

**Technology Plan**  
**For**  
**07/01/2015 through 06/30/2016\***  
\*update to 2011-2014 Technology Plan

**School District Five of Lexington and Richland Counties**  
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This Technology Plan has been reviewed and submitted on behalf of School District Five of Lexington and Richland Counties.

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Date: 9-1-15



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Date: 9-1-15

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## Executive Summary

Steeped in a tradition of academic excellence, School District Five of Lexington and Richland Counties has earned a reputation as one of the top school districts in South Carolina and one of the finest in the nation. District Five offers an educational program that challenges and stimulates thinking and problem solving and fosters superior achievement. The comprehensive educational program focuses on both academic and personal success for all students at all ability levels from early childhood education through grade 12, including adult and community education programs.

Located just 10 miles northwest of Columbia, the state's capital, the district includes the northwestern portion of Richland County and the northern section of Lexington County. District Five has a total of twenty-two schools, with twelve elementary schools, four middle schools, four high schools, a Center for Advanced Technical Studies (CATS) and an Academy for Success.

The district serves more than 17,000 students that live within the boundaries. Ten schools have been named National Blue Ribbon Schools of Excellence, with two of the high schools receiving the award twice. Also, six of the schools have earned the Palmetto's Finest Award, South Carolina's highest recognition for schools of excellence. Additionally, one of our high schools has been named a 2014-2015 Palmetto's Finest Award Finalist.

The administration of School District Five of Lexington and Richland Counties (District Five) recognizes that technology plays an intricate part in educating its students. Technology equipment and resources are important in the process of educating students. It is important to future generations of students, as well. It is a constant challenge for school districts to meet this challenge that is vital to the success of its students. District Five welcomes this challenge. The district views this challenge as an opportunity to strengthen the community by producing competent, contributing high school graduates that are capable of excelling in a technology-driven world. An important, initial component in the successful implementation of technology equipment and resources in education is planning. The purpose of this document is to outline and update the district's vision for technology through the years 2015 to 2016.

## Background Information

School District Five of Lexington and Richland Counties is commonly referred to as District Five. The school district was organized by action of the Lexington County Board of Education in 1951 and the Richland County Board of Education in 1952. The action of the Boards of Education consolidated several smaller school districts in the Counties. In addition to District Five, there are four other school districts in Lexington County and two other school districts in Richland County. District Five, as well as the other school districts in Lexington County, are fiscally independent. The Board of Trustees has the responsibility for setting the operational millage within the restrictions allowed by the State Legislature.

District Five encompasses a land area of approximately 196 square miles, approximately one-half of which is situated in each of Lexington and Richland Counties. The school district consists of the northern portion of Lexington County lying north of Lake Murray and the Saluda River and the northwestern portion of Richland County lying south of the Broad River. The School District is primarily a residential suburb located to the northwest of the city of Columbia, the capital city of South Carolina. Included in the District Five are the towns of Irmo and Chapin. The school district has three attendance areas: Chapin, Dutch Fork, and Irmo. District Five operates a total of 12 elementary schools, four middle schools, four high schools, a Center for Advanced Technical Studies (CATS) and an Academy for Success.

All twenty-two schools are fully accredited by the South Carolina State Department of Education and the Southern Association of Schools and Colleges. District Five offers an educational program that challenges and stimulates thinking and problem solving and fosters superior achievement. Our comprehensive educational program focuses on both academic and personal success for all students from early childhood education through grade 12 and including adult and community education programs. A variety of programs are offered to meet the diverse needs of our students.

Today, District Five is known as one of the premier schools districts in the state of South Carolina. The district continues to excel in all sectors of the education process: academics, the arts, athletics, and community service. This excellence, coupled with steady growth and change, ensures that District Five will be an educational entity that will continue to be a leader in the state of South Carolina. It also emphasizes the need for visionary planning for the future endeavors in all aspects of district operations. Technology planning is an important aspect in creating a vision of excellence in District Five.

<b>District Statistics</b>	
Number of schools/sites	22
Number of students enrolled in district schools	17,016
Percentage of students eligible for free and reduced lunches	32.4%
Number of English as a Second Language (ESL) students	682
Number of dropouts (percentage of district enrollments)	1.1%
Graduation rate (percentage of district enrollment)	86.9%

<b>District E-Rate Discount</b>					
<b>School Name</b>	<b>Total Enrollment</b>	<b>Number Eligible for Free Lunch</b>	<b>Number Eligible for Reduced Lunch</b>	<b>% Free and Reduced Lunch</b>	<b>USF Discount</b>
Ballentine Elementary	730	76	15	12.5%	40%
Chapin Elementary	907	162	51	23.5%	50%
Chapin High	1155	92	34	10.9%	50%
Chapin Middle	1180	132	41	14.7%	40%
CrossRoads Middle	920	311	63	40.7%	60%
Dutch Fork Elementary	540	194	49	45.0%	60%
Dutch Fork High	1829	424	93	28.3%	60%
Dutch Fork Middle	1087	253	59	28.7%	50%
HE Corley Elementary	591	309	52	61.1%	80%
Harbison West Elementary	609	301	34	55.0%	60%
Irmo Elementary	502	127	19	29.1%	50%
Irmo High	1515	667	97	50.4%	60%
Irmo Middle	847	387	73	54.3%	80%
Lake Murray Elementary	1021	70	34	10.2%	60%
Leaphart Elementary	459	240	38	60.6%	60%
Nursery Road Elementary	498	152	20	34.5%	60%
Oak Pointe Elementary	664	110	54	24.7%	60%
River Springs Elementary	597	91	24	19.3%	50%
Seven Oaks Elementary	581	350	91	75.9%	80%
Spring Hill High	784	74	44	15.1%	50%
<b>Total</b>	<b>17,016</b>	<b>4522</b>	<b>985</b>	<b>32.4%</b>	<b>50.00</b>

\*Free and Reduced Count/Percentages pulled from PowerSchool on 1/29/2015

\*Dropout and graduation rate pulled from [2014 SC Annual District Report Card Summary](#)

\*ESL student count pulled from PowerSchool on 2/2/2015

## School District Mission Statement

*The mission of School District Five, in partnership with the community, is to provide challenging curricula with high expectations for learning that develop productive citizens who can solve problems and contribute to a global society. As a community we envision that School District Five will empower all students to meet or exceed expectations for academic, social, and emotional growth and success, that we will provide opportunities for students to develop creative and critical problem-solving skills, as innovative learners, to meet dynamic global changes, and that we will maximize our use of resources through collaborative partnerships with our community, our business and education partners. District Five's students will be prepared to pursue excellence for tomorrow's challenges; hence, our motto Pursuing Excellence for Tomorrow's Challenges.*

School District Five's fundamental values are best described in the following beliefs.

- Students are the primary focus of all decisions.
- Every person has the right to a safe, supportive and respectful environment.
- Education creates possibilities.
- All adults in the community are responsible for supporting quality education.
- Self-discipline, commitment, and hard work contribute to success.
- Trust is essential for a successful educational community.
- All members of the community are valued and have inherent worth.
- Excellence in learning is directly related to excellence in teaching.
- Academic growth is enhanced when students are actively engaged in rigorous, relevant learning.
- Each staff member is responsible for uncovering the potential of every student through positive relationships that foster student learning.
- Communication between home and school enhances learning.
- We will use telecommunications and information technology to improve District 5 student and staff learning to enhance potential.

The district has set forth the following goals developed from the mission, vision, and beliefs.

1. We will maintain a safe, supportive, nurturing environment that is conducive to working and learning.
2. We will provide challenging curricula with high expectations for learning.
3. We will develop productive citizens who can solve problems and contribute to a global society.
4. We will recruit, hire, and retain highly effective, diverse staff members who understand what students need to succeed in a competitive, global work place.
5. We will maximize the school district's resources of time, expertise and finances.

Specifically, in 2013 our Superintendent, Dr. Stephen Hefner, initiated the **iFive Project** (<https://sites.google.com/a/lexrich5.org/ifive-project/>). The goal of the iFive Project is to use technology to strengthen the growth of curriculum and competencies for work, citizenship and life-long learning. District Five will prepare students beyond academic success. Teachers will prepare students to demonstrate not only what they know, but show what they know, by actively promoting communicators, creators, critical thinkers and collaborators of information.

District 5 is committed to preparing students for the 21st century and wants them to be highly successful as they graduate and pursue goals for further education, training and careers. By 2015, District 5 will not only continue to be recognized as a "World Class" school district here in the Midlands and in South Carolina, but will also be recognized as a "World Class" school district all across our nation and around the world. "World Class" being a system where teachers have the setting and resources they need to do their best work and students have the setting and instruction they need to perform at their optimum levels and compete globally. Providing students with powerful tools is an important part of 21st century teaching and learning. The iFive Project will equip teachers and students with technology devices such as iPads and Chromebooks, as well as provide the connectivity for personal devices for a Device Adaptable Technology System (DATS™) infrastructure.

Additionally, in March of 2013, our Superintendent unveiled his **Vision 2015 Plan**. One of the goals of the Vision 2015 Plan is to upgrade our technology infrastructure in an effort to "move forward with expanding our access to and usage of technology to improve teaching and learning." More information and details about District's 5's Vision 2015 Plan can be found at: <http://www.lexrich5.org/files/filesystem/VISION%202015UPDATE7.March26.2012.pdf>

## Current State of Technology – Assessment and Needs

### Current Status of Technology in District Five

#### Current Technology Inventory

- Over 5,000 Computers
- Over 9,000 Laptops, Netbooks and Mobile Devices, including iPads and Chromebooks
- Over 800 Interactive Projector Systems
- Over 500 Projectors
- Over 250 other Interactive Tablet and Student Response Systems
- Over 75 Servers
- Wireless overlay in every district facility

#### Current Technology Needs

- Increase student access to technology, including increase in bandwidth to support student devices, such as laptops, iPads, Chromebooks, etc.
- Increase instructional equipment (i.e. SMART boards, interactive devices, projectors, mobile computing devices, laptops, iPads, Chromebooks, etc.)
- Increase Wide Area Network bandwidth
- Increase Wireless Overlay in Elementary Schools
- Create district plan to allow BYOD – Bring Your Own Device (DATS) for students and teachers
- Expand integration technology support staff to all schools within the district

#### Current Technology Support/Integration Strategies

- Instructional Technology Department (newly added)
- Instructional Technology Coordinator (newly added)
- Centralized District Help Desk
- Onsite computer technicians
- Network/Infrastructure Manager and support staff centrally located
- 4 full-time certified Integration Technology Specialists (INTECs) at the elementary level – these positions rotate and share 12 elementary schools
- 8 full-time certified Technology Integrations Specialists (TIS) at the secondary level  
- these positions are full-time at each secondary location
- 26 Stipend certified Technology Teacher Leaders (TTL) at the secondary level
- District Technology Training Center
- District-level Integration Curriculum Specialist
- District Collaboration Team for planning and implementation of technology
- Creation of an Elementary Technology Task Force for consideration of 1:1 device deployment at the elementary level
- Additional instructional technology support staff centrally located

## The Five Individual Technology Dimensions

The Office of Information Technology Services is committed to bringing the limitless and exciting power of emerging technologies to the students, staff and community of School District Five of Lexington and Richland Counties. Under the guidance of district leadership and with advice from all stakeholders, the Office of Information Technology Services will continue to provide the technology resources and equipment needed to support the district's uncompromising commitment to excellence in education.

The 2015 – 2016 Technology Plan of *School District Five of Lexington & Richland Counties* outlines objectives and strategies for further advancing the technology-integrated teaching, learning and administrative capabilities of the district. To maintain consistency at multiple levels and for compliance with state and federal regulations, this plan is organized based on the state-mandated focus dimensions and major goals. 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: District Five will provide students with software, hardware, and instruction to be effective 21st century digital users and producers of information.**

#### Objectives:

- 1.1 Students will use technology to demonstrate proficiency in research and information fluency, critical thinking and problem solving, collaboration and communication, and creativity and innovation as outlined in the ISTE NETS Technology Standards for Students.
- 1.2 Students will select appropriate technology tools to create individual and collaborative projects.
- 1.3 Students will engage in learning activities for core content areas that are aligned to SC curriculum and ISTE NETS Technology Standards for Students.
- 1.4 Students will access digital-age learning environments to promote research and information fluency, critical thinking and problem solving, collaboration and communication, and creativity and innovation.

#### Strategies:

- Students will create a minimum of one curriculum driven technology project per quarter or semester.
- Students will meet or exceed current ISTE NETS and Performance Indicators for Students.
- While completing curriculum based projects, students will have instructional support from a variety of certified teachers (ie InTec, TIS, Media Specialist, and classroom teacher).
- All students will have access to a range of technology tools, software, and other digital-age resources to increase student communication, participation and collaboration projects.
- Teachers will integrate technology into learning activities. Teacher lesson plans will reflect technology integration in the curriculum to include student produced projects.
- Every student will have access to up-to-date software, hardware, and district provided network access.
- District Five will provide students with digital-age learning environments to promote research and information fluency, critical thinking and problem solving, collaboration and communications, and creativity and innovation.

**Action List:**

- Create a Coordinator of Instructional Technology position within the Department of Instruction to coordinate technology integration district-wide and to collaborate with the office of Information Technology Services.
- Provide each school (K-12) with a full-time Integration Technology Specialist (InTec) to support teachers and students in the classroom.
- Expand network resources and technical staff to meet demands on infrastructure and provide necessary training to remain abreast of new technologies.
- Ensure technology infrastructure and facilities are available as new instructional programs are implemented/mandated.
- Provide professional growth opportunities in current technologies for district employees to use during direct instruction.
- Provide instructional opportunities in current technologies for all students as outlined by ISTE NETS.

**Implementation Action Steps:**

- District Five will submit its technology plan to the South Carolina State Department of Education - Office of Technology for approval.
- District Five will encourage the use of technology resources (classrooms, labs, media center, etc.) in traditional and non-traditional instructional environments.
- District Five will include community stakeholders in technology initiatives, including technology grants and assistive technology initiatives.
- District Five will constantly assess the use of school technology resources by all stakeholders.
- District Five will offer professional development courses using innovative delivery strategies.

District Five teachers will create lesson plans and projects that incorporate technologies reflective of the ISTE NETS Technology Standard for Students.

- ✓ Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- ✓ Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- ✓ Students apply digital tools to gather, evaluate, and use information.
- ✓ Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
- ✓ Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- ✓ Students demonstrate a sound understanding of technology concepts, systems, and operations.

District Five will recognize and celebrate the innovative use of technology by teachers and students.

### **Funding Considerations:**

- Technology equipment and resources needed to meet district instructional goals
- Technology professional development for all teachers, administrators, and staff
- Technology Integration staff (instructional and operational) to support technology initiatives in the district
- Formal evaluation of technology operations of District Five
- Incentive program for innovative, effective use of technology in meeting District Five strategic goals
- Technology resources to support all facets of district operations

## **Technology Dimension 2: Professional Capacity**

**Goal: District Five will provide curriculum and technology professional development opportunities for all educators in an effort to maximize technology integration and increase student achievement.**

### **Objectives:**

- 2.1 Teachers will promote effective student use of appropriate technologies in all learning environments.
- 2.2 Schools will receive technology integration training and support to promote student learning, innovation and creativity.
- 2.3 Teachers, administrators, and staff members are effective and efficient users of appropriate technologies.
- 2.4 District will create an Office of Instructional Technology that will model and promote effective use of technologies for teachers, staff members and administrators.

### **Strategies:**

- Teachers will model effective use of technologies in the classroom.
- Teachers will create classroom assignments that require students to use technology.
- Teachers will provide feedback to students on the effectiveness and appropriateness of their use of technology.
- Teachers will promote use of the International Society for Technology in Education (ISTE) standards for students.
- Promote use of the ISTE standards for teachers and administrators.
- Office of Instructional Technology Department will be housed at the district office and will work closely with district content coordinators to support the integration of technology instruction in schools and establish SMART classrooms district-wide.
- Office of Instructional Technology will provide and record staff training, including model lessons.
- Office of Instructional Technology will develop a comprehensive training and professional development program for all district staff persons, including teachers, administrators, and support staff.
- Train administrators to model effective use of technology.

### **Action List:**

- District Five will create an Office of Instructional Technology.
- District Five will continue to distribute copies (digital and/or hard copies) of the ISTE standards for teachers, students, and administrators.
- District Five will conduct technology assessments to provide maximum educational opportunities for 21st century students.

- District Five will provide professional growth opportunities in current technologies for district employees.
- District Five will develop and record model lessons that integrate technology.

### **Implementation Action Steps:**

- District Five will distribute ISTE Technology Standards for Students, Teachers, and Administrators via web links or hard copies (i.e. posters).
- District Five will create an Office of Instructional Technology to be staffed at a minimum of one Integration Technology Specialist (INTEC) per school.
- District Five will provide work environment and appropriate technological equipment, office supplies, etc., for the Office of Instructional Technology.
- District Five will assess staff members using state-generated or district-generated assessments to identify levels of technological proficiency.
- District Five will identify training goals, activities, and schedule for professional development based on state-created or district-created assessments.
- District Five will provide and promote model classroom assignments and a general rubric to evaluate student assignments. These model assignments will be shared on the district's site and/or other appropriate avenue.
- District Five will develop a 4-year comprehensive plan for training teachers and administrators on effective curriculum integration that address the ISTE Technology Standards. The state of South Carolina has adopted the ISTE NETS for Students, Teachers, and Administrators.
- District Five will continue to provide advanced applied technology training courses specifically created for teachers, media specialists and administrators.
- District Five will conduct an annual technology fair, using a conference model, to showcase and promote educational uses of technology.

### **Funding Considerations:**

- Development of professional development plans for technology
- Development of district and school technology plans
- Formalized assessment of teachers, administrators, and support staff proficiency
- Formalized measurement of teachers, administrators, and support staff proficiency
- Professional development of teachers, administrators, and support staff
- Technology equipment and resources needed to sustain professional development initiative

## **Technology Dimension 3: Instructional Capacity**

**Goal: School District Five of Lexington and Richland Counties will use current and emerging technologies to promote digital-age learning environments for teachers, students and staff.**

### **Objectives:**

- 3.1 Create an Instructional Technology Department to support technology initiatives, information literacy, ISTE NETS Technology Standards for Students, Teachers and Administrators, and South Carolina Curriculum Standards.
- 3.2 District will provide teachers, administrators, students with access to current and emerging technologies to boost productivity while lowering overall cost.
- 3.3 Teachers, administrators, and staff members are effective users of appropriate technologies.

3.4 Create a district-wide shared searchable resource for staff to share educational resources and lesson plans.

**Strategies:**

- Ensure that curricular design, instructional strategies, and classroom environments integrate appropriate technologies to significantly impact teaching and learning.
- Re-evaluate INTEC and TTL roles to best utilize positions and maximize support and training for technology integration and support for students, teachers.
- Provide access and updates to appropriate instructional technologies to include digital-age tools and resources.
- Investigate open source and cloud computing applications to offset the cost of software
- Develop a comprehensive training and professional development program for all staff members.
- Utilize and model technology tools for training, meetings and information dissemination.
- Research software options for a searchable database for shared educational resources and lesson plans.

**Action List:**

- Create a Coordinator of Instructional Technology position to coordinate technology integration district-wide and to collaborate with the Office of Information Technology Services.
- Instructional Technology department will coordinate technology integration and training district-wide and collaborate with the offices of operational technology and instruction.
- Maintain and expand as necessary network resources and technical staff to meet the demands on infrastructure and to provide necessary training to remain up-to-date with new technologies.
- Provide professional growth opportunities using current technologies for district employees.
- Conduct annual staffing technology assessments to provide maximum educational opportunities for 21st century students.
- Increase number of technology training opportunities in person and through web based applications.
- Create a shared searchable resource (in district) for staff to share educational resources and lesson plans.
- Investigate the cost effectiveness of open source and cloud based applications.

**Implementation Action Steps:**

- Support each school with an integration technology specialist (INTEC) to support teachers and students in their classrooms.
- Instructional technology department will work with curriculum specialists to develop technology rich resources for the classroom.
- The instructional technology department will develop a comprehensive plan for training teachers and administrators on effective curriculum integration that addresses state, national, international standards (International Society for Technology in Education-ISTE) and National Information Literacy Standards.
- The instructional technology department will identify training goals, activities, and timetable for training in the following areas: using hardware and software, integrating technology into the curriculum, developing a research-based curriculum using technology, i.e., developing students' skills in researching and analyzing information.
- The district will offer professional development courses using innovative delivery strategies.
- The instructional technology department will identify sources for training, either in-house (Training Coordinator, Curriculum Integration Specialists) or through outside consultants. When possible, employ the train-the-trainer model of lead teachers to make training cost-effective.
- The instructional technology department will use the technology standards as a guide to adopt a tool that will meet the requirements of the SDE teacher recertification to assess teacher skills

- and demonstrate technology proficiency.
- District Five will encourage the use of all available technology resources (classrooms, labs, media center, etc.) in traditional and non-traditional instructional environments.
- Provide a district accessible location (server or cloud) for all teachers to share educational resources and lesson plans.

**Funding Considerations:**

- Development of professional development plans for technology
- Development of district and school technology plans
- Formalized assessment of teachers, administrators, and support staff proficiency
- Formalized measurement of teachers, administrators, and support staff proficiency
- Professional development of teachers, administrators, and support staff
- Technology equipment and resources needed to sustain professional development initiatives.

**Technology Dimension 4: Community Connections**

**Goal: District Five will use district, school, and teacher web pages, Parent Portal, social networking sites, school newsletters and a global telephone system, ConnectEd, to maximize community involvement.**

**Objectives:**

- 4.1 District will establish business partnerships to foster real-world career and technical education to maximize student achievement.
- 4.2 District will provide current and up-to-date information to ensure effective and efficient communication.
- 4.3 District will provide after-hours community access to media centers, computer labs and classrooms.
- 4.4 District will promote district and school level technology fairs to showcase student created technology projects, art work, presentations, etc. demonstrating technology skills. 3.1 Create an Instructional Technology Department to support technology initiatives, information literacy, ISTE NETS Technology Standards for Students, Teachers and Administrators, and South Carolina Curriculum Standards.

**Strategies:**

- Form district-community partnerships to provide students with real-world experiences in the use of career and technical education that enhance academic achievement.
- Write community technology grants to develop and fund the use of technology to improve teaching and learning.
- Identify organizations, institutions, and initiatives currently focused on career and technical opportunities.
- Teachers, administrators, and district personnel will provide current web pages.
- District Five schools and offices will utilize various forms of media to include Parent Portal, school newsletters, etc.
- District Five schools and offices will utilize social networking sites and ConnectEd to maximize district and school communication.
- Create and publish flexible schedules of after-hours technology access for students, parents, teachers, and community members.
- District and schools will advertise and promote technology events to showcase student work reflecting proficiency in research and information fluency, critical thinking and problem solving,

collaboration and communication, and creativity and innovation.

**Action List:**

- District Five schools and offices will initiate and create district-community partnerships, identifying organizations, institutions, and initiatives focused on career and technical opportunities.
- District Five schools and offices will publish district-community partnerships
- District Five schools and offices will advertise successful technology grants developed to fund the use of technology to improve teaching and learning
- District Five schools and offices will update web resources, weekly, monthly, annually, or as needed in order to provide current information for students, parents and community members.
- District Five schools and offices will keep students, parents and community members informed through Facebook, Twitter, Parent Portal, ConnectEd, school newsletters, etc.
- District Five schools will publish schedules for after-hours use of school facilities
- District and schools will advertise and promote technology events to showcase student work reflecting proficiency in research and information fluency, critical thinking and problem solving, collaboration and communication, and creativity and innovation.

**Implementation Action Steps:**

- District will pursue funding opportunities such as grants to provide funds to acquire and maintain hardware and software for use in classroom instruction.
- District will pursue funding opportunities such as grants to acquire and maintain technology for use in classroom instruction and home access when appropriate.
- District will encourage INTECs, TTLs and administrators to participate in a district-wide technology fair showcasing student products resulting from the integration of technology into the curriculum.

**Funding Considerations:**

- Staffing of Office of Instructional Technology Department
- Staffing of one Integration Technology Specialist per school
- Technology professional development
- Technology course development
- Technology Staff
- Recognition programs

**Technology Dimension 5: Support Capacity**

**Goal: District Five will provide a reliable, secure network infrastructure with dynamic bandwidth to support teaching and learning.**

**Objectives:**

- 5.1 Continue rotation cycle for upgrading or replacing obsolete equipment in classrooms, labs, administrative areas and media centers.
- 5.2 District will provide all teachers and students with current hardware and software
- 5.3 District will ensure schools have network infrastructure that will fully support instructional technology initiatives
- 5.4 Increase Information Technology Staff to accommodate the enhancement and expansion of district technology endeavors.

- 5.5 Streamline the Technical Support Apparatus to provide enhanced communication, security and continuity of service.
- 5.6 District will develop a disaster recovery plan for technology assets and critical data.

**Strategies:**

- Form district-community partnerships to provide students with real-world experiences in the use

**Action List:**

- District Five will create a disaster recovery plan.
- District Five will develop district policies regarding password and data security
- District Five will provide redundant power for critical systems.
- District Five will review staffing requirements for Technology Department.
- District Five will increase technology integration initiatives at the classroom level.
- District Five will continue transition to web based applications
- District Five will develop District policy regarding password and data security procedures.
- District Five will ensure instructional software meets curriculum requirements.
- District Five will tailor hardware and software deployments to actual instructional programs and initiatives.
- District Five will monitor and review LAN and WAN bandwidth requirements.

**Implementation Action Steps:**

- District will place support emphasis on areas that provide the greatest technology access to students (media centers, labs, etc.)
- District will streamline process of removing old technology equipment from the schools.
- District will dedicate technology funding for purchasing mobile devices for schools.
- District will make accommodations for after hours access to technology data and instructional software
- District will develop a Software Review Team
- District will reinstate School Technology Plan
- District will expand current network to accommodate student/guest users and personal devices
- District will provide district issued student email accounts
- District will review LAN and WAN bandwidth requirements annually and increase as necessary
- District will monitor LAN and WAN traffic and maintain content filters, traffic analysis, and antivirus
- District will transition to web based or virtual platforms for application delivery
- District will re-evaluate the role of Technology Teacher Leaders (TTL) and model the INTEC positions.
- District will increase technology support personnel to comply with industry standards (network administrators, webmaster, and database administrators).
- District will increase technician count district wide to comply with industry standards.

**Funding Considerations:**

- Staffing of Office of Instructional Technology Department
- Staffing of one Integration Technology Specialist per school
- Technology professional development
- Technology course development
- Technology Staff
- Recognition programs

## Current Systems and Staffing

Lexington Five is working to expand and support a secure network infrastructure for educators and learners in a 21st century learning environment. It is the intention of the district to support teachers and students in their use of technology. Investment in responsive and reliable technical support is critical to successful use of technology in the classroom. The district has implemented a district wide Help Desk and electronic ticket system for all technology support.

District Five conducts annual technology surveys and assessments of its technology support to identify major areas in which technology improvements would benefit students and staff. Surveys have determined a need for more technology support staff and more instructional technology support at the school level.

District Five must create and support a robust infrastructure in order to remain competitive. In a digital-age society, no district can achieve results without incorporating technology into every facet of education. Creating and supporting a 21st century district requires expansive and powerful use of technology with a strong technology infrastructure.

The district recognizes the vital role technology support systems provide in the foundation for 21st century classrooms and accordingly has invested and maintained a reliable and state of the art infrastructure. The following list outlines systems which the Technology Services Department is responsible for supporting:

- 2Gbps WAN/ASE circuit (Wide Area Network/AT&T Switched Ethernet)
- 1Gbps Link for Internet access
- Fiber Optic - Connections between schools and the district office; 100Mbps at each elementary location; 500M at each secondary location (see network diagram)
- Wireless Overlay - Access for mobile computing in all facilities
- VMWare Technologies - Supporting 30+ Servers with built in redundancy
- Enterprise-Class Internet Content Filtering and Network Monitoring that is CIPA compliant
- PacketShaper - BlueCoat 12000
- Caching Server - BlueCoat Proxy SG 9000
- Virus and SpyWare Protection Detection - 9000+ Desktops/Laptops & Servers
- Storage Area Networks (SAN) - Disk storage sharing among applications
- Vbrick Media Encoders/Safari Montage for Streaming Digital Video
- VoIP Systems – Parent and teacher communication
- School Interoperability Framework (SIF) - Processes for intersystem data sharing
- Text Messaging - District network team for system alerts or problems
- School World Web Server
- Cloud based Google for Educators
- IP Security Cameras – Safety and security for all schools

The Technology Services Department is limited in personnel. However with a dedicated and well trained staff, the district is able to maintain state of the art technology that is imperative to 21st century learners.

### **Staffing - Technology Services**

- 1 - Director of Technology Services – District Level - Oversees all aspects for District Five technology services
  - 1 - Information Technology Network Manager – Designs and supports network infrastructure and LAN administrators
  - 2 - Information Technology Resource Specialists – Supports network infrastructure
  - 2 - Information Resource Technician III - Provides advanced level support
  - 4 - Information Resource Technician II - Provides school based support for classroom technologies Including voice, video and data systems
  - 2 - Information Resource Technician I – Provides school and district HelpDesk support
- Integration Technology Support – District Technology Training Center
- 1 - Educational Technology Trainer – provides training to school and district personnel

### **Staffing - Instructional Technology**

- 1 – Coordinator of Instructional Technology – District Level - Oversees all aspects for District Five instructional technology services
- 1 – District Curriculum Integration Specialist – District Level - Works with Instructional Technology Coordinator to help support technology integration at the district and school level
- 4 - Instructional support at the elementary level includes 4 full time Technology Integration Specialists (INTECs).
- 8 – Instructional support at the secondary level includes 7 full time Technology Integration Specialist (TIS).
- 26 – Additional instructional support at the secondary level - Teacher Technology Leaders (TTLs). TTLs are full time “classroom” teachers who serve as Teacher Technology Leaders in the secondary schools.

## Appendixes

**Appendix 1: No Child Left Behind Action Plan**

**Appendix 2: Technology Policies**

**Appendix 3: Acceptable Use Policy**

**Appendix 4: Network Diagram**

**Appendix 5: Report on Progress**

### Appendix 1: No Child Left Behind

School District Five has created a 21<sup>st</sup> century education system in order to improve student achievement through technology and address the No Child Left Behind (NCLB) Act. District Five is committed to bringing the limitless and exciting power of emerging technologies to the students, staff, and community of School District Five of Lexington and Richland Counties.

District Five's learning environment promotes the use of technology equipment and resources in all aspects of educating its students, teachers, and staff. Over the course of the last three years, the district has made major investments in creating a dynamic technology infrastructure to support data, video, and voice communications. Every building is equipped with a wireless network.

An essential part of the effective technology plan is building a dynamic infrastructure. District Five has continued to strive to provide a reliable, secure network infrastructure to assist and support educators and learners in meeting the NCLB, district and state academic standards, as well as technology standards to maximize teaching and learning in the 21<sup>st</sup> century environment. This strong infrastructure is imperative for integrating technology into the classroom, media center, administrative offices and district office.

In addition, the district has invested in various forms of instructional technology to include a District Technology Training Center for teachers, administrators and support staff. The Technology Training Center provides technology opportunities and professional development for K12 educators to help improve teaching and learning in education. Technology course offerings support ISTE's National Educational Technology Standards (NETS).

District Five has increased the dissemination of information and maximized community involvement through district and staff web pages, teacher, student and parent management systems, social networking sites (District Twitter and Facebook), school newsletters and both global and school telephone communication systems.

## Appendix 2: Technology Policies

### Technology Policies

The Technology Department strives to keep our network running smoothly at all times. Please be aware of our policies. The policies that primarily refer to employee usage are now listed on our *employee intranet*. If you are an employee of District 5 and have a Novell login and password you may login to the employee intranet and go to the Technology Services Division to view those policies. [Intranet](#)

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### ACCEPTABLE USE AGREEMENTS

#### FOR STUDENTS OF SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES

##### Terms of Acceptable Use Agreements:

As agreed by all principals and district administration, the language of this agreement should be included in its entirety in your student handbook. Student and parental signature can be on the form itself or on a separate line on the signature page which confirms agreement (not just having read the document.) A signature should be placed on file for each student when they begin attending a school. That same signature can be kept on file for the duration of that student's attendance at the school and will not have to be re-obtained each year.

##### Responsibility:

**District:** School District Five of Lexington and Richland Counties makes no warranties of any kind for the technology resources it is providing. The District will not be responsible for any damages the student incurs including loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruption. Use of any information obtained via the Internet is at the student's own risk. All computers with Internet access will operate with blocking or filtering technology to prevent both adults and minors from accessing visual depictions that are obscene (per 18 USC 1460) or child pornography (per USC 2256) (CIPA). The District specifically denies any responsibility for the accuracy, quality, or cost of information, goods, or services obtained through the Internet.

**Student:** Students may utilize technology resources for educational purposes as appropriate to instructional assignments. Students should practice proper system use and observe security restrictions. Security on any computer system is a high priority, especially when the system involves many users. If a student feels he/she can identify a security problem he/she should notify a school administrator or the district Coordinator of Technology Services.

##### Penalties for Improper Use:

Students who violate the terms of this Acceptable Use Agreement or otherwise misuse the technology resources provided will be subject to disciplinary action as specified in the Student Behavior Handbook. In addition, the privilege of accessing some or all of the technology resources will also be subject to cancellation for up to one year. Violation of the laws of the United States or the State of South Carolina also may subject the student to criminal prosecution. If a student incurs unauthorized costs, the student will be responsible for all such costs.

NOTE: Link to Above Posted Technology Policies:

<http://www.lexrich5.org/departments.cfm?subpage=251>



## ACCEPTABLE USE AGREEMENT

### FOR ALL STUDENTS OF SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES 2014- 2015

School and District Five of Lexington and Richland Counties are pleased to be able to offer Internet Access for student use. Our goal in offering this access is to enhance the educational experience for our students. The Internet offers access to worldwide information in text and media form that, if properly used, will stimulate student learning. It can be a particularly powerful motivational tool for students because of the richness of the format and the depth of information resources not available through conventional means.

The Student Behavior Handbook specifies guidelines for what is and is not permissible with technology. This agreement specifically addresses the privilege of using the Internet on district network systems.

Internet Use The Internet is an electronic highway connecting millions of computers and people around the globe. Students and teachers will have access to: electronic communication with people all over the world; current news; research and information databases; downloadable software and discussion groups. The District's purpose for using the Internet is to support instruction by providing access to unique resources consistent with educational objectives and the opportunity for collaborative work. School District 5 of Lexington and Richland Counties uses a technology protection measure that blocks or filters Internet access in compliance with the Children's Internet Protection Act (CIPA). New websites are constantly being created, making it hard to appropriately filter all information. If a student encounters inappropriate non-educational material, we encourage them to report it to their teacher or administrator so we can take steps to address the problem. Staff will monitor students' use of the Internet through software means and/or direct supervision. Students may not use the resources of School District 5 of Lexington and Richland Counties for entertainment purposes.

#### Students agree to:

- Be polite and use appropriate language (no swearing or use of vulgarities).
- Practice proper system use and observe security restrictions.
- Understand that electronic mail (E-Mail) is NOT private.
- Respect all electronic communications and information as private property.
- Use technology resources for educational purposes as appropriate to instructional assignments.
- Take good care of the computer (no objects on the computer or food or drink near the computer).

## ACCEPTABLE USE AGREEMENT

### FOR ALL STUDENTS OF SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES

#### Students agree not to:

- Engage in any form of Cyber Bullying while using district technology resources. Cyber bullying is defined as the use of e-mail, instant messaging, chat rooms, pagers, cell phones, or other forms of information technology to deliberately harass, threaten, or intimidate someone.
- Reveal his/her personal address or phone number or those of others.
- Use chat rooms, instant messaging, and personal e-mail is prohibited except for designated classroom activities.
- Use the network in ways that would cause disruption of the use of the network by other users.
- Use the computer to create, use or download materials which would not be permissible in District Five classrooms in any other form (i.e., obscene, profane, or pornographic materials.)
- Use the computer, programs or files without permission.
- Delete programs, systems or data files without permission.
- Login to the computer or programs as any other person or allow anyone to login with your account. Will not share district provided user name or password with other students.
- Deliberately tamper with a computer system (examples: switching cables, disabling fans, introducing a virus, removing or changing keys, putting magnets on the computer, etc.)
- Steal or vandalize any part of the computer or network.
- Use the computer to tamper with, change or alter records or documents of the district.
- Use district computers for personal use or gain, product advertisement or political lobbying.
- Use public domain software and shareware beyond the provided evaluation period without properly registering and paying for same.

#### **Enforcement of Policy:**

1. School District 5 of Lexington and Richland Counties uses technology protection measures that block or filter Internet access in compliance with the Children's Internet Protection Act (CIPA).
2. School District 5 staff will monitor students' use of the Internet through software means and/or direct supervision.

## ACCEPTABLE USE AGREEMENT

### FOR ALL STUDENTS OF SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES

#### **Responsibility:**

**District:** School District Five of Lexington and Richland Counties makes no warranties of any kind for the technology resources it is providing. The District will not be responsible for any damages the student incurs including loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruption. Use of any information obtained via the Internet is at the student's own risk. The District specifically denies any responsibility for the accuracy, quality, or cost of information, goods, or services obtained through the Internet.

**Student:** Students may utilize technology resources for educational purposes as appropriate to instructional activities. Activities that are acceptable include classroom activities, career development, and high quality research. Students may not use the resources of School District 5 of Lexington and Richland Counties for entertainment purposes. Students should practice proper system use and observe security restrictions. Security on any computer system is a high priority, especially when the system involves many users. If a student feels he/she can identify a security problem he/she should notify a school administrator.

#### Examples of Improper Use:

1. Using a computer to create, use or download materials which would not be permissible in District Five classrooms in any other form (i.e. entertainment, obscene, profane, or pornographic materials.)
2. Using chat rooms, instant messaging, and personal e-mail is prohibited except for designated classroom activities.
3. Unauthorized accessing or duplication of computer programs, systems or data files.
4. Unauthorized storage and/or loading of a computer program, system or data files. This may also be a copyright violation and as such is subject to federal copyright laws. Computer programs and manuals are copyrighted property and are not to be copied or altered in any form.
5. Deliberately deleting/destruction of any computer programs, systems or data files.
6. Using any computer access accounts other than those assigned to the individual. This includes misrepresenting self through the use of another person's ID or use of an anonymous ID.

## ACCEPTABLE USE AGREEMENT

### FOR ALL STUDENTS OF SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES

7. Providing system access to unauthorized individuals, especially non-employees of the district.
8. Deliberately tampering with a computer system (examples: switching cables, disabling fans, deliberate virus introduction, etc.)
9. Theft or vandalism of any computer, printer, port, fileserver or computer accessories.
10. Using restricted computer equipment without authorization.
11. Failing to care for computer equipment: Objects should not be placed on monitors, computers, or keyboards; **Food and beverage should never be used in the vicinity of computers.**
12. Using computers which are school or district property for commercial or personal use or gain.
13. Using computers which are school or district property for product advertisement or political lobbying.
14. Using public domain software and shareware beyond the provided evaluation period without properly registering and paying for same.
15. Transmitting any material which is in violation of any federal or state regulation is prohibited. This includes, but is not limited to, copyrighted materials, threatening or obscene material, or material copyrighted by trade secret.

**ACCEPTABLE USE AGREEMENT**

**FOR ALL STUDENTS OF  
SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES  
SIGNATURE PAGE**

**ACCEPTANCE SIGNATURE FOR STUDENTS**

Student

I understand and agree to abide by this Internet Use Agreement. I further understand that any violation of this agreement may lead to Internet technology access being revoked and, as appropriate, further disciplinary and legal action.

Student Name (please print): \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent or Guardian

As the parent or guardian of this student, I have read this Internet Use Agreement. I understand that this access is designed for educational purposes and that School District Five of Lexington and Richland Counties has taken precautions to limit access to controversial material. However, I recognize it is impossible for the district to restrict access to all materials which I might deem controversial, and I will not hold the district responsible for materials acquired on the network. Further, I accept responsibility for supervision if and when my child's use is not in a school setting. I hereby give permission for my child to use a school account for independent navigation and certify that the information contained on this form is correct.

I understand that teachers or media specialists who are exploring World Wide Web sites with a class do not need special permission for such activity if the faculty member is in control of the navigation to known educational sites. A student who is using the mouse to navigate the Net at the constant direction of the faculty member is not "independently" navigating the Net. This circumstance does not require special parental permission.

Parent or Guardian Name (please print):

\_\_\_\_\_

Parent or Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**ACCEPTABLE USE AGREEMENT**

**FOR ALL STUDENTS OF  
SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES**

**REFUSAL SIGNATURE FOR STUDENTS**

At this time I do not grant permission for my child to be granted the privilege of independent use of the Internet.

Parent or Guardian Name (please print):

\_\_\_\_\_

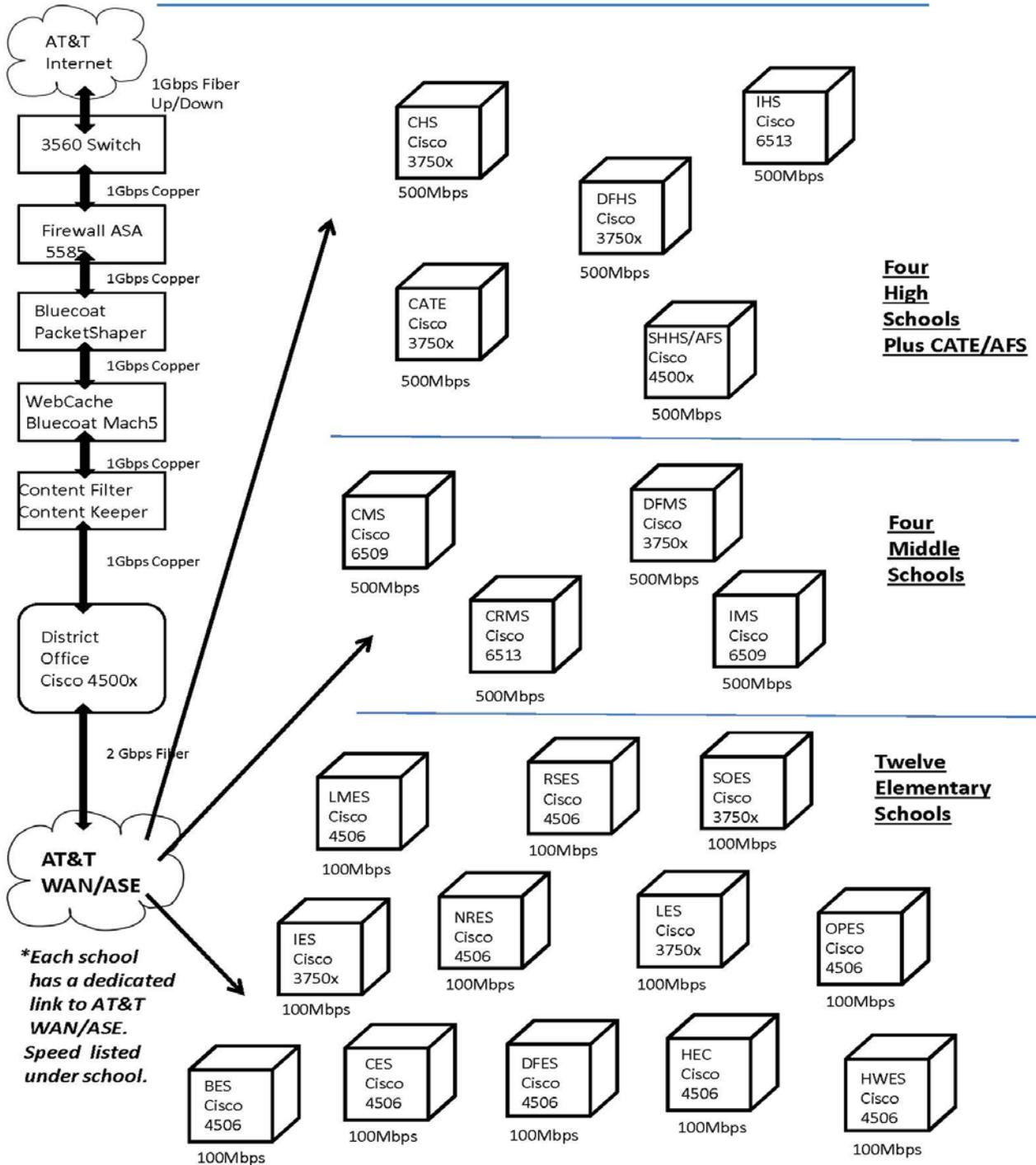
Parent or Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Link to Above Posted Acceptable Use Policy:

[http://www.lexrich5.org/files/251/acceptable\\_use\\_agreement\\_all\\_stud\\_rev\\_july2014.pdf](http://www.lexrich5.org/files/251/acceptable_use_agreement_all_stud_rev_july2014.pdf)

**Attachment 4: Network Diagram**

**School District 5 of Lexington and Richland Counties  
Network Diagram (2/19/2015)**



## Attachment 5: Report on Progress

District Five has experienced huge growth in the area of Information Technology while completing many projects that help create a teaching and learning environment in District Five that students and staff have come to expect. Progress in these areas have been measured by using many different channels, but the most important measure is by talking to students and staff and providing them the tools that they need to succeed in an ever demanding learning environment. Below are projects that have been completed or are considered on-going technology projects:

- Implemented a cloud-based Google Apps for Education (GAFE) environment
- 95% of all classrooms currently have an interactive projector and/or interactive board.
- VOIP (Voice over Internet Protocol) phone upgrade that includes a handset in every classroom
- iFive Technology Initiative <https://sites.google.com/a/lexrich5.org/ifive-project/>
- Vision 2015 <http://www.lexrich5.org/files/filesystem/VISION%202015UPDATE7.March26.2012.pdf>
- 1:1 iPads in all four high schools; Chapin, Dutch Fork, Irmo, Spring Hill
- 1:1 Chromebooks in all four middle schools; Chapin, CrossRoads, Dutch Fork, Irmo
- In the process of upgrading all secondary circuits to at least 500M
- Created an Instructional Technology Department under the Office of Instruction to include the hiring of an new Instructional Technology Coordinator
- Hired eight (8) full-time certified Technology Instructional Specialists (TIS) in all of the secondary schools; Chapin Middle, Chapin High, CrossRoads Middle, Dutch Fork Middle, Dutch Fork High, Irmo Middle, Irmo High, and Spring Hill High.
- Hired additional Technology Teacher Leaders (stipend-paid full-time lead technology teachers) to help integrate technology into the classroom. We currently have 26 TTLs.
- Hired additional full-time technicians at the four (4) middle schools to help support the 1:1 Chromebook implementation.
- Begin process to review/evaluate/purchase Elementary Devices for all PK-5 grade students.
- Superintendent's Creation and Planning for Vision 2020 for our district.