Florence County School District Three Technology Plan

2016-2021

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EXECUTIVE SUMMARY

This document, *Florence County School District Three's Technology Plan 2016-2021, Technology & Learning*, provides the framework for explaining, monitoring, and evaluating Florence County School District Three's (FCSD3) pathway to continuous progress and advancement through technology implementation and integration. The past several years have brought about dramatic changes in technologies for teaching, learning and information management. From chalkboards to interactive Promethean boards, from overheads to multimedia digital projectors, and from library card catalogs to video streaming, the landscape of education has changed. And, with change comes the need to position our educational community so that we can leverage these changes for progress and improvement. This plan is designed to allow the district not merely to satisfy but to exceed the requirements established by the Education Oversight Committee (EOC) as well as those requirements set forth in the state strategic plan and those in ESSA (Every Students Succeeds Act).

The purpose of this plan is to set forth a direction for progress and improvement and to articulate a vision for a world-class education with modern technologies. This document provides an overview of the current state of technology in the district and presents the next steps toward providing our students with the best possible opportunities for modern learning and achievement.

The plan for 2016-2021 involves the advantages of many new forms of technology that address the need for increased productivity, increased learning opportunities, and accelerated progress in academic achievement. The move to a more learner-centered focus will utilize new and emerging technologies that can accommodate varied learning styles for streamlining differentiated instruction. Professional development will be elevated to the next level that exploits the power of technology-driven learning, such as the INTEL Teach to the Future course. Curriculum planning will continue to evolve to include technology as a natural element in teaching and learning; the curriculum must drive technology, not vice versa. When we no longer "see" technology in education, then we have progressed to the aim of transparent integration.

This plan addresses the five areas stipulated in The Telecommunication Act of 1996 and will be submitted to the State Department of Education for approval (see Appendix 4).

After setting the stage for the new strategic plan that uses goals-based, measurable activities, the plan presents five core technology dimensions that must be addressed in order for us to begin improving student achievement through the use of technology as an integrated tool. All strategic actions are designed to increase student achievement through the effective integration of technology into the core curriculum. Measurable goals, objectives and strategies, an action list, an evaluation plan, and an evaluation rubric are given for each core technology initiative.

The five core technology focus dimensions and the major goals set forth for these areas are as follows:

Technology Dimension 1: Learners and Their Environment
Goal: FCSD3 and its schools will use research-proven strategies to provide home, school, and community environments in order for our students' to achieve technological literacy by the end of the eighth grade and to raise the overall level of academic achievement.

Technology Dimension 2: Professional Capacity
Goal: FCSD3 will provide curriculum development and professional development to increase the competency of all FCSD3 educators so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

Technology Dimension 3: Instructional Capacity
Goal: FCSD3 will use current and emerging technologies to create learner-centered instructional environments that enhance academic achievement.

Technology Dimension 4: Community Connections
Goal: FCSD3 will increase student achievement through the use of technology, including assistive technology, by maximizing community involvement.

Technology Dimension 5: Support Capacity
Goal: FCSD3 will expand and support technology resources to assist educators and learners in meeting the state academic standards.

Each of these goals is followed by recommended implementation strategies and considerations that reflect aspects of the particular core dimension. Provided at the end of the five dimensions sections in the document is a cumulative list of benchmarks that are crafted to enable the technology planning committee to validate progress on an annual basis. Ensuring accountability, increasing access, and funding strategies are addressed after the operational plan.

The Executive Writing Committee has infused several mechanisms for the soliciting of feedback for plan modifications on an ongoing basis. The plan will be reviewed annually, and the collected data will be used to make decisions regarding improvement and change. This plan is a dynamic document designed to be flexible and updated to support continuous growth and progress.

DISTRICT PROFILE

Florence County School District Three (FCSD3) is located in the Pee Dee region of the state. The second largest of the five school districts in Florence County, Florence Three encompasses the towns of Lake City, Coward, Scranton, and Olanta.

The eight regular schools in FCSD3 serve a district encompassing approximately 3,700 students. There are currently five elementary schools, one intermediate school, one junior high school, and one high school in the district. Enrollment ranges from approximately 250 students at the smallest school to approximately 900 at the largest school. Elementary schools include Lake City Early Childhood Center, Main Street Elementary, J.C. Lynch Elementary, Scranton Elementary and Olanta Elementary Schools. J. Paul Truluck Intermediate School is grade six and Ronald E. McNair Junior High School is grades seven and eighth. Lake City Comprehensive High School is the only high school located in the district.

Districtwide FCSD3 has a Free-Reduced lunch percentage rate of approximately 84%. According to the State Department's website (E-rate) Free-Reduced lunch percentages at the individual schools are as follows: Lake City Early Childhood Center (93%), Main Street Elementary (95%), J. C. Lynch Elementary (88%), Scranton Elementary (78%), Olanta Elementary (91%), J. Paul Truluck Intermediate School (88%), Ronald E. McNair Middle School (92%), and Lake City High School (83%). The current district E-rate discount is 85%.

DISTRICT NEEDS ASSESSMENT

Florence County School District Three employs a wide variety of technology in its five elementary schools, one intermediate school, one junior high, one high school and other locations (such as the Alternative School, District Office, Office of Early Childhood and Adult Education, and Office of Exceptional Children). Conscientious efforts have been made to enforce technology standards while recognizing and accommodating the unique needs of special programs and circumstances that vary widely from one location to the next.

The district has a well-planned and well-managed wide area network (WAN), and all classrooms in the district have been connected to the district WAN. All locations also have wireless access to the district's WAN. Currently, in the district's elementary, middle and high school buildings, there are 242 classrooms located inside permanent school buildings with 242 (100%) of them having network access either through network drops or wireless network access. In addition, there are 25 classrooms located in portable buildings and 13 classroom labs. In those 13 labs, there are at least 20 networked computers.

Providing computer labs for group instruction at all levels has been addressed both through dedicated lab facilities and through mobile labs of laptops.

The operating system for all district computers is Windows 7. Standard software includes components of the Microsoft Office Suite. Specialized curriculum software includes IReady (reading and math) and Reading Counts. Administrative software includes PowerSchool, Echo, Microsoft Office Suite and PowerTeacher.

Information on the district and individual schools is available to the community in a variety of ways. The district website (www.florence3.k12.sc.us) provides general information and links to all school websites. All district schools have individual websites hosted through School InSites. The district currently provides for teachers a web-based course enabling the creation of teacher websites which provide direct access for students and parents to homework assignments, classroom policy, student work, news and teacher contact information. In addition, the district and schools utilize School Messenger, social media and PowerSchool Parent Portal to inform parents of their children's absences from school and other important information.

The districtwide implementation of the Cisco VoIP telephone network provides the district with centralized district management, and the ability to generate reports of inbound and outbound calling. Through the use of Cisco IP management software and equipment a wide variety of features are available to our customers as well as all district and school employees. The Cisco VolP phones allow for four-digit, intradistrict communication between all district employees and increased communication among teachers, students, and parents by allowing teachers to place and receive calls during designated call times from every classroom. The number of phone lines available in the district varies based on location, size and program offerings. The Office of Technology, along with other administration, determines the number of phone lines for each location.

All full-time district employees and all students in grades 7-12 have email accounts. Because the email is web-based, it is accessible from anywhere the employee or student has web access. Increasingly district communications are relying upon technology, and many principals communicate with their staff via email.

The FCSD3 Acceptable Use Policy and other district policy statements address such issues as copyright, school websites and teacher websites. (See Appendix 3)

With nearly 3,500 network-connected devices in the district, timely support has been a challenge and improving response time is a primary focus. The district uses IT Direct, a web-based work order system, which assists in the management of computer-related incidents, audio visual and

telecommunications equipment; thereby eliminating the process of manual work orders and phone calls. This has reduced the response time in which work orders are received and processed.

Many factors combined to achieve this progress. Instructional Technology school-based personnel serve as the first line of support. The number of technicians providing service to district locations was reduced from four (4) to three (3). In addition, the standardization of district equipment contributes greatly toward increased efficiency. New computers must conform to district standards, which include a three-year manufacturer warranty as well as pre-loaded software. Due to the rapid pace of advances in hardware and software, the current standards are maintained in the Office of Technology. Compliance with standards is assured by providing a central clearinghouse for technology purchases.

Increased standardization of our infrastructure is assured by the district's long-term contract with a limited number of vendors to provide the necessary design and cabling services for all district projects.

E-rate funds have been and continue to be utilized effectively for telecommunication services and for internal connectivity in the district. The district has qualified for and has received E-rate funds every year since the inception of the E-rate program. The district has received E-Rate funds as follows: $58,319.86 in 2014, $70,636.93 in 2013, $76,532.48 in 2012 and $303,110.42 in 2011. The district funding required for completion of our E-rate projects (the "match") has fluctuated between 85% and 90%, but with changes to E-rate reimbursement rates, it is now 85%.

When applying for e-rate for an eligible project, it is necessary to identify all the necessary resources to pay the remaining cost of services after the discount is applied and to attest in the filing that sufficient funds have been earmarked for that purpose. To maximize return, e-rate project applications are posted for the district with qualifying FRN percentages (based on number of students eligible for free and reduced lunch). Constant monitoring of construction plans and timelines, assessing school needs, and communication with district personnel have allowed the e-rate program to function effectively in the district.

The district filters all internet access centrally utilizing Lightspeed Total Traffic Control filtering software, which is regularly updated by the supplier. In addition, a process is in place for school-based personnel to request that specific sites be blocked or unblocked via a work order process. Such requests are routed to the Office of Technology who usually responds within 24-hours to each request. Appropriate blocking or unblocking action is taken by manually updating the filtering software. With these safeguards, the district is compliant with the Children's internet Protection Act (CIPA).

PowerSchool is implemented districtwide and is used by all district schools for student enrollment, attendance, grade reporting, transcripts, scheduling and the creation of state-mandated reports.

FSD3 utilizes Enrich Assess, a web-based educational software solution designed to manage student data (formerly known as Test View) for data storage. Standardized test results, attendance, discipline, transcript, and grade reports can be accessed from the Enrich database. Enrich Assess unique features will allow teachers and administrators to monitor the progress and achievement of all students in a user-friendly atmosphere.

The District's Smart Fusion Package features software that supports the following administrative areas: Finance, Fixed Assets, Human Resources, Payroll, Purchasing and the Supplies Warehouse. In addition, provides in-district-developed systems to support communications mailings, transportation field trip request/permits, school and department reports as well as surveys.

DISTRICT MISSION STATEMENT

The Mission of Florence County School District Three's technology program is to ensure that all students are college and/or career ready.

DISTRICT VISION

If technology is to realize its powerful potential for improving education in FCSD3, it must be used for more than just automating the traditional methods and practices of teaching.

Rather than the computer simply being a tool which allows a common task to be done more efficiently, technology must fundamentally change how instruction is delivered, how student performance is measured, and how teachers view themselves as professionals. Technology is used to actually restructure the educational process to allow it to do things it has never been able to do before. These include using technology to ensure that:

- All students, including those with special needs, master the basic skills of writing, reading and computation.
- All students, including those with special needs, practice authentic information literacy and research skills, and the higher order thinking skills inherent in them.
- All students, including those with special needs, have access to top quality resources, including human resources, regardless of location.
- All teachers can use technology to provide students and parents
  - individualized education plans,
  - continuous feedback on how well students are meeting their learning goals, and
  - opportunities for virtual student performance assessments.

- All teachers, administrators and staff have the tools and ability:
  - to locate the research findings that will guide their use of technology, and
  - to collect the data that measures the effectiveness of their practices.
- The maximum amount of financial resources can be spent on student resources by reducing administrative costs through effective technology use.

DISTRICT BELIEFS

The basic beliefs of the district technology advisory committee concerning the use of technology by students, staff, parents, business and community include:

- ✓ Technology is a means to an end, not an end in itself.
- ✓ The use of technology must be ethical, safe, secure and equitable.
- ✓ All technology efforts must be designed to meet measurable educational and administrative outcomes and must be assessed.
- ✓ The use of technology to access, process, and communicate information is an essential skill that must be acquired by students and modeled by staff.
- ✓ Technology must be networked throughout the district and community in order to provide adequate information accessing, processing and communication.
- ✓ Technology is required for effective school district administration, planning and decision-making.
- ✓ Technology skills should be integrated throughout the curriculum and at all grade levels.
- ✓ Effective technology modeling by staff requires adequate resources: i.e., equipment, software, training, time and incentives.
- ✓ Technology planning must be a coordinated effort between building teams and district administration with input by all persons affected by the plans.
- ✓ The use of technology, by promoting student-centered learning, will have a strong, positive influence on achievement.

DISTRICT LONG RANGE PROGRAM GOALS

1. All students, including those with special needs, will demonstrate the mastered use of technology to access, process, organize, communicate, and evaluate information in order to answer questions and solve problems.

2. Technology will be used to provide the most current, accurate and extensive information resources possible to all learners in the district and community in a cost effective and reliable manner at maximum convenience to the user.

3. All district teachers will have the technology training, skills and resources needed to ensure that students, including those with special needs, will meet local, state and federal

learning objectives and have the technological means to assess and record student progress.

4. The district will use technology to improve its administrative effectiveness through efficient communication, planning and record keeping.

5. The district will have a reliable, cost-effective, and secure technology infrastructure that supports the learning, teaching, and administrative goals of the district.

OVERVIEW OF THE TECHNOLOGY DIMENSIONS

Florence County School District Three's Technology Focus Group adopted the state's choice of *Technology in American Schools: Seven Dimensions for Gauging Progress – A Policymaker's Guide*, published by Milken Exchange on Education Technology (Lemke and Coughlin, 1998), to provide a planning framework that not only would be adequate for FCSD3's needs but also would align with the core belief statements of the previous district technology plan.

The seven Milken dimensions of progress – "Learners," "Learning Environments," "Professional Competency," "System Capacity," "Community Connections," " Technology Capacity," and "Accountability" (Lemke and Coughlin, 1998, p. 3) – are regarded as synergistic parts of a single system. The framework they create emphasizes a combination of critical elements that are necessary for a school district and/or school to effectively use technology to accelerate student achievement and learning. Our goal is also to more towards more of a blending learning environment was emphasized in ESSA (Every Student Succeeds ACT).

In seeking to tailor the Milken framework to fit the current and future needs of South Carolina, the state's Executive Writing Committee paid particular attention to recent trends affecting education, particularly the goals of the South Carolina Education Oversight Committee (EOC). In addition, in its South Carolina's Progress Toward the 2020 Vision, the EOC had set the following goal: "By 2020 all students will graduate with knowledge and skills necessary to compete successfully in the global economy, participate in a democratic society and contribute positively as members of families and communities." (EOC, 2013, p. 1).

With these facts in mind, the Executive Writing Committee modified the Milken dimensions of progress to create for the South Carolina technology plan a framework of five dimensions that closely align with three of the nine "areas for public action" enumerated in the EOC long-range plan: "Early Childhood Education and Development," "Parental Support and Involvement," and "Safe and Healthy Schools" (EOC, 2008, p. 1). These five technology dimensions goals of improving student achievement in the core curriculum through technology proficiency and encouraging the effective integration of technology resources and systems through teacher training and curriculum development. The five dimensions also support

the state strategic plan as well as the teacher technology proficiency proviso. FCSD3 has adopted these five dimensions as follows.

THE FIVE DIMENSIONS

Learners and Their Environment: This dimension emphasizes helping students use technology in ways that advance their understanding of the content in the state curriculum standards while improving their real-life problem-solving and inquiry skills. The environment should be one of shared learning and should be designed to enhance student academic achievement through scientifically based learning practices and modern technologies.

Professional Capacity: This dimension emphasizes strategies to develop ongoing and sustained professional development programs for all educators—teachers, principals, administrators and school library media personnel. Utilizing a broad definition for the term *professional capacity*, this dimension is also aligned with the EOC action area called "Leadership and Coalition Building."

Instructional Capacity: This dimension is the Executive Writing Committee's further refinement of the Milken dimension "Professional Competency." South Carolina's "Instructional Capacity" dimension specifically targets the development of strategies to integrate technology into curricula and teaching and also explores ways to promote teaching methods that are based on solid and relevant scientific research. This dimension also aligns with the EOC action area "Teacher Quality."

Community Connections: This dimension emphasizes strategies for the development of partnerships and collaborative efforts to support technology-related activities and to maximize community involvement in education. This dimension promotes school and district partnerships with such entities as private schools, higher education institutions, public libraries, museums, nonprofit organizations, adult literacy providers, and business and industry in ways that will increase student achievement and teacher technology proficiency. This dimension aligns with the EOC action areas "Education for Economic Development" and "Community and Parental Support and Involvement."

Support Capacity: This dimension seeks to combine the Milken progress dimensions "Technology Capacity" and "System Capacity." South Carolina's "Support Capacity" dimension emphasizes the development of strategies to provide the necessary physical infrastructure and supporting resources such as services, software and other electronically delivered learning materials, and

print resources in order to ensure efficient and effective uses of technology. This dimension aligns with the EOC action areas “The Governance and Structure of the System” and “Efficient Use of Resources and Accountability.”

On the following pages of this document, operational plans for the individual technology dimensions are proposed. The process of developing these plans began with the identification of South Carolina’s current needs and future directions by a group of the state’s educators and community members. The group then analyzed these needs to create action plans with measurable goals, which they chiseled into separate objectives. Action lists to monitor progress were also created. Each objective was then correlated with evaluation criteria. FCSD3 has adopted and modified each component area of the dimensions to fit our individual district and has developed rubrics to use for annual evaluation (see Appendix 5).

TECHNOLOGY DIMENSION 1

LEARNERS AND THEIR ENVIRONMENT

GOAL: Florence County School District Three (FCSD3) and its schools will use research-proven strategies to provide a technologically enhanced environment in order for our students to become technologically literate by the end of the eighth grade and to raise the overall level of academic achievement.

SNAPSHOT OF CURRENT TECHNOLOGY USE

It is the mission of FCSD3 to ensure that all students are college and/or career ready. One of the goals the district set to fulfill its mission was to provide instructional programs that enable all students to acquire the knowledge and skills necessary to be prepared for the future. The district wide long-range plan provides us with consistent standards and equitable resources to improve learning for all students through the use of technology.

Our technology plan was developed to maintain flexibility and to address future developments in education that affect student achievement, such as the ESSA legislation. Technology resources throughout the district include updated media centers with automated circulation systems, internet accessible computers and staff-development as needed to integrate technology into the curriculum according to the South Carolina Curriculum Standards. All schools and individual classrooms in the district are internet accessible to provide integration of technology into the curriculum, and we are continuing the purchase of computers and other technological learning devices to assist with technology instruction.

Heavy emphasis has been and continues to be placed on helping students master the state academic standards, and technology is a major key to this effort. As evidenced by the Mentor software program and other instructional aids, integrating technology into the core curriculum is a major focus of technology initiatives in the district. Both the district office staff and the school administrators partner to ensure that technology is integrated throughout the curriculum rather than being isolated as a stand-alone tool.

State and federal grants have encouraged the innovative implementation of technology in the classroom to address state standards and increase student achievement. In addition, accountability and measurement of technology's impact in the schools have become a major area of focus. FCSD3 teachers, having a strong desire to use the skills they have acquired through professional development opportunities, are receptive to the idea of integrating technology not only into the core curriculum but into all curricula. FCSD3's students are being prepared for the 21st century's learning environment and the hands-on technology applications and project-based learning that it offers.

To continue maximizing student achievement, the learning environment must continue to be accessible and accountable for all students. With the use of grants and other technology funding, FCSD3 will ensure that its students are technologically literate according to the International Society for Technology Education's (ISTE) standards by the eighth grade and that their level of academic achievement has increased.

OPERATIONAL PLAN

I. OBJECTIVES AND STRATEGIES

GOAL: Florence County School District Three and its schools will provide a technologically enhanced environment for our students to become technologically literate by the end of the eighth grade and to raise the overall level of academic achievement.

Objectives	Strategies
1.1 Students will use technology to gather information and identify information needed to solve an information problem.	A. Use electronic resources to search effectively and retrieve information, such as Bing and Google. B. Provide network access to electronic databases (ex: DISCUS).
1.2 Students will evaluate the accuracy, relevance, appropriateness, and bias of electronic information sources.	A. Demonstrate an understanding of copyright by citing sources of copyrighted materials in papers, projects and multimedia presentations. B. Practice ethical behavior in using computer-based technology for class assignments and projects.
1.3 Students will use telecommunications efficiently to access remote information, and to communicate with others in support of direct and independent learning skills that are aligned with the state standards.	A. Use telecommunications to share and publish information (i.e., email Pen Pals). B. Evaluate information found via telecommunications for appropriateness, content and usefulness (i.e., Telecommunications Check sheet) C. Use School InSites for website access.
1.4 Students will select the appropriate technology tools for individual and collaborative writing, communicating, and publishing activities to create knowledge products for audiences inside and outside the classroom.	A. Use word processing and/or desktop publishing for a variety of writing assignments/projects. B. Select and use technological tools for classroom assignments, projects and presentations. C. Create a multimedia project as a group and/or class.
1.5 Students will use developmentally appropriate multimedia resources to work cooperatively and collaboratively with peers, family and community to support learning.	A. Research, create, publish, and present projects related to content areas using a variety of technological tools (i.e., "The Rise and Fall of Tobacco") B. Use word processing, desktop publishing, PowerPoint presentations for assignments and projects.

II. ACTION LIST

1. The district should continue to provide a communications network which will include comprehensive local area networks within all sites, schools and administrative offices; and gateway access to a variety of outside agencies and resources.
2. The district should provide technology to enhance the instructional program so that student achievement will improve.
3. Schools should ensure that each classroom is up to the state recommended level of at least five computers per classroom, as funds permit.
4. The district and schools should update computer labs with the latest hardware and software, as funds are available.
5. Schools will select instructional software and courseware which assists in the implementation of the curriculum.
6. Schools will provide access to multimedia equipment such as TV, DVD, digital projectors, and/or other technological tools.
7. Schools will ensure the ethical use of technology through our AUP's and monitoring.
8. The district will provide access to email and internet to improve communication between the schools, students and community.
9. The district will implement strategies to address the use of technology, including assistive technology, to support direct and independent learning skills aligned to the state standards.

6. IMPLEMENTATION ACTION STEPS

DISTRICT

1. Assign the Technology Department to install new software and courseware and to ensure that each school is technologically efficient.
2. Assign technology coaches, as funds are available, to ensure that technology is implemented and aligned with the state standards and used with the classroom curriculum.
3. Maintain functional district and school websites to support collaborative learning between teachers, students, parents and community.

SCHOOLS

1. Provide technological tools that will allow students to showcase their classroom assignments, projects and presentations.
2. Provide access to teacher websites, including assistive technology, to promote communication between community, parents, teachers and students.
3. Provide professional development to ensure that teachers use innovative technological strategies which support the curriculum.

I. FUNDING CONSIDERATIONS

DISTRICT

- Standards-based technology resources
- Technology coaches
- Technology support team staff
- Technology professional development for teachers

SCHOOLS

- Standards-based technology resources
- Technology coaches
- Technology professional development for teachers

II. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JUNE 2017	JUNE 2018	JUNE 2019	JUNE 2020	JUNE 2021
1.1 Students will use technology to gather information and identify information needed to solve an information problem.	On-line teacher and student assessments School InSites ethical report and usage report State Standards Checklist Technology surveys District, School and Community surveys	Teacher and Student portfolios School InSites ethical report and usage report State Standards Checklist Technology surveys District, School and Community surveys Observations					
1.2 Students will evaluate the accuracy, relevance, appropriateness, and bias of electronic information sources.							
1.3 Students will use telecommunications efficiently to access remote information, communicate with others in support of direct and independent learning skills that are aligned with the state standards.							
1.4 Students will select the appropriate technology tools for individual and collaborative writing, communicating, and publishing activities to create knowledge products for audiences inside and outside the classroom.							
1.5 Students will use developmentally appropriate multi media resources to work cooperatively and collaboratively with peers, family and community to support learning.							

TECHNOLOGY DIMENSION 2

PROFESSIONAL CAPACITY

GOAL: Florence County School District 3 (FCSD3) will provide professional and curriculum development to increase the proficiency of all FCSD3 educators so that the effective integration of instructional technology systems can be used to improve student achievement.

SNAPSHOT OF CURRENT TECHNOLOGY USE

FCSD3 is committed to professional development by supplying resources and training to enable its educators to use technology effectively. Educators are surveyed each year, the results analyzed and professional development courses are offered to meet their needs as well as to meet the requirements of the State's Proviso 1A.20. All teachers are currently required to provide documentation that they are technologically proficient during each recertification cycle.

Funding for professional development is provided directly to FCSD3 by the state's School Technology initiative and through the PDSI. The State Technology initiative training includes Cisco courses, PowerSchool, internet development courses and Microsoft training courses. Formula grant training includes graduate-level and recertification courses for teachers and administrators. FCSD3 reports training and expenditures according to the guidelines of the Office of Technology. In addition to these sources of funds, Title II funds have been used to provide technology courses, as requested, for teachers.

In addition to professional development courses, attendance at the EdTech Conference, SCASL Conference, and Lexile Conferences are encouraged and provided for all Media Specialists through the formula grant, Technology Initiative and Title II funds.

Professional development in FCSD3 will be a long-term commitment so that greater teacher proficiency and increased student performance can be realized.

OPERATIONAL PLAN

I. OBJCTIVES AND STRATEGIES

GOAL: Florence County School District 3 (FCSD3) will provide professional and curriculum development to increase the competency of all FCSD3 educators
so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

Objectives	Strategies
2.1 FCSD3 educators will achieve and demonstrate proficiency in integrating state-recommended instructional technology standards to increase student achievement.	A. Seek and hire teachers who demonstrate proficiency in integrating instructional technology standards. B. Require teachers to demonstrate ongoing proficiency in integrating instructional technology standards (i.e., Intel course). C. Adopt a district technology plan to include professional development that serves as a guide for teachers to progress from current levels of ability to full proficiency.
2.2 FCSD3 will provide schools with technology leadership to focus on making significant instructional and administrative impact for students, teachers and administrators.	A. Appoint full-time technology coaches and multidimensional technology leadership to assist with basic technology skills and the integration of technology into classroom instruction. B. Require that technology coaches provide training and consultation to all certified personnel in order to meet state technology standards.
2.3 FCSD3 will plan for professional development to ensure that teachers and district staff are trained to use technology for learning enhancement, including assistive technology.	A. Develop and submit a technology plan under the leadership of the district technology team. B. Provide professional training for district teachers and staff to evaluate software in order to make decisions that ensure the promotion of higher order thinking skills for all students.
2.4 FCSD3 will provide schools with information and training in technology integration in order that teachers can use research-based best-practice instructional methods.	A. Provide professional development in a variety of methods to address district technology needs. B. Promote technology integration throughout the PreK-12 curriculum.
2.5 FCSD3 will assess the effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement.	A. Administer district wide needs assessment to teachers and administrators to determine current levels of professional development. B. Evaluate professional development opportunities.

II. ACTION LIST

1. FCSD3 will hire or appoint leadership for the use of technology, including assistive technology, to increase student learning, as funds permit.
2. FCSD3 will utilize the expertise of staff and faculty members in the district as well as consultants.
3. Grants will be written in order to provide funds for hiring technology coaches.
4. Assistive technology specialists will be hired, as funds permit.
5. A technology plan will be submitted to the State Department of Education that documents site-based input and includes a technology professional development plan.
6. FCSD3 will provide training to assist administrators in evaluating a teachers' ability to integrate technology, including assistive technology, into the curriculum.
7. FCSD3 will provide training for assistive technology teams in assistive-technology assessment, options and curriculum integration.
8. Assistive technology teams will provide training for teachers in using assistive technology tools.
9. Teachers will keep electronic portfolios that include sample lesson plans that show increased technology integration across the core content areas to align with state academic standards.
10. FCSD3 will provide documentation of teacher technology portfolio data.
11. FCSD3 will provide an instructional technology assessment tool to determine teachers level of technology proficiency.
12. FCSD3 will continue to work with the legislature and other entities in order to secure funding for technology and training.

III. IMPLEMENTATION ACTION STEPS

DISTRICT

Florence County School District 3 will submit a technology plan which will include a technology professional development plan to the Office of Technology for approval.

1. FCSD3 will administer a technology professional development assessment to administrators and teachers to determine current training needs and to create the district technology professional development plan based on the results of the assessment.
2. FCSD3 personnel will participate in ongoing, sustained, professional development offerings with documentation in the form of a log and/or journal for each course, workshop, event, conference, etc.
3. FCSD3 will initiate partnerships with community entities to create greater access to technology and including assistive technology.

4. FCSD3 will evaluate and adjust technology professional development plans as indicated by needs assessments.

SCHOOLS

1. FCSD3 schools will hire or appoint a school technology coach who is knowledgeable about assistive technologies for each school and will submit training and needs reports to the Superintendent.
2. FCSD3 schools will monitor and adjust professional development in technology as indicated by needs assessments.

IV. FUNDING CONSIDERATIONS

DISTRICT

- Committee development of professional development plans
- Committee development of district and school technology plans
- Professional development needs-assessment tool
- Evaluation tools to measure the impact and effectiveness of technology professional development
- Evaluation methods to help show the impact of programs and initiatives
- Scientifically-based research programs

SCHOOLS

- Committee development of district and school technology plans
- School technology leader salary supplement
- Professional development needs-assessment tools
- Scientifically-based research programs
- Technology Coaches

V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JUNE 2017	JUNE 2018	JUNE 2019	JUNE 2020	JUNE 2021
2.1 FCSD3 educators will demonstrate proficiency in integrating state-recommended instructional technology standards to increase student achievement.	Teacher technology proficiency proviso forms Professional development surveys Online Technology Self-survey Teacher and administrator portfolios School technology and improvement plans Technology assessments	Professional development tracking and surveys Teacher technology proficiency proviso forms Online Technology Self-Survey Teacher and administrator portfolios Observations and interviews Anecdotal records Documented access to online resources Technology assessments					
2.2 FCSD3 will provide the schools with technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers and administrators.							
2.3 FCSD3 will plan for professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology, to enhance learning.							
2.4 FCSD3 will provide schools with information and training in technology integration so that teachers can use research-based, best-practice instructional methods throughout the curriculum.							
2.5 FCSD3 will assess the overall effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement							

TECHNOLOGY DIMENSION 3

INSTRUCTIONAL CAPACITY

GOAL: Florence County School District Three (FCSD3) will use current and emerging technology to create learner-centered, instructional environments that enhance academic achievement.

SNAPSHOT OF CURRENT TECHNOLOGY USE

Over the past several years, FCSD3 has made steady strides in acquiring instructional technologies and in using these learning tools wisely to increase student achievement. Grants continue to provide funds for increased access to technologies such as digital cameras, digital camcorders, scanners, personal digital assistants, and laptops as well as subject-specific tools such as science probes.

All FCSD3 Media Centers and schools have access to and utilize United Streaming and DISCUS, the state's virtual library that is available to all internet users in the state. DISCUS resources include popular periodical articles, professional periodicals, newspapers, encyclopedias and other reference publications, government documents, lesson plans, maps, photographs and historic documents.

In addition, FCSD3 takes advantage of E-rate discounts for internal connections, which include local phone service, servers, switches, cabling and wireless access points.

All teachers have at least one computer in their classroom and have network connectivity in their classrooms, and all teachers are offered professional development courses dealing with technology.

OPERATIONAL PLAN

I. OBJECTIVES AND STRATEGIES

GOAL: FCSD3 and its schools will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

Objectives	Strategies
3.1 FCSD3 will develop a technology framework for local planning that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.	A. Ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies (including the range of assistive technology options) to significantly impact teaching and learning. B. Facilitate the use of technologies to support and enhance instructional methods (including the use of hardware, software and assistive technology) that develop higher-level thinking, decision-making and problem-solving skills.
3.2 FCSD3 and its schools will provide teachers with the technology resources, including assistive technology, necessary to increase academic achievement by engaging students in active learning.	Provide teachers with access to knowledgeable personnel, productivity tools, online services, media-based instructional materials, and primary sources of data in settings that enrich and extend teaching goals.
3.3 FCSD3 will provide the students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule.	Provide students with access to technology, online services and media-based instructional materials, allowing them to select appropriate tools that will enrich and extend their learning.
3.4 FCSD3 will provide and support a variety of multimedia equipment and software for teaching and learning.	A. Communicate via the district technology plan a vision for multimedia infrastructure designed to support instruction. B. Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives.

II. ACTION LIST

1. FCSD3 should conduct technology planning meetings to address curricular design, instructional needs of all teachers, instructional strategies and appropriate learning environments.
2. FCSD3 should conduct technology planning meetings to address the inclusion of appropriate assistive technology into curricular design, instructional strategies and learning environments (general and special education).
3. FCSD3 should pursue funding opportunities such as grants to provide funds to acquire and maintain hardware and software for use in classroom instruction.
4. FCSD3 should pursue funding opportunities such as grants to acquire and maintain assistive technology for use in classroom instruction and for home access, when appropriate.

III. IMPLEMENTATION ACTION STEPS

DISTRICT

1. Conduct technology curriculum planning meetings.
2. Include an instructional technology component and an assistive technology component in the technology plan to be submitted to the Office of Technology for approval.
3. Create methods of gauging technology readiness.
4. Evaluate hardware and software for desirable student outcomes and standardize selection, when appropriate.
5. Designate technology leaders.
6. Participate in ongoing, sustained professional development offerings, maintaining a log and a journal for each course, workshop, event, conference, etc.
7. Initiate partnerships with community entities to create greater access to technology and a community learning environment.
8. Pursue funding opportunities such as grants to acquire and maintain hardware, instructional software and assistive technology.
9. Pursue the delivery of courses for students and professional development courses for teachers via innovative methods.

SCHOOLS

1. Conduct technology curriculum planning meetings.
2. Hire or appoint a school technology coach who is knowledgeable about assistive technologies for each school and who will submit training and needs reports to the regional technology specialist and/or Superintendent.
3. Evaluate teacher and administrator portfolios to measure the impact of technology integration, including assistive technology, on student achievement.
4. Interview students to assess information literacy and the integration of technology into the classroom.
5. Pursue funding opportunities such as grants to acquire and maintain hardware, instructional software and assistive technology.

IV. FUNDING CONSIDERATIONS

DISTRICT

- Committee development of district and school technology plans.
- Evaluation tools to measure the impact and effectiveness of the integration of technology with regard to student achievement.
- Evaluation experts to help show the impact of programs and initiatives.
- Scientifically-based research.
- Distance learning.
- School technology leader implementation.
- Professional development.

SCHOOLS

- Committee development of district and school technology plans.
- School technology leader implementation.
- Professional development needs assessment tools.
- Evaluation tools to measure the impact and effectiveness of the integration of technology with regard to student achievement.
- Evaluation experts to help show the impact of programs and initiatives.
- Scientifically-based research.
- Professional development.

V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JUNE 2017	JUNE 2018	JUNE 2019	JUNE 2020	JUNE 2021
3.1 FCSD3 will develop a technology framework for local planning that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.	Statewide achievement test scores Technology readiness and access surveys District report cards Teacher technology proficiency proviso forms Teacher and administrator portfolios School technology and improvement plans Technology assessments Documentation of offerings provided via innovative delivery methods	Statewide achievement test scores District report cards Technology readiness and access surveys Teacher technology proficiency proviso forms Teacher and administrator portfolios Observations and interviews Anecdotal records Documented access to online resources Technology assessments Documentation of offerings provided via innovative delivery methods					
3.2 FCSD3 and its schools will provide teachers with the technology resources, including assistive technology, necessary to increase academic achievement by engaging students in active learning.							
3.3 FCSD3 and its schools will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule.							
3.4 FCSD3 will provide and support a variety of multimedia equipment and software for teaching and learning.							

TECHNOLOGY DIMENSION 4

COMMUNITY CONNECTIONS

GOAL: Florence County School District Three (FCSD3) and its schools will increase student achievement through the use of technology, including assistive technology, by maximizing community involvement and community partnerships**.**

SNAPSHOT OF CURRENT TECHNOLOGY USE

Computer labs, media centers, and classrooms are the primary technology resources available to the community beyond the school day. FCSD3 and its schools have employed various strategies to provide students, parents and community members with after-hours access to technology.

Major methods of communication between the home and the school and community are email, telephone, voicemail, websites and social media. Most all schools employ either a before-school or an after-school program to help students with classwork or homework; most programs include a parent involvement component. Most schools even have a Parent Center in place where parents can use a computer with an internet connection. All teachers have class websites through School InSites that list homework, assignments and important events. Adult Education continues to offer free technology classes to senior citizens.

OPERATIONAL PLAN

1. OBJECTIVES AND STRATEGIES

Florence County School District Three (FCSD3) and its schools will increase student achievement through the use of technology, including assistive technology, by maximizing community involvement and community partnerships.

Objectives	Strategies
4.1 The school district will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement and outcomes. (The term *community* includes parents, businesses, state and local agencies, nonprofit groups and institutions of higher education.)	A. Form district-community partnerships to provide students with real experiences with the use of technology, including assistive technology that enhances academic achievement. B. Form district-community partnerships to help research and evaluate school and district projects.
4.2 The school district will utilize all resources by collaboration and support of state-supported organizations and institutions.	A. Utilize the South Carolina: Teaching, Learning, Connecting Web portal (http://www.sctlc.com) to communicate with other districts and to generate ideas. B. Partner with other school districts and community entities to provide assistive technology demonstrations, equipment loans, and assessments for students with special needs.
4.3 The school district will strive to provide after-hours training and community access to labs, media centers and classrooms.	A. Create and publish flexible schedules of after-hours technology access and training for students, parents, teachers and community members. B. Create opportunities for access to facilities for after-hours assistive technology training for students, parents, teachers and community members.
4.4 The school district will ensure that all their buildings are linked by the internet to the State Library's DISCUS databases and to the websites of universities, museums, and other institutions to facilitate virtual communication between home, school and community.	A. Develop and frequently update a district website that is linked to other relevant sites. B. Distribute the DISCUS flyer with Username and Password to parents and community members.

II. ACTION LIST

1. District and schools will increase community involvement with teachers and students and increase access and training in technology.
2. The district should publicize in local papers the success of working with outside partnerships in assessment of assistive technology.
3. The district should provide a list of partnerships and place them on their website. For example:
    - Math & Science Hubs
    - ITV (Instructional Television)
    - School Technology Initiative
    - DES (Distance Education Services)
    - South Carolina Department of Disabilities and Special Needs
    - South Carolina Educational Television
    - South Carolina State Library
4. The district should provide flexible technology training during the summer.
5. The district and schools should provide after-hours technology access and training.

III. IMPLEMENTATION ACTION STEPS

DISTRICT

1. Offer staff opportunities for professional development in technology.
2. Publicize collaborations and partnerships in grant award process
3. Develop partnerships within the community to create greater access to technology.
4. Have a technology plan with professional development
5. Include members of the community in writing the grant to develop and fund better teaching and learning through technology.
6. Measure access and use of school technology facilities

SCHOOLS

1. Encourage flexible lab, Media Center and classroom hours among schools.
2. Distribute parent and community information through reports.
3. Develop, implement and publicize flexible labs, Media Center and classroom hours, including opportunities for community members to see and try technology.
4. Initiate partnerships with community to access technology.

IV. FUNDING CONSIDERATIONS

STATE DEPARTMENT OF EDUCATION

- Grant-writing experts and workshops.
- Collection of district and school data.
- State surveys and data analysis.
- Collaboration and partnership meetings with schools and the district using the data collected.
- Teachers' professional development meetings.

DISTRICT

- Grant-writing workshop.
- Schools operation beyond the regular school day.
- District survey, collections and analysis, and reports written.
- Quality training of technology programs offered.

SCHOOLS

- School survey, collection and analysis, and report the findings.
- Operations beyond the regular school day.
- High quality technology training programs.
- Showcase special events that focus on technology in careers.

V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JUNE 2017	JUNE 2018	JUNE 2019	JUNE 2020	JUNE 2021
4.1 The district will establish community technology partnerships & collaborations by providing tools, resources, and training that support student transition, achievement and outcomes. (The term *community* includes parents, businesses, state and local agencies, nonprofit groups and institutions of higher education.)	Statewide achievement test scores Community technology access surveys District Technology Plan Documentation of offerings provided by innovative delivery methods – after school, summer school, weekends, etc.	Statewide test scores Community technology access SDE Technology plans Observations and Interviews District and school website information List of school or district grants					
4.2 The school district will utilize all available resources by fostering collaboration & cooperation among state-supported organizations, institutions and initiatives.							
4.3 The school district will provide after-hours training and community access to labs, Media Centers and classrooms.							
4.4 The school district will ensure that all their buildings are linked by LAN, WAN, and/or the internet to the State Library's DISCUS databases and to the websites of universities, museums, and other institutions to facilitate virtual communication between home, school and community.							

TECHNOLOGY DIMENSION 5

SUPPORT CAPACITY

GOAL: Florence County School District Three (FCSD3) and its schools will expand and support technology resources to assist educators and learners in meeting the state academic standards.

SNAPSHOT OF CURRENT TECHNOLOGY USE

FCSD3 and its schools understand the essential role of technology support systems to provide the foundation for teaching, learning, communication and administration in their schools. The state's, district's, and schools' investment in technology resources is evident in the amount of hardware, software, and connectivity available in the various schools. The district goals of all schools having an appropriate number of servers and connection to a local-area network (LAN) have been met. Academic software such as PLATO, Reading Counts, Measures of Academic Progress, and School InSites are provided at all schools. PowerSchool and Destiny are also in use at all schools, and technical support contracts have been purchased for these programs. All schools have a wireless connection to the district office with speeds ranging from 100Mbps to 500Mbps. District Technology staff provide maintenance for repairs and networking with day-to-day trouble shooting and upkeep provided by the school technology contacts.

Federal, state, and local funds have been used to provide connectivity, hardware and software. The funds were used to expand the existing network at the schools and throughout the district, including the district office. Funding has allowed for all schools and the district to have high-speed access. Local funding has enabled the district to provide technicians for daily maintenance. A combination of state and local funds pay the salaries of our Media Specialists. The district has used local and grant funds to upgrade networks at Lake City High, Ronald. E. McNair Junior High and J.C. Lynch Elementary. The district also is using state technology funds and local funds to upgrade networks at all other schools.

FCSD3 is continuously updating its technology plan, which is based on the State Technology Plan.

Continued progress is being made in implementing student-information collection systems, and workshops and trainings are provided on PowerSchool, ActivInspire, etc. The district also provides classes in technology competencies for teachers, administrators, and support personnel in addition to offering classes in professional development on technology.

OPERATIONAL PLAN

I. OBJECTIVES AND STRATEGIES

GOAL: Florence County School District Three (FCSD3) and its schools will provide needed materials and instruction to meet the provisions, goals and objectives of the federal, state, and local mandates of technology education.

Objectives	Strategies
5.1 FCSD3 and its schools will ensure that all students and teachers, including special needs students, have access to electronic information resources.	A. Records will be maintained that include the software applications available at each school to address state and federal academic standards, the state of network/ internet access, available peripherals and assistive technology/other resources for universal access to network resources. B. Funding will be sought for the district and its schools through local, state and federal funding, including grants and E-rate.
5.2 FCSD3 and its schools will ensure that all teachers have access to an integrated, secure network infrastructure with dynamic bandwidth capacity to support convergent networks that allow for communication, data collection and distribution, and distance learning.	A. Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives. B. Install and maintain networks, virus protection, and internet filtering according to industry standards by implementing systematic, network security tools at all levels of access to LANs, WANs and other networks.
5.3 FCSD3 will have qualified technicians, as funds allow, including one network manager, one network application specialist and one computer technician.	A. Develop minimum staffing requirements and job descriptions, with a salary schedule, for these positions. B. Provide district-level network support for technicians.
5.4 FCSD3 will devise a disaster recovery plan in case of failure in the LANs and WANs. It will include redundant data storage, robust automated backup and immediate hardware recovery (see Appendix 8).	A. Ensure that the district office and schools have electrical distribution systems that provide isolated circuits in all classrooms and redundant power sources for mission-critical equipment. B. Implement a districtwide management application used to monitor the bandwidth on the LAN and the WAN and provides network failure alarms that can be accessed remotely.

5.5 FCSD3 will implement a replacement and upgrade plan to replace and recycle equipment and software.	Ensure that the replacement plan and the upgrade plans are included in the district plan.
5.6 FCSD3 will increase the teachers' ability to design webpages and to provide web-based instruction that is accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.	Provide basic training webpage accessibility principles to staff, teachers—and when appropriate, students—who design webpages as part of the curriculum.

II. ACTION LIST

1. FCSD3 and its schools will have access to a complete technology inventory, including assistive technology, which will show the type of equipment/device and its location.
2. FCSD3 will maintain a needs assessment showing what technology-based resources and applications are required to meet the district mission, including networking, hardware/devices, assistive technology and software applications.
3. The budget will include line items for technology, including assistive technology, with sufficient funding to implement the strategies.
4. FCSD3 will develop and publish a procedure for the review of equipment used in multimedia. The review will quantify equipment and processes by their impact on teaching and learning.
5. FCSD3 will develop a disaster recovery plan as funds become available for off-site backup.
6. Plans for replacement and upgrades, including strategies to recycle obsolete devices, will be developed.
7. Plans for security accountability, virus protection, and internet filtering guidelines will be developed and implemented.
8. FCSD3 plans will be checked for and meet industry standards and building codes for outlets and amperage.
9. FCSD3 will maintain records showing the current assessment of the LAN/WAN technology.
10. FCSD3 will use the State Department of Education Technology Counts online survey to report on their use of network-managed tools.
11. FCSD3 will ensure that any new school construction provides for isolated power in each classroom, computer lab, telecommunications closet and work area.
12. FCSD3 will have UPS (uninterruptible power supply) systems for all critical equipment.
13. FCSD3 will use at least the minimum staffing and salary requirements for the positions specified in objective 5.3.
14. FCSD3 will designate a network manager.

III. IMPLEMENTATION ACTION STEPS

DISTRICT

1. Maintain technology inventory, including assistive technology.

2. Conduct a needs assessment to identify required technology, including assistive technology.

3. Develop strategies for acquiring, managing and implementing required technology, including assistive technology.

4. Develop and implement a disaster recovery plan.

5. Seek funding from local, state and federal sources.

6. Provide multimedia-capable workstations.

7. Research and implement an integrated network infrastructure.

8. Install and maintain secure networks.

9. Employ staff for adequate network maintenance and support.

10. Implement a districtwide management application to monitor bandwidth on the LAN and WAN.

11. Ensure that the schools have adequate electrical distribution systems.

12. Provide the schools with guidance and training in creating webpages to ensure that the electronic information is accessible to students and teachers with special needs.

SCHOOLS

1. Create a plan for acquiring and implementing required technology, including assistive technology.

2. Seek funding from local, state and federal sources.

3. Create flexible schedules for access to technology.

4. Provide multimedia-capable workstations.

5. Maintain secure networks.

6. Provide adequate electrical distribution systems.

IV. FUNDING CONSIDERATIONS

- Schedule Technology Committee meetings to develop products such as the district technology plan and the disaster recovery plan
- Secure materials to publish the updated technology plan
- Provide multimedia teacher workstations including data projectors
- Purchase hardware and software to ensure that all LANs and WANs comply with district, state and industry standards.
- Hire appropriate technology staff
- Conduct an annual equipment inventory assessment
- Provide support planning
- Conduct technology needs assessments and surveys

V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JUNE 2017	JUNE 2018	JUNE 2019	JUNE 2020	JUNE 2021
5.1 FCSD3 and its schools will guarantee that all students and teachers, including special needs teachers, have access to electronic information resources.	District report cards School technology and improvement plans Documented access to technology resources Technology needs assessment SDE Technology Counts online survey Budget data Personnel report	District report cards School technology and improvement plans Documented access to technology resources Technology needs assessment SDE Technology Counts online survey Budget data Personnel report					
5.2 FCSD3 and its schools will ensure that all teachers have access to an integrated, secure network infrastructure with dynamic bandwidth capacity to support convergent networks that allow for communication, data collection and distribution, and distance learning.							
5.3 FCSD3 will have qualified technicians, as funds allow, including one network manager, one network application specialist and one computer technician.							
5.4 FCSD3 will devise a disaster recovery plan in case of failure of the LANs and WANs. It will include redundant data storage, robust automated backup and immediate hardware recovery (see Appendix 8).							
5.5 FCSD3 will implement a replacement and upgrade plan to replace and recycle equipment as funds are available.							
5.6 FCSD3 will increase the teachers' ability to design webpages and web-based instruction that is accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.							

ACKNOWLEDGEMENTS

Florence County School District Three extends its gratitude to the numerous committee and staff members who have worked tirelessly to bring about the Florence County School District Three Technology Plan for 2016-2021.

Executive Writing Committee

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Brian Huckabee, Director of Technology and Communications
Matt Evans, Network Manager
Gloria McFadden, Student Data Services
Noah DeCamps, Network Applications Specialist

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Suzanne Rybak, Lake City High School
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Focus Group Committee Members

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Nakisha McKnight, Administrative Assistant

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Appendix 1
Readiness Assessment

Appendix 2

FLORENCE COUNTY SCHOOL DISTRICT THREE
Teacher Professional Development Plan

I. Standards

FCSD3 has adopted the ISTE Teacher Technology Standards.

II. Professional Development Offerings

The following technology integration professional development opportunities are available to our teachers and administrators

A. Technology Competencies for Educators – one semester
B. Advanced Technology Competencies for Educators – one semester
C. Integrating PowerPoint into the Curriculum – one semester
D. Webpage Design – one semester
E. INTEL Teach to the Future – one semester
F. Various other courses/workshops (i.e., PDA's, Excel Spreadsheet)

III. Assessment

FCSD3 conducts ongoing assessment to measure technology integration in the classroom curriculum.

Methods of Assessment:

A. Pretests and posttests
B. Portfolio (see Appendix 7 Technology Competencies for Educators)

FCSD3 provides remediation for teachers and administrators who have difficulty attaining the minimum technology standards.

IV. Timeline

FCSD3's timeline contains the activities, the person(s) responsible, and the time frame for a three- to five-year planning horizon with an annual update cycle.

Activity	Person(s) Responsible	When
Hold organizational planning meeting	Technology Coach	Annually
Develop pretest and/or survey instrument based on all ISTE standards	Technology Coach	Annually
Pretest and survey staff to determine needs	Director of Federal Programs	Annually in the spring

Activity	Person(s) Responsible	When
Develop a progressive schedule of professional development offerings to meet identified needs	Senior Director of Curriculum	Annually each summer
Create professional development delivery schedule	Senior Director of Curriculum	Annually each year
Deliver continuous professional development	District Instructional Team	Ongoing
Posttest and assess staff to determine proficiency in ISTE standards	Technology Coach	Ongoing
Once all ISTE standards have been met, submit assurance form to the Office of Teacher Certification confirming that the teacher is proficient in technology prior to the conclusion of his/her validity period	Office of Human Resources	June 30 annually
Conduct annual review and updating of the technology plan	Communications Coordinator Senior Director of Curriculum	January - March annually

V. District Contact

This person is the primary contact for the implementation and management of this plan:

Name Kasey Miles Feagin

Title: Senior Director of Curriculum, Instruction & Assessment

District: Florence School District Three

Mailing Address: P.O. Drawer 1389

City, State, ZIP: Lake City, SC 29560

Phone Number: (843) 374-8652 Ext 1135

Fax Number: (843) 374-0610 email

Address: 31 kfeagin@fsd3.org

Date Plan Written: Completed October 31, 2016 Date Plan Expires: June 30, 2021

District Technology Plans and Teacher Professional Development Plans should be mailed to:

State Department of Education
1429 Senate Street
Room 513 D
Columbia, South Carolina 29201

Appendix 3

Policy

ACCEPTABLE USE/INTERNET AND email ACCESS

Code: IJNDB Issued: 07/06

Access to the internet/Network is a privilege, not a right. With this privilege, there also is a responsibility to use the internet/Network solely for educational purposes and not to access materials unsuitable for students. As part of the implementation of the administration's guidelines, students and staff must be instructed on the appropriate use of the internet/Network. Inappropriate or disruptive use by any person will not be tolerated.

The smooth operation of the internet/Network relies on the proper conduct of the end users who must adhere to strict guidelines. These guidelines are provided so that students and staff are aware of their responsibilities when using the internet/Network. Any violations of these guidelines will subject the user to appropriate disciplinary action and possible denial of access to the internet/Network. In general, these guidelines require efficient, ethical, and legal utilization of the network resources.

In an attempt to protect students, the District has installed filtering/monitoring software to check internet access by computer users on District equipment in compliance with the Children's Online Privacy Protection Act. However, because access to the internet/Network provides connections to other computer systems located all over the world, users (and parents of students who are users) must understand that neither the District nor any District employee can completely control the content of the information available on the systems. Every effort will be made by the District to monitor and restrict ready access to known objectionable sites; however, an industrious user may discover inappropriate or offensive information. The District does not condone the use of inappropriate or offensive materials and cannot be held responsible for such use.

Acceptable Use

The purpose of the District's educational network is to support research and education in and among academic institutions by providing access to unique resources and the opportunity for collaborative work. All use of the internet and Network must be in support of education and research and be consistent with the educational objectives of the District. Use of other networks or computing resources must comply with the rules governing those networks. Transmission of any material in violation of any Federal or State laws or regulations is prohibited; this includes, but is not limited to, copyrighted material, threatening or obscene material, or material protected by trade secret. Access to computer systems and networks owned or operated by the District imposes certain responsibilities and obligations on users and is subject to District policies and local, State and Federal laws.

Acceptable use is always ethical, reflects honesty, and shows restraint in the consumption of shared resources. It demonstrates respect for intellectual property, ownership of information, system security mechanisms, and the individual's rights to privacy and freedom from intimidation, harassment and unwarranted annoyance.

Issued: 06/03; Revised 7/04; Revised 6/06

Florence County School District Three

Use of Technology

Use of Computers

1. Passwords and other electronically recorded data are the property of Florence County School District Three Schools.

2. The deliberate production or introduction of a virus onto computer stations and networks is prohibited and will result in disciplinary action.

3. Loading software and /or files onto a school computer by a student without the permission of the school network supervisor is prohibited.

4. Accessing and/or modifying information to which the computer user has not been given appropriate authorization is prohibited.

5. Modifying passwords without appropriate authorization is prohibited.

6. Any user identified as a security risk or having a history of problems with the use of computer systems will have his/her computer access severely limited.

7. Vandalism of computer hardware will result in disciplinary action. Vandalism includes, but is not limited to, removing mouse ball and/or mouse, deliberate erasing data and/or files, placing foreign objects such as paperclips in disk or CD-ROM drives, removing or alerting placement of keyboard keys.

8. If a user logs onto the computer network using his/her individual password, the individual should log off the network when he/she leaves the workstation.

9. Messages sent via the computer network should be concise and to-the-point with all necessary information. Messages should be sent only to appropriate individuals

10. All computer users in Florence Three must adhere to the copyright law. The following are not intended as a comprehensive guide to the copyright law, but as general comments on the copyright law and computer technology.

    a. Copying and installing computer programs.

        (1) The law states that it is illegal to make or distribute copies of copyrighted material, including software, without authorization. This includes loading software purchased as a stand-alone unit on multiple hard drives. If a backup copy was not included at the time of purchase, an individual may make one copy for backup purposes. Loading a computer program from a disk to a hard drive is interpreted as the making of a backup copy.

        (2) If a single copy of a computer program is purchased on a disk or CD-ROM, it can be used on only one computer at a time. Most DOS/Windows-based programs require installation on the computer hard drive. If a user loads a copy of a program on computer A and only has the rights to one copy, then the program can only be used on computer A. The only way for the program to be used legally on another computer is for the user to erase the program from computer A before loading it on computer B. If the program needs to be loaded on more than one computer, additional copies of the program must be purchased.

        (3) If a single copy of a CD-ROM or a laser disc is purchased and it comes with installation software, the installation software may be loaded on as many computers as needed. Since

the physical copy of the laser disk or the CD-ROM can only be used one at a time, the user will be following the copyright law.

(4) If a lab pack of software is purchased, the number of machines on which the software can be loaded is limited by the number of appropriate licenses offered in the lab pack. For example, if a lab pack restricts use to five users, the program may only be loaded on five machines at the same time. If the user wishes to move one of the programs to a sixth machine, he/she will need to erase the program from one of the original five before proceeding.

(5) Network versions are restricted for use on networks in that the program is loaded on the file server and accessed by computer workstations on the network. Network versions usually restrict the use of the program to a defined number of workstations.

b. Teachers, students, and community members are permitted to donate software programs to the school. The suitability of the gift must be determined by the Coordinator of Technology/Student Data Services or his/her designee prior to its being added to the school collection and loaded onto a computer. The donated program must include license information, original disk(s) and/or CD-ROM(s), and all written documentation, including manuals and/or any additional information to prove the school's ownership of the program. A letter of transmittal stating the transfer of ownership to the school should be on file in the school.

c. Use of graphics/sound in multimedia presentations:

(1) The use of small segments of a film or video imported as a QuickTime movie is acceptable. Using a substantial portion of an author's work is not permissible.

(2) Use of a single image from a CD-ROM or laser disk for inclusion in a computer-based, multimedia presentation is permitted. If the purchased product includes appropriate licenses for use, images from these products may be used as needed in the presentation.

(3) Scanned-in images, such as copyrighted cartoons, may not be used without the permission of the copyright holder.

Internet

The internet is an electronic highway connecting thousands of computers all over the world and millions of individual subscribers. Users will have access to:

1. Worldwide electronic mail services;
2. Global information and news as well as the opportunity to correspond with other institutions;
3. Public domain and shareware computer software of all types;
4. Discussion groups on a vast range of topics;
5. Access to many university library catalogs, the Library of Congress, ERIC, etc.; and
6. Access to online data bases.

Because access to the internet provides connections to other computer systems located all over the world, users (and parents of users who are students) must understand that neither the District nor any District staff member controls the content of the information available on the systems. Some of the information available is controversial and, sometimes, may be offensive. The District does not condone the use of such materials. Therefore, in the schools, each student's access to and use of the internet will be under a teacher's direction and monitored as a regular instructional activity.

Terms and Conditions.

1. Acceptable Use. The purpose of the internet in the District is to support teaching and learning by providing access to unique resources and the opportunity for collaborative work. The use of the internet must be in

support of education and research and consistent with the educational objectives of the District. Use of other networks or computing resources must comply with their rules. Transmission of any material in violation of any U.S. or state regulation is prohibited. This includes, but is not limited to, copyrighted material, threatening or obscene material, or material protected by trade secrets. Use for commercial activities is not acceptable. Use for product advertisement or political lobbying is also prohibited.

2. Privileges. The use of the internet is a privilege, and inappropriate use will result in the severe restriction of privileges. Each student who receives an account will receive instruction from a District staff member in the proper use of the network. The system administrators will determine what is inappropriate use, and their decision is final. The system administrators may suspend or close specific user accounts at any time.

3. Network Behavior (Netiquette). Users are expected to abide by the generally accepted rules of network etiquette. These include, but are not limited to, the following:

   a. Be polite. Do not be abusive in messages to others.
   b. Use appropriate language. Do not swear, use vulgarities or any other inappropriate language.
   c. Do not disrupt, harass or annoy other users.
   d. Do not reveal your home mailing address or phone number(s) or similar information about other persons.
   e. Note that electronic mail (email) is not guaranteed to be private. People who operate the system have access to all mail.
   f. Do not use the network in such a way that would disrupt the use of the network by other users.
   g. All communications and information accessible via the network should be assumed to be the private property of the creator, and appropriate citations should be made when used.
   h. Do not report personal communications without the author's prior consent.
   i. Do not share passwords. This means that the only person to ever use an account is the person to whom it belongs.
   j. All users should remain on the system only as long as necessary to complete their work so that other individuals will have opportunities to access the internet.

4. Illegal activities are strictly forbidden. Messages relating to or in support of illegal activities will be reported to the authorities.

5. The District makes no warranties of any kind, whether expressed or implied, for the service it is providing. The District will not be responsible for any damages a user suffers. This includes loss of data resulting from delays, non deliveries, mis-deliveries, or service interruptions caused by negligence, errors or omissions. Use of any information obtained via the internet is at the user's risk. The District specifically denies any responsibility for the accuracy or quality of information obtained through its services.

6. Security on any computer system is a high priority, especially when the system involves many users. If a user identifies a security problem on the internet he/she must notify a system administrator or the Coordinator of Technology/Student Data Services, and he/she must not demonstrate the problem to other users. Attempts to log on to the internet as a system administrator or any person other than the user will result, at a minimum, in cancellation of user privileges. Any user identified as a security risk or having a history of problems with the use of computer systems will have his/her computer access severely limited.

7. Vandalism will result in disciplinary action. Vandalism is defined as any malicious attempt to harm or destroy data of another user, the internet, or other networks that are connected to the internet. This includes, but is not limited to, the uploading or creation of computer viruses.

FLORENCE COUNTY SCHOOL DISTRICT 3

Internet Acceptable Use Policy for Students

It is the policy of Florence County School District 3 that all student internet users read, sign, and agree to the terms of the following Acceptable Use Policy. Please read the following agreement carefully before signing.

Internet access is available to students because we believe the internet offers vast, diverse, and unique resources that provide opportunities to link with other communities and cultures throughout the world. All users must sign in on a login sheet before each use. The login sheet should be beside each computer terminal. Internet use is a privilege and inappropriate use will result in the cancellation of internet privileges.

The internet also has rich search capabilities that will yield sources of information to support research. Unfortunately, the internet also potentially allows access to material that may not be considered to be of educational value in the context of the school setting. Florence County School District 3 has taken precautions to restrict access to controversial materials, and does not condone the use of inappropriate or offensive materials. However, the district cannot be held responsible for such inappropriate use.

The following guidelines for Network Behavior (Netiquette) are provided so that you may be aware of the responsibilities you will have either as a parent or guardian permitting your child to use these resources or as a student who will actually use Florence County School District 3 computers and internet access.

a. Be polite. Do not be abusive in messages to others.
b. Use appropriate language. Do not swear, use vulgarities or any other inappropriate language.
c. Do not disrupt, harass or annoy other users.
d. Do not reveal your home mailing address or phone number(s) or similar information about other persons.
e. Note that electronic mail (email) is not guaranteed to be private. People who operate the system have access to all mail.
f. Do not use the network in such a way that would disrupt the use of the network by other users.
g. All communications and information accessible via the network should be assumed to be the private property of the creator, and appropriate citations should be made when used.
h. Do not report personal communications without the author's prior consent.
i. Do not share passwords. This means that the only person to ever use an account is the person to whom it belongs.
j. All users should remain on the system only as long as necessary to complete their work so that other individuals will have opportunities to access the internet.

k. Use of any type of proxy server(s) to circumvent or bypass filtering or firewall is prohibited.

I have read and understand the guidelines and I agree to follow them.

_____ _____
Student's Name (Please Print) Date Student's Signature

I have read and understand the guidelines and_____I give my child permission to use the internet
_____I do not give my child permission to use the internet. (Check one)

_____ _____
Parent/Guardian/s Name (Please Print) Date Parent/Guardian's Signature

I have read and understand the guidelines and_____I give my child permission to use the internet
_____I do not give my child permission to use the internet. (Check one)

_____ _____
Parent/Guardian/s Name (Please Print) Date Parent/Guardian's Signature

Revised June 2006

Florence County School District Three

FLORENCE COUNTY SCHOOL DISTRICT 3

Internet Acceptable Use Policy for Employees

Employees in Florence County School District Three may access the internet or email for educational or work-related purposes at any time that it does not interfere with the performance of other responsibilities by the employee.

All users must have a signed copy of this policy on file with their school's Media Specialist or Human Resource Department prior to using the internet.

Internet use is a privilege and inappropriate use will result in cancellation of internet privileges. All employees and students must abide by the following rules of Network Behavior (Netiquette).

a. Be polite. Do not be abusive in messages to others.
b. Use appropriate language. Do not swear, use vulgarities or any other inappropriate language.
c. Do not disrupt, harass or annoy other users.
d. Do not reveal your home mailing address or phone number(s) or similar information about other persons.
e. Note that electronic mail (email) is not guaranteed to be private. People who operate the system have access to all mail.
f. Do not use the network in such a way that would disrupt the use of the network by other users.
g. All communications and information accessible via the network should be assumed to be the private property of the creator, and appropriate citations should be made when used.
h. Do not report personal communications without the author's prior consent.
i. Do not share passwords. This means that the only person to ever use an account is the person to whom it belongs.
j. All users should remain on the system only as long as necessary to complete their work so that other individuals will have opportunities to access the internet.
k. Use of any type of proxy server(s) to circumvent or bypass filtering or firewall is prohibited.

Employee Certification Form

I have read and understand the district's internet and email Acceptable Use Policy and the information provided on the reverse side of this form. I understand and will abide by the conditions and rules set forth herein. I further understand that violations of these conditions and rules may constitute a criminal offense. Should I commit any violation, my access privileges may be revoked and disciplinary action may be taken as well as appropriate legal action when warranted. I also agree to be responsible for any unauthorized costs incurred by my use of the internet.

_____ _____

Employee's Name (Please Print) School

_____ _____

Employee's Signature Date

Revised June 2006

Florence County School District Three

Use of Computers

The purpose of computer usage, including the internet and email, in Florence County School District Three is to support teaching and learning. This usage must be in support of education and research and consistent with the educational objectives of FCSD3. Transmission of any material in violation of any U.S. or state regulation is prohibited including, but not limited to, copyrighted material, threatening or obscene material, or material protected by trade secrets. Use for commercial activities, product advertisement or political lobbying is also prohibited.

All computer users in FCSD3 must adhere to the copyright law. The following comments on the copyright law and computer technology are here for your review.

A. The law states that it is illegal to make or distribute copies of copyrighted material, including software, without authorization. You may not load software purchased as a stand-alone on multiple hard drives. No software may be loaded or downloaded onto school computers without prior district approval. Request forms may be obtained from Media Specialists.
B. If a single copy of a computer program is purchased on a disk or CD-ROM, it can be used on only one computer at a time. If a user loads a single copy of a program on computer A, it must be erased before it can be loaded onto computer B. If the program needs to be loaded on more that one computer, additional copies of the program must be purchased, and installed by district technicians.
C. If a lab pack of software is purchased, the number of machines on which the software can be loaded is limited by the number of appropriate licenses offered in the lab pack.
D. Teachers, students and community members are permitted to donate software programs to the school. The donated program must include license information, original disk(s) or CD-ROM(s) and all written documentation, including manuals and/or any additional information to prove the school's ownership of the program.
E. When using graphics/sound in multimedia presentations, read carefully the guidelines provided with the materials. The use of small segments is usually acceptable while substantial portions of an author's work may require permission from the author. Scanned-in images such as copyrighted cartoons may not be used without the permission of the copyright holder.

USE OF ELECTRONIC MAIL (email)

The use of Electronic Mail in Florence County School District 3 is for the purpose of furthering the educational mission of the school district. Messages sent via email cannot be considered personal or private, even when they are immediately deleted following their transmission. The delete function simply removes the name of the file and this action allows that file space to eventually be overwritten. Until that time, the information can be retrieved by anyone who knows computer operations. Email may also be intercepted by a service provider. Since the computers at school are the property of the school district and the email service is provided by the district, their use can and will be regulated and monitored by the district. Inappropriate email use may result in disciplinary action by the school district.

Revised June 2006

Florence County School District Three

Appendix 4

How E-Rate Areas Have Been Addressed

1. FCSD3 and its schools' technology plans included as the Dimension 1 goal for all students to become technologically literate by the end of the eighth grade. The objectives and strategies include gathering, analyzing, and evaluating information to solve problems; using telecommunications to access remote information and communicating with others in support of direct and independent learning skills aligned with the state standards; and presenting information in appropriate multimedia formats. Dimension 3 incorporates current and emerging technology to develop learner-centered instructional environments that enhance academic achievement with all teachers having at least one networked computer, access to SCETV, DISCUS, the Lower Pee Dee DELC, and multimedia equipment. In Dimension 5, the Media Centers provide support in the form of DISCUS and are equipped with Destiny software to expedite circulation services.
2. FCSD3's technology plan incorporates professional staff development in line with state standards and Proviso 1A.20 in Dimension 2. The goal of Dimension 2 is to demonstrate proficiency in professional and curriculum development so that the effective integration of instructional technology systems can be used to improve student achievement. Training includes workshops, conferences, online courses, graduate level courses, certification renewal courses, PowerSchool courses, internet development courses and Microsoft training courses.
3. FCSD3's technology plan in Dimension 5 tracts available telecommunications services, hardware, software and technical support services. As part of Dimension 5's action plan, each of these areas will be inventoried and evaluated annually.
4. FCSD3's budget to acquire and maintain hardware, software, professional development, and other services that are needed to implement the strategy for improved education comes from many different sources. Some of these funds are from state and local appropriations, federal Title monies and various grants. Plans for hardware replacement are being developed.
5. FCSD3's technology plan includes an evaluation component for each of the five Dimensions to monitor progress toward the specified goals. Through use of these evaluations and benchmarks, the district will be able to make appropriate midcourse corrections in response to new developments and opportunities as they arise.

Appendix 5

Learners and Their Environment Rubric

	Exemplary	Proficient	Satisfactory	Needs Improvement
1.1	All Students are using Simple 4 and DISCUS	85% of students are using Simple 4 and DISCUS	70% of students are using Simple 4 and DISCUS	Less than 69% of students are using Simple 4 and DISCUS
1.2	All students are using Simple 4 to cite sources and all activities will pass the plagiarism software	85% of students are using Simple 4 to cite sources and all activities will pass the plagiarism software	70% of students are using Simple 4 to cite sources and all activities will pass the plagiarism software	Less than 69% of students are using Simple 4 to cite sources and all activities will pass the plagiarism software
1.3	All students will use School InSites and all students will adhere to the AUP Policy	85% of students will use School InSites and all students will adhere to the AUP Policy	70% of students will use School InSites and all students will adhere to the AUP Policy	Less than 69% of students will use School InSites and all students will adhere to the AUP Policy
1.4	All students will use the appropriate technological tools for class assignments	85% of students will use the appropriate technological tools for class assignments	70% of students will use the appropriate technological tools for class assignments	Less than 69% of students will use the appropriate technological tools for class assignments
1.5	All students will use multimedia resources	85% of students will use multimedia resources	70% of students will use multimedia resources	Less than 69% of students will use multimedia resources

Professional Capacity Rubric

	Exemplary	Proficient	Satisfactory	Needs Improvement
2.1	100% of new hires will demonstrate proficiency; all teachers will demonstrate ongoing proficiency	85% of new hires will demonstrate proficiency; all teachers will demonstrate ongoing proficiency	70% of new hires will demonstrate proficiency; all teachers will demonstrate ongoing proficiency	Less than 69% of new hires will demonstrate proficiency; all teachers will demonstrate ongoing proficiency
2.2	100% of schools will have a Technology Coach	85% of schools will have a Technology Coach	70% of schools will have a Technology Coach	Less than 69% of schools will have a Technology Coach
2.3	All schools will provide input for software decisions	85% of schools will provide input for software decisions	70% of schools will provide input for software decisions	Less than 69% of schools will provide input for software decisions
2.4	All faculty are provided professional development opportunities	85% of faculty are provided professional development opportunities	70% of faculty are provided professional development opportunities	Less than 69% of faculty are provided professional development opportunities
2.5	All schools will complete a needs assessment	85% of schools will complete a needs assessment	70% of schools will complete a needs assessment	Less than 69% of schools will complete a needs assessment

Instructional Capacity Rubric

	Exemplary	Proficient	Satisfactory	Needs Improvement
3.1	All schools will integrate appropriate technologies to develop higher-level thinking, etc.	85% of schools will integrate appropriate technologies to develop higher-level thinking, etc.	70% of schools will integrate appropriate technologies to develop higher-level thinking, etc.	Less than 69% of schools will integrate appropriate technologies to develop higher-level thinking, etc.
3.2	All schools will provide teachers with the tools necessary to actively engage students in the learning	85% of schools will provide teachers with the tools necessary to actively engage students in the learning	70% of schools will provide teachers with the tools necessary to actively engage students in the learning	Less than 69% of schools will provide teachers with the tools necessary to actively engage students in the learning
3.3	All schools provide students with the appropriate tools to enrich and extend their learning	85% of schools provide students with the appropriate tools to enrich and extend their learning	70% of schools provide students with the appropriate tools to enrich and extend their learning	Less than 69% of schools provide students with the appropriate tools to enrich and extend their learning
3.4	All schools will have access to a variety of multimedia equipment and software	85% of schools will have access to a variety of multimedia equipment and software	70% of schools will have access to a variety of multimedia equipment and software	Less than 69% of schools will have access to a variety of multimedia equipment and software

Community Connections Rubric

	Exemplary	Proficient	Satisfactory	Needs Improvement
4.1	All schools will form district and community partnerships to provide hands-on opportunities to utilize technology	85% of schools will form district and community partnerships to provide hands-on opportunities to utilize technology	70% of schools will form district and community partnerships to provide hands-on opportunities to utilize technology	Less than 69% of schools will form district and community partnerships to provide hands-on opportunities to utilize technology
4.2	All schools will facilitate collaborative partnerships to provide assistive technology	85% of schools will facilitate collaborative partnerships to provide assistive technology	70% of schools will facilitate collaborative partnerships to provide assistive technology	Less than 69% of schools will facilitate collaborative partnerships to provide assistive technology
4.3	All schools will provide community access to technology	85% of schools will provide community access to technology	70% of schools will provide community access to technology	Less than 69% of schools will provide community access to technology
4.4	All schools have internet access and links to other relevant sites	85% of schools have internet access and links to other relevant sites	70% of schools have internet access and links to other relevant sites	Less than 69% of schools have internet access and links to other relevant sites

Support Capacity Rubric

	Exemplary	Proficient	Satisfactory	Needs Improvement
5.1	All schools will maintain a technology inventory and seek funding from appropriate sources	85% of schools will maintain a technology inventory and seek funding from appropriate sources	70% of schools will maintain a technology inventory and seek funding from appropriate sources	Less than 69% of schools will maintain a technology inventory and seek funding from appropriate sources
5.2	All schools will ensure access to thee network through appropriate filtering programs	85% of schools will ensure access to thee network through appropriate filtering programs	70% of schools will ensure access to thee network through appropriate filtering programs	Less than 69% of schools will ensure access to thee network through appropriate filtering programs
5.3	All schools will have qualified technicians available for support	85% of schools will have qualified technicians available for support	70% of schools will have qualified technicians available for support	Less than 69% of schools will have qualified technicians available for support
5.4	All schools will have isolated circuits for WAN/LAN systems and will provide network failure alarms	85% of schools will have isolated circuits for WAN/LAN systems and will provide network failure alarms	70% of schools will have isolated circuits for WAN/LAN systems and will provide network failure alarms	Less than 69% of schools will have isolated circuits for WAN/LAN systems and will provide network failure alarms
5.5	The district will develop a replacement and upgrade plan which is revised annually	The district will develop a replacement and upgrade plan which is revised every other year	The district will develop a replacement and upgrade plan which is revised every two to three years	The district will develop a replacement and upgrade plan.
5.6	All schools will provide training on webpage development	85% of schools will provide training on webpage development	70% of schools will provide training on webpage development	Less than 69% of schools will provide training on webpage development

Appendix 6

Information Literacy and the Simple 4	Reading	Writing	Math	Social Studies	Science
PLAN (#1)	Read the questions. Read the selection. Determine the key words and/or concepts. Identify information resources.	Develop ideas and content for audience, purpose, and/or occasion. Determine voice.	Understand the problem. Select a problem-solving strategy.	Identify issue, situation or event for investigation. Develop a plan for inquiry.	Define the problem. Determine key words and/or concepts. Identify information resources. Write a hypothesis. Design a method of inquiry or experimentation.
ACT (#2)	Choose appropriate words and/or sentences. Select appropriate information from identified sources.	Refine voice, including strategies for flow.	Implement the selected problem-solving strategy.	Acquire and organize information.	Select appropriate information from identified sources. Implement the inquiry method or perform the experiment.
ORGANIZE (#3)	Use selected information, words, and/or sentences to answer the questions.	Write draft. Edit and proofread. Proofread for conventions. Submit to editor Revise as needed.	Find the solution to the problem. Report the solution or conclusion.	Make a decision about the information and take a position on the issue or event. Present results of inquiry. Justify the decision.	Interpret and communicate results of inquiry or experiment. Communicate or present conclusions.
REFLECT (#4)	Check answers for understanding, accuracy and completeness.	Publish. Evaluate for audience reception.	Evaluate the solution or conclusion for reasonableness of results.	Evaluate the process and the product of the inquiry. Gauge the effectiveness of the presentation by audience perception.	Evaluate results and conclusions for clarity, accuracy and real-life applications.

Teaching information literacy skills will be the joint responsibility of the school library media specialist and the classroom teacher. Thoughtful planning and cooperation among all teachers and media specialists are essential.

The information skills curriculum should focus on projects at each grade level during each school year. These projects should:

- use the Simple 4 information processing model
- have clearly stated objectives which support the South Carolina state curriculum research standards
- be assessed in a complete and objective manner
- use technology and identified productivity software
- build cumulatively on skills learned the previous year
- meet district benchmarks for each grade level, (K-12)

Each grade level (PreK through 12) of the South Carolina Curriculum Standards contains a research goal. The research goal requires students to access and use information from a variety of appropriately selected sources to extend his or her knowledge. These standards can be found at http://www.myscschools.com/offices/cso/standards/ela/.

The media specialist and classroom teacher will maintain an individual learning profile for each student to document which skills have been attained and how that attainment was demonstrated. This learning profile will become a part of each child's electronic portfolio.

Appendix 7

FLORENCE COUNTY SCHOOL DISTRICT THREE
Technology Competencies for Educators

Name:_____ Position:_____
School: _____ Grade Level: _____

	ISTE Standard	**COMPUTER OPERATION SKILLS** **Essential Knowledge and Skills**	Need Help!	Can Do! Date
1.1	*I.A*	Start up and shut down computer system, peripherals and applications.		
1.2	*I.A*	Identify and use icons, windows, menus and shortcuts on desktop.		
1.3	*I.A*	Select and start an application and create a document.		
1.4	*I.A*	Name, save, save as, retrieve and revise a document.		
1.5	*I.A*	Print to different size paper and envelopes.		
1.6	*I.A*	Use the right and left mouse click buttons and keyboard.		
1.7	*I.A*	Create and name/rename subdirectories/folders.		
1.8	*I.A*	Save, open and place documents inside subdirectories/ folders.		
1.9	*I.A*	Open and work with more than one application at a time.		
1.10	*I.A*	Execute commands to scan flash media and hard drive for viruses.		
1.11	*I.A*	Use the “Help” feature in Microsoft Office.		
1.12	*I.A*	Load paper in the printer and print preview, then print a document.		
1.13	*III.B*	Use special operating features that address the diverse needs of students (i.e., Personalize the "desktop," connect headphones, enable touch screen).		
1.14	*I.A*	Explain basic file structure; create folders and files.		
1.15	*II.D*	Plan technology resources for better implementation of lesson plans.		
1.16	*I.A*	Determine the size of a file in kilobytes.		
1.17	I.A.	Determine the amount of free disk space on a hard drive, flash media and optical media.		
1.18	*I.A*	Differentiate between RAM (memory) and hard disk storage capacity.		
1.19	*II.E*	Create a classroom management plan for the use of technology resources in a technology-enhanced environment.		
1.20	*I.A*	Backup files from a hard disk drive to flash or optical media.		

	ISTE Standard	**APPLICATIONS** **Word Processing**	Need Help!	Can Do! Date
2.1	*III.A*	Open Microsoft Word and create a three paragraph document.		
2.2	*III.A*	Center the title and format the font to bold and 14-point size.		
2.3	*III.A*	Cut the third paragraph and paste at ending of first paragraph.		
2.4	*III.A*	Copy the first sentence and paste it as the last sentence of the document using the clip board.		
2.5	*III.A*	Insert a page number; insert the time and date.		
2.6	*III.A*	Check spelling, grammar and word usage; use the Thesaurus.		
2.7	*III.A*	Insert a picture from Clip Art Gallery into the document.		
2.8	*III.A*	Format Text: fonts and size, set margins, line spacing and tabs.		
2.9	*III.A*	Create a table and enter data. Adjust lines.		
2.10	*III.A*	Use bullets to make a list and to make an outline.		
2.11	*III.A*	Create and insert a header and a footer.		
2.12	*III.A*	Identify and use menus, tool bars and dialog boxes.		
2.13	*II.A,II.B*	Develop lesson plans integrating word processing into objectives.		
2.14	*I.A*	Use mail merge to create and print form letters, envelopes and labels.		
2.15	*I.A*	Import and edit a variety of graphic images from various sources.		
2.16	*I.A*	Change default settings.		
2.17	*I.A*	Create a letter document based on a template.		
2.18	*II.A*	Teach students how to effectively use a word processing program.		
2.19	*I.A*	Perform formatting functions such as page numbering, bullets, special indentions, borders, shading, etc.		
2.20	*I.A*	Perform formatting functions such as hiding and displaying paragraph marks, using the clipboard, inserting section or column breaks, etc.		

	ISTE Standard	**APPLICATIONS** **Spreadsheets**	Need Help!	Can Do! Date
3.1	*I.A*	Create and enter data in a spreadsheet.		
3.2	*I.A*	Identify and use menu commands and/or toolbars.		
3.3	*I.A*	Distinguish among cells, rows, columns and files.		
3.4	*I.A*	Enter labels and values into cells.		
3.5	*I.A*	Performing formatting tasks such as: changing row height, column width, etc.		
3.6	*I.A*	Create/Copy formulas and functions to perform calculations.		
3.7	*I.A*	Preview and Print a spreadsheet with gridlines.		
3.8	*II.A, II.B*	Develop lesson plans integrating spreadsheets into core curriculum objectives.		
3.9	*III.C*	Create and format charts and graphs showing relationships among data.		
3.10	*IV.B*	Use formulas and functions to collect data, analyze data, and interpret results to improve instruction.		
3.11	*IV.A*	Develop a spreadsheet to record and calculate student averages.		
3.12	*IV.A*	Use a grade book program to assess learning (i.e., GradeBook2).		
3.13	*II.A*	Teach students how to effectively organize and sort data to solve problems using spreadsheets.		

	ISTE Standard	**APPLICATIONS** **Databases**	Need Help!	Can Do! Date
4.1	*II.A, II.B*	Develop lesson plans integrating databases into core curriculum objectives.		
4.2	*I.A*	Customize forms and tables.		
4.3	*I.A*	Perform multilevel sorts by specific fields.		
4.4	*III.C*	Create a multipage report using specific criteria.		
4.5	*II.A*	Teach students how to effectively use databases to organize, sort, find and synthesize information.		
4.6	*V.C*	Utilize technology to increase teacher productivity (i.e., GroupWise, PowerSchool, PowerPoint, Promethean Board.)		

	ISTE Standard	**APPLICATIONS** **Multimedia**	Need Help!	Can Do! Date
5.1	*I.A*	Create a new presentation by selecting a blank presentation.		
5.2	*I.A*	Select a title slide. Add text to the slide and create a title.		
5.3	*I.A*	Format the slide by applying a slide design of your choice.		
5.4	*I.A*	Import graphics (clip art, scanned photos, animation, etc.)		
5.5	*I.A*	Format the text to a larger size on one slide.		
5.6	*I.A*	Enter, edit and format text (i.e., bullets).		
5.7	*I.A*	Use the slide sorter view to arrange the slides.		
5.8	*I.A*	Save the presentation to flash or optical media.		
5.9	*I.A*	Print handouts (6 per page) of your presentation.		
5.10	*III.C*	Insert graphic objects into a multimedia presentation (tables, scanned photos, graphs and charts).		
5.11	*II.A, II.B*	Develop lesson plans integrating multimedia into core curriculum objectives.		
5.12	*II.A*	Teach students how to use multimedia presentation programs in order to communicate information and ideas effectively.		

	ISTE Standard	**TELECOMMUNICATIONS** **Internet**	Need Help!	Can Do! Date
6.1	*I.A*	Log onto a designated server using individual password (i.e. Novell)		
6.2	*I.A*	Type in a specific URL on the address line and go to that website.		
6.3	*I.A*	Add, delete and edit a URL to a bookmark list.		
6.4	*III.A*	Access and use a "search engine" to find sites related to a specific topic.		
6.5	*VI.A*	Read and agree to abide by the district's Acceptable Use Policy for Employees.		
6.6	*V.C*	Use the internet to locate instructional and curricular resources.		
6.7	*III.D*	Instruct students in appropriate use of internet and email as outlined in FCSD3's Acceptable Use Policy for Students.		
6.8	*II.A., II.B*	Develop lesson plans integrating WWW resources.		
6.9	*II.A*	Teach students how to use the internet effectively to gather and communicate ideas and information.		

	ISTE Standard	**TELECOMMUNICATIONS** **Email**	Need Help!	Can Do! Date
7.1	*III.A*	Open your email software application. (i.e., GroupWise)		
7.2	*III.A*	Compose a new message and send it to a designated person.		
7.3	*III.A*	Forward a copy of the message to an additional person.		
7.4	*III.A*	Open, reply, print, and delete a message sent to you.		
7.5	*III.A*	Open, send and print an attachment.		
7.6	*I.A*	Using the address book, enter five names with email addresses.		
7.7	*III.D*	Read and agree to abide by the district's email Acceptable Use Policy for Employees.		
7.8	*II.A, II.B*	Develop lesson plans integrating email into the curriculum		
7.9	*V.D*	Subscribe to a professional Listserv.		
7.10	*II.A*	Teach students how to use email to communicate ideas effectively.		

	ISTE Standard	**TELECOMMUNICATIONS** **Web Publishing**	Need Help!	Can Do! Date
8.1	*I.A*	Use pre-designed formats to create a webpage.		
8.2	*I.A*	Import graphics such as bars, animated objects and pictures.		
8.3	*I.A*	Create “return to” links within an html document.		
8.4	*I.A*	Create hyperlinks to other WWW sites within an html document.		
8.5	*I.A*	Create hyperlinks to other pages within an html document.		
8.6	*I.A*	Create hyperlinks to an email address within an html document.		
8.7	*II.A, II.B*	Develop lesson plans integrating web publishing into core curriculum objectives.		
8.8	*II.A*	Teach students how to use web publishing to communicate ideas and share information.		
	ISTE Standard	**CLASSROOM MANAGEMENT** **Use of Technology, Information and Resources**	Need Help!	Can Do! Date
9.1	*II.D*	Plan technology resources for better implementation of lesson plans.		
9.1	*VI.C*	Assess the instructional effectiveness and diversity of technology-based lessons.		
9.2	*VI.B*	Demonstrate appropriate attitudes in adopting the use of technology in the classroom.		
9.3	*VI.A*	Understand and comply with software copyright laws, email protocols and netiquette.		
9.4	*VI.A*	Explain and enforce Acceptable Use policies of the school and/or district.		
9.5	*VI.B*	Use technol ogy resources to enable and empower learners with diverse backgrounds, characteristics and abilities.		
9.6	*VI.A*	Establish classroom policies and procedures that ensure ethical use of technologies.		
9.7	*VI.D*	Model behaviors that promote safe, ethical and legal uses of computer/ technology resources.		
9.8	*VI.E*	Facilitate equitable access to technology resources for all students.		
9.9	*V.B*	Demonstrate positive and proactive efforts in using technology as a teaching and learning tool.		

	ISTE Standard	**INSTRUCTIONAL APPLICATIONS** **Resource Selection and Use**	Need Help!	Can Do! Date
10.1	*II.A, II.B*	Develop lesson plans integrating instructional software and electronic databases into core curriculum objectives.		
10.2	*II.C*	Determine accuracy and suitability of technology resources based upon system requirements.		
10.3	*I.B, V.A*	Read professional technology resources in support of student learning (i.e., DISCUS, SIRS, Technology and Learning, School Library Journal).		
10.4	*VI.A*	Examine and follow copyright policies.		
10.5	*I.B, V.A*	Keep abreast of current information through professional publications and attendance at workshops.		
10.6	*IV.C*	Apply multiple methods of evaluation to determine students' appropriate use of technology (i.e., video cameras, digital cameras, School InSires, Movie Maker, GPS, science probes, performance management systems, Excel, Access, MS Word, PowerPoint, etc.).		
10.8	*V.B*	Use technology to evaluate and reflect on professional practice regarding the use of technology in support of student learning (i.e., ETV Streamline SC, Technology & Learning, Classroom Connect, T.H.E. Journal, Edutopia, etc.).		

To Meet Competencies:

_____ Successful completion of Technology Competencies for Educators (85% Mastery Required)

Verification of Mastery of Competencies:

_____ _____

Instructor Date

Italics indicates correlation to ISTE Standards.

Appendix 8

Florence County School District Three
Technology Disaster Recovery Plan
June 2016

This document contains information and District procedures for the prevention and recovery from a Technology Disaster.

Anti-virus Software

Anti-virus software is installed at all district sites. The Technology Department has purchased a district license for anti-virus software for Windows-based computers and Novell Netware servers. All email coming into the district is scanned and stripped of the attachments if found to contain viruses.

Network Devices

All district network device configurations will be documented and stored off-site. This allows fast recovery time in the event of hardware or software failures. Critical network devices are also attached to a UPS unit that provides battery backup power in the event of a power outage.

Critical Data Backup

All user and email data that is generated is backed up daily. In the event of server hardware failure data can be restored from daily backups. Email is archived to a separate network appliance as required by federal and state law.

Weather

When inclement weather is expected, computers that are located near windows will be moved or covered to prevent water damage. Surge protectors and UPS units are provided for critical network equipment to limit the damage done by electrical surges.

Appendix 9

Annual Budget

EXPENSE CATEGORY	2016	2017	2018
District Technology Supplies	$85,041	$85,041	$85,041
Network Infrastructure	$450,202	$0	$0
Software/License Renewals	$240,500	$240,500	$240,500
Technology Devices	$468,760	$232,000	$232,000
Web Hosting	$14,000	$14,000	$14,000
Automated Calling (School Messenger)	$6,000	$6,000	$6,000
Technology Professional Development	$19,000	$19,000	$19,000

Appendix 10

Online Testing

Technology Readiness Assessment

For

Florence School District 3

Overview of Florence School District 3

Florence School District 3 is located in the eastern part of the state with the District Office located in Lake City, SC. As of February 2016, the district is comprised of 8 schools, serving approximately 3,558 students. Test scores for students in grades 3-8 in the district were below the state average in all areas, but above their peer districts in all areas except English in 2015 and leadership is working aggressively to take the appropriate measures to enhance the learning experience and increase student achievement rates in 2016.

Key Data Points

- Ms. Laura Hickson has served as Superintendent for the past year
- District Poverty Level is 90%
- Teacher Retention Rate is 84%
- Breakdown of schools:
  - J. C. Lynch Elementary, 59 years old, last renovated 1993, grade levels PK-5, 381 students
  - J. Paul Truluck Intermediate, 59 years old, renovated 1993, gradelevel 6, 292 students
  - Lake City Early Childhood, 21 years old, grade levels PK-2, 413 students
  - Lake City High, 46 years old, last renovated 1989, grade levels 9-12, 903 students
  - Main Street Elementary, 65 years old, last renovated 2004, grade levels 3-5, 420 students
  - Olanta Elementary, 59 years old, last renovated 2000, grade levels PK-5, 227 students
  - Ronald E. McNair Jr. High, 66 years old, last renovated 1998, grade levels 7-8,558 students
  - Scranton Elementary, 86 years old, last renovated 2000, grade levels PK-5, 364 students

Participating District Personnel

Name of District Staff Member	Roles/Responsibilities
Barbara Woodbury	Sr. Director of Instruction/Tech. Prof. Dev.
Kasey Feagin	Director of Assessment and Accountability
Penny Moore	Administrative Asst.
Gloria Davis	Student Data Manager/Instructional Software
Brian Huckabee	Director of Communication & Technology
Noah Decamps	Network Applications Specialist

Purpose of This Analysis

The purpose of this analysis is to provide an independent evaluation of the ability of Florence School District 3 to organize and conduct online testing for their students in grades 3-8 starting in the spring of 2017. Federal online testing guidelines will take effect in 2018 but South Carolina's legislature has implemented plans for all districts to begin formal online testing in March of 2017 for Math and ELA classes inclusive of all students in grades 3-8. This proactive technology analysis will benchmark a district and their schools in several key areas and provide a technology readiness score that will ultimately lead to a roadmap of detailed tasks and deliverables that are necessary to improve any of the deficient areas.

The three specific objectives of this analysis are:

1. Analyze the strengths and weaknesses of the school district and quantify their ability to carry out the online testing activities in 2017 and beyond while documenting any major gaps in "readiness."

2. Work with the district to identify recommendations to bridge the gap between where the district is and where they need to be in terms of technology readiness to carry out these activities.

3. Collaborate with the district to put in place a blueprint for completing any tasks (or procurements) necessary to achieve "technology readiness."

Analysis Background

During the 2015 budget planning period, Superintendent Molly Spearman championed the General Assembly to consider the request of reserving a portion of the K-12 Technology Initiative funds for the purpose of providing technology technical assistance to rural and less affluent districts of need. After funds were allocated through the Proviso, the Superintendent's office called together a small Advisory Task Force to begin exploration of a plan of action to implement the initiative. The Task Force included South Carolina Department of Education (SCDE) staff, representation from rural school districts, legislative representation, and private sector.

The Proviso states:

"1.94. (SCDE: Technology Technical Assistance) Of the funds appropriated for the K-12 Technology Initiative, the department is authorized to withhold up to $350,000 in order to provide technology technical assistance to school districts."

The purpose and spirit of the Proviso is for the SCDE to provide technology-consulting services ("technology technical assistance") to school districts that would otherwise struggle in securing such services and resources. In particular, consulting services would initially focus on evaluating the state of technology, in participating districts, as it relates to readiness for standardized, online assessments beginning in 2017 and the capacities to offer quality computing based instruction, including Wi-Fi availability for support of instruction.

Proposed District Participants:

While there are a substantial number of rural-based districts in the South Carolina public school system, funds allocated for this year's initiative may not be adequate to offer high quality and much needed external, independent consulting services to all districts of need. Therefore, it is recommended that initial focus be placed on the plaintiff districts involved in the lawsuit between districts and the state (Abbeville vs. South Carolina.) and any other rural districts identified by the State Superintendent's office. As time and funding are available, other rural districts may be included. There were initially at least 30 districts involved in the state suit and about 9 remained by the end of the suit. All of the original Abbeville Law Suit districts have been given the opportunity to participate in the Online Testing Technology Readiness Analysis.

Proposed Consulting Resources/Partners:

The South Carolina Department of Education did not have adequate staffing to fully offer technology consulting services of this magnitude. Therefore, it was suggested that SCDE seek and secure external, independent contracted services to facilitate this initiative. The state interviewed several industry-consulting resources and opted to leverage a lead consultant who helped the state with the analysis and writing of the Educational Technology Plan for years 2014-2017. Robert Cardelli was contacted in late 2015 and the consultant team was finalized and officially began work the second week of November 2015.

Initial Outcomes:

As a result of the initiative, each participating district receives a personalized report detailing the consultants' findings and recommendations as to the district's technology readiness for state and other online assessments, 1:1 computing, and enhanced Internet connectivity (Wi-Fi) for the support of instruction in their schools. A blueprint outlining specific steps the district and their schools need to focus on is presented to the district's superintendent as part of the final report.

Evolution of Online Testing Requirements

No Child Left Behind legislation required states to measure students' progress in reading and mathematics annually in grades 3-8 and at least once in grades 10-12 by 2005-2006. The *Every Student Succeeds Act* (ESSA) maintains the requirement that each state implement "a set of high quality student academic assessments in mathematics, reading or language arts, and science" (114th Congress, 2015, p. S.1177-24) among its provisions. Further, mathematics and reading or language arts assessments will be administered in each of grades 3-8, and at least once in grades 9-12.

Beginning in the 2014-2015 school year, learners faced a new testing challenge in that their assessments of learning will be via online testing of the Common Core standards. Assessments are being developed by organizations such as PARCC, DRC, ACT and SBAC. Tests may take learners from 8-10 hours to complete and must be integrated into the school's daily and weekly calendar of events to complete the necessary activities. (Doorey, 2014; Gewertz, 2013). Online testing has posed concerns about required technology, sufficient bandwidth, computerized test security, learners' technology skills, and new forms of test anxiety.

States Must Become Familiar with Updated Legal Policies for Computerized Testing

Computerized testing raises new issues that require updating of test security laws and policies, as policies written for standardized testing administered via paper-and-pencil are no longer sufficient. ACT has a highly relevant report in this regard: The End of Erasures: Updating Test Security Laws and Policies for Computerized Testing by Michelle Croft (2014).

Croft (2014) outlined many concerns, noting that computerized testing does not eliminate cheating and test piracy. Such practices just take on different forms. Unique risks include such things as educators logging in to tests to view questions or change student responses, computer hacking, keystroke logging, printing, emailing, or storing test information in a computer outside the test delivery system. There is a greater risk of students accessing the Internet and other programs during testing. There is great concern about students using their own devices for testing and who has administrative privileges. Technology staff and teachers need to consider how testing workstations need to be positioned and secured so that students can't see what's on the monitors of others.

Croft (2014) recommended that states update their state statutes and regulations to reflect the shift to computer-administered assessments, concentrate efforts on controlling test access, and ensure that there is a single test security section within the updated manual that contains answers for any question that a test administrator has about test security. For example, policies should consider how student login information is secured. There should be rules on how tests are reactivated if disrupted. Additionally, these rules should emphasize having more than one proctor aid in the reactivation, and most importantly, proctors should maintain a log of all reactivations to provide documentation in the event of an investigation. Likewise, the technology should be secure and the testing window should be as short as possible to reduce the likelihood that items are compromised. Finally, states should implement steps to actively monitor test access issues through data reports to determine if there have been excessive logins or logins at times when testing should not occur (e.g., on the weekends), and have clear policies in place detailing how violations will be handled.

The test security section should also include an itemized list of what materials are secure (e.g., work folders, student authorization tickets with IDs and passwords, session rosters, scratch paper, reference sheets). "Information about who can access the test should be clearly articulated across the school and communicated to all proctors on the day of testing. In addition, there should be information on how to report test security concerns and possible violations, which can be applicable regardless of the testing format" (Croft, 2014, p. 4).

It is vital for states to adequately prepare districts and schools for the evolving testing requirements and to proactively ensure educators and students are familiar with any new policies regarding computerized test administration, including what they, test proctors, and students may and may not do. Having these policies and procedures in place is critical to the success of the testing process and the legal implications for violating any of these policies are potentially severe. Advance planning and communication is required to minimize the risks associated with testing. Any technological failures in the administration of the tests could spark an outcry to invalidate the results; especially considering that high-stakes test scores are factored into school grades, teacher salaries, and federal assistance to the state. The stakes are too high!

Changes in E-Rate Rules Will Affect Funding for Districts

The federal E-Rate Program started redirecting funding support FY 2015 (7/1/2015-6/30/2016) to focus on high speed broadband connectivity and Wi-Fi to tackle the digital divide concern. This included no longer providing funding or reducing funding support for outdated, legacy, and non-broadband related services such as…Page 12 ref: https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1556A1.pdf ***FCC Order 2015, 2016: http://www.usac.org/_res/documents/sl/pdf/ESL_archive/EligibleServicesList-2016.pdf

Page 2 summary reads as follows:

"The E-rate program: (1) restructured the former Priority One and Priority Two categories into Category One and Category Two; (2) eliminated Category One (former Priority One) support for outdated, legacy, and other non-broadband services including web hosting, email, and paging; (3) adopted a phase out of support for Category One voice services; and (4) limited Category Two support to the internal connections needed to enable high-speed broadband connectivity within schools and libraries, specifically LAN/WLAN (local area networks/wireless local area networks)-focused components (broadband internal connections components), basic maintenance of eligible broadband internal connections components, and managed internal broadband services."

Services and Components No Longer Eligible for Support (Effective Funding Year 2015)

Category Two (Priority One)	Category Two (Priority Two)
Services and telephone components that were listed as eligible in the former Priority One category: • 900/976 call blocking • Custom calling services • Direct inward dialing • Directory assistance charges • Email • Inside wire maintenance plans • Paging • Text messaging • Voice mail • Web hosting	Components included in these former Priority Two entries: • Circuit Cards/Components • Data Protection (all except for firewall and uninterruptible power supply/battery back-up) • Interfaces, Gateways, Antennas (other than as specified in this Order) • Servers (other than servers necessary for caching) • Software (other than the software that supports eligible broadband internal connections) • Storage Devices • Telephone Components • Video Components • Voice/video IP components (that had been listed in the Data Distribution entry)

Many districts have relied on this funding support since the start of the E-Rate program 18-years ago. Some districts rely on this funding reimbursement to purchase additional technology/services. Others used this to pay for operational (staff, etc) expenses.

Eligible voice services are subject to an annual 20 percentage point phase down of E-rate support beginning in funding year 2015, as described in the *E-rate Modernization Order*. The reduced discount rate for voice services will apply to all applicants and all costs for the provision of telephone services and circuit capacity dedicated to providing voice services.

South Carolina's Testing Requirements

The South Carolina College- and Career- READY Assessments (SC READY) are statewide assessments in English language arts (ELA)* and mathematics that will meet all of the requirements of Acts 155 and 200, the Elementary and Secondary Education Act (ESEA) , the Individuals with Disabilities Education Improvement Act (IDEA), and the Assessments Peer Review guidance.

All students in grades 3–8 are required to take the SC READY except those who qualify for the South Carolina National Center and State Collaborative (SC-NCSC).

SC READY Assessments are not timed, and both computer-based and paper-based testing will be available. Data Recognition Corporation (DRC) is the contractor.

*** The ELA test will be a two-day test: Session 1 (Writing) and Session 2 (Reading) for all grades.**

Estimated Times for the SC READY Assessment*

Grades	ELA Session 1	ELA Session 2	Mathematics
3-8	2.5 hours	2.5 hours	2 hours

*The SC READY assessments are not timed. The Office of Assessment is providing estimated times to assist with classroom scheduling. Since there are no previous testing times to serve as a guide for SC READY, these estimates represent the Office of Assessment's best approximations. "Start" and "Stop" times will be collected this year so that more accurate estimated times may be provided in the future. Please note that SC READY includes some new item types designed to measure a more demanding set of standards. As a result, it is anticipated that in the first year of SC READY, students may require longer testing times than in previous years.

Links:

http://ed.sc.gov/tests/middle/sc-ready/sample-items/
http://ed.sc.gov/tests/middle/sc-ready/
http://ed.sc.gov/tests/middle/adoption-list-of-formative-assessments/
http://ed.sc.gov/scdoe/assets/File/tests/assessment-information/test-dates/SCREADYDates15-16(1).pdf
http://ed.sc.gov/tests/elementary/general-information/

Overview of Technology Readiness Analysis Team

A team of independent consultants has been hired by the State of South Carolina to conduct all aspects of this assessment. The objectivity that outside resources bring to the table has helped reduce the perception that "big brother" is searching for negative data points on a district's leadership team. The use of third party resources has helped foster open and honest dialogue and allowed the district staff and consultants to collaborate in all aspects of the process. The team is comprised of the following individuals:

- **Rob Cardelli**

  - Project Manager overseeing all facets of the analysis
  - More than 20 years of education and government consulting expertise
  - Personally worked with over 100 education customers including helping the Department of Education in South Carolina gather requirements and write the State's Educational Technology Plan for years 2014-2017

- **Brenda Bryant**

  - Local school teacher in Richland 2 school district
  - Focusing much of her attention on the readiness of students and teachers along with professional development concerns

- **Bob Jones**

  - Local I/T and Management Consultant with over 30 years of experience
  - Focusing much of his efforts on the infrastructure, hardware, security and funding concerns
  - Expert in data analytics and reporting

- **Heather Sutton**

  - Local I/T consultant currently residing in the Orangeburg 4 district
  - Focusing much of her effort on facilities, staffing levels, strategic planning and testing policy readiness levels
  - Expert in data analytics and reporting

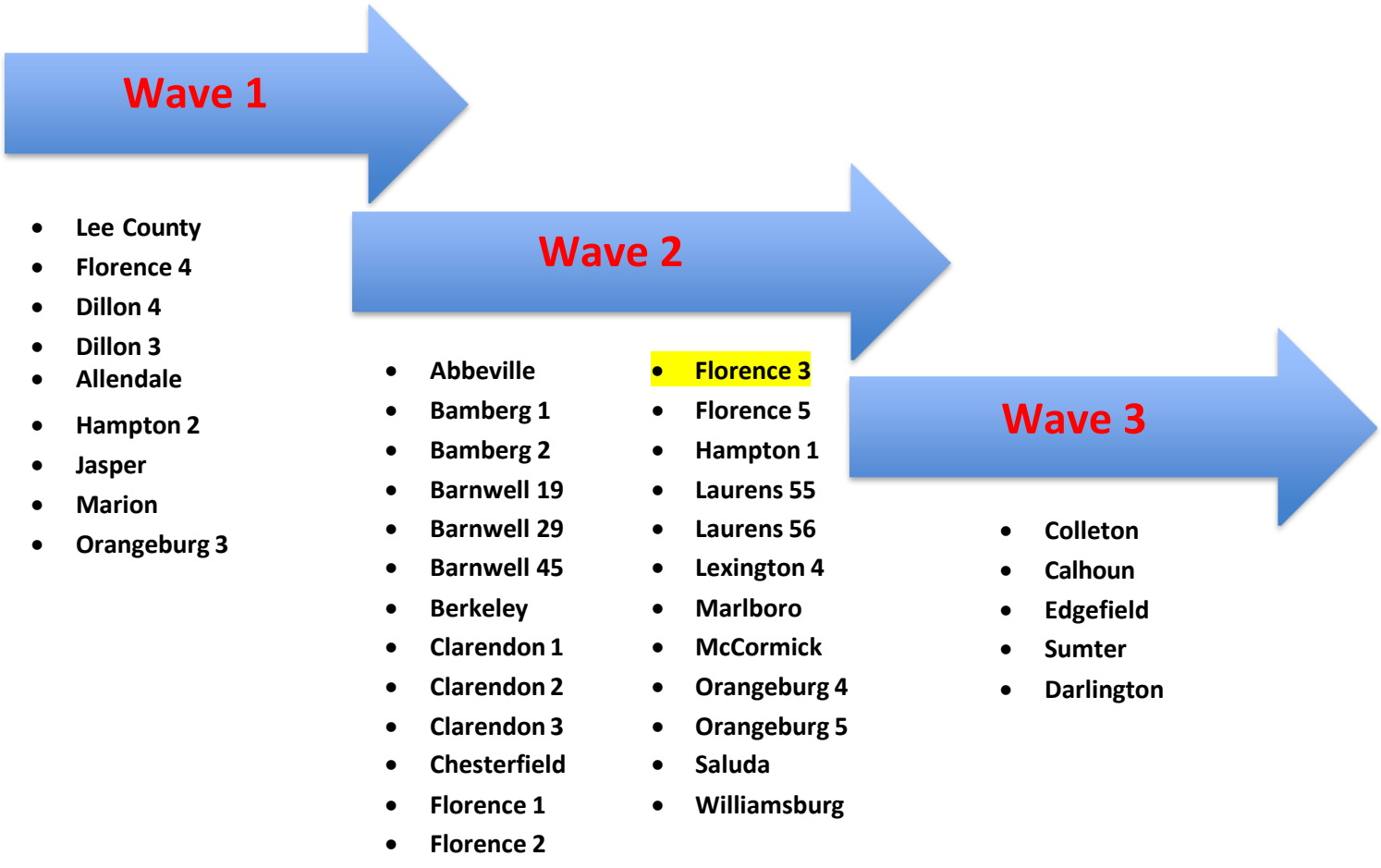
Participating Districts

The school districts that the state has identified as potential candidates for these optional readiness analysis studies have been prioritized into the following three categories:

- **Wave 1-** Includes the nine school districts that were still involved with the Abbeville Lawsuit at the time of the verdict

- **Wave 2-** Complete list of all districts participating in the Abbeville Lawsuit at any point in time over the last 20 years

- **Wave 3-** Other districts categorized as impoverished



Analysis Methodology

The consultants worked with several of the Wave 1 districts to design and ultimately refine a methodology that allows for rapid data gathering with multiple collaboration opportunities for district staff to review the findings and edit the documentation to ensure the report accurately reflects the current state of the district. The consultants realize how busy the district staff are and created a methodology that is non-invasive in nature and flexible to allow the participants to work around their "day jobs" to reduce the impact on their daily operations.

Primary Areas of Focus

The technology analysis team identified several categories that are critical for a school district to achieve technical readiness for online testing. Within each category there are multiple variables that directly impact that category's degree of readiness. Accurately documenting these variables helps paint a picture of the overall level of readiness of the school district and also can be used to craft a blueprint for improving those deficient areas. The graphic shows the eight (8) categories currently being used to measure the degree of readiness. The following pages provide details surrounding the variables that are being analyzed during the analysis process.

Categories and Variables Being Measured

Note: These are generic categories and questions being asked are not specific to any one district. Each bullet point receives a score that is averaged for the overall section.

❑ Impact of Facilities

- How does the availability or lack of space impact the district's level of readiness?
- How does the age of the schools impact cabling, wireless, and ability to connect to the Internet?
- Does poor air conditioning or ventilation in server rooms, network closets, or computer rooms present a risk to the availability of the computers for testing?
- Are there situations where rodents chew through cables and bring down the district computer network? How long is the network down and what is the frequency of these events?
- Are there leaky ceilings, poor flooring, mold, or other environmental conditions that could impact the testing facility?

❑ Readiness of Infrastructure

- How does the amount of available network bandwidth impact the testing strategy?
- Are there any risks to testing due to the "up time" of the district (or school's) network?
- How many simultaneous testing machines can a district handle during any block of time?
- Does the district need additional wireless access points to conduct testing activities?
- Do the age and type of routers or switches impact the performance of the network and the ability of students to test in a given timeframe?
- Does the current wiring/cabling of the network impact the overall system performance? Is there anything that needs to be improved to enhance the testing experience?
- Is there any evidence that the security of the district's networks or computers could impact online testing?

❑ Readiness of Existing Hardware

- How does the number of available computers directly impact the district's ability to test?
- Is there a need to upgrade the available memory (RAM) in the testing computers? How much memory is currently in the testing machines and what (if any) performance issues have been witnessed?
- Are there any concerns over the size or quality of the testing monitors?
- Is there evidence that the different types of equipment being used for online testing directly impact the staff's ability to support the technology? Are there multiple products in use overcomplicating the support strategy and overall skills of the district staff?
- Do the current operating systems of the testing computers limit the ability to test? Are there any upgrades being planned and when will these take place?
- Are there adequate backup testing machines and/or accessories to ensure the necessary number of devices on the day of testing?
- Are there any procurements currently being contemplated and will they need to be amended to reflect changes to the testing strategy?

❑ Teacher Readiness

- Are the teachers adequately prepared for 2017 online testing requirements?
- Do the teachers require professional development training to educate them on how to better leverage technology?
- Do the teachers require assistance creating and conducting computer literacy classes for their students?
- Does the district have funding to offer computer literacy?
- What is the turnover rate of the teachers? How does the turnover rate impact the district's testing strategy?
- How do the teachers interact with the district technology staff?
- Are teachers aware of testing policies and are they properly prepared to manage testing cycles?
- Do the teachers need assistance in preparing their students for computer literacy?
- Are there any other concerns related to a teacher's knowledge or ability to assist with online testing?

❑ Student Readiness

- How does the level of computer proficiency of the student's impact online testing? Are there any concerns that students are not properly prepared to take a test on a computer?
- Does the district offer kindergarten through second grade computer classes?
- Is there any proactive analysis to identify disadvantaged students in a classroom with little to no computer literacy? What, if anything, is the district doing to help these potentially at risk students?
- Does the district allow students to check out computers to take home?
- How does a district manage situations where two different teachers leverage technology differently? Is there any analysis into the student's technology proficiency between these two scenarios?
- Does the district offer practice tests to allow the students to get familiar with the testing process and what is expected of them?
- Are students aware of testing policies and the implications?
- Is there any evidence from previous online testing cycles that students need assistance in specific areas? Examples might include: typing skills, knowledge of scrolling or potentially how to properly use a mouse.

❑ Technology Support

- How many resources are available at the district level and what are their roles and responsibilities?
- What are the main skills of the staff? Are there any skills missing in the support model?
- What functions are outsourced?
- What kind of help desk system is in place and how many ticket items are open?
- How many job duties does the staff have to perform?
- Does the district staff have any assistance from within the school?
- What would the impact be on the school's ability to test if a key resource were to call in sick or resign during the testing window?
- Are there any concerns about the availability of technology staff to support the testing process?
- Are policies and testing procedures documented and disseminated to all staff?
- Are students and their families made aware of the testing policies and schedule?
- Does the technology support team regularly communicate their needs to the administration and/or school board? What is the relationship between these parties?

❑ Funding Mechanisms

- Does the district leverage all available e-Rate funds?
- How has the district utilized e-Rate funds in the recent past?
- Does the district have experienced grant writers?
- How have technology related grants been utilized in the recent past?
- Are there any funds from e-Rate or grants that have NOT been utilized but could be leveraged to help improve the overall readiness of the district for online testing?
- Who writes the e-Rate documentation and grants? Internal or external resources?
- Are there other sources of funds the technology staff has access to and for what are they used?
- How does the district determine how the funds will be utilized?
- Are there any situations where money earmarked for technology is denied and utilized for non-technical district needs?
- What is the role of the technology staff in setting budgets and preparing for online testing needs?
- Is there a formal mechanism for cross training multiple district staff in the rules, regulations and nuances of applying for e-Rate, grants or other funding sources?
- How are the district's funds allocated for student computer literacy being spent?

❑ Strategic Planning

- Does the district have an up to date district wide strategic plan?
- Does the district have an up to date district technology strategic plan?
- Are the district's strategic plan and the TECHNOLOGY strategic plan properly aligned?
- What is the level of involvement of the local school board?
- Who is involved in strategic planning?
    - *Superintendent?*
    - *Teachers/Faculty?*
    - *I/T staff?*
    - *Local Vendors?*
- How does the district proactively plan for new technology acquisitions?
- How do the schools leverage district I/T staff?
- How are students or teachers leveraged?
- How are local technology vendors utilized?
- What is the level of involvement with the local "consortium"?
- How does the technology staff procure hardware or services?
- Is there a risk of "single point of failure" with the district staff member?
- Does the district need specific training in proper strategic planning?
- What assistance is required from the state?

Overview of Readiness Rating Scale

To evaluate the readiness of a district in multiple areas the team created a rating scale to objectively measure how effectively (or ineffectively) a particular area rates compared to other districts. After each area has been given a score the analysis team compiles the statistics and averages them to derive a final readiness score for the district. To simplify the process the consultants used a scale of 1-5 that increases in increments of half a point. The following scale will be used to track future readiness decisions:

Rating	Description
1	The district is unable to prove they can successfully complete online testing in 2017.
2	The district could feasibly conduct testing in 2017 but there are multiple areas that need to be improved to make this happen and if they are not completed testing will more than likely be unsuccessful.
3	The district will be able to meet the 2017 Online Testing requirements. The district will not be able to handle additional subjects or grade levels without significant improvement in multiple areas.
4	The district will be able to meet the 2017 Online Testing requirements and they can meet a few extra subjects or grades but not all future needs.
5	The district is prepared for 2017 and beyond. They do not have any measurable risks associated with Online Testing for 2017 or beyond. They can handle online testing for all grades and subjects.

Summary of Findings for Florence School District 3

Overall Readiness Score	2.7

Impact of Facilities

Readiness Score	1.8

Area of Focus	Observations	Recommendations
Availability of Testing Labs	• The district currently has 18 labs for all 9 schools. • With the number of testing seats available, the district will not be able to complete online testing within the testing window. • The district lacks the space to add additional labs for testing.	• Florence 3 does not have additional space for labs, nor do they currently have enough labs to test. The district will need laptop carts in order to test online. • The only other viable options would be purchasing and utilizing mobile trailers. This option works well for some districts and schools where space is an issue. The consulting team recommends laptop carts though because of the multiple uses that can be derived from the extra machines and the simplicity of managing the carts.
Age of Buildings and Impact on Cabling and Wireless Connectivity	• Florence 3 has a total of 9 schools in the district. Most schools are over 45 years old. • Like all aged schools, wiring and adding additional cabling can be very difficult. • Many data closets are very small and/or share space with a janitor's closet. • The wireless network in the district desperately needs to be replaced. The director of technology has done an amazing job strategically placing the wireless access points throughout the school to ensure all have the ability to access the wireless system.	• More power supplies will be needed for laptop carts, as well as extra batteries for the school that lack the power supplies. • The small data closets could be reworked with shelving that allows for tiered storage of equipment. Expertise might need to be leveraged to provide cost effective ideas on how to better utilize the limited space. • Once wireless network is upgraded in all schools, a load performance test must be performed to ensure each school has enough access point to support testing.

Environmental Concerns (i.e. mold, air conditioning and ventilation concerns, excessive noise)	• Several schools have leaky ceilings in the classrooms and the data closets. • Ventilation is a concern in most data closets. • Data closets in the older schools lack proper ventilation/air conditioning. This increases the risks during the springtime when temperatures are high for damage to computer and network equipment.	• Maintenance from the state department of education should have someone evaluate the schools to ensure there are no mold issues. • The data closets that need improved ventilation must be fixed. The risk of technology overheating and degrading or completely taking down the computer systems is very real and could impact testing.
Condition of desks and chairs where students will be testing	• Furniture in many labs is old and unmatched. While this might not seem like a major impact on testing there is evidence to suggest standard-testing environments must be in place to properly gauge the effectiveness of student testing. Students taking tests in rickety chairs or squeaky desks could be at a disadvantage.	• New furniture is needed for labs that will be used for testing. • New desks will be needed for classrooms that will be used for testing.

Infrastructure

Readiness Score	2.1

Area of Focus	Observations	Recommendations
Available Bandwidth to the district	• 500 mbps is currently coming into the district office. • Even though the district has 500 mbps, teachers are asked to refrain from using instructional video technology during testing.	• The consultants recommend the district perform a formal analysis to determine if the available bandwidth is able to meet the needs of the district during online testing activities. Contracting with 3rd party experts may be necessary to ensure the routers, switches, access points and cabling are properly integrated and successfully maximizing the available bandwidth. Corrective action should be taken to further "tune" the networks and support components. There are specialized tools available to help assess a network's efficiency and it may be necessary to leverage a 3rd party to help justify purchasing additional incoming bandwidth to rectify the performance challenges.
Stability of Networks Within The Schools	• The district has very limited wireless access in many schools. The wireless access points have been strategically placed throughout each school to maximize the network usage. • Considering the performance issues noticed at many schools, it is doubtful that online testing could be performed using wireless.	• The district will need additional WAPs installed in order to test online in 2017. The district does not have an adequate amount of testing labs or additional space to set up labs and will have to rely on laptop carts to complete online testing within the testing window.

Available Bandwidth to the Schools	• Most schools have 100-150 mbps coming in, with the exceptions of J. Paul Truluck Intermediate at 500 mbps and Lake City ECC is sharing 500 mbps with Lake City High. There is not enough data to determine the potential performance challenges the schools may face.	• As more subjects and grades are added to online testing, performance testing will need to be conducted at each school location to determine how much bandwidth is needed at each school. The district currently believes there could be a risk to testing the current population but they lack the tools to confirm any challenges. Additional network hardware might be needed to expand the capacities and efficiency of the district's network.
Cabling Challenges	• All lines coming into the district are cat 5, 5e or 6. • Due to the age of most buildings, cabling has been a challenge. The schools have done the best they can, given the structural challenges, but it's a very challenging situation and there are clear issues with the network connectivity and what can be accomplished due to these limitations.	• The consultants recommend the district engage a firm to formally evaluate the network cabling challenges and provide a cost comparison between going heavily wireless or continuing to invest in the hardwire cabling. • As the demands on the network increase, the district should consider upgrading to all Cat 6 or fiber, if feasible.
Wireless Networks Routers Access Points Bandwidth Switches	• All switches need to be replaced. • Wireless network desperately needs to be upgraded to have an access point in every classroom. • All aged routers need replacing.	• Load testing should be performed to see where more access points are needed. • Replace all aging routers. Routers need to be modern to integrate with the switches and access points and expanded bandwidth. The routers should be upgraded before additional bandwidth is added. • Replace all switches in the district. • Increased bandwidth should be explored once the other hardware issues have been addressed. The new hardware should be able to accommodate significantly more bandwidth. It's important to do the hardware first and THEN the expanded bandwidth.

Hardware

Readiness Score	2.2

Area of Focus	Observations	Recommendations
Number of Computers Available for Testing	• District wide there are 408 computers that could potentially be used for testing in grades 3-8. Based on the number of students in the district, and the current amount of hardware, Florence 3 does not have enough computers to test grades 3-8 online within the testing window in 2017. • The district has 1102 1:1 chrome books at the middle and high school.	• A hardware refresh plan needs to be created. The district currently does the best they can but a formal plan needs to be created to handle the future management and philosophy towards consistently replacing district technology. • Laptop carts are needed in all schools. The district needs to identify exactly how many are needed and begin the acquisition process. Back up hardware and equipment, such as batteries needs to be available during testing. It is mandatory that backup systems exist or the risk to students not being able to test is very real.
Age and ability to upgrade computers	• All computers are between 1 to 7 years of age. As computers reach the end of their useful life, a replacement strategy will need to be identified.	• A consistent and well thought out technology refresh strategy should be created and approved by the superintendent and communicated and approved by the school board.
Available RAM (Memory) in testing computers	• All computers have 2 to 4 GB of RAM. • There are a large number of computers with inadequate memory to handle expanded bandwidth and the heavy reliance of video within the classroom.	• The consultants recommend the district strive for a minimum of 8 GB of memory on all future computers. Wherever possible we suggest trying to upgrade the existing computers IF it's a cost effective solution. Many times adding memory to an existing computer is NOT necessarily cost effective if you can buy a brand new laptop with a faster processor for a price of half as much as simply adding memory to an older machine.

Disaster Recovery Solution	• The district is currently working on a disaster recovery plan. A plan has been conceptualized but not implemented. There is currently a backup solution but it's not a "cloud or offsite" model, which is a very real risk.	• The consultants recommend Florence 3 collaborate with their peers in other districts who also need remote disaster recovery solutions to obtain a discounted vendor contract. • A formal DR policy and plan is needed and the consultants believe the state government should have a role in providing assistance in this area. The majority of districts interviewed have an immediate need in this area. The state should recognize this risk and assist with identifying and implementing and supporting a DR solution
Adequate replacement hardware	• The district does not currently have a replacement plan for hardware. We have mentioned this concern elsewhere. It's imperative that the district and schools have adequate machines for testing. Currently the plan would include taking computers from teachers or potentially other classes not planning for testing.	• Purchase and maintain a healthy supply of backup machines, batteries, keyboards and mice. • Create a formal hardware replacement policy.
Support and Replacement Strategy	• Currently the district does not have a formal technology refresh policy. • Funding is not predictable and purchases are made when funds are available.	• A formal strategic planning initiative is needed to review the current state situation and identify needs for the district in a variety of areas outside the scope of this assessment. The district staff has the skills to complete this assessment internally however, they don't have the time. The consultants recommend a formal plan be created to ensure infrastructure and computers are modernized on a consistent basis.

Teacher Readiness

Readiness Score	3.3

Area of Focus	Observations	Recommendations
Technical Proficiency of Staff	• The technology staff works hand in hand with district staff to ensure they know and are comfortable with using technology. • The technology staff and teachers work together to research and find new ways to bring technology into the classroom • The staff is given multiple opportunities each month to learn new things and attend technology training.	• Once the formal testing requirements are finalized the district needs to ensure all teachers are notified of testing requirements and any professional development promptly scheduled.
Turnover of Teachers	• The district has a marginal turnover rate for teachers. • Teachers have not expressed that technology is a reason for leaving the district. • The turnover of staff directly impacts the technology staff. The tech staff uses their limited training time/budget to get teachers up to speed on how to use technology and they routinely leave the district. The new teachers coming in are unable to take training because in many cases the professional development resources (people and money and time) are exhausted.	• The state should explore avenues for reducing the turnover rate in this district. It is putting the district and the schools and the students at a competitive disadvantage. • Additional professional development is needed to ensure new teachers coming in to REPLACE outgoing teachers are properly trained. • A study should be conducted to determine the impact on the students.
Level of Technical Preparedness	• Teachers are well equipped in the classroom with technology. More seasoned teachers are reluctant to use the technology.	• More seasoned teachers should be surveyed to understand their reluctance to use technology in the classroom.

Availability to prepare for testing	• Online testing requires significantly more preparation than paper testing. Preparation for online testing will result in a much greater demand on the IT staff.	• District leadership needs to mandate that dedicated time be allocated to focus on preparing for state and federal testing activities. The IT staff needs to be involved to ensure all tasks and deliverables are completed in an efficient manner. • The teachers, administration and technology staff should hold strategy meetings to ensure everyone is properly prepared for 2017 testing requirements
Other Concerns		

Student Readiness

Readiness Score	2.8

Area of Focus		
Availability of Computer/Typing Classes for K-2	• K-2 students have the opportunity go to a computer lab once a week but do NOT have formal computer literacy/keyboarding classes.	• Keyboarding instruction needs to start prior to the 3rd grade. Formal keyboarding activities are necessary to ensure 3rd graders are prepared for the testing requirements.
Level of Poverty/Home Exposure to Computers	• Approximately 90% of the district's students qualify for free or reduced lunch. • Many families in the area do not have internet services. Students' exposure to the internet is largely through the school or a smart phone. • There is a very real concern that students in this district may be at a competitive disadvantage over their peers in neighboring districts due to their high poverty rates, lack of computer proficiency at earlier ages and the lack of exposure to technology in the classroom.	• The fact that many of the district's students come from homes where heavy and consistent computer usage is unlikely only increases the need for formal computer literacy classes in the earlier grades. • The district should seriously explore giving the aging technology to the local families to allow students to become more familiar with keyboards and utilizing mouse.
English as a Second Language Concerns	• The district has 4% ESL Students. • ESL students are getting increased exposure to computers and are given many opportunities to take practice tests. These students are possibly better prepared than other K-2 students and have actually been scoring higher in previous assessment testing.	• The consultants recommend the district staff continues to work closely with the schools to formally give the ESL students an opportunity to take a practice test to ensure they are adequately prepared for testing activities. Simulated testing will help identify any potential concerns in a proactive manner.
Availability of Sample Tests	• The district currently provides students with online testing opportunities.	• DRC offers free sample tests that could be used to further familiarize students with the online testing format.

Funding Mechanisms

Readiness Score	2.8

Area of Focus	Observations	Recommendations
Maximizing e-Rate	• The district is maximizing it's usage of federal e-Rate funds. The staff proactively completes the paperwork and has full knowledge of the process.	• Ensure the district's strategy for utilizing current and future e-Rate funds are documented in the strategic plan.
Ability to successfully manage the grant writing process.	• The Director of Technology has very limited time to research grants. • Although the district has been awarded technology grants in the past, Florence 3 does not have a dedicated resource for writing grants.	• We recommend collaborating with neighboring districts to share a resource to assist in this area. This is a common solution in many states.
Multiple resources knowledgeable in e-Rate and Grant Writing	• The Director of Technology works with a 3rd party contractor in order to receive the most e-Rate money possible.	• Multiple district staff needs to be familiar with the e-Rate process for checks and balances and backup scenarios.
Other Concerns		

Strategic Planning

Readiness Score	3.3

Area of Focus	Observations	Recommendations
Technical Staff Collaborates with Administrative Staff to Determine Technology Needs	• The Director of Technology informs the administrative staff of the district's needs for upgraded technology. • The administrative staff is extremely supportive of the recommendations that come from the Director of Technology. • The Director of Technology attends School Board meetings regularly and presents as needed as part of the Superintendent's cabinet.	• Best practices dictate that the technology staff regularly updates the school board on technology usage and needs.
Thoughtful analysis into how funds will be spent	• The district lays out a plan each year for the top priorities of the schools and teachers and students. The IT staff is actively involved in this process. • Technology purchases are sometimes made prior to consulting the district's technology department. It is imperative that purchases made can be supported by the district's network and staff.	• Continued strategic planning efforts are required. Communicating to the school board and ensuring all parties are aware of the importance of consistent funding for technology and professional development is mandatory. • It is important that the technology staff have a methodology for educating administrative staff on technology needs and recommendations.
Teachers needs are considered top priority	• The district does a consistent job focusing on the needs of the teachers and their needs.	• No recommendations are needed in this area.
The role of technology is agreed upon by all parties	• The technology department collaborates with other departments to ensure the needs of the district are met. • School administrators sometimes make purchases without consulting the Director of Technology.	• Administrators and staff need to understand they must have everything approved through the Director of Technology.

Proper amount of professional development	• The district offers technology classes once a month at every school during PLC time. • Attendance at Technology conferences (Ed Tech, SCASL). • The district has made professional development a top priority by ensuring teachers receive the training they need to successful in the classroom.	• Survey teachers to see what additional professional development sessions they would like.
Implementation, Distribution and Enforcement of Testing Policies.	• The district staff is very busy. Formal policies and procedures for current testing requirements may not be up to date.	• Everything dealing with online testing must be coordinated with the Director of Technology and the testing coordinator.

Readiness of Technical Staff to Support Online Testing

Readiness Score	2.7

Area of Focus	Observations	Recommendations
Number of support technical support staff	• Currently the technology department has 4 staff members including the Director of Technology. This staffing model is more robust than other districts but Florence 3 includes several support functions for IT staff that other districts have residing outside of IT.	• As online testing grows, Florence 3 will need to increase the technology staff. Currently it takes the entire staff to man online testing district wide. Help desk tickets increase during current testing due to the lack of help.
Technical skills and proficiency of support staff	• Each member of the team is extremely educated in technology and has well versed certification. The district has done an excellent job attracting skilled labor.	• Retention must be a focus for district leadership. Losing any of these key IT resources could cause significant damage to the existing support model.
Availability of staff to proactively engage with the teachers and administrative staff	• The technology staff faces issues daily with tackling everyday operational duties and handling issues throughout the district. • A "First Responder" is in place at each school for triage and putting in help desk tickets. This position is usually held by the media specialist. The technology staff provides them with minimal training at the beginning of the school year.	• Administration needs to pay attention to hours worked and burnout. The existing staff appears to be working significant overtime. This is a risk and needs to be monitored. • Identifying middle and/or high school students capable of performing basic tasks could also help reduce the help desk ticket volume and free up IT staff to be more strategic.
Ability of staff to assist with professional development efforts	• The district has Instructional Technology Coaches to assist with professional development.	• Florence 3 is doing an exceptional job of providing professional development to their staff.

Risk of Single Point of Failure. If a key resource leaves will testing become at risk?	• The current Director of Technology is in a "Lead" role in several critical areas and there is no formal backup plan; however, he feels if he was to be unavailable during the testing process his staff would be able to complete all steps necessary to successfully complete online testing. • Due to the current model of the technology staff, there would be a clear risk of single point of failure if any of these key IT resources were to leave or become unavailable. • The district is working on cross training and documenting roles and responsibilities. There is currently good backup in key areas.	• An effort should be undertaken to cross train other staff members with duties of Director of Technology to be able to provide backup for each other. • It is imperative that all staff continue to be cross-trained in all areas to provide adequate backup if needed.

Additional Consultant Observations

Highlighted below are the most frequently cited strengths of the school district, which can be used as a foundation for creating a roadmap to address any areas of concern. The items in the table are rank-ordered according to the frequency with which they were mentioned in the interviews. Multiple points of engagement took place with a minimum of two analysis team members involved with every district.

Rank	Strengths	Common Themes
1	Willingness to improve	Everyone in the district strives to work together to see that improvements are made not only yearly, but on a daily basis.
2	Attitude / Enthusiasm	Florence 3 makes the best of all situations. The attitude of the district is whatever it takes to get it done, they will do it.
3	Work well together	The entire district is more than co-workers, they are a family unit. They thoughtfully plan and execute everything in the best interest of the children of Florence 3.
4	Dedication	The technology staff gives up many hours with family and friends to ensure every staff member and child has the up to date technology and teachers know how to utilize the tools in their classrooms.
5	Professional Development	Florence 3 is a leader in this area. The district recognizes the importance of professional development and has made the investment necessary to ensure teacher technical proficiency.

Commonly Cited Concerns

Listed below are the most frequently cited concerns about testing that were documented over the course of the analysis process.

Rank	Concern	Sample Answers
1	Budget	The technology department has a very limited budget. Without careful planning the district may not be able to upgrade or refresh hardware as needed each year.
2	Schedule / timeline	Florence 3 technology staff is stretched thin. They have very limited time to plan far in advance due to daily operations.
3	Staffing Levels and Workload	Inadequate staff to complete the workload to prepare for testing. The focus on assisting teachers and their classroom technology consumes the majority of the staff's time leaving little availability for additional tasks.
4	Disaster Recovery	Like most districts, a backup is done of the system, however nothing is offsite or in a cloud.

District's Inventory of Readiness Needs

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Facilities	Space/Testing Rooms							
	Air Conditioning Unit	To keep servers cool	JohnStone Supply Company/ Benton Air	9 Server rooms	18,000	9,000	TBD	Aug, 1, 2016
	Roof/Ceiling Repair	To repair leaks in server rooms to protect equipment	Southern Roofing	As needed	100,000	On going as needed	TBD	Aug1, 2016
	Desks	Need stronger/ newer desk to hold computers	Nu Idea School Supply	400	30,000.00	7,500.00	General Funds/TBD	Aug. 1, 2016
	Chairs	Need chairs to go with desk	Nu Idea School Supply	400	10,000.00	2,500.00	General Funds/TBD	Aug. 1, 2016
	Other							

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Infrastructure	Bandwidth	For increased bandwidth	Sprint	Monthly access – 2,500	30,000 yearly	30,000 yearly	eRate/ TBD	Aug 1, 2016
	Routers							
	Switches	replace core switches and switches at all IDFs	DCS & A3	5 core 19@ IDF	$450,855.49		GO Bond Funds Erate Funds	Aug. 1, 2016
	Access Points	for testing to run effectively	A3 Communications	149	$700 each x 149 = $104,300		GO Bond Funds Lottery Funds TBD	Jan. 1, 2017
	Cabling	upgrade existing wireless network to CAT6	A3 Communications	149	$225 per drop x 149 = $33,525		Lottery Funds TBD	Jan. 1, 2017
	Installation/Testing							
	Disaster Recovery	Off site backup	Unknown		$13,000/year	$13,000/year	TBD	
	Other							

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Hardware	Laptops	needed in order to be able to test within the testing window limits	Dell	1160	$1,508,000		TBD	July 1, 2016
	Desktops							
	Memory							
	Operating System Upgrade							
	Monitors							
	Computer Carts (Cart Only	to be able to do multiple testings in a day		39	$19,500		TBD	July 1, 2016
	Extra Batteries	for defective batteries during testing		125	$7,500		TBD	July 1, 2016
	Installation/Testing							
	Other	Extension cords, headphones with microphones		500	$45 x 500=22,500	replacement costs	Title I Local Funds TBD	Sept. 1, 2016

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Teacher Readiness	Type of training needed by grade and by topic							
	Teacher's Knowledge of Online Testing Requirements including security							
	Technology Coach	Technology Coach to assist with district needs and teachers		1	$45,000	$45,000	TBD	Aug, 1, 2016

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Student Readiness	Computer Literacy Curriculum	SC Ready , SC PASS & ACT Testing practice for grades 3-8	USA Test Prep	1 year subscription	21,600.00	25,200.00	Title 1/TBD	Aug.1, 2016
	Computers needed for training							
	Practice Tests							
	Other							

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Funding Mechanisms	Assistance/Training for Writing Grants							
	Assistance/Training to manage e-Rate	Erate Consulting Services	Service Associates	1	$12,000	$12,000 yearly	General Funds	on-going
	Other							

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Strategic Planning	Consulting Assistance to educate staff in the strategic planning areas							
	Formal Training of Staff							
	Project Management	Someone to manage projects	Unknown	1	15,000	15,000	TBD	On-going

Category	Specific Need	Detail Specific Need (As required)	Vendor	Qty	Estimated Cost (One Time)	Estimated Recurring Cost	Potential Funding Source	Date Needed
Technical Support	Consulting Assistance to help in specific areas							
	Additional resources	temporary technology assistance-Level 1 or 2 technician		2 as needed	$60/hour 350 hours - $21,000 times 2 - $42,000	$42,000	TBD	summer and as needed
	Other							

Strategic Roadmap

This section will provide an overview of the specific action items the district should focus on to improve the readiness of each area discussed in this report. The Roadmap is broken down into measurable tasks and deliverables to

1-Month Plan

- **Write proposals for cabling, laptops, etc.**
- **Make action plan for staff development of digital testing**
- **Research available technology grants**

3-Month Plan

- **Award bids for proposals. Schedule with vendors**
- **Begin imaging laptops**
- **Begin communications of digital testing**

6-Month Plan

- **Begin infrastructure work**
- **Complete and test infrastructure upgrades**
- **Imaging completed**
- **Train staff on digital testing**
- **Administer practice tests**

12-Month Plan

- **Monitoring and maintaining network**
- **Write grants, if available.**

18-Month Plan

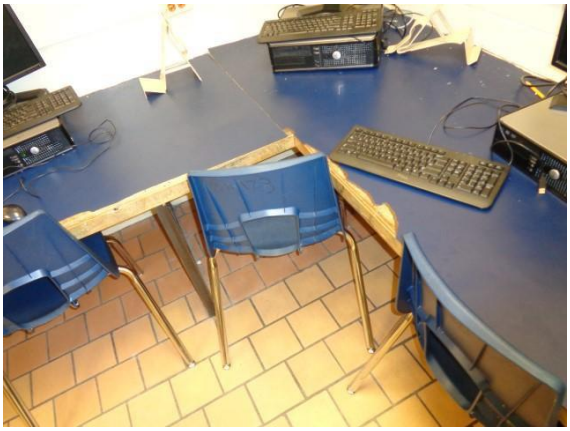
- **Write grants, if available.**

APPENDIX

Pictures of District

Lake City Elem IDF

Mismatched Lab Furniture



Ronald E McNair Jr High Lab

Scranton Elementary IDF

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