

Lancaster County School District

Technology Plan

2010-2015

Dr. Gene Moore, Superintendent
Scott Johnson, Director of Technology

300 South Catawba Street
Lancaster South Carolina 29720

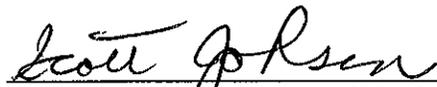
803-286-6972

803-286-4865 (Fax)

www.lancasterscschools.org



Dr. Gene Moore, Superintendent
rmoore@lcsd.k12.sc.us



Scott Johnson, Director of Technology
sjohnson@lcsd.k12.sc.us

Lancaster County School District Profile

October 20, 2009

Lancaster County School District is comprised of all schools in Lancaster County. There are 4 high schools, 5 middle schools, and 9 elementary schools. Also, there is Early Childhood Center with only PK students, and one charter school that serves grades K – 5.

Name	Grades	Enrollment	%F/R Lunch	# ESL
A. R. Rucker Middle	6 – 8	525	65%	33
Andrew Jackson High	9 – 12	616	53%	3
Andrew Jackson Middle	6 – 8	477	46%	3
Brooklyn Springs Elementary	K - 5	457	88%	103
Buford Elementary	PK - 5	833	53%	12
Buford High	9 – 12	589	41%	4
Buford Middle	6 – 8	445	47%	4
Clinton Elementary	K - 5	389	92%	24
Discovery School	K - 5	108	0%	2
Erwin Elementary	K - 5	440	62%	20
Heath Springs Elementary	PK - 5	415	47%	4
Indian Land Elementary	K - 5	1181	19%	77
Indian Land High	9 – 12	643	34%	43
Indian Land Middle	6 – 8	526	31%	38
Kershaw Elementary	K - 5	507	64%	5
Lancaster High	9 – 12	1659	64%	50
McDonald Green Elementary	K - 5	472	44%	27
North Elementary	K - 5	667	57%	63
South Middle	6 – 8	621	68%	35
Southside Early Childhood	PK	125	88%	0

The following rates were reported on the state-issued district report card for the 2008 - 2009 school year

Graduation rate 84.6%

Dropout rate 2.9%

Lancaster County School District is applying for e-Rate funds for technology-related projects for the upcoming 2010 - 2011 school year. The E-Rate discount was calculated at 73% for 09-10 school year.

Executive Summary

The Lancaster County School District strives to maintain the technological resources needed to support the teaching/learning process for all students, teachers and staff. The district's technology plan focuses on the following general areas: network infrastructure, technical support, staff development, software, and equipment.

1. Network infrastructure: The district will maintain and enhance the telecommunications and technology infrastructures in order to provide access to electronic tools for teaching, learning, and operations.
2. Technical support: The district will provide technical support for all its users and maintenance for all technology equipment.
3. Staff development: The district will provide training and staff development activities to support the application of technology-based resources in all areas of the district
4. Software: The district will provide the software resources along with appropriate training to best meet the needs of the students, teachers, and staff.
5. Equipment: The district will provide the technology equipment needed to promote academic performance. This includes items such as projection units, printers, interactive white boards, digital cameras, electronic readers and other new and relevant technologies that become available.

In keeping with the State Technology Plan, Lancaster County School District will address the five Technology Dimensions as follows:

Technology Dimension 1: Learners and Their Environment

Goal: Lancaster County School District will provide school environments conducive to providing optimal learning opportunities and high academic achievement for our students. We will use technology assessment results to determine what is needed to insure that our students are technologically competent by the end of the 8th grade.

Technology Dimension 2: Professional Capacity

Goal: Lancaster County School District will provide professional development to increase the competency of our educators. We will provide them with the skills to effectively integrate instructional technology with the goal of increasing student achievement.

Technology Dimension 3: Instructional Capacity

Goal: Lancaster County School District will use current and emerging technologies to create learner-centered instructional environments that enhance academic achievement.

Technology Dimension 4: Community Connections

Goal: Lancaster County School District will maximize community involvement and community partnerships by combining resources in order to increase opportunities for student achievement.

Technology Dimension 5: Support Capacity

Goal: Lancaster County School District will support technology resources to assist educators and learners in meeting the state academic standards.

District Needs Assessment

Current Technology Needs

Adequate funding is always a concern. Our district provides each teacher a laptop to use, not only for administrative purposes such as entering grades and attendance, but also to enhance instruction. In order to keep up-to-date, these laptops need to be replaced periodically, ideally every 3 – 4 years. We are currently behind that schedule and are in need of replacing them now, during school year 2009 – 2010. The funding for this is not available and we currently have this replacement scheduled for the following school year.

Normal wear and tear of school-based and other office equipment, along with functional obsolescence also impacts our current technology needs. We have strived to maintain computers and printers in satisfactory condition but find that there is a constant need for funds to replace computers, projectors, printers, etc.

We have made significant strides in placing interactive white boards in classrooms. There are still many instances of classrooms that would greatly benefit from adding the boards and projectors. While we don't have the intention of putting an interactive white board in every classroom, we do hope to eventually have them available for use in all appropriate classrooms.

As newer technology devices and software become available, we want to provide our teachers the ability to investigate them and determine what is applicable for their students. Providing software, equipment and training for products that are on the horizon is a priority.

Current Status

- Preparation of students for the technological world of the 21st century has become a continuous challenge due to rapid technical changes and inadequate levels of funding. We strive to maintain and expand our resources in ways that most benefits the students.
- Communications between classrooms, schools, our district office and the outside world is a constant concern and needs to be reviewed periodically. The district uses eChalk and ConnectEd to enhance communication with parents and the community in general. We also plan to move to a hosted-IP system to improve our telecommunications system.
- Technology training and support is continuing to improve. We now have nine certified personnel that have been trained to be certified SMART trainers.
- Efforts toward equity and standardization are constantly being reviewed.
- Management systems to streamline and increase operating efficiency have been adopted district-wide. We have computerized systems for

entering work orders, securing buildings, monitoring activities in and around schools, and controlling HVAC systems.

- Our current inventory of technology resources consists of the following supported equipment:
 - ★ 4 Distance Education Labs, one in each high school, plus one portable station currently at AR Rucker Middle School
 - ★ 4840 Student/Admin Desktops, 890 Wireless Laptops for classroom teachers, and 380 student laptops/netbooks
 - ★ 35 Servers
 - ★ 248 CISCO Switches, 98 LaserJet Printers
 - ★ 23 Sites, all schools have wireless internet access
 - ★ There are over 450 SMART interactive whiteboards with projectors dispersed throughout the district
 - ★ All schools have at least one computer lab and most have additional labs
 - ★ Classworks, a K – 8 software system, has been adopted at all elementary and middle schools in order to assist in providing differentiated instruction.

District Mission and Belief Statements

Our Technology Mission

The technology mission of the Lancaster County School District is to prepare students for the changing demands of society by infusing and integrating technology into the total educational program to enhance the learning, teaching, and management processes.

We believe . . .

- our schools must prepare students for today's workplace and the workplace of the future by using a wide variety of technological tools.
- it is imperative for all students to have equitable access to information via technology as a basis for lifelong learning.
- it is essential for all learners, including educators, to process and manage information through the use of technology
- the use of technology supports the development of process skills such a flexibility, adaptability, critical thinking, problem solving, and collaboration
- technology enhances our ability to serve the diverse learning styles of our students.
- technology is an integral part of the curriculum, instruction, and assessment.
- technology is a key part of both beginning and continuing teacher education, which will provide teachers with the knowledge and skills needed to integrate technology into the curriculum and adapt it to instructional strategies.
- networked technology systems permit efficient and effective communications within and outside the school, district, state, nation, and world.
- technology maximizes productivity and efficiency and enables schools to better prepare students for future learning.

Plans for the Five Individual Technology Dimensions

Lancaster County School District will address the five technology dimensions identified in the state technology plan (Realizing the DREAM, November 2003)

Technology Dimension 1: Learners and Their Environment

A. Snapshot of Current Technology Use in District

All classrooms in the district have from 1 – 3 computers for student use. Each of them is connected to the Internet. In addition to these computers, each teacher has a laptop for use in the classroom as he/she chooses. There are LCD projectors available in each school's media center. Each school has one or more labs that are used for instruction, research and writing activities, and for diagnostic testing related to state academic standards.

B. Overall Goal for This Dimension

Lancaster County School District will provide school environments conducive to providing optimal learning opportunities and high academic achievement for our students. Our students will become technologically competent by the end of the 8th grade.

C. Objectives, Strategies, and Action List to Reach Goal

Objectives	Strategies
<p>1.1 Students will use technology to acquire and demonstrate communication, collaboration, and engagement skills that are aligned with state standards across the curriculum and will thereby increase their level of academic achievement.</p>	<p>A. Provide resources to schools that facilitate the development and implementation of effective communication and collaboration skills using technology.</p> <p>B. Provide resources that allow students to demonstrate engaged learning and collaboration in all areas of instruction.</p>
<p>1.2 Provide resources in all schools that promote the integration of technology into all areas of instruction.</p>	<p>A. Maintain the numbers of computers in schools at an appropriate level and distribute in a matter best suited for the school's population</p> <p>B. Assist teachers in implementation of technology-rich lessons through providing appropriate equipment and adequate professional development.</p>

<p>1.3 Implement a portfolio system for students.</p>	<p>A. Adopt grade-level technology standards and integrate them into the curriculum to prepare students to function in an information-rich global society.</p> <p>B. Develop surveys and/or performance-based assessments that measure student technology proficiency.</p>
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Action List

- Lancaster County School District will provide equipment that will allow for students to have access to online resources and to software appropriate for developing communication and collaboration skill in alignment with state standards
- Lancaster County School District will provide remediation and enrichment software such as Classworks.
- The district and schools will coordinate access to online databases of technology-infused lesson plans such those available through ETV OnePlace SC.
- Develop student portfolios and assessments to evaluate student technology proficiency.

Implementation Action Steps for District and Schools

Lancaster County School District

- Evaluate the numbers and locations of computers in schools to determine if placement of computers is appropriate
- Maintain current software resources and evaluate needs for upgrades and replacement
- Work with teachers to develop technology-rich lessons
- Provide staff development opportunities to assist in technology integration
- Develop student technology standards and appropriate evaluation/assessment tools

Lancaster County Schools

- Provide goals and strategies for teachers to expand the use of technology in the classroom
- Encourage teacher collaboration in developing technology-rich lessons both within the schools and across the district
- Expand access to technology resources during nontraditional school hours

Funding Consideration for District and Schools

Lancaster County School District

- Technology equipment (computers, networks, peripherals)
- Technology staff development
- Technology resources (software licenses and subscriptions) to support standards-based instruction
- Development of standards and assessment tools

Lancaster County Schools

- Technology staff development
- Support for development of technology-rich lessons (resources and time)

Evaluation of Objectives

Objectives	Possible Baseline Data	Possible Sources for Evaluation	Outcomes					
			June 2011	June 2012	June 2013	June 2014	June 2015	
1.1 Students will use technology to acquire and demonstrate communication, collaboration, and engagement skills that are aligned with state standards across the curriculum and will thereby increase their level of academic achievement.	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Surveys - Student portfolios 	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Surveys - Student portfolios - Observations 						
1.2 Provide resources in all schools that promote the integration of technology into all areas of instruction.								
1.3 Students will develop an electronic portfolio that will showcase technology skills								

Technology Dimension 2: Professional Capacity

A. Snapshot of Current Technology Use in District

Lancaster County School District currently provides professional development opportunities to increase the competency of its teachers and support staff to promote the effective integration of instructional technology systems with the intent of increasing student achievement. Professional development in the form of in-service training, workshops, and courses is provided throughout the year. Significant training has been offered, and will continue to be offered, on the use of SMART software and equipment. Training on new software products for instruction is a priority. A centralized computer lab with 25 workstations, interactive white board, and a network printer is available for professional development use.

B. Overall Goal for This Dimension

Lancaster County School District will provide professional development to increase the competency of our educators to provide for the effective integration of instructional technology to increase student achievement.

C. Objectives, Strategies, and Action List to Reach Goal

Objectives	Strategies
2.1 Lancaster County School District will enable educators to achieve and demonstrate proficiency in integrating state-recommended instruction technology standards into their specific area to increase student achievement	A. Require the demonstration of a minimal level of technology proficiency from all teachers B. Adopt ePortfolio across the district C. Provide professional development to assist in satisfying the requirements of the teacher technology proficiency proviso.
2.2 Lancaster County School District will collaborate with the schools in planning for professional development to ensure that teachers and staff are trained to use technology to enhance learning, including assistive-technology tools.	A. Develop and submit a district-wide technology plan that calls for site-based input from teams in each building B. Provide for training as needed to ensure the accessibility of electronic and information technology to students with special needs. C. Provide opportunities for site-based professional development to ensure technology is making a significant impact in instruction.

<p>2.3 Lancaster County School District will provide technology leadership at the school level to assist teachers in integrating technology into their instruction.</p>	<p>A. Designate one or more persons at each school to assist with basic technology skills. B. Provide additional assistance as needed to meet the needs of the teachers for training in basic technology skills.</p>
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Action List

- Lancaster County School District will designate full-time leadership for the use of technology to increase student learning.
- Lancaster County School District will provide training for teachers in using assistive-technology tools.
- Lancaster County School District will monitor the technology skills and ability of teachers to integrate technology into their classroom instruction
- Lancaster County School District will provide a contact person at each school to assist teachers with basic technology skills.

Implementation Action Steps for District and Schools

Lancaster County School District

- Submit a technology plan, including a professional development plan, to the Office of Technology for approval.
- Submit teacher technology proficiency assurance forms to the Office of Technology.
- Conduct teacher technology proficiency assessment to ensure teachers have a minimal level of technology proficiency.
- Provide professional development to provide teachers the skills needed to maintain ongoing technology proficiency and successfully integrate technology into their instruction.
- Adopt the state-provided ePortfolio system teachers.

Lancaster County Schools

- Designate a person to work with teachers in obtaining minimal technology skills as needed.
- Administer needs assessments to identify areas of weakness and follow up with appropriate professional development in technology.

Funding Consideration for District and Schools

Lancaster County School District

- Committee development of technology plans
- Professional development needs-assessment tools
- High-quality sustained professional development programs

- Development of portfolio template

Lancaster County Schools

- Committee development of school technology plans
- Professional development needs-assessment tools
- School technology contact salary/stipend

Evaluation of Objectives

Objectives	Possible Baseline Data	Possible Sources for Evaluation	Outcomes				
			June 2011	June 2012	June 2013	June 2014	June 2015
<p>2.1 Lancaster County School District will enable educators to achieve and demonstrate proficiency in integrating state-recommended instruction technology standards into their specific area to increase student achievement</p>	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Teacher technology proficiency assurance forms - Professional development surveys - Teacher portfolios - District and school technology plans - Technology assessments 	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Teacher technology proficiency assurance forms - Professional development surveys - Teacher portfolios - District and school technology plans - Technology assessments 					
<p>2.2 Lancaster County School District will collaborate with the schools in planning for professional development to ensure that teachers and staff are trained to use technology to enhance learning, including assistive-technology tools.</p>							

<p>2.3 Lancaster County School District will provide technology leadership at the school level to assist teachers in integrating technology into their instruction.</p>							
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Technology Dimension 3: Instructional Capacity

A. Snapshot of Current Technology Use in District

Lancaster County School District provides a wide variety of technology resources to enhance instruction. Included are the following:

- 3 – 5 computers in each classroom.
 - Microsoft Office is installed along with other school-specific software.
 - Filtering software is applied
 - Anti-virus software on all computers
 - eChalk web presence
 - District and school web sites
 - Teacher and class pages
 - Group pages, as needed
 - Student-save email
 - Email for all district employees
 - Cellular phones and smart phones provided for some school and district staff
- At least one computer lab at each school. Additional labs are at some schools. Labs are used for remediation and enrichment. In most schools, teachers request access to a lab or can have a mobile lab of laptop computers brought to the classroom.
- Each high school has a distance education room which can connect through the internet with any of the other high schools and York Tech.
 - 2 wall-mounted plasma TVs
 - Ceiling-mounted projector and automatic screen
 - Document camera
 - Computer
 - Tandberg Codec unit
- Software included at various schools in the district:
 - Classworks
 - Reading Counts
 - Accelerated Reader
 - Destiny for Media Centers
 - World Book Online
 - NovaNet
 - FitnessGram
 - Testview

B. Overall Goal for This Dimension

Lancaster County School District will use current and emerging technologies to create learner-centered instructional environments that enhance academic achievement.

C. Objectives, Strategies, and Action List to Reach Goal

Objectives	Strategies
3.1 Lancaster County School District will develop a technology framework that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.	Ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to significantly impact teaching and learning.
3.2 Lancaster County School District will provide teachers with the technology resources necessary to increase academic achievement by engaging students in active learning	A. Provide teachers with access to resources such as online services, productivity tools, media-based instructional materials that enrich and extend teaching goals. B. Ensure teachers are competent in utilizing new technological resources by providing training and support as needed
3.3 Lancaster County School District will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting	A. Provide students with access to technology, online services, and media-based instructional materials outside the traditional classroom. B. Incorporate emerging technologies that will increase student engagement in all content areas.

Action List

- Lancaster County School District will conduct technology planning meetings to address curricular design and instructional needs of all teachers.
- Lancaster County School District will continually evaluate the technology resources currently in place to determine effectiveness.
- Lancaster County Schools will incorporate technology-related strategies that increase student engagement.

Implementation Action Steps for District and Schools

Lancaster County School District

- Conduct technology planning meetings
- Submit technology plan to Office of Technology for approval
- Monitor condition of technology equipment
- Evaluate hardware and software and standardize selection where appropriate
- Designate technology leaders
- Provide appropriate professional development

- Submit teacher technology proficiency assurance forms to the Office of Technology
- Increase the delivery of courses for students and teachers via distance learning classrooms, online coursework, etc.

Lancaster County Schools

- Provide technology contact person
- Support and enhance teacher use of technology resources
- Support and enhance student use of technology resources

Funding Consideration for District and Schools

Lancaster County School District

- Committee development of technology plans
- Distance learning and/or online courseware
- Emerging technologies for enhancing student engagement
- Professional development
- Evaluation of impact of programs and initiatives

Lancaster County Schools

- Committee development of technology plans
- Professional development
- Technology leader salary/stipend

Evaluation of Objectives

Objectives	Possible Baseline Data	Possible Sources for Evaluation	Outcomes			
			June 2011	June 2012	June 2013	June 2014 June 201
<p>3.1 Lancaster County School District will develop a technology framework that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.</p>	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Teacher technology proficiency assurance forms - Teacher portfolios - District and school technology plans - Technology assessment 	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Teacher technology proficiency assurance forms - Teacher portfolios - District and school technology plans - Technology assessment <p>Documentation of offerings provided via innovative delivery methods</p>				

<p>3.2 Lancaster County School District will provide teachers with the technology resources necessary to increase academic achievement by engaging students in active learning</p>							
<p>3.3 Lancaster County School District will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting</p>							

Technology Dimension 4: Community Connections

A. Snapshot of Current Technology Use in District

Currently, Lancaster County School District maximizes community involvement in the area of technology by the following:

- eChalk
 - Parents and others can access teacher and class pages via the Internet to get information about class assignments and school activities
 - Student-safe email and direct teacher email accounts are available
- Media Center Access
 - Many schools provide extended hours of operation in the media center to allow for community access
- LearnTV
 - Student-developed and produced television shows are aired through the local cable network
 - Shows include community events, interviews with local individuals and groups, and a variety of public-service items
- Adult Education Classes
 - Technology courses are offered to community members at nominal expense to the individual
 - District technicians support technology equipment at our Vocational Rehabilitation Center
- Technology support for community projects
 - District staff has assisted with the setup and operation of a computer lab at Caroline Courts housing project
 - District staff has assisted with the setup and operation of computer equipment at Lancaster's Vocational Rehabilitation Center
 - Continue use of ConnectEd. This allows virtually instant communication capability with parents and gives schools the ability to make automated phone calls and emails

B. Overall Goal for This Dimension

Lancaster County School District will maximize community involvement and community partnerships by combining resources in order to increase opportunities for student achievement.

C. Objectives, Strategies, and Action List to Reach Goal

Objectives	Strategies
<p>4.1 Lancaster County School District will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes.</p>	<p>A. Form district-community partnerships to provide students with real-world experiences in the use of technology, including assistive technology, that enhance academic achievement.</p> <p>B. Write community-collaborative technology grants to develop and fund the use of technology to improve teaching and learning</p> <p>C. Form district-community partnerships to facilitate the use of technology, including assistive technology, in the public schools and to improve outcomes for students transitioning from school to work or higher education.</p>
<p>4.2 Lancaster County School District will provide after-hours training and community access to labs, media centers, and classrooms as deemed appropriate.</p>	<p>A. Create and publish schedules of after-hours technology access and training for students, parents, teachers, and community members.</p> <p>B. Create opportunities for access to facilities for after-hours assistive technology training for students, parents, teachers, and community</p>

<p>4.3 Lancaster County School District will ensure that all their buildings are linked by the Internet to the State Library's DISCUS databases and to the web sites of universities and other institutions to facilitate virtual communication between home, school, and community.</p>	<p>members. A. Ensure that links to DISCUS and other appropriate databases exist on school websites. B. Develop links to other community-related web sites that foster collaboration between schools and community.</p>
<p>4.4 Lancaster County School District will provide parental access to student information through the PowerSchool student information system</p>	<p>A. Fully implement and maintain PowerSchool and PowerTeacher.</p>

Action List

- Lancaster County School District will initiate and increase community collaborations that give students, teachers, and members of the local community increased access to and training in technology, including assistive technology.
- Lancaster County School District will publish school lab schedules showing after-hours technology access and training.
- Lancaster County School District will participate in meetings of representatives of collaborative groups to determine how they can best cooperate to meet the needs of Lancaster County educators, students, and community members.
- Lancaster County School District will provide increased access and use of school facilities for after-hours technology training.
- Lancaster County School District will implement and support PowerSchool and PowerTeacher

Implementation Action Steps for District and Schools

Lancaster County School District

- Submit a technology plan, including a professional development plan, to the Office of Technology for approval.
- Encourage flexible lab, media center, and classroom hours among schools, including opportunities for community members to see and utilize technology resources, including assistive technology.
- Initiate partnerships with community entities to create greater access to technology and a community learning environment.
- Include members of the community in writing technology grants to develop and fund better teaching and learning through technology.
- Develop a system of measuring the use of school technology facilities.

Lancaster County Schools

- Develop, implement, and publicize flexible lab, media center, and classroom hours, including opportunities for community members to see and utilize technology resources, including assistive technology.
- Include members of the community in writing technology grants to develop and fund better teaching and learning through technology.

- Develop a system of measuring the use of school technology facilities.

Funding Consideration for District and Schools

Lancaster County School District

- High-quality sustained community training technology programs
- Community partnerships and apprentice internships
- Facility operations beyond regular school day
- Implementation of system to measure and analyze use of school technology facilities

Evaluation of Objectives

Objectives	Possible Baseline Data	Possible Sources for Evaluation	Outcomes				
			June 2011	June 2012	June 2013	June 2014	June 2015
4.1 Lancaster County School District will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes.	<ul style="list-style-type: none"> - Statewide achievement test scores - Surveys on technology accessibility - Schedules of resource availability - Technology plans - SDE Technology Counts surveys 	<ul style="list-style-type: none"> - Statewide achievement test scores - Surveys on technology accessibility - Schedules of resource availability - Technology plans - SDE Technology Counts surveys 					

<p>4.2 Lancaster County School District will provide after-hours training and community access to labs, media centers, and classrooms as deemed appropriate.</p>							
<p>4.3 Lancaster County School District will ensure that all their buildings are linked by the Internet to the State Library's DISCUS databases and to the web sites of universities and other institutions to facilitate virtual communication between home, school, and community.</p>							
<p>4.4 Lancaster County School District will provide parental access to student information through the PowerSchool student information system.</p>							

Technology Dimension 5: Support Capacity

A. Snapshot of Current Technology Use in District

Lancaster County School District constantly works to provide appropriate support for its technology resources. We strive to provide an infrastructure that supports the technology needs of our educators and learners. The technical demands are increasing in every area of education and the technical support staff works diligently to meet this demand.

B. Overall Goal for This Dimension

Lancaster County School District will provide technical support and advice to obtain maximum efficiency of technology resources. The district strives to maintain an atmosphere of service to teachers, students and staff with the ultimate goal of meeting the technology needs of everyone in the district in a timely manner and of maintaining technology resources at an appropriate level.

C. Objectives, Strategies, and Action List to Reach Goal

Objectives	Strategies
<p>5.1 Lancaster County School District will insure that all students, including those with special needs, and teachers have access to electronic information resources.</p>	<p>A. Maintain a technology inventory that includes the status of current network/Internet access, workstations, and other technology devices and of software applications used for addressing state academic standards.</p> <p>B. Conduct needs assessments to identify needs for upgrades and replacement of equipment and software applications.</p>
<p>5.2 Lancaster County School District will ensure that its schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection, distribution, and distance learning.</p>	<p>A. Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives.</p> <p>B. Ensure the installation, maintenance, and support of multimedia-capable teacher stations in specified classrooms to support instructions.</p> <p>C. Install and maintain networks, virus protection, and Internet filtering according to industry standards by</p>

	<p>implementing systemic, state-of-the-art network security tools at all levels of access to LANs, WANs, and other networks</p> <p>D. Implement a district network management tool that performs automated software installation</p>
<p>5.3 Lancaster County School District will maintain a qualified technical staff, including an adequate number of networking engineers and technicians to maintain its WANs and LANs and one end-user support technician per thousand users</p>	<p>A. Develop minimum staffing requirements and job descriptions, with a salary schedule, for the positions of networking engineer, networking technician, educational technology director, and support technicians</p> <p>B. Identify and evaluate network management tools that will meet the needs of the district</p>
<p>5.4 Lancaster County School District will implement a disaster recovery plan for all points of failure in LANs and WANs, including redundant data storage, robust automated backup and immediate hardware recovery.</p>	<p>A. Ensure that disaster recovery plans are included in the technology plan</p> <p>B. Ensure that schools will have electrical distribution systems that provide isolated circuits in all classrooms and redundant power sources for critical equipment.</p>
<p>5.5 Lancaster County School District will implement an obsolescence and upgrade plan to replace and recycle equipment and software.</p>	<p>Ensure that the obsolescence and upgrade plans are in place and followed</p>

Action List

- Lancaster County School District will have access to a database with a complete technology inventory, including assistive technology, showing the type of equipment/device, its location, its use, peripherals to which it has access, applications to which it has access, and other relevant information.
- Lancaster County School District will maintain a needs-assessment document showing technology-based resources and applications required to address the mission of the district, including networking, hardware/devices, and software applications as well as assistive technology.
- Lancaster County School District will include in its budget line items for technology, including assistive technology, with sufficient funding to implement the designated strategies.

- Lancaster County School District will develop a plan to include a vision for building a multimedia infrastructure to support instruction.
- Lancaster County School District will maintain a disaster recovery plan.
- Lancaster County School District will maintain an obsolescence and upgrade plan, including strategies to refurbish, resell, recycle, or donate obsolete devices.
- Lancaster County School District will provide for security accountability and virus protection, and follow Internet filtering guidelines.
- Lancaster County School District will use the SED Technology Counts online survey to report on their use of network management tools.
- Lancaster County School District will produce reports of assessment of current LAN/WAN technology
- Lancaster County School District will have a network manager in place
- Lancaster County School District's network managers will provide the district office with reports of statistics on bandwidth utilization
- Lancaster County School District will provide UPS (uninterruptible power supply) systems for all critical equipment
- Lancaster County School District will work toward meeting the minimum staffing requirements for the positions specified in objective 5.3
- District staff, teachers, and students will be aware of the guidelines and requirements for accessibility to the district's technology resources.
- LCSD will ensure that new school construction provides for isolated power in each classroom, computer lab, telecommunications closet, and work area.

Implementation Action Steps for District and Schools

Lancaster County School District

- Maintain technology inventories, including assistive technology
- Conduct needs assessments to identify required technology.
- Develop strategies for acquiring, managing, and implementing required technology
- Implement a district disaster recovery plan and an obsolescence and upgrade plan
- Seek funding from local, state, and federal sources
- Create a vision for a multimedia infrastructure
- Use bundled distribution packages to manage fully converged networks
- Install and maintain secure networks
- Employ staff for adequate network maintenance and support
- Implement a plan for monitoring bandwidth on the LAN and WAN
- Ensure that schools have adequate electrical distribution systems

Lancaster County Schools

- Provide multimedia-capable workstations

- Develop strategies for acquiring and implementing required technology, including assistive technology
- Seek funding from local, state, and federal sources
- Create flexible schedules for access to technology
- Maintain secure networks
- Employ staff for adequate technology support
- Provide adequate electrical distribution systems

Funding Consideration for District and Schools

Lancaster County School District

- Total cost of ownership (TCO) calculation to determine the allocation per student per year necessary to keep the pace with the need for access to network resources
- Development, implementation, and maintenance of multimedia infrastructure plan and disaster recovery plan
- Multimedia workstations with data projectors
- Hardware and software to secure all LANs and WANs to comply with district, state, and industry standards
- Personnel to include Technology director, networking engineer, networking technicians and administrative support
- Assuring adequate electrical distribution systems
- Assessments and surveys

Lancaster County Schools

- Total cost of ownership (TCO) calculation to determine the allocation per student per year necessary to keep the pace with the need for access to network resources
- Development, implementation, and maintenance of multimedia infrastructure plan and disaster recovery plan
- Multimedia workstations with data projector
- Assessments and surveys

Evaluation of Objectives

Objectives	Possible Baseline Data	Possible Sources for Evaluation	Outcomes				
			June 2011	June 2012	June 2013	June 2014	June 2015
<p>5.1 Lancaster County School District will insure that all students, including those with special needs, and teachers have access to electronic information resources.</p>	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Technology Needs Assessments and Other Surveys - District and school technology plans -SDE Technology Counts online survey - Budget data - Documented access to technology resources 	<ul style="list-style-type: none"> - Statewide achievement test scores - District and school report cards - Technology Needs Assessments and Other Surveys - District and school technology plans -SDE Technology Counts online survey - Budget data - Documented access to technology resources 					

<p>5.2 Lancaster County School District will ensure that its schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection, distribution, and distance learning. -</p>					
<p>5.3 Lancaster County School District will maintain a qualified technical staff, including an adequate number of networking engineers and technicians to maintain its WANs and LANs and one end-user support technician per thousand users</p>					
<p>5.4 Lancaster County School District will implement a disaster recovery plan for all points of failure in LANs and WANs, including redundant data storage, robust automated backup, and immediate hardware recovery.</p>					
<p>5.5 Lancaster County School District will implement an obsolescence and upgrade plan to replace and recycle equipment and software.</p>					

Cumulative Targets and Benchmarks

2010-2011

Learners and Their Environment

- Fifty percent of the county's eighth grade students will possess effective communication skills and technology literacy as evidenced by student technology assessment

Professional Capacity

- 100% percent of the district's teachers will possess technology proficiency by the end of their current certification period as evidenced by the teacher ePortfolio system and the district's Technology Proficiency Assurance Forms
- Each school in the district will have at least one technology contact person designated

Instructional Capacity

- 100% of the district's teachers will integrate technology into their teaching of the SC academic standards by the end of their current certification period as evidenced by the teachers' ePortfolios

Community Connections

- The district will provide web access through the use of eChalk to the district and all schools for all teachers, parents, and community members
- The district will collaborate with community members and organizations to make better use of technology
- The district will keep parents and community informed via ConnectEd and PowerTeacher

Support Capacity

- The district will assess their current technology needs and maintain a current technology inventory

2011-2012

Learners and Their Environment

- 65% percent of the county's eighth grade students will possess effective communication skills and technology literacy as evidenced by student technology assessment.

Professional Capacity

- 100% percent of the district's teachers will possess technology proficiency by the end of their current certification period as evidenced by the teacher ePortfolio system and the district's Technology Proficiency Assurance Forms
- Each school in the district will have at least one technology contact person designated

Instructional Capacity

- 100% of the district's teachers will integrate technology into their teaching of the SC academic standards by the end of their current certification period as evidenced by the teachers' ePortfolios

Community Connections

- The district will provide web access through the use of eChalk to the district and all schools for all teachers, parents, and community members
- The district will collaborate with community members and organizations to make better use of technology
- The district will keep parents and community informed via ConnectEd and PowerTeacher
- District schools will provide access to technology-related facilities after hours for parents, teachers, and community members.

Support Capacity

- The district will assess their current technology needs and maintain a current technology inventory
- The district technology staff will maintain and upgrade technology resources to acceptable current standards

2012-2013

Learners and Their Environment

- 85% percent of the county's eighth grade students will possess effective communication skills and technology literacy as evidenced by student technology assessment.

Professional Capacity

- 100% percent of the district's teachers will possess technology proficiency by the end of their current certification period as evidenced by the teacher ePortfolio system and the district's Technology Proficiency Assurance Forms
- Each school in the district will have at least one technology contact person designated

Instructional Capacity

- 100% of the district's teachers will integrate technology into their teaching of the SC academic standards by the end of their current certification period as evidenced by the teachers' ePortfolios.

Community Connections

- The district will provide web access through the use of eChalk to the district and all schools for all teachers, parents, and community members as evidenced by eChalk usage reports
- The district will collaborate with community members and organizations to make better use of technology
- The district will keep parents and community informed via ConnectEd and PowerTeacher
- District schools will provide access to technology-related facilities after hours for parents, teachers, and community members

Support Capacity

- The district will assess their current technology needs and maintain a current technology inventory
- The district technology staff will maintain and upgrade technology resources to acceptable current standards

2013-2014

Learners and Their Environment

- 90% of the county's students will possess effective communication skills and technology literacy appropriate for their grade level as evidenced by teacher surveys and student technology portfolios.

Professional Capacity

- 100% percent of the district's teachers will possess technology proficiency by the end of their current certification period as evidenced by the teacher ePortfolio system and the district's Technology Proficiency Assurance Forms

- Each school in the district will have at least one technology contact person designated

Instructional Capacity

- 100% of the district's teachers will integrate technology into their teaching of the SC academic standards by the end of their current certification period as evidenced by the teachers' ePortfolios

Community Connections

- The district will provide web access through the use of eChalk to the district and all schools for all teachers, parents, and community members as evidenced by eChalk usage reports
- The district will collaborate with community members and organizations to make better use of technology
- The district will keep parents and community informed via ConnectEd and PowerTeacher
- District schools will provide access to technology-related facilities after hours for parents, teachers, and community members

Support Capacity

- The district will assess their current technology needs and maintain a current technology inventory
- The district technology staff will maintain and upgrade technology resources to acceptable current standards

2014-2015

Learners and Their Environment

- Ninety percent of the county's students will possess effective communication skills and technology literacy appropriate for their grade level as evidenced by teacher surveys and student technology portfolios.

Professional Capacity

- 100% percent of the district's teachers will possess technology proficiency by the end of their current certification period as evidenced by the teacher ePortfolio system and the district's Technology Proficiency Assurance Forms
- Each school in the district will have at least one technology contact person designated

Instructional Capacity

- 100% of the district's teachers will integrate technology into their teaching of the SC academic standards by the end of their current certification period as evidenced by the teachers' ePortfolios

Community Connections

- The district will provide web access through the use of eChalk to the district and all schools for all teachers, parents, and community members as evidenced by eChalk usage reports
- The district will collaborate with community members and organizations to make better use of technology
- The district will keep parents and community informed via ConnectEd and PowerTeacher
- District schools will provide access to technology-related facilities after hours for parents, teachers, and community members

Support Capacity

- The district will assess their current technology needs and maintain a current technology inventory
- The district technology staff will maintain and upgrade technology resources to acceptable current standards

Acknowledgements

Jan Collins, Instructional Technology Specialist

Al Ferguson, Parent (Vice-president, Risk Management, KMG America)

Scott Johnson, Director of Information Technology

Phyllis Mills, Information Technology Administrative Assistant

Shirley Mickles, SASI Coordinator

Lydia Quinn, Director of Planning and Accountability

Taneshia Samuel, Parent

Debbie Walker, Parent

Brenda Rallings Parent

Appendix 1

No Child Left Behind Action Plan

1. A description of how your district will use federal funds including Enhancing Education through Technology (E2T2) competitive and/or formula funds to improve the academic achievement, including the technology literacy, of all students attending the schools served and to improve the capacity of all teachers teaching in these schools to integrate technology effectively into curricula and instruction.
Refer to "Budget Items"
2. A description of your school district's specific goals for using advanced technology to improve student academic achievement aligned with challenging state academic content and student academic achievement standards. This explanation should include a description of the curriculum and teaching strategies that integrate technology effectively into curricula and instruction, based on an intensive review of relevant research.
Refer to "Technology Dimension 1"
3. A description of the steps your district will take to ensure that all students and teachers in schools served by the local education agency have increased access to educational technology.
Refer to "Technology Dimension 3"
4. A description of how your district will use the E2T2 competitive and/or formula funds (including the combining of these funds with monies from other federal, state, and/or local sources) to help ensure that students in high-poverty and high-needs schools have access to technology and to ensure that teachers are prepared to integrate technology effectively into curricula and instruction.
Refer to "Budget Items"
5. A description of how your district will provide ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel serving the local education agency, to further the effective use of technology in the classroom or library media center, including, if applicable, a list of the entities that will be partners with the local education agency involved in providing the ongoing, sustained professional development.
Refer to "Appendix 2"
6. A description of the type and costs of technologies to be acquired for your technology program through the use of E2T2 competitive and/or formula funds, including supporting sources such as services, software, and digital

curricula. Your explanation should include specific provisions for interoperability among the components of such technologies.

Refer to “Budget Items”

7. A description of how your district will integrate technology (including software and other electronically delivered learning materials) into curricula and instruction to support standards-based learning and provide a timeline for such integration.

Refer to “Appendix 2”

8. A description of how your district will encourage the development and utilization of innovative strategies for the delivery of specialized or rigorous academic courses and curricula through the use of technology, including distance learning technologies, particularly for those areas that would not otherwise have access to such courses and curricula due to geographical isolation or insufficient resources.

Refer to “Technology Dimension 3”

9. A description of how your district will ensure the effective use of technology to promote parental involvement and increase communication with parents, including a description of how parents will be informed of the technology being applied in their child's education. Explain how these strategies will allow parents to reinforce at home the instruction their child receives at school.

Refer to “Technology Dimension 4”

10. A description of how programs in your district will be developed, where applicable, in collaboration with adult literacy service providers, to maximize the use of technology.

Refer to “Technology Dimension 4”

11. A description of the process and accountability measures that your district will use to evaluate the extent to which the activities in your technology plan, including those activities funded under the E2T2 program, are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to meet challenging state academic content and student academic achievement standards.

Refer to “Technology Dimension 1 - 5”

12. A description of the supporting resources (such as services, software, other electronically delivered learning materials, and print resources) that will be acquired to ensure successful and effective uses of technology.

Refer to "Technology Dimension 5"

Appendix 2 Teacher Technology Proficiency Priviso Professional Development Plan

Beginning with the 2009 – 2010 school year, the district will implement the ePortfolio system provided by the South Carolina Department of Education.

All certified teachers will be expected to meet the requirements delineated in the ePortfolio system during each 5-year recertification cycle.

Professional development opportunities will be made available based on the performance of the teachers on the technology assessment.

Appendix 3

Acceptable Use Policies for Staff and Students:

Page 4

LEARNING

Using our computers

Our district's acceptable use & internet safety regulations

Educational purpose

- Our district system has been established for educational purposes. The term "educational purpose" includes classroom activities, career development and limited high-quality self-discovery activities.
- The district system has not been established as a public access service or a public forum. The district has the right to place reasonable restrictions on the material you access or post through the system. You are also expected to follow the rules set forth in disciplinary code and the law in your use of the district system.
- You may not use the district system for commercial purposes. This means you may not offer, provide or purchase products or services through the district system.
- You may not use the district system for political lobbying. However, you may use the system to communicate with elected representatives.

Student Internet access

- Access to the World Wide Web and other Internet resources will be available to all students who have a signed approval by their parents or guardians. The parent or guardian may withdraw approval at any time.
- Students only have e-mail access through eChalk.

Unacceptable uses

These uses of the district system are considered unacceptable and are subject to consequences stated in the district discipline code.

Personal safety

- You will not post personal contact information about yourself or other people. Personal contact information includes your address, telephone, school address, work address, etc.
- You will not agree to meet with someone you have met online.
- You will promptly disclose to your teacher or other school employee any message you receive that is inappropriate or makes you feel uncomfortable.
- You will not attempt to setup a personal e-mail account, chat site or instant messaging service.

Illegal activities

- All personal (not district) wireless network devices will not be allowed to connect to the district's wireless network.
- You will not attempt to gain unauthorized access to any district system or to any other computer system through the district system or go beyond your authorized access.
- You will not assist others in gaining unauthorized access to any district or school computer system.
- This includes attempting to log in through another person's account or access another person's files.
- These actions are illegal, even if only for the purpose of "browsing."
- You will not make deliberate attempts to disrupt the computer system or destroy data by spreading computer viruses or by any other means.
- You will not use the district system to engage in illegal act.

System security

- You are responsible for your individual account and should take all reasonable precautions to prevent others from using your account. Under no conditions should you provide your password (if any) to another person.
- You will immediately notify a teacher or the system administrator if you have identified a possible security problem. Do not look for ways to circumvent security, because this may be construed as an illegal attempt to gain access.

- You will avoid the inadvertent spread of computer viruses by following the district virus protection procedures.

Inappropriate language

- Restrictions against inappropriate language apply to all computer usage in the district and include obscene, profane, lewd, vulgar, rude, inflammatory, threatening or disrespectful language.
- You will not engage in personal attacks, including prejudicial or discriminatory attacks.
- You will not knowingly or recklessly access sites with false or defamatory information about a person or organization.

Respect for privacy

- You will not post personal or private information about another person.

Respecting resource limits

- You will use the system only for educational and career development activities and limited, high-quality, self-discovery activities.
- You won't download large files unless absolutely necessary for a school activity. Access to streaming audio and video is limited to teaching activities.

Plagiarism & copyright infringement

- You will not plagiarize works that you find on the Internet. Plagiarism is taking the ideas or writings of others and presenting them as if they were yours.
- You will respect the rights of copyright owners.
- Copyright infringement occurs when you inappropriately reproduce a work that is protected by a copyright.
- If a work contains language that specifies appropriate use of that work, you should follow the expressed requirements.
- If you are unsure whether or not you can use a work, you should request permission from the copyright owner.
- Copyright law can be very confusing. If you have questions ask a teacher, media specialist or computer facilitator.

Inappropriate access to material

- All internet traffic is monitored at the district according to CIPA regulations.
- Access to noneducational games is prohibited.
- You will not use the district system to access material
 - that is profane or obscene (pornography),
 - that advocates illegal acts
 - or that advocates violence or discrimination towards other people (hate literature).
- If you mistakenly access inappropriate information, you should immediately tell your teacher, media specialist or computer facilitator (or disclose this access in the manner specified by your school). This will protect you against a claim that you have intentionally violated this policy.
- The district fully expects you to follow your parents' instructions in regards to additional material they feel is inappropriate.

Your rights

Free speech

- Your right to free speech applies also to your use of the district computer system. The district system is considered a limited forum, similar to the school newspaper, and, therefore, the district may restrict your speech for valid educational reasons.

Search and seizure

- You should expect only limited privacy in the contents of your personal files on the district system. The situation is similar to the rights you have in the privacy of your locker.

On our district website

Under Directories

- School listings & profiles • Administrators & staff • District departments & strategic plan

Under Instruction

- Exams/promotion/graduation • Gifted & talented programs • Grading/report cards • Homebound instruction • Internet/computer use • What we teach (information on our curriculum) • Accountability Act requirements • Adult Education • Instructional Services Homepage

Under Health/discipline/safety

- Discipline codes • Health • Punishment for crimes/frauds • Student complaints & grievances • Student records rules

Under Meals/buses

- Summer meal program • Breakfast & lunch menus

Under Calendars

- Calendars for 2007-8 & 2008-9 • District calendar

Under Board of Trustees

- Board policies • About our board • Agenda for next board meeting • Board meeting dates • Minutes for last board meeting • Our board members

Under Employment

- Vacancies for principal, teachers, support staff • Monthly payroll schedule • Salary schedule

Under Finance/Procurement

- Financial audits • Procurement procedures

- Routine maintenance and monitoring of our system may lead to the discovery that you have violated this policy, the disciplinary code or the law.

- An individual search will be conducted if there is reasonable suspicion that you have violated this policy, the disciplinary code or the law. The investigation will be reasonable and related to the suspected violation.

Due process

- The district will cooperate fully with local, state or federal officials in any investigation related to any illegal activities conducted through the district system.
- In the event of a claim that you have violated the regulation or disciplinary code in your use of the district system, you will be provided an opportunity to be present an explanation before a neutral administrator.
- The violation will be handled in a manner described in the disciplinary code. Additional restrictions may be placed on your use of your Internet account.

Limitation of liability

- The district makes no guarantee that the functions or the services provided by or through the district system will be error-free or without defect.
- The district will not be responsible for any damage you may suffer, including but not limited to, loss of data or interruptions of service.
- The district is not responsible for the accuracy or quality of the information obtained through or stored on the system.
- The district will not be responsible for financial obligations arising through the unauthorized use of the system.

Appendix 4

How E-Rate Areas Have Been Addressed

1. The district technology plan must establish clear goals and a realistic strategy for using telecommunications and information technology to improve education and library services.

Refer to “Technology Dimension 3”

2. The district technology plan must have a professional development strategy to ensure that staff members know how to use new technologies to improve education.

Refer to “Appendix 2”

3. The district technology plan must include an assessment of the telecommunications services, hardware, software, and other services that will be needed to improve education.

Refer to “Technology Dimensions 1 – 5”

4. The district technology plan must provide for a sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy for improved education. Specifically, how does the district intend to fund those items of equipment, software, services, and training *not* covered by the E-rate discount? It is recommended that a plan for hardware refreshment be built into all district technology plans.

Refer to “Budget Items”

5. The district technology plan must include an evaluation process that enables the district and its schools to monitor progress toward the specified goals and make midcourse corrections in response to new developments and opportunities as they arise.

Refer to “Technology Dimensions 1 – 5”

Budget Items

- eRate will be used to fund various projects such as eChalk and infrastructure improvements and expansions such as cabling, servers and switches
- E2T2 funds have been used, and will continue to be used depending on its availability, to provide training in technology for teachers and to provide needed equipment and technology-related supplies for teachers
- LEAP – These funds are being used for replacing desktop computers, teacher laptops, printers, and servers that are not covered by eRate
- District and State Technology funds are used to maintain and replace hardware and for software licenses as needed when not covered by eRate

General Fund Technology budget for 2009 – 2010:

Training	3,700
Rentals	8,400
Repairs and Maintenance	291,474
Travel	22,950
Supplies	900
Technology Supplies	27,000
Technology Software	2,290
CSI Software Upgrades	35,000
School-based Supplies & Equipment	511,000
PowerSchool Configuration/Installation	55,000

Future Capital Improvements:

FY 10 – 11

1. Replace teacher laptops	1,300,00
2. Infrastructure for new school	300,000
3. Desktop upgrade, 1 school	113,000
4. Printers for Student Services	25,000

FY 11 – 12

1. Desktop upgrades, 3 schools	413,000
2. Server upgrades	30,000
3. New LCD projectors	140,000