Anderson School District Four School District Four Instructional Technology Plan

Anderson School District Four
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ñA World-Class Lighthouse School Districtò

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Table of Contents

From the Office of Superintendent 5

Board of Trustees and District Administration 6

District Profile 7

Schools in Anderson School District 4 7

Pendleton High School 7

Riverside Middle School 7

La France Elementary School 7

Mount Lebanon Elementary School 7

Pendleton Elementary School 7

Townville Elementary SchoolExecutive Summary 7

Executive Summary 8

Technology Coordinator 8

District Instructional Technology and Software Integration Trainer and CoachDistrict Needs Assessment 8

District Needs Assessment 9

Funding 10

District Vision and Mission Statements 10

Plans for the Five Individual Technology Dimensions 11

Technology Dimension 1: Learners and Their Environment 12

Technology Dimension 2: Professional Capacity 20

Technology Dimension 3: Instructional Capacity 30

Technology Dimension 4: Community Connections 37

Technology Dimension 5: Support Capacity *44*

District Technology Standards 53

Local Area Networking *53*

Wide Area Networking *577*

Computer Hardware and Associated Peripherals *588*

Elementary Schools *588*

Middle Schools *611*

High Schools *644*

Building-Wide Resources *688*

Media Centers *69*

Cumulative Targets and Benchmarks 711

Acknowledgements 722

Bibliography 733

Appendix 1: No Child Left Behind Action Plan 74

Appendix 2: Teacher Technology Proficiency Proviso Professional Development Plan 83

Appendix 3: Acceptable Use Policies 94

- **Staff Web Authoring Guidelines 945**
- **Staff Web Authoring Agreement 945**

Staff Web Authoring Guidelines 106

Content Guidelines *106*

Legal Guidelines *106*

Technical Guidelines *107*

Miscellaneous *107*

Web Design Checklist 108

Staff Web Authoring Agreement 110

Appendix 4: How E-Rate Areas Have Been Addressed 111

Appendix 5: Report on Progress toward Goals, Objectives, Strategies, Benchmarks, Actions, and Outcomes..... 112

From the Office of Superintendent

The Mission of Anderson School District Four, in partnership with the community, is to develop productive citizens prepared for the changing world by providing challenging, lifelong learning opportunities in a safe, healthy, and positive environment. In keeping with this mission, the Board of Trustees and the administration have made a commitment to embrace and integrate new technologies in the classroom, in the school and in the district.

Current research indicates that technology expands the experiences of those that we serve, both children and adults. It is our goal to use technology to enhance student success, in addition to helping teachers augment their content knowledge and their pedagogical skills. The goal for our use of technology in Anderson School District Four is student learning. Technological opportunities in our district reflect the current and future advances in the technology field causing our school and community to be engaged as learners at all levels.

It is this foundation of thought that caused Anderson School District Four to set about the task of developing a comprehensive technology plan. This plan has been developed to communicate technology competencies for instructional personnel and students, provide for a complete infrastructure design for schools, and to correlate technology to the districtôs curriculum and instructional program. We feel confident that this plan will assist those we serve, students and teachers, us in preparing our students for the challenges of the 21st century.

Board of Trustees and District Administration

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Ken Lindsey
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Dr. Lee D'Andrea
Superintendent

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Deputy Superintendent

District Profile

Number of schools in the district: **6**
Number of students enrolled in district schools: **2939**
Percentage of students eligible for free and reduced lunches: **47%**
Number of English as a Second Language (ESL) students: **41**
Number of dropouts: **2009-10 was 4.4%**
Graduation rate: **2009-10 was 74.4%**
District E-rate discount: **approximately 60%**

Schools in Anderson School District 4

Pendleton High School

Riverside Middle School

La France Elementary School

Mount Lebanon Elementary School

Pendleton Elementary School

Townville Elementary School

Executive Summary

The plan submitted by Anderson School District 4 is inline with the National as well as State of SC Technology Plan. It is our goal to remain as one of the leaders in technology and instructional technology in the state of South Carolina as well as the nation. Our innovative approaches to PC distribution and use of wireless labs allow the greatest flexibility in meeting the challenges of delivering instruction in today's modern classroom.

Scott Brock
Technology Coordinator

Stuart Gay
District Instructional Technology and Software Integration Trainer and Coach

District Needs Assessment

Anderson School District Four over the past several years has invested in the hardware infrastructure. The District now must focus on the instructional software and tools to move it forward in its quest to become a World Class School District with respect to technology. Some of the areas of need are the following:

1. Comprehensive software for core content areas at the Middle and High School level.
2. Software at the elementary and middle school level that targets identified areas of curricular weakness as determined by Measures of Academic Progress and PACT.
3. Tools for engaging students in authentic learning activities at all levels, including Tandberg equipment, interactive white boards, interactive student voting systems, flexible cameras, etc.
4. Staff training in the use of current and emerging technologies on Level B as identified in our plan for Proviso 1.40.

Our current technology inventory is listed in the chart below:

Location	HP/Compaq dc5700	HP/Compaq dc5800	NX6110	HP nc7400	HP 6710	Total PCs/Laptops	Network Printers
District Office	20		8			28	3
LaFrance Elem		145	36	15		196	7
Mount Lebanon Elem	132		30	15		177	7
Pendleton Elem		157	38	15		210	9
Townville Elem		126	25	15		166	7
Riverside Middle		149	38		90	277	14
Pendleton High		252	68		90	410	23
Total	152	829	243	60	180	1464	70

The greatest need at the middle and high school level is to revise the model for technology integration by removing the classroom computers, leaving one teacher workstation and adding additional wireless mobile and fixed labs for whole class work. This is in our technology plan for the 2010 - 2011 school year.

Currently, each school in Anderson School District Four has a technology coach available to them. The technology coaches will continue to support teachers in the use of technology integration in the curriculum.

Funding

Funding for this technology plan is provided by general budget line items as indicated below. However, due to budget constraints and reductions, certain aspects of this plan may not be funded.

Item	2009 -2010	2010-2011	2011-2012	2012-2013	2013-2014
workstations / network hardware	$825,000	$825,000	$825,000	$825,000	$825,000
software	$22,000	$22,000	$22,000	$22,000	$22,000
maintenance	$20,000	$20,000	$20,000	$20,000	$20,000
supplies	$20,000	$20,000	$20,000	$20,000	$20,000

District Vision and Mission Statements

The mission of Anderson School District Four, a historical and diverse community, strong in leadership and resources, is to develop all students into lifelong learners and responsible citizens, by providing educational opportunities involving home and community in a safe, supportive environment.

We believe that….

- The family is the most influential force in the life of an individual.
- All life is interdependent
- Every individual has worth
- Learning is a continuous lifelong process
- There are strengths in our differences
- Children are our first priority
- Responsible citizenship is essential; for a successful society
- All children can learn
- Academic, artistic, social, and technical skills are critical elements of our educational system.

Plans for the Five Individual Technology Dimensions

Dimension 1: Learners and Their Environment

Dimension 2: Professional Capacity

Dimension 3: Instructional Capacity

Dimension 4: Community Connections

Dimension 5: Support Capacity

Technology Dimension 1: Learners and Their Environment

A. Snapshot of Current Technology Use

Anderson School District Four actively pursues the effective use of technology to support teaching and learning. Currently our schools have the distributed model of computers, with 3-5 computers allocated per classroom, grades K-4 and one mobile lab available for check-out in the upper grades. The elementary and middle schools have one open lab per 250-300 students, with another lab dedicated to academic skills reinforcement. The middle school also has three labs for business/technology programs and three mobile labs for teacher check-out. The high school has three mobile labs per 900 students, with six additional labs for business/technology courses, all of which are open for one ninety-minute block each day for teachers to use. Students are formally taught technology skills in our middle school through Keyboarding and Discovering Technology classes and at our high school in business classes. Technology is integrated throughout the K-12 curriculum through projects, including research, writing, presentation, and credit recovery with the purpose of helping studentsômaster key academic standards. Software programs vary within the schools with the focus on the needs of each schoolsôcliental.

Anderson School District Four made a commitment to technology integration in the 2009 -2010 school year by having technology coaches for each school in the district. Two of the core jobs of the technology coaches are to assist teachers with technology integration and to ensure that the students are technologically literate.

Anderson School District Four also made a commitment to technology integration by providing laptops for each of the district teachers, an LCD projector and Smartboard and/or slate for each classroom for instructional purposes. This enables the teacher the ability to work on curriculum instruction assignments and resources outside of the school environment.

Our goal over the next five years is to move away from the distributed computer model at the middle and high schools, providing additional open labs for technology integration through internet activities such as teacher lead blogs. We believe this will increase the level of rigor for our core academic classes as technology is used in an authentic environment for problem solving and projects. Our goal is to use technology to increase genuine, sustained understanding of the South Carolina Academic Standards.

Another goal is to develop elementary technology objectives that all students are expected to master and meet the State Technology Proficiency standards by 8th grade. These objectives will be taught in the context of core academic subjects. Student mastery of specific technology objectives will ensure that students are fully prepared in middle and high school to utilize technology in genuine ways.

B. Overall Goal for This Dimension

Anderson School District Four, in cooperation with the SDE, will use research-proven strategies to provide home, school, and community environments conducive to our student achieving technological literacy by the end of the eighth grade and to raise the overall level of academic achievement in South Carolina.

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

Objective 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.

Strategy 1.1.1: 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.

Strategy 1.1.2: Conduct student projects that will yield sustained, engaged learning and collaboration in the core content areas.

Strategy 1.1.3: Have students present their collaborative projects to identified audiences.

Strategy 1.1.4: Recognize and promote best practices that successfully integrate technology, including assistive technology, into the curriculum.

Strategy 1.1.5: Provide appropriate accommodations for students with special needs when conducting tests, including standardized tests, using technology.

Strategy 1.1.6: Provide District approved software, to enable blogging and other teacher lead, student interactive opportunities.

Objective 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.

Strategy 1.2.1: Develop technology-enhanced learning activities aligned with state standards in core content areas.

Strategy 1.2.2: Create and maintain student technology portfolios documenting grade-level appropriate technology competencies.

Strategy 1.2.3: Continue support for district wide school technology coaches 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.

Objective 1.3: Students will select the appropriate tools to complete authentic, real-life multidisciplinary tasks and will demonstrate technology competence by the end of the eighth grade.

> ***Strategy 1.3.1:*** Create and use lesson activities in which students employ a variety of technology tools, including assistive technology, to complete authentic multidisciplinary tasks.
>
> ***Strategy 1.3.2:*** Measure student technology proficiency by using surveys and performance-based assessments.
>
> ***Strategy 1.3.3:*** 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.
>
> ***Strategy 1.3.4:*** Provide students with access to the district's communications network infrastructure to enable communication and information exchange with other district users and the global community at large.

Objective 1.4: The SDE, the school districts, and the schools will provide students with an enhanced learning environment through technological tools, including assistive technology, that are designed to promote high academic achievement.

> ***Strategy 1.4.1:*** Establish school and community learning environments that enable students to use technology for real-world problem solving and research.
>
> ***Strategy 1.4.2:*** Adopt grade-level-appropriate technology standards and integrate them into the curriculum to enable students to fully participate in todayôs information-rich global society.
>
> ***Strategy 1.4.3:*** Adopt grade-level-appropriate technology standards and integrate them into the curriculum to prepare students to function in an information-rich global society.
>
> ***Strategy 1.4.4:*** Adopt standardized computer programs to enable students to earn credits through credit recovery in order to keep students up to grade level.

Action List

a. ASD4 will 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 ñThinkfinity ñInternet Content for the ClassroomòWeb site (http://www.thinkfinity.org /), and ASD4ôs Online Curriculum Map.

b. ASD4 will provide access to effective, research-based assistive technologiesð including software, peripherals, and other tools to increase

student communication, collaboration, and engagementð that will support inclusion of students with disabilities in the core content courses at all grade levels.

c. ASD4 will 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.

d. ASD4 will utilize grade-level-appropriate technology standards and competencies based on the ISTE NETS-S.

e. ASD4 will establish 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.

f. 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 will 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.

g. Students themselves will be given opportunities to assess the effectiveness of technology tools, including the range of assistive technology, being used for classroom activities.

h. ASD4 will complete initial and ongoing assessments to measure increased availability of technology opportunities and resources.

i. Educators and parents will 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.

j. ASD4, in conjunction with the SDE and regional curriculum/technology teams, will identify best practices of seamless technology integration that will be disseminated via on-line resources such as the SCTLC Web portal and the *South Carolina Technology News* e-magazine, conferences and workshops, and the South Carolina Association for Educational Technology (SCAET) technology project awards, including ASD4ôs Intranet and Online Curriculum Map..

k. ASD4 will develop methods of recognizing student technology achievement, including the use of assistive technology, using resources such as CPU (Computer Power Users) and TNT (Teachers ôN Technology).

D. Implementation Action Steps for District and Schools

a. ASD4 will assign school technology coaches to offer guidance to schools.

b. ASD4 will 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 individual special needs.

c. ASD4 will offer professional development courses using innovative delivery strategies.

d. ASD4 will begin working with teachers in the classroom to create lesson plans that incorporate a variety of technologies into authentic multidisciplinary tasks. These activities will be published to ASD4ôs Online Pacing Guide.

e. ASD4 will recognize exemplary technology teachers and students.

f. ASD4 will develop a district online interface for parents and teachers to communicate .

g. ASD4 will encourage home and community involvement in the public school system by electronic communications and other media.

h. ASD4 schools will implement an on-line system for displaying student work such as e-mail projects, on-line projects, and so forth.

i. ASD4 schools will recognize exemplary student technology projects.

j. ASD4 schools will hold ñtechnology nightsò that showcase exemplary student technology projects and technology teachers to the community.

k. ASD4 schools will provide access to technology resources, including assistive technology, during nontraditional school hours.

l. ASD4 schools will include goals and strategies for technology and assistive technology development in school improvement plans.

m. ASD4 schools will encourage home and community involvement in the public school system through the use of electronic communications and other media.

E. Funding Considerations for District and Schools

a. SDE, ASD4, and school technology professional development

b. SDE, ASD4, and school technology course development

c. SDE Regional Technology Center operation

d. SDE, ASD4, and school statewide recognition programs

e. SDE, ASD4, and school technology resources to support standards-based learning across the curriculum

f. ASD4 and school technology staff

g. ASD4 and school recognition programs
h. ASD4 and school teacher and student portfolio materials
i. Ed Tech Formula Grant
j. American History Grant

F. Evaluation of Objectives

EVALUATION							
Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	**Outcomes (Include "action list" items achieved.)**				
			20009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
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.	Statewide achievement test scores District report cards Technology surveys Student portfolios School technology and improvement plans District, school, and community surveys	Statewide achievement test scores District report cards Technology surveys Student portfolios Observations and interviews Anecdotal records Documented access to on-line resources Listing of recognition programs	Development of blogging activities, where appropriate, in classrooms. Upgrading of ATLAS Curriculum Mapping software. Reviewing of Curriculum Integrated software programs	Updating Curriculum mapping software as needed.			
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.			Summer institute to upgrade the Curriculum map to reflect the new Math Series ATLAS Curriculum Mapping Program Review of MAPTRAKKER	Curriculum Mapping software	Curriculum Mapping software	Curriculum Mapping software	Curriculum Mapping software
1.3 Students will select the appropriate tools to complete authentic, real-life multidisciplinary tasks and will demonstrate technology competence by the end of the eighth grade.			Exemplary technology teachers honored at school level School Tech Nights held at elementary schools Student work published on school websites		Exemplary technology teachers and coaches honored at state level	• Exemplary technology teachers and coaches honored at school level	• Exemplary technology coach honored at school and national level
1.4 The SDE, the school districts, and the schools will provide students with an extended learning environment through technological tools, including assistive technology, that are designed to promote high academic achievement.			Purchase of BrainPop and Access to the state provided technology tools for learning. Curriculum rich resources accessed from district web site.	Purchase of BrainPop and Access to the state provided technology tools for learning. Curriculum rich resources accessed from district web site.	Purchase of BrainPop and Access to the state provided technology tools for learning. Curriculum rich resources accessed from district web site.	Purchase of BrainPop and Access to the state provided technology tools for learning. Curriculum rich resources accessed from district web site.	Purchase of BrainPop and Access to the state provided technology tools for learning. Curriculum rich resources accessed from district web site.

G. Current Best Practices in District

The Anderson School District Four School Board has made a solid commitment to technology integration in our schools. Their support has allowed us to have 3-5 computers per classroom in our district. Although we believe this model is not the most effective one for middle and high school students, the commitment of the school board will allow us to reallocate the computers in our lease program, moving the classroom computers into open labs at the middle and high schools and retaining a high student-computer ratio at the elementary schools. For the 2009-2010 school year, the middle school will have three open labs [one fixed and two mobile] and one lab dedicated to academic skill reinforcement. The high school will have five open labs [two fixed and three mobile], in addition to the five labs that are in place for the business/technology program.

Another best practice in Anderson School District Four is the use of our school technology coaches. The coaches work daily with teachers to assist with technology integration. They also help teachers and computer lab assistants to ensure that students are technologically literate. Technology Coaches assist teachers in posting student work online, providing an authentic publishing arena.

Our technology coaches also have worked diligently this year with all certified staff and classified instructional support staff to ensure that they have foundational technology skills. They will work with this group in the years to come to bring our staff to a highly proficient level of technology competency.

Technology Dimension 2: Professional Capacity

A. Snapshot of Current Technology Use

In the 2009 ï 2010 school year, the Anderson School District Four School Board revised and adopted new technology proficiency standards for all staff, classified and certified. (See Appendix 2.) These standards are correlated to the ISTE NETS-T standards. During the 2004-2009 school years, the technology coaches worked with the staff members at the school level to ensure that all had mastered the Level A and Level B Technology Competencies. We feel confident that all of our teachers have a basic knowledge of technology skills that gives them a strong foundation for future growth. This will build on their current foundation, giving teachers the ability to integrate technology into core academic areas in order to increase student achievement. Re-evaluation of current technology standards are reviewed and modified to keep pace with the new technologies available.

In addition to the Staff Technology Competencies, our technology coaches assist teachers with the use of technology that is unique to each classroom setting. For example, all of our elementary grade teachers have SMART Boards, LCD Projectors And some have digital cameras. The technology coaches work with these teachers to help them master the hardware and software to enhance the learning experiences of students.

B. Overall Goal for This Dimension

Anderson School District Four, in cooperation with the SDE, will provide curriculum development and professional development to increase the competency of all South Carolina educators so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

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

Objective 2.1: The SDE will enable educators to achieve and demonstrate proficiency in integrating state-recommended instructional technology standards (ISTE NETS-A, ISTE NETS-S, and ISTE NETS-T) into their specific area of professional practice to increase student achievement.

> ***Strategy 2.1.1:*** Encourage an initial teacher certification process that requires demonstration of proficiency in integrating instructional technology standards
> ***Strategy 2.1.2:*** Adopt a process that requires teachers to demonstrate ongoing proficiency in integrating instructional technology standards

Strategy 2.1.3: Adopt a state educator professional development program to aid districts in satisfying the requirements of the teacher technology proficiency proviso

Strategy 2.1.4: Include in district technology plans a professional development program that provides a guide for teachers to progress from their current levels of ability in using technology, including appropriate assistive technology, to full proficiency

Strategy 2.1.5: Require district and school administrators to demonstrate technology proficiencies based upon the state-recommended standards for administrators (ISTE NETS-A)

Objective 2.2: The SDE and the school districts will provide the schools with full-time multidimensional technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers, and administrators.

Strategy 2.2.1: Fund Appoint or hire full-time technology coaches to assist with basic technology skills and the integration of the technology into classroom instruction in every school

Strategy 2.2.2: Require that technology coaches provide direct training and consultation to teachers in their classrooms, with special emphasis on helping administrators, teachers, and students meet the state-recommended technology standards (ISTE NETS-A, ISTE NETS-T, ISTE NETS-S) as well as helping students to meet the state's content standards in all areas

Objective 2.3: The SDE and the school districts will collaborate in planning for professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology, to enhance learning.

Strategy 2.3.1: Develop and submit a technology plan that (1) is directed by the district's technology leadership, (2) is designed for the district and for each school in the district as applicable, and (3) calls for site-based input from technology committees or teams in each building

Strategy 2.3.2: Include in district technology plans professional development for district staff and teachers to be part of assistive technology assessment teams

Strategy 2.3.3: Include in district technology plans the training needed to ensure the accessibility of electronic and information technology to students with special needs

Strategy 2.3.4: Include in district technology plans the training needed

for school and district staff to evaluate software in order to make decisions that ensure the promotion of higher-order thinking skills for all students, including those with special needs

Objective 2.4: The SDE and the school districts will provide schools with information and training in technology integration so that teachers can use research-based best-practice instructional methods throughout the curriculum.

Strategy 2.4.1: Offer professional development activities and training in a variety of ways (i.e., on-site, off-site, on-line, self-paced, and combinations of these methods) to address the technology needs of staff, paying special attention to high-need schools and schools serving economically disadvantaged populations, including students with special needs

Strategy 2.4.2: Provide a list of professional development opportunities on the SCTLC (South Carolina: Teaching, Learning, Connecting) Web portal at http://www.sctlc.com and publicize other recognized professional opportunities for educators

Strategy 2.4.3: Provide professional development opportunities focused on aligning state technology standards with state content standards

Strategy 2.4.4: Develop alliances with subject, grade, or position-specific professional organizations to promote technology integration throughout the Kï 12 curriculum

Strategy 2.4.5: Increase the availability of technology professional development tools to teachers: access to laptop computers and presentation devices, Internet access at the classroom level, interactive on-line access to state curriculum standards and lesson plans, access to Web-based and/or CD-ROM-based training opportunities, and access to state-of-the art training centers in their particular geographic areas

Strategy 2.4.6: Develop an extensive statewide network of professional development providers who have the skills and experience necessary to prepare teachers for effective technology use.

Objective 2.5: The SDE and the school districts will assess the overall effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement.

Strategy 2.5.1: Establish minimum levels of teacher technology proficiency for replication and adaptation across the state

Strategy 2.5.2: Incorporate instructional technology assessment into current teacher and administrator evaluation processes

Strategy 2.5.3: Administer a statewide needs assessment to teachers and administrators to determine current levels and types of professional development that must be offered

Strategy 2.5.4: Administer evaluations to determine the effectiveness and impact of the professional development offered to teachers and administrators

Strategy 2.5.5: Encourage teachers to create and maintain technology portfolios showing examples of their studentsôwork and documenting use of technology in their classrooms

Strategy 2.5.6: Develop an on-line professional development tracking system of teachers and administrators

Action List

a. ASD4 will hire or appoint full-time leadership for the use of technology, including that for assistive technology, to increase student learning.

b. Leadership committees will include participants such as educators (including special educators), therapists, school administrators, parents, and librarians.

c. The SDE should utilize the expertise of staff members and faculty in school districts and institutions of higher learning throughout the nation.

d. A school technology coach should be hired or appointed in every school in every district.

e. An assistive technology specialist and an assistive technology assessment team will be hired or appointed in every school district.

f. ASD4 will submit to the SDE an annual technology plan that documents site-based input and includes a plan for professional development that outlines the technology education offerings and requirements, including assistive technology.

g. District and school administrators should submit to their supervisors an annual professional development plan that includes technology goals

aligned with ISTE NETS-A and that is reviewed as part of the administratorôs annual evaluation.

h. ASD4 will provide training to district- and building-level administrators so that they can effectively assess a teacherôs ability to integrate technology, including assistive technology, into the curriculum.

i. ASD4 will provide training for assistive technology teams in assistive-technology assessment, options, and curriculum integration.

j. ASD4 will provide training for teachers in using assistive technology tools.

k. ASD4 will provide training in the evaluation of software in order to make decisions that ensure the promotion of higher-order thinking skills for all students, including those with special needs.

l. ASD4 will provide training in accessibility issues involving applicable state and federal legislation.

m. ASD4 teachers will keep portfolios that include sample lesson plans indicating increased technology integration across the core content areas in alignment with the state academic standards.

n. ASD4 will collect, maintain, and report documentation of teacher technology portfolio data.

o. The SDE and the school districts should develop or adopt on-line assessment instruments and make them available to all school districts in the state to determine teachersôlevel of technology proficiency.

p. SDE- and district-developed tracking tools (electronic or Web-based surveys) of district professional activities should be completed each year in conjunction with ADEPT (Assisting, Developing, and Evaluating Professional Teaching) or other district evaluation procedures that include an instructional technology component.

q. District reports and evaluations of professional development initiatives and reports on the use of technology grant funds will show an increase in access to professional development.

D. Implementation Action Steps for District and Schools

a. ASD4 will submit a technology plan, including a professional development plan, to the Office of Technology for approval.

b. ASD4 will administer a district technology professional development assessment to administrators and teachers to evaluate current training need areas and to create the district technology professional development plan on the basis of current needs.

c. ASD4 will participate in ongoing, sustained professional development offerings, maintaining a log and a journal for each course, workshop, event, conference, and so forth, to place in portfolios.

d. ASD4 will submit teacher technology proficiency assurance forms to the Office of Technology by the announced deadline.

e. ASD4 will initiate partnerships with community entities to create greater access to technology, including assistive technology, and a community learning environment.

f. ASD4 will perform random and periodic checks of teacher and administrator portfolios to measure the impact of professional development in technology.

g. ASD4 will administer needs assessments to identify areas of weakness and follow up with assessments that measure the impact of professional development in technology.

h. ASD4 will evaluate and adjust technology professional development plans as indicated by needs assessments.

i. ASD4 schools will submit a technology plan, including a professional development plan, to the local district office.

j. ASD4 schools will hire or appoint a school technology coach who is knowledgeable about assistive technologies for each school and will submit training and needs reports to the regional technology specialist.

k. ASD4 schools will begin keeping technology portfolios.

l. ASD4 schools will evaluate teacher and administrator portfolios to measure the impact of professional development in technology.

m. ASD4 schools will administer needs assessments to identify areas of weakness and follow up with assessments that measure the impact of professional development in technology.

n. ASD4 schools will monitor and adjust professional development in technology as indicated by needs assessments.

E. Funding Considerations for District and Schools

a. SDE Regional Technology Center professional development

b. SDE collaboration and partnership meetings with schools, schools districts, institutions of higher education, business and community entities, and other states to determine professional development direction

c. SDE professional development for distance-learning

d. SDE, ASD4, and school scientifically based research

e. ASD4 committee development of professional development plans

f. ASD4 and school committee development of district and school technology plans

g. ASD4 and school professional development needs-assessment tools

h. ASD4 and school evaluation tools to measure the impact and effectiveness of technology professional development

i. ASD4 and school evaluation experts to help show the impact of programs and initiatives

j. ASD4 high-quality sustained professional development programs offered via innovative delivery methods

k. School technology leader salary

l. Ed Tech Formula Grant (E2T2 Funds)

m. American History Grant

n. State technology funds (when made available)

F. Evaluation of Objectives

V. EVALUATION							
Objectives	**Possible Baseline Data**	**Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report**	**Outcomes**				
			2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
2.1 The SDE will enable educators to achieve and demonstrate proficiency in integrating state-recommended instructional technology standards (ISTE NETS-A, ISTE NETS-S, and ISTE NETS-T) into their specific area of professional practice to increase student achievement.	Statewide achievement test scores District report cards Teacher technology proficiency proviso forms Professional development surveys Teacher and administrator portfolios School technology and improvement plans SCTLC ñTrainingò tab Technology assessments	Statewide achievement test scores District report cards Professional development tracking and surveys Teacher technology proficiency proviso forms Teacher and administrator portfolios Observations and interviews Anecdotal records Documented access to on-line resources SCTLC ñTrainingò tab Technology assessments	Revised Staff Technology Competencies in place at all buildings. All certified staff and classified instructional support staff assessed on Level A.				
2.2 The SDE and the school districts will provide the schools with full-time multidimensional technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers, and administrators.			Technology Coaches for each school	Continue support for technology coaches	Continue support for technology coaches	Continue support for technology coaches	Continue support for technology coaches
2.3 The SDE and the school districts will collaborate in planning for professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology, to enhance learning.			Graduate technology course offered. During school and after-school trainings held.	Graduate technology course offered. During school and after-school trainings held.	Graduate technology course offered. During school and after-school trainings held.	Graduate technology course offered. During school and after-school trainings held.	Graduate technology course offered. During school and after-school trainings held.

V. EVALUATION							
Objectives	**Possible Baseline Data**	**Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report**	**Outcomes**				
			2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
2.4 The SDE and the school districts will provide schools with information and training in technology integration so that teachers can use research-based best-practice instructional methods throughout the curriculum.			Graduate technology course offered. During school and after-school trainings held.				Graduate technology course offered. During school and after-school trainings held.
2.5 The SDE and the school districts will assess the overall effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement			Technology Professional Development needs survey administered in early fall.. Post-evaluations done routinely for technology course offerings	Technology Professional Development needs survey administered in early fall..	Technology Professional Development needs survey administered in early fall..	Technology Professional Development needs survey administered in early fall..	Technology Professional Development needs survey administered in early fall..

G. Current Best Practices in District (if applicable)

Currently the school technology coaches work with teachers to help them master the technology skills necessary to fully integrate technology into the classroom curricula. The technology coaches have a plan over the next five years to move all teachers to a high level of technology proficiency, consistently working with teachers on the Technology Competencies (See appendix.) The district purchases additional hardware/software for teachers who have demonstrated greater technology proficiency, such as SMART Boards, CPS interactive voting systems, flexible cameras, etc. The technology coaches then work with these more advanced technology users on this hardware/software. This allows for certain teachers at each school to be ñtechnology leadersò who can master new hardware/software and serve as an encouragement and motivation to others who are struggling to master basic technology competencies.

During the 2009-2010 Year, ASD4 will also be introducing a new web interface,(Schoolfusion) to enable parents to recive instant information via the web for their individual student.

In the Fall of 2009, ASD4 held its first PowerTeacher training to highlight the new technology and provide training sessions on on best use of the new software. ASD4 is presently offering graduate credit courses with the integration of technology into the curriculum. These offerings were based on a professional development needs assessment surveys.

Technology Dimension 3: Instructional Capacity

A. Snapshot of Current Technology Use

Currently Anderson School District Four has sufficient hardware resources, thanks to a school board that has a solid commitment to technology. We use *Internet Explorer* and Microsoft Office XP software, including *Word*, *PowerPoint*, *Excel*, *Access*, *FrontPage*, and *Publisher*. These software pieces allow for technology project integration at all levels. We also have KeySkills a skills-based supplemental instructional resource, *Inspiration* software at the middle and high schools, *Kidspiration* and *Scholastic Keys* for our elementary schools, allowing for project integration in a developmentally appropriate way for our younger students. We have additionally purchased Smartboards and use the Smartboard software package for teacher and student interaction with technology.

We have added data analysis software that allows for greater technology integration, as well as skills software that will meet instructional weaknesses as identified by MAP, PASS, and teacher diagnostic assessments.

Our middle school and high school will move away from a distributed computer model to wireless mobile and fixed labs. Software will be purchased that reinforces basic skills in the core content areas, extends studentsô understanding through project-based learning, and actively engages students in authentic learning experiences.

B. Overall Goal for This Dimension

Anderson School District Four, in cooperation with the SDE, will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

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

Objective 3.1: The SDE will develop a technology framework for local planning that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.

> ***Strategy 3.1.1:*** Ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies (including the range of assistive technology options) to significantly impact teaching and learning.

Strategy 3.1.2: Facilitate the use of technologies to support and enhance instructional methods (including the use of hardware, software, and assistive technology) that develop higher-level thinking, decision-making, and problem-solving skills.

Objective 3.2: The SDE, the school districts, and the schools will provide teachers with the technology resources, including assistive technology, necessary to increase academic achievement by engaging students in active learning.

Strategy 3.2.1: Provide teachers with access to knowledgeable personnel, productivity tools, on-line services, media-based instructional materials, and primary sources of data in settings that enrich and extend teaching goals.

Objective 3.3: The SDE, the school districts, and the schools will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule.

Strategy 3.3.1: Provide students with access to technology, on-line services, and media-based instructional materials, allowing them to select appropriate tools that will enrich and extend their learning.

Objective 3.4: The school districts will provide and support a variety of multimedia equipment and software for teaching and learning.

Strategy 3.4.1: Communicate via the district technology plan a vision for multimedia infrastructure designed to support instruction

Strategy 3.4.2: Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives

Action List

a. ASD4 will conduct technology planning meetings to address curricular design, instructional needs of all teachers, instructional strategies, and appropriate learning environments.

b. ASD4 will conduct technology planning meetings to address the inclusion of appropriate assistive technology into curricular design, instructional strategies, and learning environments (general and special education).

c. ASD4 will pursue funding opportunities such as grants to provide funds to acquire and maintain hardware and software for use in classroom instruction.

d. ASD4 will pursue funding opportunities such as grants to acquire and maintain assistive technology for use in classroom instruction and home access when appropriate.

e. Student portfolios will display products resulting from the integration of technology into the core curriculum areas and documentation of student presentations that illustrate the ability to synthesize and analyze information.

D. Implementation Action Steps for District and Schools

a. ASD4 will conduct technology curriculum planning meetings.

b. ASD4 will include an instructional technology plan and an assistive technology plan in the technology plan to be submitted to the Office of Technology for approval.

c. ASD4 will create methods of gauging technology readiness.

d. ASD4 will evaluate hardware and software for desirable student outcomes and standardize selection when appropriate.

e. ASD4 will designate technology leaders.

f. ASD4 will participate in ongoing, sustained professional development offerings, maintaining a log and a journal for each course, workshop, event, conference, and so forth, to place in portfolios.

g. ASD4 will submit teacher technology proficiency assurance forms to the Office of Technology by the announced deadline.

h. ASD4 will initiate partnerships with community entities to create greater access to technology and a community learning environment.

i. ASD4 will pursue funding opportunities such as grants to acquire and maintain hardware, instructional software, and assistive technology.

j. ASD4 will pursue the delivery of courses for students and professional development courses for teachers via innovative methods.

k. ASD4 schools will conduct technology curriculum planning meetings.

l. ASD4 schools will submit a technology plan, including a professional development plan, to the local district office.

m. ASD4 will hire or appoint a school technology coach who is knowledgeable about assistive technologies for each school and will submit training and needs reports to the regional technology specialist.

n. ASD4 schools will ensure that teachers and administrators begin keeping technology portfolios.

o. ASD4 schools will evaluate teacher and administrator portfolios to measure the impact of technology integration, including assistive technology, on student achievement.

p. ASD4 schools will interview students to assess information literacy and the integration of technology into the classroom.

q. ASD4 schools will pursue funding opportunities such as grants to acquire and maintain hardware, instructional software, and assistive technology.

E. Funding Considerations for District and Schools

a. SDE equity of instructional technology access

b. SDE distance learning

c. SDE, ASD4, and school scientifically based research

d. SDE committee development of curriculum guides for integrating technology

e. District and school technology audit visits

f. SDE evaluation tools to measure the impact and effectiveness of the integration of technology on student achievement

g. SDE and ASD4 eighth-grade proficiency measurement

h. SDE, ASD4, and school professional development

i. ASD4 and school committee development of district and school technology plans

j. ASD4 and school evaluation tools to measure the impact and effectiveness of the integration of technology with regard to student achievement

k. ASD4 portfolio creation

l. ASD4 and school evaluation experts to help show the impact of programs and initiatives

m. ASD4 distance learning

n. ASD4 and school technology leader implementation

o. School professional development needs-assessment tools

p. Ed Tech Formula Grant (E2T2)

q. State Technology Funds (when made available)

F. Evaluation of Objectives

EVALUATION							
Objectives	**Possible Baseline Data**	**Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report**	**Outcomes (Include "action list" items achieved.)**				
			2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
3.1 The SDE will develop a technology framework for local planning that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.	Statewide achievement test scores Technology readiness and access surveys District report cards Teacher technology proficiency proviso forms Teacher and administrator portfolios School technology and improvement plans Technology assessments Documentation of offerings provided via innovative delivery methods	Statewide achievement test scores District report cards Technology readiness and access surveys Teacher technology proficiency proviso forms Teacher and administrator portfolios Observations and interviews Anecdotal records Documented access to on-line resources Technology assessments Documentation of offerings provided via innovative delivery methods	Hardware Review Process for upcoming year Software review process for upcoming year MAP & PACT Data analysis allows ASD4 to identify curricular weaknesses	Hardware Review Process for upcoming year Software review process for upcoming year	Hardware Review Process for upcoming year Software review process for upcoming year	Hardware Review Process for upcoming year Software review process for upcoming year	Hardware Review Process for upcoming year Software review process for upcoming year
3.2 The SDE, the school districts, and the schools will provide teachers with the technology resources, including assistive technology, necessary to increase academic achievement by engaging students in active learning.			3-year to possible 4 year plan for new hardware/software is in place Atlas Rubicon Software renewed Maptrakker software reviewed				
3.3 The SDE, the school districts, and the schools will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule.			A+ software used to provide credit recovery forcatching students up and teaching missed knowledge.	A+ software used to provide credit recovery forcatching students up and teaching missed knowledge. Review needed modules	A+ software used to provide credit recovery forcatching students up and teaching missed knowledge. Review needed modules	A+ software used to provide credit recovery forcatching students up and teaching missed knowledge.	A+ software used to provide credit recovery forcatching students up and teaching missed knowledge.
3.4 The school districts will provide and support a variety of multimedia equipment and software for teaching and learning.			Technology Teacher stationed up[dated as needed. (Station includes interactive whiteboard, projector and laptop computer)				

G. Current Best Practices in District

Currently, Anderson School District Four uses a variety of instructional technologies to create learner-centered instructional environments that enhance academic achievement. We use A+ for specific students at the middle and high school for credit recovery, skills mastery, homebound instruction, home-based special ed. Instruction, GED preparation at the Family Learning Center. Some of our high school students take online courses through Florida Virtual High School and AMDG. Our teachers know how to use SCETV, DISCUS, SCTLC, and United Streaming for instructional technology resources. We also have developed the ASD4 Online Pacing Guide and Curriculum MAP that has a wealth of resources and teaching strategies, including many that integrate technology.

We use MAP data and PACT data analysis to set goals for individual student achievement in order to meet NCLBôs goal of 100% proficiency in student achievement across core academic areas.

Through the American History Grant, technology teacher stations were purchased for Lead American History Teachers in each school with 4th, 5th, and 8th grade students. This package includes an LCD projector, a SMART board, CPS interactive student voting systems, and a digital camera. These teachers have received special training in these technologies and will continue to receive further training during the 2009-2011 school years.

We use several assisted technologies including Test Talker, screen enhancers, and software specifically designed for the needs of students receiving special services.

Technology Dimension 4: Community Connections

A. Snapshot of Current Technology Use

Currently in Anderson School District Four we work with Anderson County Adult Education Center to offer classes for staff. We also have a partnership with New Holly Light Missionary Church through a Century 21 Grant that provides a computer lab for an after-school lab.

B. Overall Goal for This Dimension

Anderson School District Four, in cooperation with the SDE, will increase student achievement through the use of technology, including assistive technology, by maximizing community involvement and community partnerships.

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

Objective 4.1: The school districts will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes. (The term *community* includes parents, businesses, state and local agencies, nonprofit groups, and institutions of higher education.)

Strategy 4.1.1: Form district-community partnerships to provide students with real-world experiences in the use of technology, including assistive technology, that enhance academic achievement.

Strategy 4.1.2: Form district-community partnerships to help research and evaluate school and district technology projects

Strategy 4.1.3: Provide recognition/reward programs and/or incentives for partnerships showing impact

Strategy 4.1.4: Write community-collaborative technology grants to develop and fund the use of technology to improve teaching and learning

Strategy 4.1.5: 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

Objective 4.2: The SDE and the school districts will fully utilize all available resources by fostering collaboration and cooperation among state-supported organizations, institutions, and initiatives.

> ***Strategy 4.2.1:*** Identify all of the organizations, institutions, and initiatives that are currently focused on instructional technology applications
>
> ***Strategy 4.2.2:*** Compile a database of institutions willing to partner with high-need school districts by creating a message board on the South Carolina: Teaching, Learning, Connecting (SCTLC) Web portal (http://www.sctlc.com) where potential partners can communicate with one another and generate ideas
>
> ***Strategy 4.2.3:*** Partner with other school districts as well as community entities to collaborate in order to provide assistive technology demonstration, loan, and assessment for students with special needs

Objective 4.3: The school districts will provide after-hours training and community access to labs, media centers, and classrooms.

> ***Strategy 4.3.1:*** Create and publish flexible schedules of after-hours technology access and training for students, parents, teachers, and community members
>
> ***Strategy 4.3.2:*** Create opportunities for access to facilities for after-hours assistive technology training for students, parents, teachers, and community members

Objective 4.4: The school districts will ensure that all their buildings are linked by the Internet to the State Libraryôs DISCUS databases and to the Web sites of universities, museums, and other institutions to facilitate virtual communication between home, school, and community.

> ***Strategy 4.4.1:*** Host an electronic list through the SCTLC Web portal for school districts and community entities interested in collaborative initiatives

Action List

a. ASD4 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.

b. ASD4 schools will develop a rubric to measure the success of their community partnerships.

c. ASD4 will publish school lab schedules showing after-hours technology access and training.

d. ASD4 will maintain logs of professional development, community offerings, and internship opportunities in technology.

e. ASD4 will maintain logs of partnerships and their role in helping research and evaluate technology projects.

f. ASD4 will publicize successful collaborations with outside entities in the demonstration, loan, and assessment of assistive technology.

g. ASD4 will post successful technology grant applications on the Internet for others to use as models

h. ASD4 will develop lists of possible partner organizations, institutions, and initiatives that may include the following:

    i. South Carolina Commission on Higher Education

    ii. Distance education learning centers (DELCs)

    iii. Instructional Television (ITV)

    iv. School Technology Initiative

    v. Math and Science Hubs

    vi. South Carolina: Teaching, Learning, Connecting (SCTLC) Web portal

    vii. South Carolina Assistive Technology Advisory Committee

    viii. South Carolina Assistive Technology Project

    ix. South Carolina Commission for the Blind

    x. South Carolina Department of Disabilities and Special Needs

    xi. South Carolina Department of Education

    xii. South Carolina Educational Television

    xiii. South Carolina State Library

    xiv. South Carolina Vocational Rehabilitation Department

i. ASD4 will lead the formation of consortia among local education agencies, business and industry, public entities, private organizations,

museums, libraries, colleges, and private schools for the full utilization of technology and assistive technology expertise.

j. ASD4 will publish a list of successful consortia, partnerships, and initiatives on the SDE Web site and the SCTLC Web portal.

k. ASD4 surveys will provide increased access and use of school facilities for after-hours technology training.

l. ASD4 will provide flexible technology training schedules to SDE.

m. ASD4 will provide information about assistive technology training opportunities on the SDE Web site and through the SCTLC Web portal.

n. ASD4 will utilize its Web site to publish a list of volunteers for possible technology partnerships to benefit that districtôs schools.

D. Implementation Action Steps for District and Schools

a. ASD4 will submit a technology plan, including a professional development plan, to the Office of Technology for approval.

b. ASD4 will encourage flexible lab, media center, and classroom hours among schools, including opportunities for community members to see and try assistive technology.

c. ASD4 will initiate partnerships with community entities to create greater access to technology and a community learning environment.

d. ASD4 will initiate partnerships with community entities to research technology projects.

e. ASD4 will include members of the community in writing technology grants to develop and fund better teaching and learning through technology, including assistive technology.

f. ASD4 will utilize the Web site to publish a list of volunteers for possible technology partnerships.

g. ASD4 will measure access and use of school technology facilities.

h. ASD4 schools will submit a technology plan, including a community partnership plan, to the local district office.

i. ASD4 schools will distribute parent and community information through report cards.

j. ASD4 schools will develop, implement, and publicize flexible lab, media center, and classroom hours, including opportunities for community members to see and try assistive technology.

k. ASD4 schools will initiate partnerships with community entities to create greater access to technology and a community learning environment.

l. ASD4 schools will initiate partnerships with community entities to research technology projects.

m. ASD4 schools will include members of the community in writing technology grants to develop and fund better teaching and learning through technology, including assistive technology.

E. Funding Considerations for District and Schools

a. SDE Regional Technology Center professional development for teachers

b. SDE collaboration and partnership meetings with schools, schools districts, institutions of higher education, and business and community entities

c. State surveys and data analysis

d. SCTLC Web portal maintenance

e. SDE and ASD4 grant-writing experts and workshops

f. SDE collection of district and school data

g. ASD4 and school evaluation experts to help show impact of community programs and initiatives

h. ASD4 and school high-quality sustained community training technology programs offered via innovative delivery methods

i. ASD4 community and apprentice internships

j. ASD4 / school facility operation beyond the regular school day

k. ASD4 district survey and school survey administration, collection and analysis, and reporting

l. School community internships

m. Century 21 Grant

F. Evaluation of Objectives

EVALUATION							
Objectives	**Possible Baseline Data**	**Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report**	**Outcomes (Include "action list" items achieved.)**				
			2009-2010	**2010-11**	**2011-12**	**2012-13**	**2013-14**
4.1 The school districts will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes. (The term *community* includes parents, businesses, state and local agencies, nonprofit groups, and institutions of higher education.)	Statewide achievement test scores Community technology access surveys Lab, media center, and classroom schedules SDE Technology Counts survey School technology plans Documentation of offerings provided via innovative delivery methods	Statewide achievement test scores Community technology access surveys Lab, media center, and classroom schedules SDE Technology Counts survey School technology plans Observations and interviews District and school Web site information Documentation of offerings provided via innovative delivery methods Districts and school list of grants and community partnerships	Century 21 Grant & New Holly Light Church				
4.2 The SDE and the school districts will fully utilize all available resources by fostering collaboration and cooperation among state-supported organizations, institutions, and initiatives.			American History grant with Anderson 1&5	American History grant with Anderson 1&5			
4.3 The school districts will provide after-hours training and community access to labs, media centers, and classrooms.			Graduate class through Clemson. Afterschool training offered in the prescriptive Learning Lab.	Graduate class through Clemson. Afterschool training offered in the prescriptive Learning Lab.	Graduate class through Clemson. Afterschool training offered in the prescriptive Learning Lab.	Graduate class through Clemson. Afterschool training offered in the prescriptive Learning Lab.	Graduate class through Clemson. Afterschool training offered in the prescriptive Learning Lab.
4.4 The school districts will ensure that all their buildings are linked by LAN, WAN, and/or the Internet to the State Library's DISCUS databases and to the Web sites of universities, museums, and other institutions to facilitate virtual communication between home, school, and community.			Links to the state resources found on school and district home pages.	Links to the state resources found on school and district home pages	Links to the state resources found on school and district home pages	Links to the state resources found on school and district home pages	Links to the state resources found on school and district home pages

G. Current Best Practices in District *(if applicable)*

Century 21 Grant & New Holly Light Church ï Twenty-First Century Grant that houses a computer lab that is utilized in the summer for the community. There are onsite instructors and teachers that assist in the use of the technology as well as the evaluation of the use of the computer lab.

Anderson School District Four began a partnership during the 2004 school year with the Anderson County Adult Education Center to provide training to staff and community, as needed.

Technology Dimension 5: Support Capacity

A. Snapshot of Current Technology Use
Refer to the District Technology Standards which follow.

B. Overall Goal for This Dimension
Anderson School District Four, in cooperation with the SDE, will expand and support technology resources to assist educators and learners in meeting the state academic standards.

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

Objective 5.1: The school districts will ensure that all students, including those with special needs, and teachers have access to electronic information resources.

Strategy 5.1.1: Maintain a technology inventory that includes the status of current network/Internet access, workstations and other devices available for access, software applications available for addressing state academic standards, peripherals, and other factors related to universal access to network resources

Strategy 5.1.2: Conduct needs assessments (1) to identify required network components, workstations, and other devices needed for network access, including assistive technology devices, and (2) to identify and evaluate software applications required to meet academic needs as well as peripherals and other resources required to create universal access to network resources

Strategy 5.1.3: Create a district strategic plan for acquiring and implementing the technology, including assistive technology, that is required to provide universal access to network resources

Strategy 5.1.4: Develop the district strategic plan with input from all segments of the school communityð students, teachers, therapists, administrators, parents, community members, community agencies, and local businessesð and include in the plan a mechanism for review and revision as needed.

Strategy 5.1.5: Seek school and district funding from available local, state, and federal sources, including E-rate, grants, and bonds

Objective 5.2: The school districts will ensure that their schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection and distribution, and distance learning.

Strategy 5.2.1: Communicate in the district technology plan a vision for multimedia infrastructure designed to support instruction

Strategy 5.2.2: Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives

Strategy 5.2.3: Ensure the installation, maintenance, and support of multimedia-capable teacher stations in classrooms including data projectors to support large-group instruction

Strategy 5.2.4: Research and implement an integrated network infrastructure capable of utilizing all distribution modules

Strategy 5.2.5: Use bundled distribution packages as a primary means of distribution to manage fully converged networks

Strategy 5.2.6: Install and maintain networks, virus protection, and Internet filtering according to industry standards by implementing systemic, state-of-the-art network security tools at all levels of access to LANs, WANs, and other networks

Strategy 5.2.7: Assess LAN/WAN technology currently implemented to determine SNMP (simple network management protocol) compliance

Strategy 5.2.8: Implement a district network management tool that performs automated software installation

Objective 5.3: The school districts will have qualified technical staff, including one networking engineer per WAN or per ten LANs, one networking technician per LAN, and one end-user support technician per every five hundred users.

Strategy 5.3.1: Develop statewide minimum staffing requirements and job descriptions, with a state-guided salary schedule, for the positions of networking engineer, networking technician, educational technology director, and support technician

Strategy 5.3.2: Provide state-level network support for district

engineers

Strategy 5.3.3: Appoint a district network manager who will lead a committee in identifying and evaluating network management tools that will meet the needs of the district

Objective 5.4: The school districts 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.

Strategy 5.4.1: Ensure that disaster recovery plans are included in the district technology plan

Strategy 5.4.2: Ensure that schools will have electrical distribution systems that provide isolated circuits in all classrooms and redundant power sources for mission-critical equipment

Strategy 5.4.3: Implement a district management application that monitors bandwidth on the LAN and WAN and provides network failure alarms that can be accessed remotely

Objective 5.5: The school districts will implement obsolescence and upgrade plan to replace and recycle equipment and software.

Ensure that the obsolescence and upgrade plans are included in the district technology plan

Objective 5.6: The SDE and the school districts will increase their ability to design Web pages and Web-based instruction that are accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.

Provide training in basic Web page accessibility principles to staff, teachersð and, when appropriate, studentsð who design Web pages as part of the curriculum

Action List

a. School districts should 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.

b. Districts should 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.

c. Districts should include in their local budgets line items for technology, including assistive technology, with sufficient funding to implement the designated strategies.

d. Districts should publish a procedure for the perpetual review of equipment used in multimedia development processes. Reviews should quantify equipment and processes by their impact on teaching and learning.

e. Districts should maintain a strategic plan for acquiring and implementing technology, including assistive technology, for universal access to network resources. This document should show the strategies for addressing the identified needs, the persons responsible for addressing and completing each strategy, and the resources/funds necessary to fully implement the strategies.

f. District technology plans should include a strategic vision for building a multimedia infrastructure to support instruction.

g. District technology plans should include a disaster recovery plan.

h. District technology plans should include an obsolescence and upgrade plan, including strategies to refurbish, resell, recycle, or donate obsolete devices.

i. District policies outlined in district technology plans should include security accountability, virus protection, and Internet filtering guidelines.

j. District technology plans should provide for outlets and amperage and for meeting industry standards and building codes.

k. Districts should use professional discussion groups to share the results of their research about the implementation of integrated network infrastructures and bundled distribution practices.

l. Districts should have records to show that they have assessed their current LAN/WAN technology.

m. District network managers should provide the district office with quarterly reports of statistics on bandwidth utilization.

n. Districts should use the SDE Technology Counts on-line survey to report on their use of network management tools.

o. Districts should ensure that new school construction provides for isolated power in each classroom, computer lab, telecommunications closet, and work area.

p. Districts should provide UPS (uninterruptible power supply) systems for all critical equipment.

q. Districts should use the minimum staffing and salary requirements for the positions specified in objective 4.3.

r. Districts should have a network manager in place.

s. The SDE should establish network security support within the Office of Technology. District staff, teachers, and students should be aware of basic Web accessibility guidelines when designing Web pages.

t. Districts should designate a Web accessibility resource person to coordinate training and information sharing among district personnel.

D. Implementation Action Steps for District and Schools

DISTRICT

a. Maintain technology inventories, including assistive technology.

b. Conduct needs assessments to identify required technology, including assistive technology.

c. Create a strategic technology plan that includes strategies for acquiring, managing, and implementing required technology, including assistive technology

d. Implement a district disaster recovery plan and an obsolescence and upgrade plan

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

f. Encourage and publicize flexible access schedules

g. Create a vision for a multimedia infrastructure

h. Encourage schools to provide multimedia-capable workstations

i. Research and implement an integrated network infrastructure

j. Use bundled distribution packages to manage fully converged networks

k. Install and maintain secure networks

l. Employ staff for adequate network maintenance and support

m. Implement a district management application that monitors bandwidth on the LAN and WAN

n. Ensure that schools have adequate electrical distribution systems

o. Publish procedures and schedules for review of equipment and software used in multimedia development including rubrics for judging impact on teaching and learning

p. Provide schools with the necessary guidance and training in creating Web pages to ensure that electronic information is accessible to students and teachers with special needs

SCHOOLS

a. Create a strategic technology plan that includes strategies for acquiring and implementing required technology, including assistive technology

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

c. Create flexible schedules for access to technology

d. Provide multimedia-capable workstations

e. Install and maintain secure networks

f. Employ staff for adequate network maintenance and support

g. Provide adequate electrical distribution systems

E. Funding Considerations

DISTRICT

a. 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 [Consortium for School Networking's TCO tool available on-line at http://www.classroomtco.org]

b. Technology committee meetings to develop products such as the multimedia infrastructure plan and the disaster recovery plan

c. Materials to publish an updated technology plan

d. Multimedia teacher workstations including data projectors

e. Hardware and software to secure all LANs and WANs to comply with district, state, and industry standards

f. Technology director, networking engineer, and networking technician

g. Equipment inventory assessment program

h. Isolated circuit plan

i. Support planning

j. Technology needs assessments and surveys

SCHOOLS

a. 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 [Consortium for School Networking's TCO tool available on-line at http://www.classroomtco.org]

b. Technology committee meetings to develop products such as the multimedia infrastructure plan and the disaster recovery plan

c. Materials to publish an updated technology plan

d. Multimedia teacher workstations including data projectors

e. Hardware and software to secure all LANs and WANs to comply with district, state, and industry standards

f. Support planning

g. Technology needs assessments and surveys

F. Evaluation of Objectives

EVALUATION							
OBJECTIVES	**POSSIBLE BASELINE DATA**	**POSSIBLE DATA SOURCES TO BE USED FOR ONGOING EVALUATION AND END-OF-PROGRAM REPORT**	**OUTCOMES (INCLUDE "ACTION LIST" ITEMS ACHIEVED.)**				
			2009-2010	**2010-2011**	**2011-12**	**2012-13**	**2013-14**
5.1 The school districts will ensure that all students, including those with special needs, and teachers have access to electronic information resources.	Statewide achievement test scores District report cards Professional development tracking and surveys District, school, and community surveys School technology and improvement plans Documented access to technology resources Technology needs assessments SDE Technology Counts on-line survey Budget data State personnel reports	Statewide achievement test scores District report cards Professional development tracking and surveys Observations and interviews Documented access to technology resources District, school, and community surveys School technology and improvement plans Documented access to technology resources Technology needs assessments SDE Technology Counts on-line survey Budget data State personnel reports	Computers placed in classrooms, mobile labs for teacher checkout, and computer stations in the media center.				
5.2 The school districts will ensure that their schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection and distribution, and distance learning .			Renewal of the Total Traffic Control Security Software	Renewal of the Total Traffic Control Security Software	Renewal of the Total Traffic Control Security Software	Renewal of the Total Traffic Control Security Software	Renewal of the Total Traffic Control Security Software
5.3 The school districts will have qualified technical staff, including one networking engineer per WAN or per ten LANs, one networking technician per LAN, and one end-user support technician per every five hundred users.			Continue contract for network manager and staff	Continue contract for network manager and staff	Continue contract for network manager and staff	Continue contract for network manager and staff	Continue contract for network manager and staff

EVALUATION							
OBJECTIVES	**POSSIBLE BASELINE DATA**	**POSSIBLE DATA SOURCES TO BE USED FOR ONGOING EVALUATION AND END-OF-PROGRAM REPORT**	**OUTCOMES (INCLUDE "ACTION LIST" ITEMS ACHIEVED.)**				
			2009-2010	**2010-2011**	**2011-12**	**2012-13**	**2013-14**
5.4 The school districts 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.			Back-ups performed daily utilizing a centralized back-up server.	Evaluate amount of data storage. Adjust storage capacity and data types as necessary.	Evaluate amount of data storage. Adjust storage capacity and data types as necessary.	Evaluate amount of data storage. Adjust storage capacity and data types as necessary.	Evaluate amount of data storage. Adjust storage capacity and data types as necessary.
5.5 The school districts will implement an obsolescence and upgrade plan to replace and recycle equipment and software.			Hardware / software updated as necessary.	Replace teacher laptops	Replace Desktop units	Update peripherals	Replace Teacher Laptops
5.6 The SDE and the school districts will increase their ability to design Web pages and Web-based instruction that are accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.			Purchase and integration of School Fusion				

G. Current Best Practices in District *(if applicable)*

See District Technology Standards that follow.

District Technology Standards

Where specific products are mentioned, the manufacturers specifications of these products are intended as minimum functional requirements for these components. Substitutes that meet or exceed these product specifications may be used. As emerging technologies stabilize and Anderson School District Four proceeds with phased implementations of technology, it is likely the new and improved products and connectivity methods will be available. Anderson School District Four will continually evaluate and modify these technology standards as appropriate

Local Area Networking

This element of the technology standards encompasses all intra-building network communications connectivity for all sites within Anderson School District Four.

Desktop/ Application Hardware Connectivity

Anderson School District Fourôs infrastructure will consist of 1GB connectivity between closets with 10/100/1000BaseT switch connectivity to workstations and printers.

For all data and voice station cabling, each station cable will be a 4 pair, 24 AWG, Category 5 unshielded twisted pair cable. The cable and installation practice must meet or exceed all specifications as set forth by the current release of the National Electric Code, manufacturer's installation guidelines, BISCI's Telecommunications Distribution Methods Manual, EIA/TIA 568, EIA/TIA 569 guidelines and in accordance with EIA/TIA Technical Systems Bulletin (TSB-36) as summarized below. All Category 5 unshielded twisted pair cable must be performance verified by Underwriters Laboratories, Inc.

Cable Specifications

- 24AWG
- Solid Copper Four Unshielded Twisted Pair
- Maximum DC resistance per 1000 ft: 28.6 Ohms
- Mutual capacitance at 1 Khz-17 *pF/ft,* max

Characteristic Impedance

Frequency	Impedence
1 MHz	85-115 Ohms
4 MHz	85-115 Ohms
10 MHz	85-115 Ohms
16 MHz	85-115 Ohms
20 MHz	85-115 Ohms
25 MHz	85-115 Ohms
31.25 MHz	85-115 Ohms
62.5 MHz	85-115 Ohms
100 MHz	85-115 Ohms

In addition to the above-mentioned standards, the following installation specifications will also apply:

- No workstation run is to exceed 270'
- All runs must be continuous without any splices.
- Observe the 568B color code scheme for UTP termination.
- Each drop tested to current Category 5 specifications with two copied of test reports generated and submitted.
- Wall mounted UTP patch panels and hinged brackets should be avoided.
- Station cabling patch panels should be 48 ports in density, 3U in height, and consist of a 110-type displacement contact.
- Wire management to include one 2U wire management panel per station cable patch panel.
- All equipment to be rack mounted.
- All racks to be bolted to floor, grounded to suitable ground, and provided with 3' Ladder rack access to provide access for ALL cables to the rack structure. Should the drop density in a single area exceed 96 pulls, and then a dual rack structure should be deployed. A 6" vertical wire manager should be used to join a dual rack structure.

Workgroup Switches

To minimize the complexity of supporting the LAN infrastructure, the number of different connectivity electronic components must be limited and a simple graphical means to remotely manage all of these different components must be provided.

Anderson School District Four will utilize Cisco Switches for connectivity to workstations and printers. Connectivity to each device will be at a speed of 100/1000Mbps. Any new switches purchased will also have the capability to connect to other switches via either a 1GB Copper connection or a 1GB Fiber Connection. This configuration will allow for the increased bandwidth needed to support streaming video, voice, and data.

Any new remote closet switches will consist of the following:

- Twenty-Four to Forty-Eight ports with and RJ45 Interface for 10/100/1000 connectivity.
- Two modular ports for GB Connectivity using either copper of fiber.
- Switches will have SNMP capability built in to report on RFC 1368 IEEE MIB and MIBII. The Switches management software will provide a graphical user interface that is supported directly through a browse or management packages such as HP Openview/Windows and HP Openview/UNIX.
- Switches will be rack mounted.
- Wire management panels will be utilized as well on the data rack.

Core Switches

All remote closets will connect to a core switch in the main closet in a star configuration. Reducing the number of hops to the file server and router are critical to performance and a star configuration is the most effective way of handling latency. All closets will connect to the main closet core switch via full duplex 1GB. Core Switches at schools that have more than 300 PCs will be capable of handling Layer 3 routing for VLAN support. Separating the school network into many VLANôs or sub-networks will increase performance significantly and allow for future growth without seriously impacting the network. Locations that have less than 300 PCs do not need a Layer 3 capable switch. Consequently, a combination of Cisco Modular Layer 3 switches and Cisco Fixed Configuration Layer 2 switches will be utilized at the core.

Local Area Network Backbone

Anderson School District Four will utilize full duplex 1GB Backbone at a minimum between all remote wiring closets and the main closet

For fiber optic cabling, the cable and installation practice will meet or exceed all specifications as set forth by the current release of the National Electric Code, manufacture's installation guidelines, BISCI's Telecommunications Distribution Methods Manual, EIAITIA 568 and EIAITIA 569 guidelines.

In addition to the above-mentioned standards, the following specifications will also apply:

- Maximum attenuation for 62.5x125um 3.5dB/km@850nm
- Maximum attenuation for 62.5x125um 1.25dB/km@1300nm
- Maximum attenuation for 8.3x125um 0.80dB/km@1300nm
- Maximum attenuation for 8.3x125um 0.50dB/km@1550nm
- No single run exceed 5000'
- Each strand of multimode must be bi-directionally tested with power loss

meter @ 850nm and 1300nm with two copies of test reports generated and submitted.

- Each strand of single mode must be bi-directionally tested with power loss meter @ 1300nm and 1550nm with two copied of test reports generated and submitted.
- If any fusion or mechanical splicing is involved, all strands involved must be tested with optical time domain reflectometer, with two copies of test reports generated and submitted.
- Wall mounted fiber patch panels to be avoided.
- Fiber optic patch panels should be modular in construction providing for optional bulkhead types
- All fibers should be terminated directly to ST type terminations.
- All fiber ST terminations must be of epoxy and polish type construction that utilizes the Kevlar strength member.
- Crimp type, and crimp type with index matching gel should be avoided.
- All fiber should be strain relieved with Kevlar strength member to fiber patch panel chassis at both ends to resist shear and strain forces.
- A 20' service loop, formed in a figure 8 should be provided and stored unobtrusively for every pull of fiber at both the IDF and MDF sides.
- Wire management to include one 2U wire management panel per fiber optic patch panel.
- All equipment to be rack mounted.
- All fiber optic patch panels should be located at the top of the racks.
- All fiber should be 62.5x125um unless otherwise specified-
- All fiber patches should be ST to ST duplex multimode 62.5x125um (2 meter lengths)
- All underground fiber cable should be placed in conduit and inner duct. A locator wire should be placed in the trench or duct during installation.

Bridge Specification

Bridge devices utilized in the LAN infrastructure will be configured for Ethernet-to-100 Base FX bridging. The bridges will utilize store-and-forward bridging technology with a low packet latency for all switched traffic. These bridges must also:

- Support full IEEE 802.1d transparent bridging standard
- Employ Store and Forward technology
- Provide support for IP fragmentation
- At least support modules for 100 Base FX & 100 Base TX
- Support SNMP, MIB II, RFC 1493 bridge MIB

Wide Area Networking

Anderson School District Four will construct a meshed WAN configuration using Metro-Ethernet. Utilizing the most appropriate products as the WAN routing solutions, the district will use the most appropriate connection speed and medium (as determined by the allocation of the State Department of Education) to the Internet. The routing solution provides various functionality for the Anderson School District Four and will allow for future bandwidth expansion to the Internet and school sites.

Router/Switch Specification at remote sites

- Ethernet Capable, Fast Ethernet preferred
- Multi-protocol support with IP/AT Software
- A console port for configuration and an auxiliary port for out-of-band network management
- At least 8MB of system memory and 4 MB of Flash EPROM memory
- Frame Relay, X.25 and Switched 56 software
- Intelligent SNMP-manageable
- Remote management and control

Computer Hardware and Associated Peripherals

This element of the infrastructure encompasses both the computing and non-computing hardware and the associated peripherals used in schools. This element of the infrastructure will ensure that the appropriate computers and other hardware technologies (Desktop/Application Hardware) are placed within easy reach of every student and teacher throughout Anderson School District Four.

The issues and items to be considered here include teacher and student desktop computers, file-servers, computer hardware details (e.g., CPU power, memory, disk, monitor, audio/video capabilities, keyboard, and mouse), computer peripherals (e.g., CD-ROM, LCD projection panels, printers, and scanners), video and television equipment (e.g., DVD Players, VCR, Digital Cameras, Digital Video Recorders, and TV monitors), and laptop computers.

Elementary Schools

It is envisioned that computers will be distributed within elementary schools according to staff input and evolving instructional models. All computers will be networked to enable in-classroom printing and classroom-wide viewing/display for each class.

The following is an initial set of general guidelines:

Classroom Resources

Each elementary school classroom grades K through 5 will contain the following as a goal of this plan:

- One Teacher workstation
- 3 or 4 student workstations (may vary based on logistics in a specific classroom)
- LCD Projector (1 Projector per 4 Teachers)
- SmartBoard (Electronic Whiteboard)
- FlexCamera
- Optional Classroom Performance System (CPS)

Note: For the purposes of this *Plan,* each elementary school classroom is populated with one teacher and twenty-five students.

The inclusion of technological tools in and throughout each elementary school classroom for instructional enhancement and student enlightenment is at the forefront of this *Plan.* It is also recognized that technological changes leading to

rapid hardware obsolescence, staff development and re-education requirements, and funding source availability, will require an effective phased inclusion of these tools at a pace that parallels industry trends, instructional staff readiness and resource availability. Therefore, it is recommended that a planned phased inclusion occur whereby a limited number of technological tools are made available at the onset of inclusion allowing shared classroom based access to information. The breadth of this inclusion will depend on factors specific to each school. Careful attention should be given to all factors depicted in this *Plan.*

Full information resource access via a one to one ratio of student to computer is the basis on which this *Plan* proceeds, thus enabling the studentôs access to all available learning and educational resources.

Basic Technological Components (Technology Laboratory)

- Twenty-six student workstations
- One DVD player (on-board the Lab teacher workstation)
- LCD Projector for classroom-wide viewing of teacherôs computer screen
- One networked color printer and one networked black and white laser printer (e.g., HP Laser jet).
- One telephone and regular business phone line

Non-classroom Rooms and Administrative Office Resources

Each administrative person in the elementary school will be provided with a networked computer workstation equipped comparably to student workstations. There will also be one laser printer and five color inkjet printers for each 300 students attending the school. Administrative and other support personnel will use these printers for school administrative functions.

Basic Technological Components

- One networked computer (student workstation configuration) per administrator or support staff personnel.
- Five color inkjet printers per 300 students
- One laser printer per 300 students

Instructional Support Area Resources (teacher work areas)

Every elementary school teacher must have access to technological tools. Maximum provisions for this access must be made to enable attitudinal and instructional adaptations to occur thereby positively impacting classroom instructional practices. It is likely that a one to one ratio of teacher or instructional

personnel to computer is not immediately attainable; therefore this *Plan* includes equipping instructional support/teacher work areas with technological tools necessary to provide access to teachers and other instructional personnel to information resources available via the elementary school network. This *Plan* reflects the need for a minimum of ***four*** networked computers configured comparably to the teacher workstation of the elementary classroom and one color laser printer for every 300 students attending the school. Optimally, each teacher and instructional support personnel at each elementary school will have full access to a computer.

Building-wide Resources

The following is a listing of the basic technological components that should be included in each elementary school building local area network as sub-devices to the over-all LAN infrastructure. This listing is to be used as general guidelines. Specialized applications or directed processes may warrant inclusion of additional devices, however, careful consideration should be given to the "openness" of such devices in that open and seamless access to all resources is the cornerstone of the infrastructure of this *Plan.*

Basic Technological Components

- One or more building file server(s) able to support all administrative and classroom computers within the building equipped with appropriate file server and network system wide backup capabilities
- One networked postscript capable black-and-white laser printer
- One networked postscript capable color laser jet printer
- One flatbed color scanner
- Fax capability (either via a stand-alone fax machine or preferably a networked fax server accessible to all network users)
- An appropriate number (e.g., proportional to number of students) of laptop computers with dial-in capabilities to be checked out by teachers and students
- One liquid crystal display (LCD) projection device/panel for auditorium/large group use. (Minimum of 2500 lumen XGA compatible)
- Video recording and playback equipment: camcorder(s) and VCR(s)
- Studio production facility:
    - Satellite dish
    - TV production quality cameras
    - Editing/dubbing Equipment

Middle Schools

It is envisioned that computers will be distributed within middle schools according to staff input and evolving instructional models. The following is an initial set of general guidelines:

Classroom Resources

Each middle school classroom grades 6 through 8 will contain the following as a goal of this plan:

- One Teacher workstation
- LCD Projector (1 Projector per 2 Teachers)
- *Optional: SmartBoard or Wireless slate (Electronic Whiteboard intefaces)*
- *Optional: Classroom Performance System (CPS)*

For the purposes of this *Plan,* each middle school classroom is populated with one teacher and twenty-five students.

The inclusion of technological tools in and throughout each middle school classroom for instructional enhancement and student enlightenment is at the forefront of this *Plan.* It is also recognized that technological changes leading to rapid hardware obsolescence, staff development and re-education requirements, and funding source availability, will require an effective phased inclusion of these tools at a pace that parallels industry trends, instructional staff readiness and resource availability. Therefore, it is recommended that a planned phased inclusion occur whereby a limited number of technological tools are made available at the onset of inclusion allowing shared classroom based access to information. The breadth of this inclusion will depend on factors specific to each school and/or district. Careful attention should be given to all factors depicted in this *Plan.*

This plan pushes the use of technology laboratories rather than the previous classroom computer model. Anderson Four strives to make the technology resources available to all students in the class versus the one computer to five student model of the past. Below is the composition of the equipment for the technology laboratory:

<u>Basic Technological Components (Technology Laboratory - Fixed)</u>

- Thirty student workstations
- One DVD player (on-board the Lab teacher workstation)
- LCD Projector for classroom-wide viewing of teacherôs computer screen
- One networked color printer and one networked black and white laser printer (e.g., HP Laser jet).
- One telephone and regular business phone line

Non-classroom Rooms and Administrative Office Resources

Each administrative person in the middle school will be provided with a networked computer workstation equipped comparably to student workstations. There will also be one laser printer and five color inkjet printers for each 300 students attending the school. These printers will be used for school administrative functions by administrative and support personnel.

Basic Technological Components

- One networked computer (student workstation configuration) per administrator or support staff personnel.
- One laser printer per 300 students

Instructional Support Area Resources (teacher work areas)

Every middle school teacher must have access to technological tools. Maximum provisions for this access must be made to enable attitudinal and instructional adaptations to occur thereby positively impacting classroom instructional practices. It is likely that a one to one ratio of teacher or instructional personnel to computer is not immediately attainable; therefore this *Plan* includes equipping instructional support/teacher work areas with technological tools necessary to provide access to teachers and other instructional personnel to information resources available via the school network. Optimally, each teacher and instructional support personnel at each middle school will have full access to a computer.

Building-wide Resources

The following is a listing of the basic technological components that should be included in each middle school building local area network as sub-devices to the over-all LAN infrastructure. This listing should be used as general guidelines. Specialized applications or directed processes may warrant inclusion of additional devices, however, careful consideration should be given to the "openness" of such devices in that open and seamless access to all resources is the cornerstone of the infrastructure of this *Plan.*

Basic Technological Components

- One or more building file server(s) able to support all administrative and classroom computers within the building equipped with appropriate file server and network system wide backup capabilities. The students will be creating portfolios on the file server with a minimum of 100MB per student. This will require a separate file server with backup capabilities.
- One networked postscript capable black-and-white laser printer
- One networked postscript capable color laser jet printer

- One flatbed color scanner
- Fax capability (either via a stand-alone fax machine or preferably a networked fax server accessible to all network users)
- An appropriate number (e.g., proportional to number of students) of laptop computers with dial-in capabilities to be checked out by teachers and students
- One liquid crystal display (LCD) projection device/panel for auditorium/large group use. (Minimum of 2500 lumen XGA compatible)
- Video recording and playback equipment: camcorder(s) and VCR(s)
- Studio production facility:
    1. Satellite dish
    2. TV production quality cameras
    3. Editing/dubbing Equipment

High Schools

It is envisioned that computers will be distributed within the high school according to staff input and evolving instructional models. What follows is an initial set of general guidelines.

Classroom Resources

It is envisioned that computers will be distributed within middle schools according to staff input and evolving instructional models. The following is an initial set of general guidelines:

Each high school classroom grades 9 through 12 will contain the following as a goal of this plan:

- One Teacher workstation
- LCD Projector (*1 Projector per 2 Teachers*)
- *Optional: SmartBoard or Wireless Slate (Electronic Whiteboard)*
- *Optional: Classroom Performance System (CPS)*

For the purposes of this *Plan,* each middle school classroom is populated with one teacher and twenty-five students.

The inclusion of technological tools in and throughout each high school classroom for instructional enhancement and student enlightenment is at the forefront of this *Plan.* It is also recognized that technological changes leading to rapid hardware obsolescence, staff development and reeducation requirements, and funding source availability, will require an effective phased inclusion of these tools at a pace that parallels industry trends, instructional staff readiness and resource availability. Therefore, it is recommended that a planned phased inclusion occur whereby a limited number of technological tools are made available at the onset of inclusion allowing shared classroom based access to information. The breadth of this inclusion will depend on factors specific to each school and/or district. Careful attention should be given to all factors depicted in this *Plan*

Full information resource access via a one to one ratio of student to computer is the basis on which this *Plan* proceeds, thus enabling the students access to all available learning and educational resources.

<u>Non-classroom Rooms and Administrative Office Resources</u>

Each administrative person in the middle school will be provided with a networked computer workstation equipped comparably to student workstations. There will also

be one laser printer and five color inkjet printers for each 300 students attending the school. These printers will be used for school administrative functions by administrative and support personnel.

Basic Technological Components

- One networked computer (student workstation configuration) per administrator or support staff personnel.
- Five color inkjet printers per 125students
- One laser printer per per 300 students

Instructional Support Area Resources (teacher work areas)

Every high school teacher must have access to technological tools. Maximum provisions for this access must be made to enable attitudinal and instructional adaptations to occur thereby positively impacting classroom instructional practices. It is likely that a one to one ratio of teacher or instructional personnel to computer is not immediately attainable; therefore this *Plan* includes equipping instructional support/teacher work areas with technological tools necessary to provide access to teachers and other instructional personnel to information resources available via the school network. Optimally, each teacher and instructional support personnel at each middle school will have full access to a computer.

Computer Lab Resources

There will be a minimum of **five** fixed computer labs in the high school and an additional **four** mobile labs for classroom usage. The five fixed high school labs will be designed and equipped with specialized hardware and software for use as subject-specific labs. Subjects requiring specialized arrangements include (but are not limited to) mathematics, business, technology, and foreign language.

All computer labs will be integrated into the building's networking infrastructure.

Unless otherwise stated below, each lab will be equipped with one teacher workstation, thirty student workstations, in-lab network printing, and lab-wide viewing/display capabilities. The following are possible additional configuration requirements for five labs to facilitate subject specific instruction. This is a non-exclusive listing. To meet specific student population instructional needs, multiple labs of the same or varied configurations may be appropriate.

This plan pushes the use of technology laboratories rather than the previous classroom computer model. Anderson Four strives to make the technology resources available to all students in the class versus the one computer to five student model of the past. Below is the composition of the equipment for the technology laboratories:

Engineering Academy - CAD, Graphics, Media Production, Technical Drawing Lab

Lab One is envisioned to be used in the delivery of specific course objectives and instruction in the following areas: computer aided design, graphic communications, communication systems, media production technology, technical drawing, architectural drawing, and design drawing for production.

Basic Technological Components

- One teacher workstation
- Twenty to twenty-five student workstations
- One LCD projector for lab-wide viewing
- One networked graphics/CAD compatible plotter
- One color flatbed scanner
- One networked postscript capable color or black and white printer
- One telephone and regular business phone line

Business Analysis, Computer Applications, Business Mathematics Lab

Lab Two is envisioned to be used in the deliver of specific course objectives and instruction in the following areas: accounting; business analysis, business computer applications; business mathematics, electronic information processing; business communications, and other business subjects.

Basic Technological Components

- One teacher workstation
- Thirty student workstations
- One LCD projector for lab-wide viewing
- One networked postscript capable color or black and white printer
- One networked flatbed color scanner
- Audio capabilities
- One telephone and regular business phone line

Foreign Languages Lab

Lab Three is envisioned to be used in the deliver of specific course objectives and instruction in the area of foreign languages.

Basic Technological Components

- One teacher workstation

- Thirty student workstations
- One LCD projector for lab-wide viewing
- One networked postscript capable inkjet color or black and white printer
- One networked flatbed color scanner
- Audio capabilities
- One telephone and regular business phone line

Mathematical Simulations. Computer Programming Lab

Lab Four is envisioned to serve the needs of the mathematics instruction, which requires simulations. This also includes computer programming.

Basic Technological Components

- One teacher workstation
- Thirty student workstations
- One LCD projector for lab-wide viewing
- One networked postscript capable color or black and white printer
- One networked flatbed color scanner
- Audio capabilities
- One telephone and regular business phone line

Scientific Research Lab

Lab Five is envisioned to be an advanced scientific research lab. This lab contains scientific research specific systems and devices that may not be commonly recognized, therefore brief explanations are provided. As with any science-based laboratory, all measures to ensure student and equipment safety must be addressed.

Basic Technological Components

- One Closed Circuit Video Microscopy System

> A video microscopy system is used for collecting visual data using both low and high magnification of specimens. Images may be saved for further study on videotape or photographed. The teacher can also use this as a demonstration tool; it is particularly useful in helping students with visual and fine motor difficulties. As with other techno- logical devices, this is a tool of discovery and extension. In the same way that DVD discs extend control over stored images, the video microscopy system extends control over current images of specimens that the student has collected and prepared.

- Five spectrophotometers

  Spectrophotometers are one of the workhorses of the modem chemical laboratory in industry and medicine. By use of photocell, this device tracks color-coded chemical changes and enables students to collect data about the course of chemical reactions.

- Five OHAUS Electronic Balances

  OHAUS balances are fast, accurate massing devices that chemistry students can use to weigh substances. The electronic balance allows students to collect information quickly and thereby make the best use possible of brief lab periods. These balances can also be interfaced with computers to collect, store and graph laboratory data.

- Five General Purpose Probes

  Probes enable students to graph data about motion, pH, temperature, light, and radioactivity as physical events occur. Simultaneous readings of temperature and pH may be taken during a chemical reaction. As a teaching tool, these devices enable teachers to focus on physical processes and concepts rather than being caught up in the details of using pH paper and thermometers. They do not take the place of making measurements in the traditional ways; they provide teaching options for those lessons in which the focus is not on the means of measurement but on the interpretation of the results of measurement. Furthermore, they model equipment that students will encounter in college and the industrial workplace.

- One teacher workstation
- Thirty student workstations
- One LCD projector for lab-wide viewing
- One networked postscript capable color or black and white printer
- One networked flatbed color scanner
- Audio capabilities
- One telephone and regular business phone line

Building-Wide Resources

The following is a listing of the basic technological components that should be included in each high school building local area network as sub-devices to the over-all LAN infrastructure. This listing should be used as general guidelines. Specialized applications or directed processes may warrant inclusion of additional devices, however, careful consideration should be given to the "openness" of such devices in that open and seamless access to all resources is the cornerstone of the infrastructure of this *Plan.*

Basic Technological Components

- One or more building file server(s) able to support all administrative and classroom computers within the building equipped with appropriate file server and network system wide backup capabilities. The students will be creating portfolios on the file server with a minimum of 100MB per student. This will require a separate file server with backup capabilities.
- One networked postscript capable black-and-white laser printer
- One networked postscript capable color laser jet printer
- One flatbed color scanner
- Fax capability (either via a stand-alone fax machine or preferably a networked fax server accessible to all network users)
- An appropriate number (e.g., proportional to number of students) of laptop computers with dial-in capabilities to be checked out by teachers and students
- One liquid crystal display (LCD) projection device/panel for auditorium/large group use. (Minimum of 2500 lumen XGA compatible)
- Video recording and playback equipment: camcorder(s) and VCR(s)
- Studio production facility:
    1. Satellite dish
    2. TV production quality cameras
    3. Editing/dubbing Equipment

Media Centers

It is important that elementary, middle and high school libraries/media centers incorporate today's technology and automation services as we prepare our students for lifelong learning and develop their ability to access information. Automation of a media center incorporates the functions of an on-line public access catalog, circulation arrangement of the media center resources, and the periodic inventory of these resources. The requirements for a school and/or district-wide *media automation application* can be summarized as follows:

- The ***media automation application*** must provide for such media center activities as on-line catalog, circulation, search, checkout, inter-library loans, and inventory.
- The ***media automation application*** must be customizable per school building and must be capable of providing a hierarchical view of various building and district collections. For example, a user in a particular elementary school should be able to view that particular building's collection only, or all elementary schools' collections, or the high school collection, or the entire district's collection, thus comprising a union catalog.
- The ***media automation application*** will include all necessary hardware and software to provide on-line catalog, circulation, search, checkout, and

inventory throughout each school building.

- The ***media automation application*** will use and will be fully integrated with each building's local area network(s).
- Access to the ***media automation application*** will be available from all desktop computers attached to the building's local area network as well as from the media center workstations. Access to *media automation system* also will be available from home via dial-in capabilities.

In addition to basic automation every media center staff person will have full access to a workstation. The number of media center staff stations will vary depending on school size.

Each media center will be configured with Instructional Television (ITV) via satellite. This will allow each site to record instructional television programming at the local school level. ITV support will be provided by the SCETV program.

Each media center will also be configured with multimedia workstations (Research Station below).

Basic Technological Components

- Media automation application (basic functions as described above)
- One lookup workstation per 100 students used for resource *"lookup"* (electronic resource catalog)
- One catalog workstation per school dedicated for *"cataloging"* media and related resources
- One checkout workstation per 300 students equipped with appropriate bar code reading /scanning devices dedicated to resource reservation and *"check-out"*
- One research station per 100 students and includes:
- One workstation (classroom teacher workstation configuration)
- One color or black and white laser jet printer
- One Digital Video Recorder
- One Digital Camera
- One color flatbed scanner

Cumulative Targets and Benchmarks

2009 -2010 Benchmarks		
Benchmarks	**Timeline**	**Method of Assessing**
Instructional Technology Coordinator	July 2009	Administrative Professional Development Plan
Network Administrator	July 2009	Administrative Professional Development Plan
Technology Coaches	July 2009	Technology Coach Professional Evaluation Summary & Teacher Surveys
Hardware Review Process	Fall 2009	Surveys, Research
Software Review Process	Winter-Spring 2010	Surveys, Research
100% of Staff Completed Assessments for Level A Technology Competencies as defined in plan for Proviso 1.40	May 2010	Hands-On Demonstration of Technology Competencies under the supervision of school Technology Coaches

2010-2011 Benchmarks		
Benchmarks	**Timeline**	**Method of Assessing**
Software Effectiveness Review	January 2011	Surveys, MAP Analysis
Computer Lab Use Surveys	January 2011	Administrative Assessment, Surveys, Open Lab usage Computer Logs
Site Visits to Schools Highly Effective with Technology Implementation	Spring 2011	Logs of School Visits; Site Visit Reports

Acknowledgements

Executive Writing Committee

- Scott Brock, Technology Coordinator
- Stuart Gay, District Instructional Technology and Software Integrator and Coach

School Technology Coaches

- Stu Gay, District Instructional Technology and Software Integrator and Coach, Pendleton Elementary School, LaFrance Elementary and Mount Lebanon Elementary
- Harriet Smith, Pendleton High School
- Michael Williams, Townville Elementary School

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Appendix 1: No Child Left Behind Action Plan

1. **Describe how your district will use federal funds under Enhancing Education Through Technology (Ed Tech) section to improve the student academic achievement, including the technology literacy, of all students attending schools served.**

   The districtõs primary use of Ed Tech funds will be to provide opportunities for professional development and to provide resources for training teachers in the effective integration of technology into instruction. Additionally the following will be outgrowths from the funding.

   - Empower teachers and other instructional personnel with the ability to effectively use technology as a tool for learning.
   - Integrate instructional software and technology applications into the district curriculum as appropriate to enhance student learning and the learning process.
   - Use technology to enhance the school learning process and prepare students for a lifetime of learning experiences.
   - Develop and employ progressive technology programs to accommodate individual needs and abilities.
   - Develop and employ progressive technology programs that address development and utilization of student technical skills that will be required in the work force of an-informational society.

2. **Describe your 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.**

   GOALS FOR USING ADVANCED TECHNOLOGY

   - To improve student achievement to the proficient level in science, mathematics, social studies and English/language arts through the use of technology-infused instruction
   - To integrate the core content courses with occupational courses and experiences at the middle and high school level through the use of technology
   - To utilize MAP (Measures of Academic Progress; Northwest Evaluation Association) for online diagnostic assessment and use the data to make instructional decisions.
   - To provide an Intranet for staff and students that provides the

following:

- instructional pacing guides with specified South Carolina Standards of Learning for core content courses K-12
- brain-based research strategies that engage students in the learning process for sustained understanding of South Carolina Standards of Learning, including strategies that incorporate technology
- resources to support instruction, including technology-related resources

- To provide a wide area network communications infrastructure that supports and promotes local, regional, national and global information exchange (voice, video, and data) between students and district instructional and administrative staff and the world at large, particularly in the area of video streaming
- To train teachers in the use of distance learning equipment, digital video, interactive whiteboards, LCD projectors, flexible cameras, and interactive student voting systems. Included in this training will be specific strategies, based on brain research, that make this technology engaging to students and support sustained understanding of South Carolina Standards of Learning
- To continue training of teachers in technical productivity and problem solving/decision making.

3. **Describe the steps the district will take to ensure that all students and teachers in schools served by the local educational agency have increased access to educational technology.**

Anderson School District Four's three year plan very clearly addresses the intent to **improve** access to technology. In 2005-2006, the following provisions will be addressed.

- Provide students with access to technology in classrooms, wireless and stationary laboratories, and media center environments throughout each school.
- Provide students with access to the district's computer network to enable communication and information exchange with other district users and the global community at large. Use of student email and individual network logins will be provided to the middle and high school students.
- Continue with the District Technology Plan, which includes the update of computers, software, and network infrastructure to provide the latest industry standards to its students, staff, and administration.
- Provide NovaNET online instruction for special education and remedial students as needed.

- Plan, in collaboration with instructional leaders, to revise the leasing model to a model more appropriate for needs of different student populations. Teacher technology stations will eventually be placed in all classrooms, contingent on teachers participating in training. [Teacher technology stations to include laptop, mounted LCD projector, flexible camera, digital camera, interactive whiteboard, and interactive voting system] Plan for 2005-2006 moves away from 5 computers per classroom to the following model:
  - Kindergarten through 2nd grade; 1 teacher technology station, 5 computers per classroom; classroom computers separated into core-content centers with software appropriate for each center [language arts, science, social studies, math].
  - 3rd through 5th grades; 1 teacher technology station, 2 computers per classroom
  - 6th through 8th grades; 1 teacher technology station, greater access to wireless and stationary labs
  - 9th through 12th grades; 1 teacher technology station, greater access to wireless and stationary labs, including a lab devoted to the High School English Department.
  - Special education classrooms will be equipped as needed based on student IEPs.

4. **Describe how your district will use funds under this subpart (such as combining the funds with monies from other sources such as federal, state, and 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.**

   Anderson School District Four continues to combine funds to address the technology needs of students. Title I, Title V, EIA funds, Professional Development Standards Implementation funds, Ed Tech grant funds, special education funds, and local district funds support the technology program. Title I schools receive additional funding through Title I to purchase networked instructional software.

   The District has a line item in its budget to support a lease purchase of approximately 1300 computers for instructional use. Starting with the 2005-2006 school year, this money will be reallocated to provide teacher technology stations, increased access to wireless and stationary labs, as well as classroom computers. The EIA funds are used to support the occupational program at the high school which includes a computer science initiative. Staff development for teachers is funded through local and state funds. School Technology Coaches provide teachers with training for technology integration. The coaches are certified teachers with technology expertise and provide individual, small group, and large group instruction. In

addition, the district also provides recertification and graduate courses in technology integration and productivity software, including online and traditional settings.

5. **Describe how your district will provide ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel serving the local educational 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 educational agency involved in providing the ongoing, sustained professional development.**

The District has employed one technology coach per school in conjunction with a District Instructional Technology Coordinator. All are certified teachers with technology expertise. One of the technology coachesô top priorities is the technology competency of the school staff. [Updated technology competencies were written during the 2003-2004 school year.] A shared Access database is kept by the Instructional Technology Coordinator and technology coaches to track staff technology competencies and participation in technology-related staff development activities. In addition, the District has a partnership with Clemson University and Anderson Adult Education to offer graduate and continuing education courses to our staff. The partnership enables the district to offer classes for certified, non-certified and community residents in advanced application skills. The goals of professional development in the area of technology are:

- Establish and maintain a culture of continuous improvement that promotes adult learning.
- Develop and implement a program to systematically assess basic competencies to be demonstrated by all instructional and administrative personnel.
- Promote continuous and on-going staff development to extend professional knowledge and use of existing and emerging technologies.
- Implement staff development activities designed to integrate the use of technology into the curriculum and the management of this instruction.
- Evaluate staff development activities on a regular basis.

In addition the District developed a staff development technology fair for all staff, certified and support, called the Technology Extravaganza. This was a one day event that brought technology vendors (both hardware and software) to the teachers to expose them to the latest technologies. Staff development training related to the District Technology Competencies also occurred throughout the day. This event will be repeated for the 2005-2006

school year, with more focused staff development training sessions related to new technology purchases such as interactive whiteboards, digital cameras, flexible cameras, interactive voting systems, and specific ways to engage students with these tools.

6. **Describe the type and costs of technologies to be acquired under the Enhancing Education through Technology (Ed Tech) program, including supporting sources such as services, software, and digital curricula. Your explanation should include specific provisions for interoperability among components of such technologies.**

   The primary purchase with formula Ed Tech funds will be professional development. These funds will be combined with other local funds to pay instructional staff salaries. This will ensure ongoing opportunities for staff and community to receive support in the integration of technology into classroom instruction, as well as to enroll in mini-course offerings in both basic and advanced technical application skill training. Through a county consortium, we will apply for Ed Tech competitive funds. This application will address the purchase of hardware and software, as well as professional development. Our focus will be technologies that engage students in the teaching/learning process. We will purchase LCD projectors, digital cameras, flexible cameras, scanners, interactive student voting systems, and digital white boards. The estimated cost for one teacher technology station is $5,219.00. This hardware will work in conjunction with current software and software under consideration, provided teachers are trained in its use.

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

   Anderson School District Four will use progressive technology programs that enhance the development and utilization of student skills in the use of basic technology application tools such as word processing, database, spreadsheet, communications, desktop publishing and other appropriate applications. Revised student technology standards are being writing this school year and will be implemented at the start of the 2005-2006 school year.

   The District is currently piloting several software applications to determine the validity of purchasing for various student populations. Upon review by teachers, the district will work with instructional leaders to develop a purchasing and implementation timeline. Software that is being piloted includes: Academy of Reading, SAS Curriculum Pathways, iCoach Math,

and NetTrekker. The use of Compass by Jostens has been replaced with other curriculum related software.

Develop and design presentation, productivity, and research applications of technology to address communication skills goals and objectives. The District will define and develop data manipulation applications technology (i.e. graphing calculators, spread sheets etc.). Resources that use these technology applications will be posted to the District Intranet.

Purchase Kidspiration for the elementary schools as a writing/brainstorming technology resource for students. Provide teacher training in the use of Kidspiration.

Purchase Scholastic Keys for the elementary schools as a writing/brainstorming technology resource for students. Provide teacher training in the use of Scholastic Keys.

Provide instructional materials on the Intranet for teachers to assist in teaching numeration, measurement, sequencing, patterns, computational skills, graphing, and problem solving through the use of technology.

Provide instructional materials on the Intranet for teachers for schools to assist in teaching reading, writing, speaking, listening, viewing, and presenting skills through the use of technology.

Involve technology to prepare students for immediate employment or highly skilled post -secondary education through Vocational and other curricular programs.

8. **Describe 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.**

Anderson School District Four is currently using A+ software for credit recovery and skill reinforcement The effectiveness of this method of instructional delivery will be evaluated at the end of the course and a decision will be made as to if the district will continue to offer such courses and how eligibility for these courses will be determined. In addition to student courses, the district offers online technology integration courses free to teachers through the office of technology. The courses are tied to the District Technology Competencies and the South Carolina Standards of Learning. Courses through PBS Teacherline are also offered to lead teachers throughout the school year.

9. **Describe 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.**

The following activities will be offered to parents and the community:

- Schedule district/school technology committee meetings for updates and dissemination of information.
- Offer parent, student, and community access to school information and communication via remote communication processes and procedures.
- Encourage parents and community to be involved with Technology Fairs, both at school and district levels.
- Promote ñOpen Houseò to invite parents and community to tour schools ad observe technology in use.
- Offer parent classes in computer/technology literacy or other skills.
- Provide parents with guidance toward home technology purchases, particularly software appropriate for instructional needs of students.
- Provide parents access to the Pacing Guide overviews that are on the District Intranet. The Pacing Guides will be placed on the District Internet with links to websites that support classroom learning. These websites may be different from the links on the District Intranet, so students are exposed to different activities at home than they are at school.

10. **Describe how programs will be developed, where applicable, in collaboration with adult literacy service providers, to maximize the use of technology.**

The District has worked in collaboration with the adult literacy program and Adult Education since 1995. This collaboration will continue through the academic year. Courses are added or deleted upon the need of the adults.

11. **Describe your district's process and accountability measures that will be used to evaluate the extent to which activities funded under the Ed Tech 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.**

Establish and conduct a technology/curriculum integration review and evaluation format and process to:

- Identify problems associated with integrating technologies into the

curriculum.

- Develop strategies to correct problems and incorporate new and emerging technologies. The school technology coaches play a pivotal role in identifying problems and strategies to remedy problems.

- Identify model/successful applications of technology/curriculum integration and replicate as appropriate.

Continue to maintain the Staff Technology Competency Database to determine technology competency needs of all staff. At the end of each year, assess (using a spreadsheet) how teacher technology competency relates to student performance in MAP (NWEA Measures of Academic Progress) and state testing such as PACT, HSAP, etc. Revise staff technology competencies as needed based on data.

12. Describe your district's 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.

Anderson School District Fourõs Services

- Technology Support Staff
  - Technology Director
  - Network Administrator
  - Instructional Technology Coordinator
  - School Technology Coaches
- Online Professional Development

Anderson School District Fourõs Print Resources

- PDF ñHow Tooò Sheets for all Technology Competencies
- Various Textbooks for online, individual, small group, and large group training:
  - Office XP Simplified
  - Learning Microsoft Office XP
  - Learning Microsoft FrontPage
- ñHow Tooò sheets, pamphlets, and training books are available for all instructional software available to students

Anderson School District Fourôs Electronically Delivered Learning Materials

- Brainpop
- Readinga-z
- Internet
- Pacing Guide / Curriculum Map resources on Intranet
- Streaming Video ï United
- Rubicon Atlas Curriculum Mapping software
- Testview
- Map Testing Data

Anderson School District Fourôs Software

- Microsoft Office (Word, PowerPoint, Excel, Access, FrontPage, Publisher, Photo Editor)
- Adobe Photoshop Elements
- Kidspiration / Inspiration
- Scholastic Keys
- Edmark
- Star Reader
- Type to Learn / All the Right Type
- Accelerated Reader
- Stanford SAT and ACT/Princeton Review SAT Practice/TestU
- AutoCad
- Brain Pop
- Quia
- Jumpstart Pre-K through 4th
- Key Skills for Math
- Math for the Real World
- Math Blaster
- Oregon Trail
- Sammyôs Science House
- Timeliner
- Writers Companion
- Adobe Photoshop
- Rubicon Atlas Curriculum Mapping Software
- A+ Software
- Destiny Library Media Center software
- Readinga-z

Appendix 2: Teacher Technology Proficiency Proviso Professional Development Plan

Anderson School District Four plan for Proviso 1.40 follows.

Anderson School District Four

Staff Technology Competencies

Anderson School District Four
315 East Queen Street
Pendleton, South Carolina 29670
Superintendent: Dr. Lee DôAndrea

ñA World-Class Lighthouse School Districtò

August 2009

From the Office of Superintendent

The Mission of Anderson School District Four, in partnership with the community, is to develop productive citizens prepared for the changing world by providing challenging, lifelong learning opportunities in a safe, healthy, and positive environment. In keeping with this mission, the Board of Trustees and the administration have made a commitment to embrace new technologies and to train teachers in their effective use.

Current research indicates that technology expands the experiences of those that we serve, both children and adults. It is our goal to use technology to enhance student success, in addition to helping teachers augment their content knowledge and their pedagogical skills. The goal for our use of technology in Anderson School District Four is student success. Technological exposure in our district reflects the current and future advances in the technology field causing our school and community to be engaged as learners at all levels.

It is with this foundation of thought that Anderson School District Four has developed Staff Technology Competencies that will help us fulfill our mission of student success. The Board of Trustees and the administration believe that the best hardware and software in existence will have little impact on student achievement without teacher expertise. Therefore the Staff Technology Competencies are essential to the effective use of technology in our district. I look forward with much excitement to seeing the impact on student success as this plan is implemented.

Table of Contents

Overview ..... Page 86
Level A.1 Hardware I ..... Page 87
Level A.2 System Operations I ..... Page 87
Level A.3 Telecommunications I ..... Page 88
Level A.4.A PowerTeacher (For Teachers) ..... Page 88
Level A.4.B PowerSchool (For Attendance Clerks, Secretaries, Guidance Counselors, and Administrators) ..... Page 88
Level A.4.C PowerTeacher (For Teachers) ..... Page 88
Level A.5. Interactive Whiteboard Basics ..... Page 88
Level A.6 Word Processing / Desktop Publishing I ..... Page 89
Level A.7 Internet I ..... Page 89
Level A.8 Presentation Program/PowerPoint I ..... Page 89
Level A.9 School Fusion Page 94
Level A.10 MAP (NWEA) Page 94
Level A.11 Testview Page 94
Level B.1 Hardware II ..... Page 90
Level B.2 System Operations II ..... Page 90
Level B.3 Telecommunications II ..... Page 90
Level B.5 Interactive Whiteboard Page 95
Level B.6 Word Processing / Desktop Publishing II Page 90
Level B.7 Internet II Page 90
Level B.8 Presentation Program/PowerPoint II Page 96
Level B.9 Excel I Page 96
Level B.10 MAP (NWEA) Essentials Page 96
Level B.11 Testview Essentials Page 96

Technology Competencies for Staff (v2.2)

The following includes the sections and tasks associated with specific technology competencies for Anderson School District Four staff. Staff may complete training sessions for each section or may test out. For certified staff, these are the competencies that must be demonstrated as part of state technology requirements. Workshops, modules, and/or graduate courses will be offered at each level. These count toward recertification for certified staff. *(Testing out does not count toward recertification.)*

Level A:

All certified and some support staff must demonstrate competency in section A within their first year of hire, with any applicable technologies to do their job.
. Support staff members included in this process are bus drivers, attendance clerks, secretaries, nurses, head custodians, and custodial staff.

Level B:

All certified staff must demonstrate competency in all sections in Level B by December of their second year of employment. Graduate courses and modules will be offered as funds are made available.

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LEVEL A

A.1 Hardware I (NETS-T: 1. A, VI.A, VI.D)

1. Set up the computer system and peripherals (mouse, keyboard, etc.).
2. Start up and shut down computer system and peripherals.
3. Insert and eject a CD-ROM.
4. Use the proper method for cleaning computer components.
5. Explain the proper care of CD-ROMÕs.

A.2 System Operations I(NETS-T: V. A, V.B, V.C)

1. Turn on the computer and printer.
2. Using the Start Menu, click on the Word Processing program or application (Microsoft Word, Notepad, etc.)
3. Type at least two paragraphs of text on the topic of your choice into a new document.
4. Name the document My Demo and save it to the :H Drive
5. Print the document using the assigned network printer.
6. Close the document.
7. Minimize the word processing program being used.
8. Open the Windows Explorer program. Create a new folder on the H: Drive
9. Copy your document ñMy Demoòfrom :H drive and into the folder you create in My Documents located on :C Drive.
10. Locate the Internet Explorer icon and go to the Anderson School District Four homepage.
11. Highlight and copy text from the webpage into Microsoft Word.
12. Paste the text into the ñSample Oneòdocument.
13. Save the document and close the word processing program.
14. Make a backup copy of a document on the H: Drive.
15. Close the Internet Explorer program.
16. Insert a CD-ROM into the computer. (If it automatically starts a program, close it).
17. Remove the CD-ROM from the computer.
18. Access and use the Windows Help Menu to answer the following questions:
    - How do I create a new folder?
    - How do I create a shortcut?
    - How do I switch between programs?
19. Shut down the computer.

A.3 Telecommunications I (NETS-T: V.A, V.B, V.C, V.D)

1. Open the the District Email System application.
2. Compose a new message and send it to a designated person. Send a copy of the message to another designated person.
3. Open a message sent to you.
4. Print the message.
5. After reading the message, reply to the sender.
6. Forward the message to a designated person.
7. Save the message to your computer
8. Using the address book, enter five different contacts with name and E-mail address.
9. Create and name a group from these five entries.
10. Send a message to the group.
11. Send a message to a designated person with a file attachment.
12. Close the browser and the E-mail program.

A.4.A PowerTeacher(For Teachers) (NETS-T: V.C)

1. Login to PowerTeacherI using ID and password.
2. Understand and explain terminology.
3. Take attendance.
4. Obtain student demographic information. (home address, phone numbers, etcé)

A.4.B PowerSchool (For Attendance Clerks, Secretaries, Guidance Counselors, and Administrators)
(NETS-T: V.C)

Extensive PowerSchool skills are required for attendance clerks, secretaries, guidance counselors, and administrators and will be addressed according to the job.

A.4.C PowerTeacher (For Teachers) (NETS-T: V.C)

1. Login to PowerTeacher using ID and password.
2. Understand and explain PowerTeacher terminology. (Grading Scale, Assignments, etc..)
3. Set up grade book.
4. Record grades.
5. Print student progress reports.
6. Import and Export.
7. Locate student demographic information.

A.4.D PowerSchool (For Guidance Counselors and Administrators) (NETS-T: V.C)

1. Locate student demographic information

A.5.A Interactive Whiteboard Basics

1. Open the Interactive Whiteboard Program
2. Create a new page
    a. Add graphics
    b. Add Text
    c. Add a new page
3. Demonstrate how to make pen writing into machine text boxes.
4. Give 3 examples of how the Interactive Whiteboard can be used in class.

A.6 Word Processing / Desktop Publishing I (NETS-T: I.A, V.A, V.C, V.D)

1. Open Microsoft Word and begin a new document.
2. Type the text from the assignment sheet onto the document.
3. Center the title and format the font to bold and 14-point size.
4. Cut the third paragraph and paste it at the ending of the first paragraph.
5. Copy the first sentence and paste it as the last sentence of the document.
6. Insert the page number in the lower right corner.
7. Insert the time and date at the end of the document.
8. Check the spelling and grammar of the document. Make necessary corrections.
9. Change the default location for saved files.
10. Insert a picture from the Clip Art into the document.
11. Insert a bulleted list into the document and type it in the list five methods to format a document.
12. Print the document.

A.7 Internet I (NETS-T: I.A, I.B, II.A, II.B, II.C, II.D, II.E, III.A, III.B, V.A, V.B, V.C, V.D, VI.A, VI.B, VI.C, VI.D)

1. Click on the Internet Browser icon to access the District Homepage.
2. Type in a specific URL on the address line to go to a news or educational site.
3. Add this URL to the favorite/bookmarks list.
4. Access a ñsearch engineò of your choice either by typing in the URL.
5. Using the Search Engine, find sites related to a topic from a unit of study in your school.
6. Explore a variety of professional resources and list some appropriate for your grade/subject level.
7. Explain security procedures for using the Internet in a school setting including passwords, servers, access rights, etc.

A.8 Presentation Program/PowerPoint I (NETS-T: I.A, I.B, II.A, II.B, II.C, II.D, II.E, III.A, V.C, VI.B)

1. Open Microsoft PowerPoint.
2. Open a template.
3. Enter information into the template for a professional or instructional presentation.
4. Perform basic text formatting and editing tasks such as changing font attributes, alignment, spacing, and spell check.
5. View and print presentation in various formats (outline view, slide view, slide sorter view, notes view, and slide show view).
6. Save and close the presentation.
7. Present a PowerPoint presentation.

A.9 School Fusion (District and School web based application)

1. Log into the District School Fusion Site
2. Create a web page with your name, position, and a little about your educational background.
3. Update Assignments in your personal web

A**.10 MAP (NWEA)**

1. Log into the MAP (NWEA) site
2. Bring up your class roster sheet
3. Print out your class roster sheet
4. Bring up individual student report
5. List the RIT Bands that your students are in

A.11 Testview

1. Log into Testview
2. Create a report of your students showing their PACT Data
3. Create a report to show your students MAP Data

LEVEL B

B.1 Hardware II (NETS-T: I.A, I.B, V.A, V.C, VI.A)

1. Connect and use a LCD projector.
2. Use a digital camera or other external source and load an image into an application such as Word or PowerPoint.

B.2 System Operations II (NETS-T: I.A, I.B, II, V.C)

1. Create, delete, copy, move, and rename folders and subfolders in Windows Explorer and My Computer.
2. Copy, move, rename, delete, and print files in Windows Explorer and My Computer.
3. Create a shortcut to the desktop.
4. Restore a deleted item from the Recycle Bin.
5. Minimize, restore, and close windows.
6. Use Find features to locate files and folders.

B.3 Telecommunications II (NETS-T: I.A, I.B, V.A, V.B, V.C, V.D)

1. Login to the District Email System remotely.
2. Compose a new message and send it to a designated person. Send a copy of the message to another designated person.
3. Open a message sent to you.
4. Print the message.
5. After reading the message, reply to the sender.
6. Forward the message to a designated person.
7. Save the message to a floppy diskette.
8. Using the address book, enter five different contacts with name and E-mail address.
9. Create and name a group from these five entries.
10. Send a message to the group.
11. Send a message to a designated person with a file attachment.
12. Close the browser and the E-mail program.

B.5 Interactive Whiteboard /Smartboard (NETS-T: I.A, I.B, V.A, V.B, V.C, V.D)

1. Create a Lesson plan/unit with the software
2. Add hyperlinks
3. Share, evaluate, download and modify a lesson plan / unit.

B.6 Word Processing / Desktop Publishing II (NETS-T: I.A, I.B, V.A, V.B, V.C, V.D)

1. Use templates to create documents.
2. Create a professional-looking newsletter that combines text, graphics, columns, borders, and shading.
3. Use the Drawing toolbar.
4. Use advanced table features.
5. Use a mail merge lesson plan template.

B.7 Internet II (NETS-T: I.A, I.B, II. A, II.B, II.C, II.D, II.E, III.A, III. B, III. C, III. D, IV,.A, IV. B, IV.C, V.A, V.B, V.C, V.D, VI. A, VI.B, VI.C, VI, D, VI.E)

1. Find, evaluate, and use educational web resources for instructional purposes.
2. Write a lesson plan that incorporates web resources.
3. Include a student accountability activity sheet with the lesson plan to keep students on task.

B.8 Presentation Program / Power Point II (NETS-T: I.A, I.B, II.A, II.B, II.C, II.D, II.E, III.A, V.C, VI.B)

1. Use Microsoft PowerPoint to create professional and/or instructional presentations, using templates and blank presentations.
2. Identify and use menu commands and toolbars.
3. Select appropriate slide layouts.
4. Insert and manipulate text and media (graphics, animation, and sound) appropriately.
5. Add basic slide transitions and preset text animation.

B.9 Excel I (NETS-T: I.A, I.B, II.A, II.B, II.C, II.D, II.E, III.A, III.B, III.C, III.D, V.A, V.B, V.C, V.D)

1. Open Microsoft Excel.
2. Appropriately insert data into cells for charting.
3. Create charts using the chart wizard.
4. Format charts.
5. Manipulate various chart features.
6. Print charts and graphs.
7. Plan ways to use charts and graphs with students.

.

B.10 MAP (NWEA) Essentials

1. Break students into RIT Band Groups
2. Use the DeCartes Scale to develop RIT Band strategies to teach.
3. Compare student growth as presented in MAP
4. Make a chart based on the MAP growth predicated growth, for the students.
5. Identify a students Lexile Reading Level.

B.11 Testview Essentials

1. Create a report to show students MAP/HSAP/PASS Score from the previous testing season.
2. Create a report to show MAP score and PASS from the most recent PASS Test Year and add the current MAP testing data.

Teacher Technology Competency Tables

Level A											
Competency	**A.1**	**A.2**	**A.3**	**A.4**	**A.5**	**A.6**	**A.7**	**A.8**	**A.9**	**A.10**	**A.11**
Date Completed											

Level B											
Competency	**B.1**	**B.2**	**B.3**		**B.5**	**B.6**	**B.7**	**B.8**	**B.9**	**B.10**	**B.11**
Date Completed											

Level A		**Level B**	
A.1	Hardware I	**B.1**	Hardware II
A.2	System Operations I	**B.2.**	System Operations II
A.3	Telecommunications I	**B.3**	Telecommunications II
A.4	PowerTeacher		
A.5	Smartboard Basics	**B.5**	Smartboard Essentials
A.6	Word Processing / Desktop Publishing I	**B.6**	Word Processing / Desktop Publishing II
A.7	Internet I	**B.7**	Internet II
A.8	Presentation Sofware /PowerPoint I	**B.8**	Presentation Sofware /PowerPoint II
A.9	SchoolFusion ï Web page	**B.9**	Spreadsheet Software /Excel I
A.10	MAP Software	**B.10**	MAP Essentials
A.11	Testview Software	**B.11**	Testview Essentials

Appendix 3: Acceptable Use Policies

Anderson School District Four's Acceptable Use Policies for Technology follow.

- Data Network Acceptable Use Rules and Regulations (Rev 1.3)
- Employee Data Network Agreement
- Parent / Guardian Grades K-5 Data Network and Internet Agreement/Permission Form
- Student Data Network and Internet Agreement and Assurance Form (Grades K-5)
- Parent / Guardian Grades 6-12 Data Network and Internet Agreement/Permission Form
- Student Data Network and Internet Agreement and Assurance Form (Grades 6-12)
- Directory Information Release Form (Rev 1.0)
- Staff Web Authoring Guidelines
- Web Design Checklist
- Staff Web Authoring Agreement

Anderson School District Four
Data Network Acceptable Use Rules and Regulations (Rev 1.3)

I. ACCEPTABLE USE

The Anderson School District Four Data Network (ASD4-Net) includes but is not limited to networked instructional software, networked printers, networked hardware, networked file storage space, and the Internet. The ASD4-Net will be used in a responsible, efficient, ethical and legal manner and must be in support of the educational objectives and the student behavior guidelines of Anderson School District Four. Use of other networks or computing resources must comply with the rules appropriate for that network.

II. UNACCEPTABLE USE

Transmission of material in violation of any federal or state laws or regulations is prohibited. Unacceptable use includes, but is not limited to the following:

A. Violating copyright laws
B. Using threatening or obscene material
C. Distributing material protected by trade secret
D. Utilizing ASD4-Net for commercial purposes
E. Providing political or campaign information
F. Using offensive or harassing statements or language
G. Sending or soliciting sexually oriented messages or images
H. Operating a business for personal gain, sending chain letters, or soliciting money for any non-school related reason
I. The access of restricted information; Restricted information includes, but is not limited to obscene, libelous, indecent, vulgar, profane, or lewd materials; advertisements for products or services not permitted to minors by law; insulting, fighting and harassing words; and other materials which may cause a substantial disruption of the academic environment.
J. Violating the statutes or school district policies pertaining to studentsôrights to privacy
K. Violating the statutes or school district policies pertaining to staff rights to privacy

III. PRIVILEGE

The use of ASD4-Net is a privilege, not a right, and inappropriate use, including violation of these rules and regulations may result in cancellation of the privilege and possible disciplinary actions.

IV. MONITORING

The District reserves the right to review any material on user accounts for purposes of maintaining adequate fileserver space. In reviewing and monitoring user accounts for the purpose of determining adequate fileserver space, the District shall respect the privacy rights of the User.

V. NETWORK ETIQUETTE

All users are expected to abide by the generally accepted rules of network etiquette. These rules include, but are not limited to the following:

A. Be polite. Do not use abusive language in your message to others.
B. Use appropriate language. Do not swear, use profanity, use vulgarities or any other inappropriate language.

C. Do not engage in activities, which are prohibited under local, state or federal law.
D. Do not reveal your personal address and/or telephone number or that of other students and employees.
E. Do not use the network in such a way that would be disruptive to others.
F. All communications and information accessible via the network should be assumed to be private property.
G. Do not use the network to send or receive messages that discriminate based on gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual orientation, social and family background, linguistic preference, disability or that are inflammatory.

VI. SECURITY

Attempts to tamper with programs, to access the system as another user, or to share a password may result in cancellation of user privileges.

VII. USE OF ELECTRONIC MAIL BY STAFF, FACULTY, & STUDENTS

Electronic mail (E-mail) is not guaranteed to be private; Network Administrators have access to all e-mail. However, individual e-mail will not be monitored unless reasonable suspicion has been established that the user has violated acceptable use regulations. Messages relating to or in support of illegal activities or activities listed under **Section II. Unacceptable Use** will be reported to the authorities, and disciplinary action may follow. E-mail could be considered a public record and thus subject to all federal and state laws with regard to Freedom of Information and documentation in legal challenge.

VIII. VANDALISM AND HARRASSMENT

Vandalism or harassment while using the ASD4-Net may result in cancellation of user privileges and disciplinary action. This includes, but is not limited to uploading, creating, or transmitting computer viruses. Vandalism of computer systems, including unauthorized access, is a violation of the criminal law.

IX. PROCEDURES FOR USE

K-5th GRADE STUDENT: PROCEDURES FOR USE

Network Guidelines: Students in Kindergarten through 5th grade must always get permission from teachers/staff members before using the network or accessing any specific file or application on the network. Student users must also follow written and oral classroom instructions.

A. All users have the same right to use the equipment. Therefore, users shall not play games or use the computer resources for non-academic activities. In addition, users shall not waste nor take supplies, such as paper, printer cartridges, and diskettes that are provided by the District.
B. Teachers are responsible for teaching proper techniques and standards for participation, for guiding student access to appropriate sites on the Internet, and for assuring that students understand that if they misuse the network or its equipment, they may lose their privilege to access the network from the classroom environment.
C. Use of the ASD4-Net for accessing networked instructional software, hardware, printers, and file storage space does not require written parent/guardian permission. Use of the Internet by students under the age of 18 does require written parent/guardian permission.

Internet Guidelines: Independent use of the Internet by students in Kindergarten through 5th grade requires parent/guardian signature on the **Data Network and Internet Agreement and Permission Form**. The signed permission form should be maintained by the school and should be obtained prior to assigning independent work on the Internet. Students in grades K through 5 who have parent permission will use the Internet only under the direct supervision of a teacher/staff member and will use only sites pre-selected by teachers/staff members. Sites used will be for research purposes or classroom assignments, such as online encyclopedias, virtual fieldtrips, WebQuests, SC State Library resources, etc. Students may **view** pre-selected web sites for educational purposes as a class or small group under the teacherôs direction without parental permission.

6th-12th GRADE STUDENT: PROCEDURES FOR USE

Network Guidelines: Student users must always get permission from teachers/staff members before using the network or accessing any specific file or application. Student users must also follow written and oral classroom instructions.

A. All users have the same right to use the equipment. Therefore, users shall not play games or use the computer resources for non-academic activities. In addition, users shall not waste nor take supplies, such as paper, printer cartridges, and diskettes that are provided by the District.
B. Teachers are responsible for teaching proper techniques and standards for participation, for guiding student access to appropriate sections of the Internet, and for assuring that students understand that if they misuse the network or its equipment, they may lose their privilege to access the network from the classroom environment.
C. Use of the ASD4-Net for accessing networked instructional software, hardware, printers, and file storage space does not require written parent/guardian permission. Use of the Internet by students under the age of 18 does require written parent/guardian permission.

Internet Guidelines: Independent Navigation of the Internet is to be conducted by students in grades 6-12 only. Independent Navigation of the Internet by students requires both the students and parents acceptance and signature on the **Data Network and Internet Agreement and Permission/Assurance Form**. Students are not permitted to search for, download, or print any objectionable, vulgar, or offensive material. Unsupervised participation in group discussion chats

or newsgroups is not permitted. The signed permission form should be maintained by the school and should be obtained prior to assigning independent research on the Internet. Students utilizing the computer labs before and/or after school for Internet activities of their own choice should also have assurances on file at the school. Students may **view** pre-selected web sites for educational purposes as a class or small group under the teacherôs direction without parental permission.

EMPLOYEE: PROCEDURES FOR USE

Network Guidelines:

A. **User Name IDs, Account Numbers and Passwords:** User names, account numbers, and passwords issued to staff members must remain confidential.
B. **Installation of Personal Software:** Faculty and Staff may not install any software on computers attached to the ASD4-Net without the prior approval of the District Department of Technology. This includes, but is not limited to: file sharing programs (Morpheus, Napster, etal.) and instant messaging programs. Any request for **installation** should be made by submitting a description and use of the software to the District Department of Technology for review and approval.
C. **Virus Protection:** Faculty and Staff should be aware that there is virus protection on all ASD4-Net computers. The District is not **responsible** for any damage to machines or programs resulting from the exchange or importation of infected programs or files.
D. **Network Updates**: Faculty and Staff should be aware that when the District periodically updates the network and its computers, it is possible that their files may be removed from their local machines. It is recommended that the teachers maintain regularly updated backup copies of all files saved on the internal hard drive.

Internet Guidelines:

A. **Web Usage:** Employees are encouraged to explore WWW resources. Clearly, such explorations should be for educational purposes. Downloading and/or printing files and images containing content, which is inappropriate for a K-12 setting, is prohibited. School participation in chat discussion groups or newsgroups whose content is inappropriate for a K-12 setting is also prohibited. Staff members are expected to employ professional judgment in the determination of inappropriate content.
B. **Websense:** Teachers may not show blocked websites to students using teacher IDs. Requests for websites to be unblocked should be made on the Websense Request Form found on the District Intranet.

X. AGREEMENT

Employees must sign the Anderson School District Four **Data Network Agreement Form** prior to accessing ASD4-Net. A parent or guardian must sign the Anderson School District Four **Data Network and Internet Agreement/Permission Form** prior to students under age eighteen (18) accessing Internet. Students must sign the Anderson School District Four **Student Data Network and Internet Agreement and Assurances Form** prior to accessing Internet.

XI. DISCLAIMER

Anderson School District Four will not be responsible for any damages suffered, including loss of data resulting from delays, non-deliveries, service interruptions, or inaccurate information. Anderson School District Four will not be for any personal files obtained or stored on ASD4-Net.

Anderson School District Four
Employee Data Network Agreement Form

I have read, understand, and will abide by **Anderson School District Four Data Network Acceptable Use Rules and Regulations**. I further understand that any violation may result in the loss of access privileges and possible disciplinary action.

Signature: _____

Date: _____

Anderson School District Four
Parent / Guardian Data Network and Internet Agreement/Permission Form
Grades K-5

I have read the **Anderson School District Four Data Network Acceptable Use Rules and Regulations** and understand that Data Network access is designed for educational purposes only. I also recognize that it is impossible to restrict access to all inappropriate materials and that students must abide by directions given to them by teachers/staff members. However, I accept full responsibility for my childôs compliance and, hereby, give permission for my child to use the ASD4-Net for accessing networked instructional software, hardware, printers, and file storage space.

I also understand that independent Internet use by students in grades K through 5th grade is designed for educational purposes only. I understand that students will visit only sites pre-selected by teachers/staff members and will be supervised at all times by a teacher/staff member.

[*Check One*]

Ï I **give** permission to use the Internet under the conditions described above.
NOTE: *Student will need to complete Student Data Network and Internet Agreement and Assurance Form*.

Ï I **deny** permission to use the Internet under the conditions described above.

Parent/Guardian Signature: _____

Student Name: _____

Date:_____

Student Data Network and Internet Agreement and Assurance Form
(Grades K-5)

When using the Internet independently on the ASD4-Net, I will:

- Use only the Internet sites given to me by a teacher/staff member;
- Not give the name, home address, or telephone number of myself or anyone else in any location on the Internet;

I understand that any violation may result in the loss of access privileges and possible disciplinary action.

Student Name: _____

Student Signature: _____

Date:_____

Anderson School District Four
Parent / Guardian Data Network and Internet Agreement/Permission Form
Grades 6-12

I have read the **Anderson School District Four Data Network Acceptable Use Rules and Regulations** and understand that this access is designed for educational purposes only. I also recognize that it is impossible to restrict access to all inappropriate materials. However, I accept full responsibility for my childôs compliance and, hereby, give permission for my child to use ASD4-Net for accessing networked instructional software, hardware, printers, and file storage space, and:

[*Check One*]

Ì **give** permission to conduct independent research on the Internet under the conditions described above. **NOTE:** ***Student will need to complete Student Data Network and Internet Agreement and Assurance Form.***

Ì **deny** permission to conduct independent research on the Internet under the conditions described above.

Parent / Guardian Signature: _____

Student Name: _____

Date: _____

Student Data Network and Internet Agreement and Assurance Form
(Grades 6-12)

When conducting independent research on the ASD4-Net, I will:

- Use the ASD4-Net for legitimate educational purposes;
- Send e-mail only at the direction of my teacher or media specialist;
- Not register the name, home address, or telephone number of myself or anyone else in any location on the Internet;
- Not attempt to download or save files to the computer hard drive or to a disk without teacher permission;
- Not search for, download, or print any material that violate school handbook codes regarding possession or display of inappropriate, offensive, or vulgar material, or assist any other student in such activities;
- Not use or attempt to use Telnet, Internet Relay Chats or other interactive exchanges without teacher permission;
- Not damage or alter computers, computer systems, or computer networks;
- Not violate copyright laws;
- Not trespass in anotherôs folders, work or files.
- Shall only use electronic mail, chat rooms, blogging and other electronic communications for school-related purposes.

I have read, understand and will abide by Anderson School District Four's Data Network Acceptable Use Rules and Regulations and the ASD4-Net Student Assurances. I further understand that any violation may result in the loss of access privileges and possible disciplinary action.

Student Signature: _____

Student ID#: _____
Date:_____

Anderson School District Four
315 E. Queen Street
P. O. Box 545
Pendleton, SC 29670
Phone (864) 646-8000 FAX (864) 646-8555

Dear Parent(s),

Anderson School District Four has installed computer connections to their Data Network on every campus which will allow access to the Internet. The purpose is to encourage the use of the Data Network by **Anderson School District Four** staff and students to support and enhance the educational program of the district.

The Internet provides a powerful access to worldwide information in text and media form that, if used properly, can enhance student learning. It can be particularly exciting for student because it provides a wealth of information resources not readily available through conventional means. There are many on-going educational projects available on the Internet that are appropriate for K-12 students. Many encourage subject area studies or support ñvirtual field tripsò to museums or other locations around the world. Much of this information can be integrated into ongoing classroom instruction or used in individual student projects. Unfortunately, the Internet also provides access to information, images, or discussions and conversations of individuals and groups that are not appropriate for K-12 students; therefore, the district will take various precautions to restrict access to controversial or inappropriate materials. This kind of screening is not new; schools have always screened materials for student use to exclude many books, magazines, and videos not appropriate in a school setting. However, it is possible that a student conducting individual research may disregard faculty and staff instructions and actively seek out inappropriate material.

Grades K -5: We believe that independent use of the Internet can be permitted for students in Kindergarten through Grade 5 with little possibility of exposure to inappropriate materials under these conditions:

1. Parents are advised of the rules and give written permission;
2. The student gives written assurance regarding appropriate behaviors while accessing the Internet;
3. Students are directly supervised;
4. Students are given pre-selected sites to use;
5. Students only use those pre-selected sites; and
6. The student and parents/guardian understand that violations of these rules and regulations may result in the loss of Internet privileges and / or disciplinary action.

Grades 6 ï 12: We believe that independent research can be permitted for students in Grade 6-12 with little possibility of exposure to inappropriate materials under these conditions:

1. Parents are advised of the rules and give written permission;
2. The student gives written assurance regarding appropriate behaviors while accessing the Internet;
3. The student and parents/guardian understand that violations of these rules and regulations may result in the loss of Internet privileges and / or disciplinary action.

If you should have any further concerns or questions, please contact your childôs principal.

Sincerely,

Anderson School District Four

Anderson School District Four

Summary of ASD4-Net (rev 1.1)

Summary: Anderson County School District Four (ASD4) offers a data network, the **Anderson School District Four Data Network (ASD4-Net),** which will allow access to networked software, hardware, printers, file storage space, and the Internet, accessible by students, faculty, and staff. Employees who use the ASD4-Net must sign an **Employee Data Network Agreement** prior to being given access to ASD4-Net. Student use of the ASD4-Net for accessing networked instructional software, hardware, printers, and file storage space does not require written parent/guardian permission. However, students under the age of eighteen (18) must have written parental permission before being given access to the Internet. *[Constitutional and Statutory Provisions S.C. 30-4-20 44 U.S.C. 3301 60 FR 44640, August 28, 1995 The Communications Act of 1934, as amended, 47 U.S.C. 223(b) The High Performance Computing Act of 1991, P.L. 102-194, 105 Stat 1594, sec 3 (1)(H)]* Students who use the Internet must have a parent-signed **Parent / Guardian Data Network Agreement and Permission Form** and a student-signed **Student Data Network Agreement and Assurance Form** prior to being given access to the Internet. These agreements define the educational objectives and guidelines for acceptable use as well as unacceptable uses, which may lead to revocation of access and possible disciplinary action.

The Internet, an electronic highway, connects thousands of computers, computer networks and individual subscribers around the world. Users (and parents of users, if the user is younger than age 18) must understand that ASD4 cannot control the content of the information available. Some of the information is controversial and, sometimes, offensive. However, the valuable information and interaction accessible on this worldwide network make this an excellent resource for students and staff. ASD4 prohibits the use of inappropriate materials accessible via the Internet and takes reasonable precautions to filter access to these materials. The responsibilities accompanying freedom of speech and access to information will be taught. School employees, students, and parents must be aware that access to the Internet may be withdrawn from users who do not respect the rights of others or who do not follow the rules and regulations established by ASD4. Access to and uses of the Internet are intended solely to further the educational objectives of ASD4 and to supplement and enrich existing curricula. Internet users will be required to adhere to the following policies and procedures governing the Internet access and use.

1. Directory Information Release Form (Rev 1.0)

The Family Educational Rights and Privacy Act (ñFERPAò) authorizes Anderson County School District Four to release ñdirectory informationò of students to individuals who request it. Directory information includes your childôs name, address, telephone number, photograph (as related to school/district sponsored events, activities and special recognitions), date and place of birth, participation in officially recognized activities and sports, weights and heights of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous school attended, and other similar information.
Additionally, information about your child may appear in newspaper articles, on television, in radio broadcasts, on displays, on the World Wide Web (WWW) ï a part of the Internet, or in District or school promotional pieces.

If for some reason you object to the release of the above referenced information, please indicate below in the appropriate space. If you do not complete and return this form to your childôs school within 15 days, you understand that we will be free to release or use information on your child as appropriate.
If you have any questions about the content of this form, please call Dr. Lee DôAndrea, Assistant Superintendent of Curriculum and Instruction, at 646-8000.

Release of Student Directory Information – Please check ONLY ONE.

Ï We, the parent(s)/guardian(s) and student or I, the student (if 18 years of age or older), hereby, GRANT PERMISSION to Anderson County School District Four TO RELEASE ALL DIRECTORY INFORMATION as related to school/District sponsored events, activities, special recognitions, or artwork.

Ï We, the parent(s)/guardian(s) and student or I, the student (if 18 years of age or older), hereby, GRANT PERMISSION to Anderson County School District Four TO RELEASE ALL DIRECTORY INFORMATION, WITH THE EXCEPTION OF PHOTOGRAPHS of the student, as related to school/District sponsored events, activities, and special recognitions.

Ï We, the parent(s)/guardian(s) and student or I, the student (if 18 years of age or older), hereby, ask that Anderson County School District Four NOT RELEASE ANY DIRECTORY INFORMATION as related to school/District sponsored events, activities, and special recognitions.

Ï We, the parent(s)/guardian(s) and student or I, the student (if 18 years of age or older), hereby, ask that Anderson County School District Four NOT RELEASE ANY DIRECTORY INFORMATION as related to school/District sponsored events, activities, and special recognitions EXCEPT FOR USE IN THE SCHOOL ANNUAL.

_____ _____
Date Notice Given to Student Principal

_____ _____ _____
Studentôs Full Name Studentôs Home Phone Number School Name

_____
_____
Studentôs Full Address

_____ _____
Date Parent/Guardian/Student Signed Parent/Guardianôs Full Name (Print)

_____
Parent/Guardian/Student Signature (If student is 18 years or older.) We, the parent(s)/guardian(s) and students or I, the student (if 18 years of age or older), understand that we may revoke this authorization at anytime except when action has been taken. We further understand that this revocation must be in writing and must specify the date of revocation.

Anderson School District Four
315 E. Queen Street
P.O. Box 545
Pendleton, SC 29670
Phone (864) 646-8000 **FAX** (865) 646-8555

Staff Web Authoring Guidelines

The purpose of staff web sites is: (1) to provide parents, students, and the community information about curriculum and instruction, as well as student, classroom, and school activities, (2) to foster communication among those groups, and (3) to provide a means for authentic publication of student work. All web sites must comply with the following guidelines.

Content Guidelines

1. Content must be related to instruction and/or to school or district-sponsored activities.
2. Staff biographical information must (1) be brief and limited to information parents need to know, and (2) not include links to personal web sites or to businesses, organizations, or other affiliations not directly associated with Anderson School District Four. Professional background, degrees, etc. may be included. One or two images may be published provided they are professional and tasteful.
3. Staff must verify all links included in their web sites for developmental appropriateness and relevance to curriculum.
4. Content must not be obscene, profane, racist, sexist, inflammatory, threatening, slanderous, or subversive to administration and/or the board of trustees.
5. The web site must not be used to publish information for individuals, businesses, organizations, or affiliations or to solicit money for any non-school related purpose.
6. Content should be free of spelling and grammatical mistakes.
7. Information should be accurate and current.
8. The home page should include the date of the last update to the web site and the name of the person responsible for the site.
9. These links must be included on the staff member's home page:
    a. Link to Anderson School District Four;
    b. Link to staff member's school; and
    c. Link to Anderson School District Four's Copyright Notice Web Page.
10. Staff must adhere to Anderson School District Four's *Network Acceptable Use Policy.*

Legal Guidelines

1. Copyright Laws
    a. Staff must comply with United States copyright laws.
    b. All content and graphics that are used in compliance with copyright laws must be properly credited on the web page.
        i. Content and graphics used with permission must include a notice at the bottom of the web page crediting the original producer and noting how and when permission was granted. This should include the URL web address of the original source.
        ii. If free sites require a link to the web site, please do so as a courtesy to the original producer.
        iii. The failure of a web site to display a copyright notice should not be interpreted as permission to copy content and/or graphics free. Written permission from the original producer must be granted.
    c. All information accessible via the Internet should be assumed to be private property. Quotes, references, and sources should be cited.
    d. Teachers should make every effort to verify that published student work has not been plagiarized.

2. Student Directory Information
   Some student directory information may be published on staff web sites provided that parents have not notified the district in writing that they objects to the release of that information. Anderson School District Four limits web site publication of directory information to the following:
   a. Photographs may be published without an identifying name.
   b. Student work may be published with a first name and grade only.
   c. Student full names and grade levels may be listed (without photographs) for school/district awards and recognitions for school or district-sponsored activities, academics, and athletics.
3. All pages on Anderson School District Fourôs server are the property of Anderson School District Four. The district reserves the right to examine, restrict, or remove any material on its server.

Technical Guidelines

1. Passwords and IDS must not be shared with anyone, including students.
2. Images should load quickly.
3. Images should be removed from the Images folder when they are not being used.
4. GIF and JPG images formats are to be used for all graphics.
5. Photographs and scanned images should be thumb nailed when possible.
6. File names should be lower case and not include spaces.
7. The homepage should be named *default.htm.*
8. Approved district logos are available at: http://www.anderson4.k12.sc.us/logos.htm.

Miscellaneous

Various web site design training courses, such as Microsoft FrontPage or Publisher, will be offered to staff members on an on-going basis. Staff members who take these courses will be given a web site with a staff ID and password, which will allow them to publish to their web sites independently. This is a privilege and responsibility; therefore, staff members will be required to sign a statement acknowledging that they will adhere to these guidelines. Any violation of the guidelines may result in a loss of the right to publish to Anderson School District Fourôs server.

A web design checklist is provided to assist staff members with web site design.

Material on web sites reflects an individualôs thoughts, interests, and activities. Such web sites do not, in any way, represent individual schools or the district, nor are they endorsed or sanctioned by Anderson School District Four. Concern about the content of any page created by staff should be directed to the building principal of that school. An employee who violates the Staff Web Authoring Guidelines or the Network Acceptable Use Policy will be subject to disciplinary action, up to and including discharge.

Anderson School District Four
315 E. Queen Street
P.O. Box 545
Pendleton, SC 29670
Phone (864) 646-8000 **FAX** (865) 646-8555

Web Design Checklist

Content Possibilities

- ☐ Student work samples, projects.
  - Showcase a variety of students throughout the year.
  - Projects show strong evidence of editing, proofing, and revising.
- ☐ Homework assignments with specific ways parents can help at home.
  - Must remain current.
  - May want to include long-term homework assignments only.
- ☐ Curriculum topics and standards of learning
- ☐ Classroom rules
- ☐ Field trip information
- ☐ Notices and reminders
- ☐ Calendar of events and due dates
- ☐ Class newsletter
- ☐ Student/staff awards and recognitions
- ☐ Staff email addresses
- ☐ Internet sites relevant to curriculum
- ☐ Content to share with other students/schools (games, projects, email correspondence, etc.)

Technical Considerations

- ☐ Do my images load quickly?
- ☐ Have I thumb nailed photographs when possible?
- ☐ Does my overall page (color, text, graphics) set a tone that will establish credibility with the audience?
- ☐ Is my text easy to read?
- ☐ Are all my pages consistent in font, style, graphics?

- ☐ Have I clearly organized my content?
- ☐ Is my navigation easily understood?
- ☐ Have I double checked all links to ensure they are working?

Content Considerations

- ☐ Is my overall content related to instruction?
- ☐ Are student activities prominent?
- ☐ Will viewers get a clear picture of my classroom?
- ☐ Is my page free of spelling and grammatical errors?
- ☐ Have I double checked all links for relevance to curriculum?
- ☐ Have I linked to **Anderson School District Four** from my homepage?
- ☐ Have I linked to my school from my homepage?
- ☐ Have I linked to **Anderson School District Four's *Copyright Notice Web Page***?
- ☐ Have I included the date of the last update?
- ☐ Have I included my name on the homepage?
- ☐ Are my homework assignments up to date?
- ☐ Are my student activities up to date?
- ☐ Have I fully credited any copyrighted source, both content and graphics?
- ☐ Have I ensured protection of student privacy?
    - Are photographs published without identifying name?
    - Is published student work accompanied by first name and grade only?
    - Are student full names and grade levels only listed for school and district awards and recognitions?
    - Have I checked to make sure I do not include any of the above information for students whose parents have signed the Student Directory Opt Out Form?

Anderson School District Four
315 E. Queen Street
P.O. Box 545
Pendleton, SC 29670
Phone (864) 646-8000 **FAX** (865) 646-8555

Staff Web Authoring Agreement

I have read, understand, and will abide by **Anderson School District Four's *Staff Web Authoring Guidelines***. I understand that the purpose of staff web sites is: (1) to provide parents, students, and the community information about curriculum and instruction, as well as student, classroom, and school activities, (2) to foster communication among those groups, and (3) to provide a means for authentic publication of student work. Additionally, I agree that I will not share my password and ID for publishing to the district server with anyone, including students. I further understand that any violation may result in the loss of publishing privileges and possible disciplinary action.

Signature: _____
Date: _____

Appendix 4: How E-Rate Areas Have Been Addressed

ERATE has and continues to be used primarily for reimbursement of local, long distance and cell phone services including data access. We are in the process of updating our network infrastructure to accommodate the Metro Ethernet project for which we will file under the ERATE program in hopes of funding in our Title 1 eligible schools. We continue to look at the possibility of filing for ERATE for other sites as the percentage of funding drops to levels that could possibly meet our District Wide rate.

Appendix 5: Report on Progress toward Goals, Objectives, Strategies, Benchmarks, Actions, and Outcomes

Accomplishments in Anderson County School District Four

1. Staff Web Authoring Policy -Approved by Board and Implemented
2. Staff Technology Competencies
    a. Approved by Board and Implemented
    b. 100 % of Professional Certified Staff required to meet Technology Proficiency met Level A Competency by the end of their first year of employment.
3. Increased Offerings in Technology-Related Staff Development
    a. 1000+ hours devoted to Curriculum Mapping.
    b. Workshops on technology integration in programs like Streamline Video, BrainPop, and Maptrakker.

Major Accomplishments for Anderson County School District Four

1. Staff Technology Competencies
    a. 100% of Professional Certified Staff mastered Technology Proficiency Level A Competencies.

2. Technology-Related Staff Development
    a. Continued offering of technology-related staff development, including online course offerings; partnership formed with Anderson County Adult Education Center.
    b. Technology Curriculum Mapping Staff Development ï throughout the year for all staff members.
3. Instructional Technology Model
    a. Constent revised model for technology use in the classroom for:
        i. K-2nd
        ii. 3rd -6th
        iii. 7th ï 8th
        iv. 9th ï 12th
4. Instructional Software/Resources
    a. Researched instructional software to support the hardware available in the district.
    b. Purchasing decisions and goals set for instructional software purchases each school year.
    c. Added interactive curriculum map and pacing guide to Intranet which serves as long-term plans for teachers while providing them with resources for instruction.
    d. Internet resources like BrainPop.com, Readingatoz.com and Rubicon Atlas Curriculum Mapping Software are annually renewed.
5. Hardware Infrastructure -
    a. Teachers are furnished laptops for their instruction.
    b. LCD projectors are installed in most classrooms, depending on the use of the classroom for instruction
    c. Interactive Whiteboards are installed most classrooms, depending on the use of the classroom for instruction.