitions. Social media sites such as Facebook, Twitter and YouTube are also used to inform the community.

Communication with parents and families is a high priority of the BCSD. The district and schools use SchoolMessenger as an electronic means to communicate with parents regarding emergency information, attendance alerts, upcoming events, and general announcements through phone calls, text messages, and electronic newsletters.

Additionally, BCSD has formed partnerships with multiple local business, organizations, and community members.

B. Overall Goal for Community Connections

SDE Goal 4: The SDE, the school districts, and the schools will increase student achievement through the use of technology, including assistive technology, by maximizing community involvement and community partnerships.

District Goal 4: To strengthen support for public education by building and maintaining connections with the local community through the use of available technologies.

C. Objectives, Strategies and	Action List to Reach Goal
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Objectives	Strategies
Objective: 4.1 BCSD will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes. (The term <i>community</i> includes parents, businesses, state and local agencies, nonprofit groups, and institutes of higher	 A) Form district-community partnerships to provide students with real-world experiences in the use of technology B) Form district-community partnerships to help research and evaluate school and district technology projects.
education.)	C) Write community-collaborative technology grants to develop and fund the use of technology to improve teaching and learning
Objective 4.2 : BCSD will fully utilize all available resources by fostering collaboration and cooperation among state-supported organizations, institutions, and initiatives.	 A) Continue formal partnerships with the University of South Carolina-Beaufort and the Technical College of the Lowcountry B) Ensure that all buildings are linked by the Internet to the State's Library's DISCUS databases and to the websites of universities, museums, and other institutions to facilitate virtual communication between home, school, and community C) Form relationships with local organizations that will provide opportunities for students to have greater access to technology resources outside of school. D) Promote current and future technology initiatives through local community organizations.
Objective 4.3 BCSD will provide technology- based opportunities for learning to the local community.	A) Collaborate with businesses, organizations and schools to provide services and support to teachers, students, and families.
Objective 4.4 BCSD will provide regular communication with the community of events and happenings within the district and schools.	A) Distribute regular publications providing news events and announcements through multiple platforms.

Action List	D. Action Implementation Steps
BCSD will encourage schools and students to communicate with local professional and field experts.	Provide opportunities for field trips where technology is used
 BCSD will organize meetings and collaborations with community leaders and organizations. 	• Encourage virtual field trips and other electronic communication with professionals using various communication tools including interactive video, email, discussion forum, blogs, etc.
BCSD will continue to stay informed of current grant opportunities for schools and teachers.	 Collaborate with public libraries, churches, community centers, Boys and Girls Clubs, etc. to provide secure remote access to web-based
BCSD will ensure that all schools have access to DISCUS as well as other web-based	applications and software
resources offered by public educational institutions.	 Ensure that all online resources made available by public institutions are accessible by all staff and students
 BCSD will promote opportunities for community members to experience technology available in schools. 	
BCSD will continue to communicate with students, parents and the community through various forms of technology	 Require district/school webmasters and teachers to update websites regularly
	Encourage school administrators to take advantage of the many resources available for communication
	Continue utilizing communication tools such as SchoolMessenger, district and school websites, and social networking platforms
	 Meet with local community organizations to showcase and discuss district technology initiatives.

E. Funding Considerations

- Annual budgeting for software licensing
- Additional Funding Opportunities (Grants, Special Revenue, eRate, etc.)
- Instructional and Systems Support Staff
- Professional Development
- Facility use for non-school hours
- Field trips and transportation

F. Evaluation of Objectives

Objectives	Possible Data Sources to Be Used for Baseline and Ongoing Evaluation and End- of-Program Report	(Include "a	Outcomes action list" items	achieved.)
		2016	2017	2018
Objective: 4.1 BCSD will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes. Objective 4.2: BCSD will fully utilize all available resources by fostering collaboration and cooperation among state- supported organizations, institutions, and initiatives.	 Statewide achievement test scores MAP Scores Community technology access surveys Lab, media center and classroom schedules School Technology Plans 			
Objective 4.3 BCSD will provide technology-based opportunities for learning to the local community.	 Observations and interviews District and school websites Documentation of learning opportunites 			
Objective 4.4 BCSD will provide regular communication with the community of events and happenings within the district and schools.	 List of district and school grants and community partnerships 			

Technology Dimension 5—Support Capacity

Beaufort County School District is committed to building and maintaining a robust and reliable infrastructure to support a 21st century learning environment. The district's Technology Services Department has a centralized data center that houses the majority of technology operations for the district. Each building is connected to this data center through high capacity fiber optic cables.

Various levels of technology staff are in place to support BCSD's technology infrastructure, hardware, applications and users. To increase efficiency and the level of service, a centralized technology support help desk, work order system, and A+ certified technicians are made available to every building throughout the district. Additionally, a team of Systems Support Specialists are assigned to the centralized Network Operations Center (NOC) to monitor and support systems and applications district-wide.

BCSD also recognizes that both staff and student access to technology resources is extremely important. This is why the district has implemented a scheduled refresh cycle on all district-owned teacher and students' laptops and mobile devices. Additionally, Technology Services routinely refreshes network and infrastructure hardware based on manufacturer's suggested lifespans.

B. Overall Goal for Support Capacity

SDE Goal 5: The SDE, the school districts, and the schools will expand and support technology resources to assist educators and learners in meeting the state academic standards.

District Goal 5: BCSD will expand and support technology resources to assist educators and learners in meeting the state academic standards.

C. Objectives, Strategies and Action List to Reach Goal		
Objectives	Strategies	
Objective 5.1: BCSD will ensure that all students, including those with special needs, and teachers have access to digital information resources.	A) Conduct annual needs assessments and surveys to determine how technology is currently being utilized and to identify technology needs throughout the district	
	B) Promote and expand the use of web-based resources that will allow students to access content from any location	
	C) Collaborate with district special services department to ensure technology resources are readily available to students with special needs	
	D) Assign every BCSD teacher and student a unique login account that will allow access to various district and online resources	
Objective 5.2: BCSD will ensure that schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication,	 A) Provide high-capacity WAN connectivity between schools/sites and centralized data center. 	
data collection and distribution, and distance learning.	 B) Monitor bandwidth consumption and increase based upon instructional needs 	
	C) Increase wireless density throughout the district as needed	
	D) Utilize technologies that support secure, role based access to district resources	
	E) Ensure proper security measures are in place to protect and provide safe network access for all staff and students	
Objective 5.3: BCSD will have qualified technical support staff	A) Provide district-level technology support through systems, network, and security administrators	
	B) Support teachers and staff through a centralized help desk support center and electronic work order system that is accessible to all district employees	
	C) Provide school level support through Systems Support Specialists and Supervisors	
	D) Require that all Systems Support Specialists obtain industry-standard technology certifications	

Objective 5.4: BCSD will implement a disaster recovery plan for all points of failure, in LANs and WANs, including redundant data storage, robust automated backup, and immediate hardware recovery.	 A) Provide real-time replication of data and virtual servers to an off-site data center B) Expand the use of virtual server technology C) Utilize enterprise software for data backup and recovery D) Expand off-site disaster recovery capabilities E) Equip each school's main network closets with a generator-backed electrical circuit and adequate Uninterruptable Power Supplies (UPS) G) Provide each school with backup analog and cellular phone systems H) Utilize various tools to monitor network and server health
Objective 5.5: BCSD will provide obsolescence and upgrade plan to replace and recycle equipment and software.	A) Plan and budget for lifecycle replacements of other district-owned technology based upon the manufacturer's suggested equipment lifespan
Objective 5.6: BCSD will provide and support the district website, school sites, individual teacher websites, and learning management systems.	 A) Provide schools and teachers access to template- based website authoring tools B) Promote the use of online Learning Management Systems C) Continue on-going collaboration with BCSD special services department to ensure technology resources are readily available to students with special needs D) Expand the BCSD Virtual School Program

Action List	D. Action Implementation Steps
BCSD will provide access to network and online resources based upon assigned login credentials	 Utilize Microsoft Active Directory to group, organize, and manage all district user accounts
 BCSD will continue to expand its offering of content to all students and staff outside of the district network 	 Assign permissions for resources and content, both locally and online, to students and staff based on their assigned credentials
 BCSD will collaborate with all departments to ensure that the technology needs of all students, including these with engaging and being 	Continue to leverage and expand access to cloud-based resources
including those with special needs, are being met	Meet regularly with school and district leadership to assess student technology needs
BCSD will provide and monitor bandwidth to accommodate the instructional paceds of students and staff	Provide assistive technology and support
 BCSD will expand and upgrade its wireless 	 Provide high-capacity, fiber network connectivity between each school/site and the district's centralized data center
infrastructure to accommodate an increase of mobile devices and users	Utilize various network tools to analyze network
 BCSD will leverage various technologies to ensure a safe and secure environment for all staff and students 	traffic and system healthIncrease bandwidth as needed
BCSD will offer technical support to staff and students	Upgrade BCSD wireless infrastructure to increase density in classrooms and commons areas
BCSD will leverage various tools to ensure ongoing protection of critical data	 Install and centrally manage enterprise class endpoint protection on all district-owned computers and servers
BCSD will provide access to current technology resources	Utilize enterprise class firewalls and SC State
BCSD will provide and support web-hosting services to district, school and teacher websites	provided Intrusion Detection Systems (IDS) to provide an additional layer of protection against network threats and vulnerabilities
	Automatically deploy system and security updates to district-owned computers and servers
	Utilize theft recovery software to aide in the recovery of lost or stolen devices
	Protect students and staff from potentially harmful or inappropriate content through a CIPA compliant internet content filtering solutions
	Provide a centralized help desk and technology

work-order system for all BCSD employees Manage a centralized Network Operations Center, including a team of certified network and security administrators Provide technical support to each school or site through a team of certified Systems Support Specialists and Supervisors Perform routine backup audits to ensure all critical data is protected by enterprise level backup and recovery software Leverage virtual server technology to reduce costs and increase scalability Utilize a secondary Storage Area Network (SAN) at a remote disaster recovery site to ensure realtime replication of critical data Assess and expand offsite disaster recovery capabilities Continue the district's implemented refresh of district owned computers and mobile devices Plan and budget for lifecycle replacement of • other district-owned technology based upon the manufacturer's suggested equipment lifespan

E. Funding Considerations

- Annual budgeting for software licensing
- Annual budgeting for hardware additions, replacements and repairs
- Annual budgeting for technology infrastructure upgrades
- Instructional and Systems Support Staff
- Professional Development and Certification
- Assistive technology training and support

F. Evaluation of Objectives

	Possible Data Sources to		Outcomes		
Objectives	Be Used for Baseline	(Include "action list" items achieved.)			
Objectives	and Ongoing Evaluation and End- of-Program Report	2016	2017	2018	
 Objective 5.1: BCSD will ensure that all students, including those with special needs, and teachers have access to digital information resources. Objective 5.2: BCSD will ensure that schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks 	 District Technology Inventory Reporting from various network and systems monitoring tools Annual review of Technology Services Department personnel 				
that allow for communication, data collection and distribution, and distance learning. Objective 5.3: BCSD will have qualified technical support staff	 Professional development tracking and surveys Observations and interviews 				
 Objective 5.4: BCSD will provide a disaster recovery plan for all points of failure, in LANs and WANs, including redundant data storage, robust automated backup, and hardware recovery. Objective 5.5: BCSD will provide obsolescence and upgrade plan to replace and recycle equipment and software. 	 School technology and improvement plans Technology needs assessments surveys Budget Data District technology refresh policies 				
Objective 5.6: BCSD will provide and support the district website, school sites, individual teacher websites, and learning management systems.					

	VII. Cumulative Benchmarks
2015-2016	Evaluate and implement hardware for new high school
Spring 2016	Evaluate and implement teacher laptop refresh
Spring 2016	Revise adult and student AUPs.
2016-2017	Create technology skills checklist for student and teachers. Review and update annually.
July 2016	Refresh K-2 Devices
2016-2018	Data electronics refresh
January 2017	Review BCSD Technology Plan & AUP
2016-2017	Review and evaluate technology need reporting system
2016-2017	Review and evaluate refresh for local machines (desktops/labs)
2016-2019	Expand capabilities of the district's disaster recovery site.
2016-2019	Continue lifecycle refresh of all technology equipment.
2016-2019	Monitor district bandwidth needs. Increase as needed.
2017-2018	Review and evaluate mobile device refresh for students
January 2018	Review BCSD Technology Plan & AUP
January 2019	Review BCSD Technology Plan & AUP

VIII. Acknowledgements

Beaufort County School District would like to acknowledge and thank the following employees for their contribution to the district Technology Plan:

Mike Brandau – eRate Coordinator Colleen Beck Ungvarsky – Educational Technology Coordinator Mark Chauhan – Technology Services Officer Daniel Fallon – Director of Accountability Casey Farmer – iLearning Coordinator Lynette Green – Student Data Specialist Chrissy Robinson – Director of Educational Technology Mark Weech – Director of Network Operations

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X. Appendixes

Appendix 1: Teacher Technology Proviso Professional Development Plan

The following is an annual plan to be completed by teachers to meet Technology Proficiency as determined by the Beaufort County School District. At the end of a certified employees five year recertification window, Educational Technology will work directly with Human Resources and Instructional Services to verify an employee's completion of their technology proficiency. Human Resources will report an employee's proficiency level to the South Carolina Department of Education.

REQUIRED

- 1. Teachers complete an annual Needs Assessment by October 1st.
- Teachers whose certification expires at the end of the school year will complete and turn in a technology lesson to their tech coach by May 1st (Using district technology lesson plan template). Teachers, whose certification does not expire, will continue to integrate technology into curriculum maps.
- 3. Teachers will maintain a classroom webpage (see website expectations).
- 4. Teachers will participate in a minimum of 30 hours documented in My Learning Plan of instructional technology professional development over their 5 year certification period.

OPTIONAL

1. Teachers will set their own technology goal via their My Learning Plan Goal Based Evaluations to be reviewed by principals. (Principal's Choice)

DETAILS:

Needs Assessment—The Educational Technology Coaches will design and distribute a Technology Needs Assessment survey to each teacher at the beginning of the school year. All teachers should complete this assessment by October 1st. This will help Technology Coaches understand the needs of each staff member and assist in forming authentic, meaningful technology trainings.

Technology Lesson Plans—The technology lesson plans allow a time for teachers to reflect on how they are integrating technology into the curriculum. Teachers whose certification expires at the end of the school year will complete a formal lesson plan template (BCSD Technology Lesson Plan Template) and send this to assigned EdTech Coach by May 1st. This can be done at any point in the year.

Teachers whose certification does not expire at the end of the school year, will show how they integrate technology through their curriculum maps in Rubicon Atlas.

Classroom Website Development—All teachers will create and maintain a classroom webpage. All teachers will be required to have a profile page on the new school website platform. The profile page will give professional information about the teacher and contact information. BCSD Technology Plan 2016-2019

From their profile page, teachers will link to at least ONE of the following:

- 1. The district powered webpage platform to create a class webpage
- 2. The district supported learning management system to create class groups
- 3. A self-created website hosted by an external provider

NOTE:

Principals may dictate the expectations for their building from the 3 options above.

Professional Development Hours—Teachers will participate in at least 30 technology professional development hours over their 5 year certification period. Hours must be documents in My Learning Plan and the class must have a technology focus.

Goal Based Evaluations—Principal's may choose to utilize My Learning Plan and requiring their staff to create one personal technology goal for the year. These will be reviewed by principals during their annual goals meetings.

Appendix 2: District's Acceptable Use Policy

Adult AUP

Beaufort County School District Acceptable Use Policy for Technology

The Beaufort County School District makes a variety of communication and information technologies available to authorized users. When properly used, these technologies promote the District's instructional and business purposes. Illegal, unethical, or inappropriate use can have significant negative consequences for the District, its students, and its employees. This policy is intended to minimize the likelihood of such harm by setting standards which protect the District, its users, its data, and its systems.

Scope

This policy governs the use of all electronic systems owned, provided, or subscribed to by the District, including computers and computer-like devices, mobile devices, voice and data communication systems, networks, software, and services. It applies to all users (students and adults) of these systems, on or off District property, at all times.

District employees, contractors, and vendors will sign this policy prior to account access. Students are bound by an opt-out mechanism: parents not wishing for their child to be allowed access to computer networks, Internet, or other communication services must so indicate in writing to the school's Principal.

Under certain circumstances, the use of personally-owned computing and communication devices may be allowed on District property. These non-District-owned devices access District services, networks, data, and services, and as such are bound by this policy. Such devices are the sole responsibility of the owners.

Guest user access can be arranged for lecturers, program presenters, or other event-based needs by arrangement with Technology Services. The Technology Services Help Desk can provide credentials for such users who are bound by this policy. Guest access is limited in terms of Internet and file access.

Network and Internet General Usage

The District employs a variety of technology protection measures to secure and protect data and systems, including filtering Internet content. These protection measures are imperfect and cannot guarantee complete protection. Access to Technology resources is made available to authorized users in support of the District's instructional and business processes only. Any use of these resources which interferes with these processes is prohibited. Users of the District's technology systems assume all responsibility for use of the network access accounts issued to them, and for District technology assets issued to them or entrusted to their use and care.

The District prohibits the use of its resources to view, access, download, store, or transmit any material which is in violation of any District policy or rule, or violates any local, state, or federal law or regulation. Prohibited material includes but is not limited to:

- Obscenity or pornography
- Threats against persons or property
- Material which could reasonably be construed as harassing, bullying, or discriminatory
- Material used to further any commercial business, political party, or other organization not specifically endorsed or supported by the District

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- Material protected by copyright or trade secret; plagiarism
- Material which is potentially disruptive of the District's instructional and business processes, including viruses, malware, spam, and tools or software intended to bypass, interrupt, or disable District security, filtering, or data-protection measures

Prohibited activities include but are not limited to:

- Attempts to access data or services to which the user has no District-defined need or permission
- Attempts to bypass, interrupt, or disable District security, filtering, or data-protection measures; hacking
- Use of a network access account other than that issued to you, or allowing (by any means) use of your account by anyone else; impersonation, misrepresentation of identity
- Operating or using a non-District network on District property, such as rogue Wi-Fi, MiFi, mobile hot-spots, or other network technology
- Attaching any personally-owned device to the District's wired network
- Student use of a staff-owned personal device
- Transmission or transportation of confidential or privileged data (such as student information or records, personally-identifying information, District financial data, or personnel data) without authorization, or via a means which make the data subject to loss
- Use of District resources for personal monetary gain; conducting personal financial activities
- Use of District resources to send unsolicited messages unrelated to District business, chain messages, spam, or bulk messages
- Installing software not approved or allowed by Technology Services, particularly any which interfere with the intended operation of the system
- Alteration of or damage to District resources

Personally-owned Devices

The District has a specific wireless network configured for the use of personally-owned laptops or mobile computing devices. When on District property, users of personally-owned devices may access only this wireless network and no other network. This network allows filtered access to Internet, and no access to the District's business network.

Personally-owned devices are permitted on District property, but may only be used at the direction of a teacher or school administrator. All use during the school or work day must be clearly related instructional purposes. Administrators, Teachers, or Technology Services personnel may prohibit the use of personally-owned devices at any time.

Owners of these devices are solely responsible for the configuration, content, upkeep, and safety of their devices. The District will not assist with configuration, will not troubleshoot issues, and assumes no responsibility for function or safety.

Student Use of Electronic Communication Tools

Electronic communication tools, including, but not limited to, student email accounts, learning management platforms, or District-approved social networking sites, may be provided by the District. Students must abide by the guidelines established in this document while using all electronic communication tools. Students are only permitted to access email accounts provided by the district. Accessing personal email accounts is not allowed.

Student Internet access will be under the direction and guidance of a District staff member. In addition, all students in grades K-12 will receive instruction on Internet safety and cyberbullying each school year.

Confidentiality and Privacy

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Information considered to be confidential or personal should not be transmitted via District systems except via means designed or approved for that purpose by Technology Services. The District assumes no responsibility for lost or stolen personal information sent or received via or stored on District systems.

Any data stored on or communication transmitted via its systems should not be considered private. The District maintains the right to examine this information at any time.

Violations and Consequences

Users who observe or become aware of violations of this policy are required to report them to a teacher, administrator, supervisor, or Technology Services immediately. Failure to do so is itself a violation of this policy.

Upon discovery of violations or threats to the proper function of District systems, Technology Services will act to protect data and systems. User account access may be suspended to isolate threats. Account suspension will be communicated to the Principal (in the case of student involvement), to the Supervisor and Human Resources (in the case of employee involvement), or to the sponsoring department (in the case of a vendor or contractor).

Violation of this policy by District employees may result in disciplinary action up to and including dismissal. Disciplinary action is the responsibility of Human Resources. Typically, a first violation may be met with a suspension of access privileges and a formal reprimand. Second or subsequent violations may be dealt with more severely. Violation of this policy by students is within the scope of the Student Code of Conduct. The school's disciplinary process will be followed.

Violation of this policy by contractors, vendors, or other authorized users who are not District employees may result in revocation of access privilege or other consequence as defined by the District.

Exceptions:

Rapid advances in the state of technology and the District's interest in testing or evaluating new technologies may warrant temporary suspension of certain provisions of this policy. Technology Services will supervise and manage these exceptions during evaluation periods.

Technology Services personnel are exempt from certain provisions of this policy for diagnostic and troubleshooting purposes, provided these exceptions are within the scope of their professional responsibilities.

Limitation of Liability:

Beaufort County School District will not be responsible for damage or harm to persons, files, data, or hardware, including personally-owned devices.

The District employs security and filtering mechanisms and attempts to ensure their proper functioning, but can make no guarantee regarding their effectiveness.

I have read and understand the Beaufort County School District's Acceptable Use Policy for Technology.

Print Name

Signature

Date