Lexington School District Four

Technology Plan

2005 – 2010

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DISTRICT PROFILE

Lexington School District Four is located in the Midlands of South Carolina. It covers 87 square miles and has an estimated population of 15,350. It is within a 30-minute commute of 13 institutions of higher learning, including the University of South Carolina; 5 museums; 2 planetariums; 4 live theaters; 9 parks; Riverbanks Zoo, one of the top ten zoos in the country; Lake Murray with approximately 520 miles of shoreline; Columbia Metropolitan Airport with more daily arrivals and departures than any other airport in the state; and local businesses offering a variety of goods and services to meet the needs of local residents. Medical services including dentists and large regional medical centers are conveniently available. Legal and accounting services are available, as well.

Lexington School District Four is comprised of 6 schools with a total enrollment of 3,397. The percentage of students eligible for free and reduced cost lunches is 65.85%. The number of English as a Second Language (ESL) students is 59. The dropout rate is 11%; the graduation rate is 65.2% and the district E-rate discount is 80%.

<u>2008-2009 – Schools in Lexington District Four</u>
Swansea Primary School, 1195 I.W. Hutto Rd, Swansea SC 29160-8996; Grades PK-02
Frances Mack Primary School, 161 Gaston St, Gaston SC 29053-9525; Grades PK-02
Sandhills Elementary School, 130 Lewis Rast Rd, Swansea SC 29160-9392; Grades 03-04
Sandhills Intermediate School, 140 Lewis Rast Rd, Swansea SC 29160-9392; Grades 05-06
Sandhills Middle School, 582 Meadowfield Rd, Gaston SC 29053-8249; Grades 07-08
Swansea High School, 500 East First St, Swansea SC 29160-9004; Grades 09-12

<u>2009-2010 – Schools in Lexington District Four</u>
*Early Childhood Center, 135 Lewis Rast Rd, Swansea SC 29160-9392; Grades 3's, 4's, 5K
Sandhills Primary School, 140 Lewis Rast Rd, Swansea SC 29160-9392; Grades 01-02
Sandhills Elementary School, 130 Lewis Rast Rd, Swansea SC 29160-9392; Grades 03-04
Frances Mack Intermediate School, 161 Gaston St, Gaston SC 29053-9525; Grades 05-06
Sandhills Middle School, 582 Meadowfield Rd, Gaston SC 29053-8249; Grades 07-08
Swansea High Freshman Academy, 1195 I.W. Hutto Rd, Swansea SC 29160-8996; Grade 09
Swansea High School, 500 East First St, Swansea SC 29160-9004; Grades 10-12

*New Construction

EXECUTIVE SUMMARY

Following the framework developed by the document *South Carolina State Technology Plan 2003–08: Realizing the Dream*, Lexington School District Four has begun the journey of revising and developing an integrated technology plan. Our goal is to not only meet but to exceed requirements established by the Education Oversight Committee as well as the state strategic plan; the federal No Child Left Behind Act of 2001; and Proviso 1.40 of 2001, which is Proviso 1.29 in 2003-04 and Proviso 1.28 in 2004-05 General Appropriations Bill and is titled "SDE: Teacher Technology Proficiency":

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

Throughout the document, *Lexington School District Four Technology Plan 2005-2010*, the plan is correlated with key state and federal legislation, including legislative acts such as the Education Accountability Act and the No Child Left Behind Act.

After setting the stage for the necessity of a new strategic plan that uses goals-based, measurable activities, the *South Carolina State Technology Plan 2003–08* presents five core technology dimensions that must be addressed in order for districts to begin improving student achievement through the use of technology as an integrated tool. All strategic actions are designed to increase student achievement through the effective integration of technology into the core curriculum. Measurable goals, objectives and strategies, an action list, an evaluation plan, and benchmarks are given for each core technology dimension.

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

<u>Technology Dimension 1: Learners and Their Environment</u>
Goal: Student learning communities use technical tools to engage in authentic knowledge building, inquiry, problem solving, exploration, experimentation, reflection and collaboration in the process of becoming lifelong learners.

<u>Technology Dimension 2: Professional Capacity</u>
Goal: Teachers and administrators have technological literacy development opportunities to become proficient in the integration of technology as a tool for enhancing student-centered instructional environments.

Technology Dimension 3: Instructional Capacity
Goal: Teachers use technical tools to engage students in authentic knowledge building, inquiry, problem solving, exploration, experimentation, reflection and collaboration in the process of building lifelong learners at all levels of the system.

Technology Dimension 4: Community Connections
Goal: Stakeholders have technological literacy development opportunities to develop an awareness of technology as a tool that supports student learners.

Technology Dimension 5: Support Capacity
Goal: All learning communities have equitable access to diverse, quality technology and timely technical support.

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

Needs Assessment

Results

Current Instructional and Administrative Technology Needs

- Increase instructional equipment (i.e. smart boards, projectors, handheld computers, laptops, etc.)
- Upgrade servers
- Increase wide area network bandwidth
- Expand district administrator laptop initiative
- Upgrade telephone systems for IP Telephony
- Expand instructional support staff for technology

Current Technology Inventory

- 1156 PCs
- 133 laptops
- 18 SmartBoards
- 69 projectors
- 130 handheld computers
- 22 Servers
- Six document cameras
- Total of eighty digital and video cameras

Current Instructional and Administrative Technology Support Strategies

- One computer technician for every three schools
- Additional network support staff centrally located
- One certified technology integration specialist for grades K-8
- District level interdisciplinary team for planning and implementation

Lexington Four utilizes district level surveys and online surveys provided through Project Tomorrow (formerly NetDay Foundation) in the form of National Speak Up Day for use with its staff and students. The Speak Up data is used in the district and school level technology planning process. The Speak Up data allows the school leaders to understand the array of interests and ability levels of its students in regard to technology as well as target potential areas of concern for the school. For example, through the analysis of the 2005 school data and its discovery that 36% of the students use the Internet to do homework, the district's *Online Assignments System* for students became a priority. This finding supported the principals' initiative of using and updating the online assignments page in a timely manner. Teachers had the misconception that students did not use the Internet for homework. The URL is now being posted in a variety of places throughout schools and school secretaries refer parents to this web resource when they call to speak with the teacher during teaching hours of the day. Student results are reviewed and teachers use them to guide their classroom teaching practices.

CORE BELIEF

Shaping a culture of learning
drives our passion to
promote employee quality.

STRATEGIC VISION

When our core beliefs are put into practice, we envision our schools as communities of learners utilizing a variety of quality technology as tools to become lifelong learners, to communicate and connect to anywhere, and to manage and analyze data. Student learning communities use technical tools to engage in authentic knowledge building, inquiry, problem solving, exploration, experimentation, reflection and collaboration in the process of becoming lifelong learners. Teachers and administrators have technological literacy development opportunities to become proficient in the integration of technology as a tool for enhancing student-centered instructional environments. Teachers use technical tools to engage students in authentic knowledge building, inquiry, problem solving, exploration, experimentation, reflection and collaboration in the process of building lifelong learners at all levels of the system. Stakeholders have technological literacy development opportunities to develop an awareness of technology as a tool that supports student learners. All learning communities have equitable access to diverse, quality technology and timely technical support. To this end, technology becomes an integral component of our culture of learning at all levels of the system.

STRATEGIC MISSION

Our mission is to shape a culture of learning in which all adults and students are valued members of a learner-centered environment.

Technology Milestones

2001 - Technology Literacy Challenge Fund Grant
http://ed.sc.gov/news/more.cfm?articleID=64
2002 - E2T2 Grant Recipient
2003 - SCAET TIP District Award for Tech Connect Program
http://www.scaet.org/tips2003.htm

2004 - SCAET TIP Honorable Memtion School Award "Stories from the Dirt"
http://www.scaet.org/tips2004.htm

NASA Explorer School Program Announcement @ SMS

HP Teaching for Technology Grant Recipient @ SMS

2005 - SCAET TIP District Award for "Aisle of Palms" Handheld Program
http://www.scaet.org/tips2005.htm

NetDay Speak Up Day 100, SMS and SIS
http://www.netday.org/news_speakup_100_pr.htm

NASA Featured Article for Handheld Program Implementation
http://www.nasa.gov/audience/foreducators/informal/features/F_Good_Things_Small_Packages.html

Technology Planning for SC Educators – two employees successfully completed parts I and II of the course sponsored by SC Department of Education.

2006 - NetDay Speak Up Day 100, SMS and SIS
http://www.netday.org/news_speakup_100_pr.htm

GoKnow Software Sketchy Contest Winners
Student Category Social Studies Second Place (3rd grade)
http://goknow.com/sketchycontest/sketchy.php?img=2ndSSCivilWar.gif&s=ss
Student Category Science Third Place (7th grade)
http://goknow.com/sketchycontest/sketchy.php?img=3rdSGenetics.gif&s=s
Teacher Category Third Place (7th grade)
http://goknow.com/sketchycontest/sketchy.php?img=3rdTTraffic.gif&s=t

2007 – SC Certified Project Manager for IT – two employees successfully completed certification as SC Certified Project Managers as sponsored by the SC Office of CIO.

E2T2 Grant Recipient – Sandhills Intermediate School Sixth Grade English Language Arts

Donors Choose Grant Recipient – Sandhills Intermediate School – video conferencing

TECHNOLOGY DIMENSION 1

LEARNERS AND THEIR ENVIRONMENT

GOAL

Student learning communities use technical tools to engage in authentic knowledge building, inquiry, problem solving, exploration, experimentation, reflection and collaboration in the process of becoming lifelong learners..

SNAPSHOT OF CURRENT TECHNOLOGY USE

Lexington School District Four is fostering the effective use of technology to support teaching and learning throughout the district. Technology resources are now widely available in our schools. Lexington Four is implementing the use of portfolios and other performance-based methods to conduct needs assessments and to measure students' technological proficiency.

Heavy emphasis has been and continues to be placed on helping students master the state academic standards, and technology is the key to this effort. As evidenced by the Mentor software program and other instructional aids, integrating technology into the core curriculum is a major focus of technology initiatives in Lexington Four.

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

According to the Taking a Good Look at Instructional Technology (TAGLIT) on-line survey in 2002, between 60 and 70 percent of South Carolina students perceive themselves to be proficient in "technology basic tools," "multimedia," "communication," and "research tools." Over 50 percent of South Carolina's students use the Internet for educational purposes more than once a week.

SNAPSHOT OF CURRENT TECHNOLOGY USE

According to the 2002 TAGLIT survey, 60 percent of South Carolina school districts make technology resources available to parents and the community. Lexington Four has held technology evenings to allow students and parents access to technology. Through grants and other sources of technology funding, Lexington Four has utilized mobile laptop carts to make computers accessible in the maximum number of classrooms and to allow technology to touch every aspect of the student's environment including home, school, and community. All school buildings are linked to the DISCUS databases to enable educators, parents, and students to access a wide range of information and learning resources.

The operational plan that follows should ensure that Lexington Four reaches its goal of providing home, school, and community environments conducive to assisting students in using technology to communicate effectively, achieve high academic standards, and achieve technological literacy by the end of the eighth grade.

OPERATIONAL PLAN

I. OBJECTIVES AND STRATEGIES

GOAL: Student learning communities use technical tools to engage in authentic knowledge building, inquiry, problem solving, exploration, experimentation, reflection and collaboration in the process of becoming lifelong learners.

OBJECTIVES	STRATEGIES
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.	A. Provide opportunities and resources to schools to facilitate the development and implementation of effective communication and collaboration skills using technology in the core content areas B. Conduct student projects that will yield sustained, engaged learning and collaboration in the core content areas C. Have students present their collaborative projects to identified audiences D. Recognize and promote best practices that successfully integrate technology, including

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OBJECTIVES	STRATEGIES
	assistive technology, into the curriculum E. Provide appropriate accommodations for students with special needs when conducting tests, including standardized tests, using technology
1.2 Students will engage in authentic learning activities that are aligned with state standards and that integrate technology, including assistive technology, into the core content.	A. Develop technology-enhanced learning activities aligned with state standards in core content areas B. Create and maintain student technology portfolios documenting grade-level-appropriate technology competencies C. Appoint or hire district wide school technology coaches or form district wide technology integration teams to offer guidance to schools, educate teachers, and help ensure that lesson plans and activities incorporate a variety of technologies, including those appropriate for students with special needs
1.3 Students will demonstrate technology competence by the end of the eighth grade.	A. Create and use lesson activities in which students employ a variety of technology tools, including assistive technology, to complete authentic multidisciplinary tasks B. Measure student technology proficiency by using performance-based assessments C. Provide all students, including those with special needs, access to a range of high and low technology solutions, including software, peripherals, and other tools to increase student communication, participation, and collaboration
1.4 The school district and the schools will provide students with an enhanced learning environment through technological tools, including assistive technology, that are designed to promote high	A. Establish school and community learning environments that enable students to use technology for real-world problem solving and research B. Adopt grade-level-appropriate ISTE standards and integrate them into the curriculum to enable

I. OBJECTIVES AND STRATEGIES

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OBJECTIVES	STRATEGIES
academic achievement.	students to fully participate in today's information-rich global society C. Adopt grade-level-appropriate technology standards and integrate them into the curriculum to prepare students to succeed in an information-rich global society

II. ACTION LIST

- The school district should coordinate access to an on-line database of technology-infused lesson plans and classroom examples across the core content areas in alignment with the state academic standards, through the SCTLC Web portal, the MarcoPolo/Thinkfinity "Internet Content for the Classroom" Web site (http://www.marcopolo-education.org/), and other digital resources.
- The school district should provide access to effective, research-based assistive technologies—including software, peripherals, and other tools to increase student communication, collaboration, and engagement—that will support inclusion of students with disabilities in the core content courses at all grade levels.
- The district should develop strategies to ensure that school improvement plans address the use of technology, including assistive technology, to support a shared learning environment that includes educators, parents, and community members.
- The school district and the schools should ensure improved student achievement test scores in the core content areas, increased student access to technology (shown by the SDE Technology Counts on-line survey), and increased student access to technology outside the school environment (shown by the 2002 TAGLIT on-line survey).
- The school district participate with SDE in establishing minimum requirements for student portfolios that document student progress by including technology collaborative scoring rubrics and checklists, videos and pictures of student activities, samples of individual and collaborative problem-solving and research projects, samples of student products created using a variety of technology tools, and samples of other student work.
- Student portfolios and checklists in all grades as well as a performance-based technology applications evaluation at the completion of the fifth and eighth grades should be used to assess student technology proficiency as well as to assess the effectiveness of the assistive

technology tools used by students with special needs.

- Students themselves should be given opportunities to assess the effectiveness of technology tools, including the range of assistive technology, being used for classroom activities.
- The district should complete initial and ongoing assessments to measure increased availability of technology opportunities and resources.
- Educators and parents should complete initial and follow-up assessments to ensure that the use of technology, including the range of assistive technology tools, is effective in enhancing student learning.

III. IMPLEMENTATION ACTION STEPS

DISTRICT

- Assign school technology coaches or form district wide technology integration specialist teams to offer guidance to schools
- Assign assistive technology coaches to educate teachers and help ensure that lesson plans and activities incorporate a variety of technologies in ways that make them accessible to individuals special needs
- Offer professional development courses using innovative delivery strategies
- Begin working with teachers in the classroom to create lesson plans that incorporate a variety of technologies into authentic multidisciplinary tasks
- Recognize exemplary technology teachers and students
- Hold technology fairs that showcase exemplary student technology projects to the community
- Encourage home and community involvement in the public school system by electronic communications and other media

SCHOOLS

- Implement an on-line system for displaying student work such as e-mail projects, on-line projects, and so forth
- Recognize exemplary student technology projects
- Hold "technology nights" that showcase exemplary student technology projects and technology teachers to the community
- Provide access to technology resources, including assistive technology, during nontraditional school hours
- Include goals and strategies for technology and assistive technology development in school improvement plans
- Encourage home and community involvement in the public school system through the use of electronic communications and other media
- Offer courses to the community utilizing various forms of technology uses

IV. FUNDING CONSIDERATIONS

DISTRICTS

- Technology professional development
- Technology course development
- Technology staff
- Recognition programs
- Teacher and student portfolio materials
- Technology resources to support standards-based learning across the curriculum

SCHOOLS

- Technology professional development
- Technology course development
- Technology staff
- Recognition programs
- Teacher and student portfolio materials
- Technology resources to support standards-based learning across the curriculum