SOUTH CAROLINA K-12 SCHOOL TECHNOLOGY INITIATIVE

State Budget and Control Board
State Department of Education
South Carolina Educational Television
South Carolina State Library
BellSouth
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South Carolina K-12 School Technology 2001 Progress Report Executive Summary

SOUTH CAROLINA K-12 SCHOOL TECHNOLOGY INITIATIVE

SC K-12 School Technology 2001 Progress Report

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Executive Summary

Introduction

In 1996 the General Assembly anticipated the advantages of using technology as a tool to promote learning in South Carolina. To facilitate the infusion of technology into the schools, the General Assembly created the K-12 School Technology Initiative which is guided by a unique public/private partnership of the State Department of Education (SDE), SCETV, the State Budget and Control Board, the State Library and the state's private sector telecommunications providers. While the Initiative has achieved much success in deploying the technological innovations of the early and mid-1990s, there is still much to be done. Technology alone is not the panacea to the educational improvement effort in the state. However, the use of technology and the integration of "e-learning" into the classroom can be a key strategy in the state's roadmap to education excellence.

Background

On July 20, 2001, the South Carolina Education Oversight Committee (EOC) accepted its Long-Range Plan as a working document (See Attachment 1.) In this document the EOC states that:

> South Carolina stands at a precipice. The state's textile economy is declining, and South Carolina must move its economy into the twenty-first century. South Carolina's citizens have relied upon an economy that no longer offers independence and the ability to realize their ambitions. Its educational system has made gains in recent years, but the amount and type of gains are insufficient for successful competition in the years ahead. To ensure a viable economy and the opportunity for her citizens to live independently, the state must change profoundly.
>
> Education is the most critical variable in economic development. Yet in this area, South Carolina's performance is not as strong as other states. South Carolina must enter the marketplace demonstrating strong gains and positive changes in educational results. Therefore, South Carolina must take actions that bring the state to a more competitive stance. To propel change we have set the goal stated here:

> *By 2010, South Carolina's student achievement will be ranked in the top half of states nationally. To achieve this goal, we must become one of the five fasted improving systems in the country.*[1]

In order to achieve this goal, the EOC identified nine areas for public action. Three of these strategic issues – Governance and Structure, Efficient Use of Resources and Accountability, and Teacher Quality – have a direct link to the use of technology in K-12 education. This report focuses on the success the state has realized through the K-12 School Technology Initiative in meeting the Key Results of the EOC's strategic issues. The report also examines the challenges the state will face in making further advances in the use of technology in the classroom.

Strategic Issue: Governance and Structure

Key Result (9): SC Students shall have access to Internet and/or multi-media coursework for low incidence courses, alternative schedules, curricula enrichment and in response to teacher shortages and students shall participate in Internet-delivered assessments with rapid delivery of results. [2]

Actions: In order to implement Internet and/or multi-media coursework, the Internet connectivity must be in place and the student must have access to a multi-media computer.

Results:

- South Carolina is recognized as a national leader in technology with one hundred percent of South Carolina schools connected to the Internet and the first state in the country with connectivity to all public libraries.

- Presently, 96 percent of the schools and 64 percent of the library sites have a T-1 or greater connectivity. This means that 96 percent of the schools in South Carolina meet the CEO Forum[3] standard of "high-tech" school for connectivity.

- Many schools have more than 75 computers connected in classrooms to the state network and Internet. More than $31 million have been distributed to school districts to purchase needed hardware and software to effectively use the connectivity provided. All media centers and more than half the classrooms in the

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[1] Long Range Plan. South Carolina Education Oversight Committee. July, 2001. P. 1.

[2] Long Range Plan. South Carolina Education Oversight Committee. July, 2001. P.2.

[3] School Technology and Readiness Report: Professional Development: A Link to Better Learning. The CEO Forum on Education and Technology. February, 1999. P. 16.

state are wired to use the technology infrastructure. Based on KPMG survey results, schools in South Carolina average a "student to computer" ratio of 5:1 which makes South Carolina a "high tech" state.[4]

Actions: In order to ameliorate teacher shortages and to provide coursework for low incidence classes, distance learning facilities must be available.

Results:

- Distance education projects using two-way video are providing resources to students in rural and less affluent areas of the state. The results of these projects have enabled South Carolina to make efficient and effective decisions about future technologies. In FY2001, 136 courses were offered to 2,670 students via distance education projects funded through the K-12 School Technology Initiative.

- Over 40 teachers, administrators, and technical staff are completing a course collaboratively offered by the State Department of Education, SCETV, and USC in distance education processes and techniques. The course evaluations are extremely positive and the course will be offered in the upstate in the spring 2002.

- The SCETV 32-channel satellite system is now broadcasting digital content to all schools in the state. A dish and at least three receivers are currently in each school. The satellite system makes more channels available to classrooms and maximizes the outreach of programs like the Governor's School for Science and Mathematics and the Governor's School for the Arts and Humanities. Having additional receivers in each school has made it possible to transition from using the normal television channel for broadcast to using satellite channels. Doing this makes it possible to broadcast the Ready to Learn service into every home in South Carolina over the public channel to aid in preparing preschool children for first grade.

Key Result (10): SC will use electronic data submission, storage and analysis for efficiency and broad access.[5]

Actions: In order to assess data on a statewide basis, a data warehouse and retrieval system must be development

- Steady progress continues with installing an up-to-date student information system in all South Carolina schools and district offices. Once completed, a district-wide database of all available student data will be available to each district office.

[4] State of South Carolina Education Technology Evaluation Project. KPMG consulting. September, 2000. P. III-2.

[5] Long Range Plan. South Carolina Education Oversight Committee. July, 2001. P.3

Components of the data can then be extracted and sent to the State Department of Education for accountability analysis.

- As part of the student information system, teachers will have access to

✓ an electronic tool to take daily or period attendance from a workstation,
✓ an electronic grade book that can be used at home or school to record grades into the reporting system,
✓ a special education tracking system,
✓ a curriculum and assessment system, and
✓ A model curriculum and assessment database that is correlated to the SC curriculum standards.

- The State Department of Education has designed a straightforward yet highly extendable data warehouse containing information on student enrollment, staff and certification, PACT Test Score Results and the school/district hierarchical organization. Once available, information from the student information system will be loaded into the data warehouse, along with information on the school report card results.

Strategic Issue: Efficient Use of Resources and Accountability

Key Result (3): 90 percent of teachers will report that equipment and materials are aligned with the content standards.[6]

Action: Content must be developed that is aligned with the state's curriculum standards.

Results:

- During FY 2001, South Carolina Educational Television's Creative Services Department made great strides in bringing new digital content, tied to SC curriculum standards, to the Web, through its Knowitall.org Web portal. By the end of the fiscal year, SCETV was on target to nearly double the original content titles available through Knowitall.org. Processes were put into place to provide meaningful curriculum standards connections, as well as additional teachers' content such as lesson plans and teacher guides on many sites. The Knowitall portal itself was redesigned to improve clarity, enhance navigation, and allow for the seamless inclusion of new content. SCETV continued to explore and exploit the best and most efficient technologies, such as Flash, QuickTime Virtual Reality, ColdFusion, and Java, seeking to open the digital resources of Knowitall.org to as many schools and home-based users as

[6] Long Range Plan. South Carolina Education Oversight Committee. July, 2001. P.4

possible. Finally, through targeted, relationship-based marketing efforts, Knowitall.org was promoted to South Carolina educators and students, resulting in a dramatic 266 percent increase in site usage from the first half of FY 2001 to the second half.

- The State Department of Education formed a partnership with MCI WorldCom to deliver high-quality, standards-based commercial free Internet content for the K-12 classroom. More than 900 lesson plans are available in the areas of Economics, Geography, Humanities, Mathematics, Science and the Arts. All lessons are standards-based and South Carolina school districts receive training on this resource free of charge.

- This year the South Carolina State Library expanded the use of DISCUS – South Carolina's Virtual Library – to anyone in the state with Internet access. This expansion resulted in South Carolinians obtaining over 3.8 million full-text articles and other documents through DISCUS, a 10 percent increase over the previous year. The resources available include millions of articles from general magazines, professional periodicals, newspapers, encyclopedias, other reference publications, and government documents. DISCUS resources also include lesson plans, student activities, maps, photographs and other images, historic documents and links to carefully selected web sites.

Key Result (7): 100 percent of SC students will have access to school facilities that support the teaching and learning of the content standards (size, design, instructional support, and technology.)[7]

Action: Appropriate technology must be available in the schools.

Results:

- In order to facilitate the availability of computers in schools, the State Department of Education partnered with Manning Correctional Institution to upgrade computers donated from governments and businesses across the state. More than 400 computers were upgraded and provided free of charge to districts during this fiscal year.

- During FY 2001, 600 new Gateway computers were furnished to the districts in greatest need of technology for the classroom.

[7] Long Range Plan. South Carolina Education Oversight Committee. July, 2001. P.5

Strategic Issue : Teacher Quality

Key Result (3): 90 percent of teachers will report involvement in quality professional development which meets the national standards.[8]

Results:

- Over the last four years many South Carolina educators have participated in professional development opportunities with funding provided by the K-12 Technology Initiative. These include graduate-credit distance education courses, re-certification courses, workshops, and technical courses for teachers and school district technicians.

- In FY 2001, the K-12 School Technology Initiative provided $2 million directly to districts for technology professional development.

- The State Department of Education has created an electronic tracking system for technology professional development activities taking place across South Carolina. This reporting system enables monitoring and documentation of professional development opportunities. The system also enables the sharing of technology professional development best practices and innovations among the districts.

- In cooperation with USC Columbia, Columbia College and Converse College, graduate courses were offered on integrating technology into visual art, dance, theater and music. Each teacher received three hours of graduate credit, a new computer with peripheral devices designed for his or her area of teaching, as well as specialized software targeted to the area of study. 160 performing arts teachers were trained through this program.

- The K-12 School Technology Initiative was an essential player in EdTech 3000, the state's premier technology conference for educators, technicians and decision-makers. This conference offered over 110 concurrent presentations that showcased best practices of technology integration into the classroom, hands-on experience and practical workshops.

[8] Long Range Plan. South Carolina Education Oversight Committee. July, 2001. P.7

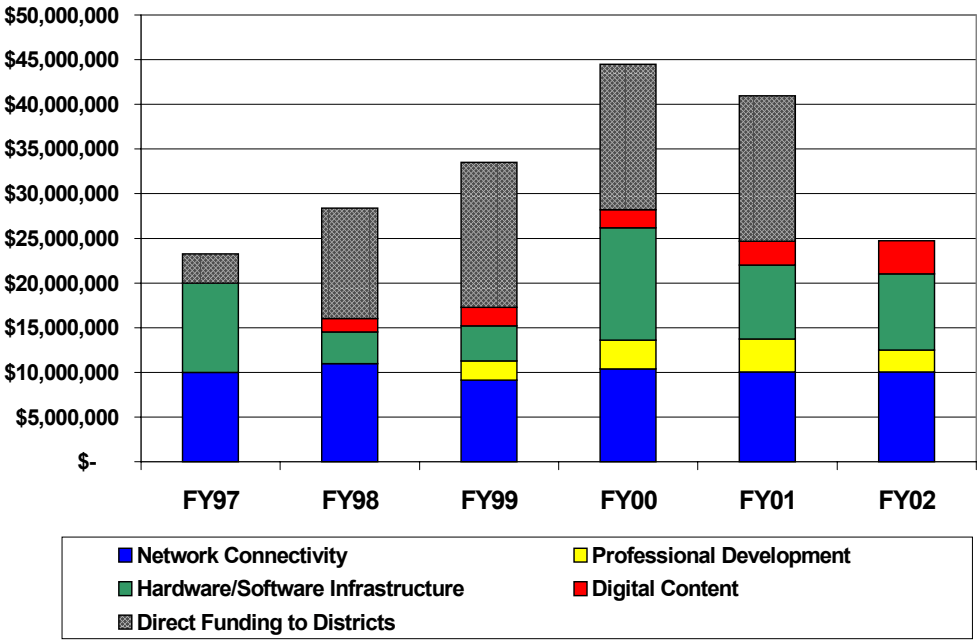
Challenges for Success

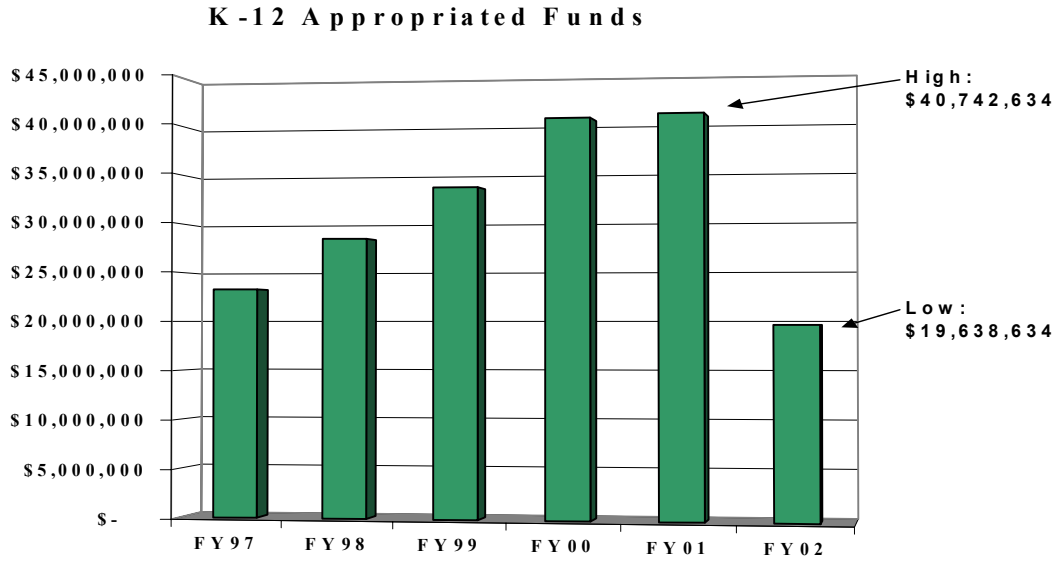
Through the K-12 Technology Initiative, state leaders have shown their commitment to providing the state's school children the tools and resources necessary to promote enhanced learning opportunities. In moving toward this goal, the K-12 School Technology Coordinating Committee has established three objectives for the distribution of funds. They are:

- Provide connectivity and hardware for learning;
- Educate teachers on the use of technology; and
- Provide technology tools that support the state's curriculum standards.

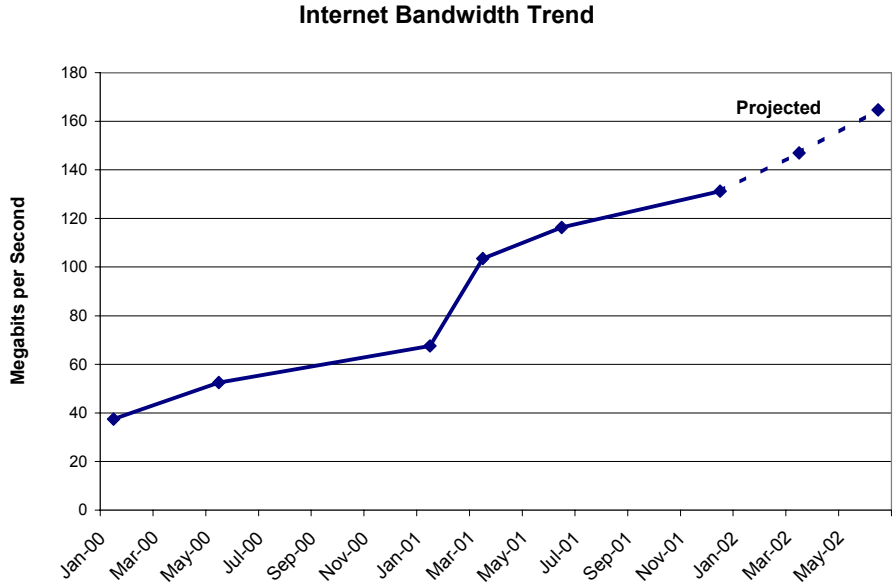
As illustrated below, the distribution of K-12 School Technology Funds have supported these goals over the last several years. Due to budget constraints, the appropriation of funds to the K-12 School Technology initiative did not include nonrecurring funds in FY2002, thus, reducing the amount of funds available by half for this fiscal year. Because of this the state was unable to pass technology funds on to the districts. The lack of "flow through" monies significantly impaired some districts in improving the use of technology in their schools.

Distribution of K12 Appropriated and ERATE Funds: FY97-FY02





As South Carolina teachers successfully integrate technology into the classroom and as more standards-based content becomes available, the need for bandwidth for connectivity will increase. As illustrated below, the need for Internet bandwidth has been steadily climbing over the past two years. Unfortunately, the state's current budget situation does not bode well for increased funding. As the state's financial resources are diminished, schools may be forced to scale back their use of broadband services, thus diminishing the gains that have been made.



Likewise, without funding schools may be unable to continue to upgrade their computer infrastructure to take advantage of the multi-media content that is being made available.

Conclusion

Although the K-12 School Technology Initiative was started in advance of the Education Oversight Committee's long range plan, the programs funded through the initiative complement and promote the EOC's strategies. Through the Technology Initiative, South Carolina has made major strides in providing the technology tools necessary to enhance the learning environment for all students. Through constancy of purpose and coordination of resources, the partners in the K-12 School Technology Initiative are committed to achieving the EOC's goal of making South Carolina one of the five fastest improving educational systems in the country.

Introduction

> *An integral part of school improvement and reform efforts in the 21st century, in the United States and abroad, will be student and teacher access to educational technology…* [9]

On July 20, 2001, the South Carolina Education Oversight Committee (EOC) accepted its long-range plan as a working draft. In this plan, the EOC identified nine areas for public action that were necessary to meet the state's goal of being in the top half of the states when ranked on student achievement in 2010. These areas are:

- The Governance and Structure of the System
- Sufficient Funding for All School Districts and Schools
- Efficient Use of Resources and Accountability
- Education for Economic Development
- Leadership and Coalition Building
- Teacher Quality
- Early Childhood Education and Development
- Community and Parental Support and Involvement
- Safe and Healthy Schools

The K-12 School Technology Partnership which oversees the K-12 School Technology Initiative identified Governance and Structure, Efficient Use of Resources and Accountability, and Teacher Quality as areas that will be impacted by the use of technology in our school systems. This report is organized around these three issues in order to illustrate the progress that has been made in our schools through the efforts of the Governor and General Assembly as part of the K-12 School Technology Initiative.

[9] e-Learning: Putting a World-Class Education at the Fingertips of All Children – The National Educational Technology Plan. U.S. Department of Education. P. 1.

Governance and Structure

> *Education technology is a valuable tool to achieve educational objectives. Particularly when combined with the other key factors that increase achievement, such as clear, measurable objectives, parental and community involvement, increased time spent on task, frequent feedback and teacher subject matter expertise, technology can help deliver significant positive results.*[10]

In its long range plan, the EOC addresses the governance and structure of the state's educational system in the roles and responsibilities of the districts' school boards and superintendents, the fiscal autonomy of districts, and the relationship of the Governor and Superintendent of Education. However, Key Results 9 and 10 under Governance and Structure advocate technology solutions for addressing teacher shortages and addressing data collection, management, analysis, and dissemination methodologies.

Key Result (9): SC Students shall have access to Internet and/or multi-media coursework for low incidence courses, alternative schedules, curricula enrichment and in response to teacher shortages and students shall participate in Internet-delivered assessments with repaid delivery of results.

Actions: In order to implement Internet and/or multi-media coursework, the Internet connectivity must be in place and the student must have access to a multi-media computer.

Results:

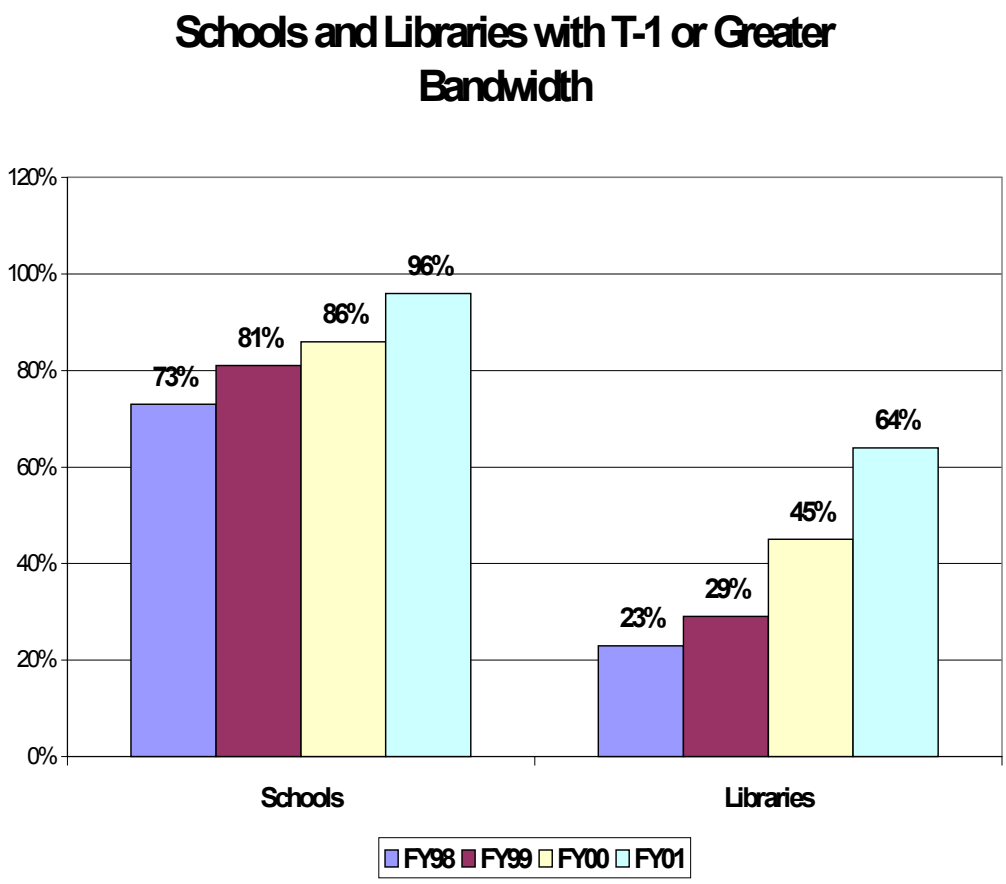
CONNECTIVITY

The objective of the Network Connectivity element of the K-12 School Technology Initiative is to connect schools and public libraries with Wide Area Networks to meet local needs and connect each district and main library to the SCINET (South Carolina's backbone network), which links them to state resources and provides connectivity to the Internet. The Budget and Control Board's Office of Information Resources (OIR), the State Library, the school districts and the county library systems worked with the 26 telephone companies to determine the best connectivity design for each entity. Perhaps more importantly, South Carolina compares favorably to the Unites States in the number of public classrooms connected to the Internet. This connectivity allows teachers to deliver digital content to their students, thus opening a whole new realm of teaching and research possibilities.

[10] Key Building Blocks for Student Achievement in the 21st Century: Assessment, Alignment, Accountability, Access, Analysis. The CEO Forum School Technology and Readiness Report. June 2001. P. 5.

Over the last several years, the state and local school districts have invested funds in computer hardware and other technologies for the classrooms. As a result of this increased investment, much of the connectivity work in the current year was devoted to upgrading low speed circuits delivering inadequate performance to a T-1 level that delivers much faster, more satisfactory performance. Presently, 96 percent of the schools and 64 percent of the library sites have a T-1 or greater connectivity. This means that 96 percent of the schools in South Carolina meet The CEO Forum standard of "high-tech" school for connectivity.

The quality of Internet access is critical. Broadband access will be the new standard. Slow, unreliable connections that cannot support interactivity or rich multimedia content will no longer be sufficient.… [I]t will become increasingly important to build and support network infrastructures-wired or wireless, desktop or handheld- that allow multiple devices to connect simultaneously to the Internet throughout every school building and community in the nation.[11]



[11] e-Learning: Putting a World-Class Education at the Fingertips of All Children – The National Educational Technology Plan. U.S. Department of Education. P. 2.

ETV has been especially helpful with … The JASON Project curriculum. South Carolina is one of only two states in the nation that currently are able to view the two week live teleconference. My students are able to watch science experiments in progress and then replicate them in the classroom for real time comparisons and inquiry learning. Through this broadcasting of the live teleconference my students have been able to travel to study the volcanoes and ecosystems in Hawaii, the rainforest in Belize, the underwater laboratory Aquarius off the coast of Florida and the International Space Station all from the confines of the classroom. -Robin Salonich, Sandhills Intermediate

ACCESS TO MULTI-MEDIA COMPUTERS

Many schools have more than 75 computers connected in classrooms to the state network and Internet. More than $31 million have been distributed to school districts to purchase needed hardware and software to effectively use the connectivity provided. All media centers and more than half the classrooms in the state are wired to use the technology infrastructure. Based on KPMG survey results, schools in South Carolina average a "student to computer" ratio of 5:1 which makes South Carolina a "high tech" state.

Actions: In order to ameliorate teacher shortages and to provide coursework for low incidence classes, distance learning facilities must be available.

Results: SCETV INSTRUCTIONAL TELEVISION AND DISTANCE EDUCATION LEARNING CENTERS. ITFS (Instructional Television Fixed Services) expansion has been a major goal of the K-12 Technology Initiative since its inception. Through continual funding, a total of 35 Distance Education Learning Centers (DELC) now provide ITFS service to all 86 school districts in the state. (See map on page 14.)

School districts are using the DELCs to provide four channels of closed circuit microwave broadcast into their schools. The DELCs are also equipped with a distance learning studio which provides the capability to produce specific direct instruction courses, staff development and other programming which meets local needs. Where financially and technically possible, several school districts have gone together to share a DELC.

The K-12 School Technology Fund has also allowed SCETV to complete its digital satellite service to all of the state's public schools. Through the use of these funds, each school in the state now has a satellite dish and a minimum of three digital receivers. The satellite system makes more channels available to classrooms and maximizes the outreach of programs like the Governor's School for Science and Mathematics and the Governor's School for the Arts and Humanities. Having additional receivers in each school has made it possible to transition from using the normal television channel for broadcast to using satellite channels. Doing this makes it possible to broadcast the Ready to Learn service into every home in South Carolina over the public channel to aid in preparing preschool children for first grade.

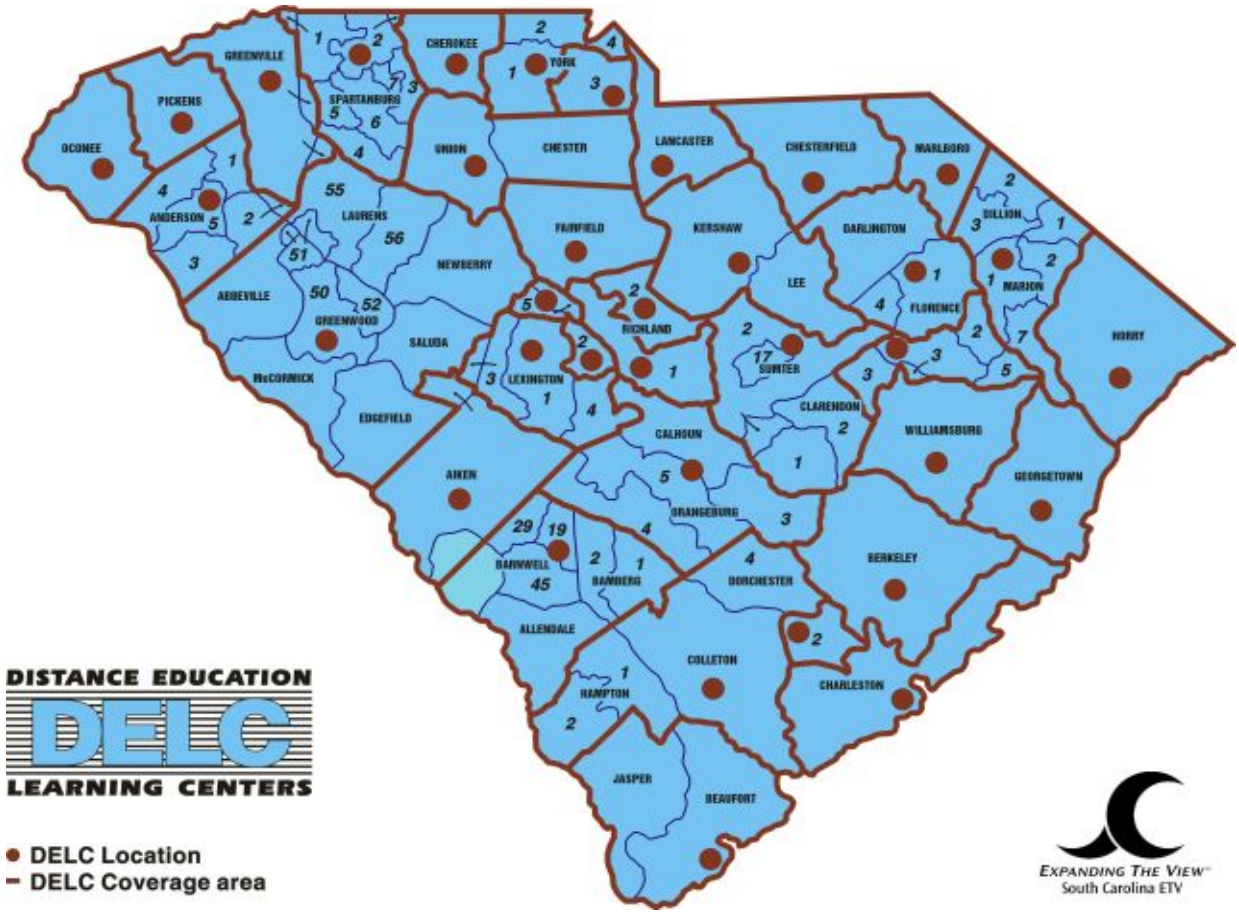
TWO WAY DISTANCE EDUCATION PROJECTS

Since 1996, the K-12 School Technology Initiative has funded and evaluated the use of two-way distance education as a method of delivering coursework to students who otherwise would not have access to various curriculum. The purpose of the project was to place hardware and connectivity in place to allow for two-way interactive learning. To date, 22 projects have been funded. 5,425 students have be instructed in the 247 courses that have been offered via two-way distance education

As the K-12 Partnership continues to support two-way interactive distance learning as part of the technology delivery system to improve education in SC, the educational opportunities in our state will increase. It is important that each district analyze its curricular and instructional needs while seeing how interactive distance learning can be integrated into the district's overall technology delivery system. Educators are changing the way South Carolina learns by creating electronic classrooms of the future.

DISTANCE EDUCATION PROFESSIONAL DEVELOPMENT

Faculty development and training on the use of distance education equipment and methodology is one of the most critical needs in ensuring that the state takes full advantage of this teaching methodology. To this end, the State Department of Education, SC Educational Television and the University of South Carolina partnered to develop and deliver a course on distance education processes and techniques. Over 40 teachers, administrators and technical staff completed the training. The course will be offered in the upstate of South Carolina during the Spring of 2002.



Key Result (10): SC will use electronic data submission, storage and analysis for efficiency and broad access.

Actions: In order to assess data on a statewide basis, a data warehouse and retrieval system must be developed.

Results:

NCS: STUDENT ACCOUNTABILITY SYSTEM

Steady progress continues in replacing the student information system in all South Carolina schools and district offices. By April 2002, a total of seventy-four school districts and special sites (Alternative Programs, Career Centers and Governor's Schools, etc.) will be installed across the state. This is a total of one thousand seventy separate installations of SASIxp (School Administrative Student Information, cross platform). The implementation process includes introductory seminars, end user training, site surveys, data conversion and school/district office setup. Technical support is provided by NCS and District Services in the Office of Technology in the State Department of Education (SDE) and supplemented by listservs setup by the SDE.

While the task of implementing a system such as SASIxp is a huge undertaking for school district personnel, it offers some huge benefits as well. Perry Bullard, Technology Director for Anderson school district 1 says, " SASI is a great improvement over OSIRIS." … Mr. Bullard said that state reporting is easier than the old method using diskette and modems. Data is more accessible in SASI than it was in OSIRIS and generally, SASIxp has more functionality.

Once the installation is complete, a school district has the ability to move data from each school to the district office nightly. For the first time, the district office has a composite district-wide database of all available student data. Work continues on the last component of the data transfer from the district office to the SDE. Currently a subset of the data located at the district office can be extracted and sent to the SDE for funding and accountability analysis. This fall (2001-2002) fifty-six percent of school districts are reporting their 45 day Membership and Attendance reports and Cumulative Class Reports using SASIxp via the State Network. In addition, administrators and teachers benefit from the tools included with SASIxp: CLASSxp is a tool that allows teachers to take daily or period attendance from a classroom workstation. InteGrade Pro is electronic grade book that teachers can use at home or at school to record grades and export their work into SASIxp.

Once a district has been converted to SASIxp, they will also receive installation of Tranquility, a Special Education system, and ABACUSxp, a curriculum and assessment system. Tranquility is typically installed three-to-six months after SASIxp. By April 2002, thirty-one school districts will have the new Special Education software. ABACUSxp is typically installed six-to-twelve months after the initial installation of SASIxp. Thirty districts will have been trained using a train-the-trainer model and will have received the ABACUSxp Model Curriculum & Assessment Database (MCAD) by April 2002. The MCAD data is correlated to the South Carolina Curriculum Standards.

"... All of our teachers love the grade program, especially since time they entered a grade it gives them an average for their students...The parents like this because it is very detailed and lets them know exactly what test the student might be missing." Ann Drose, Marion High School

"Regarding ClassXP, we have been using it for almost a year for teachers to input grades. This year we also began using IGPro. Teachers were a bit apprehensive about a new program at first, but seem to like it now." - Debbie Schrader, Rock Hill

SOUTH CAROLINA EDUCATION DATA WAREHOUSE

The South Carolina Education Data Warehouse project is being scaled back due to the budget cuts sustained in FY02. In spite of the reductions, much has been accomplished, and a solid foundation has been implemented and deployed. Following is a summary of the project's accomplishments, and the capabilities that will be made available upon final release of the data warehouse, anticipated December 21, 2001:

- A straightforward yet highly extendable data warehouse data base has been designed, implemented, loaded, and is available over the SDE network (intranet).
- The design, all load procedures, and general usage techniques have been fully documented on electronic media and in hard copy. The load procedures are semi-automated, and should be easily adaptable for additional years' data.
- Two separate years' data, 1999-2000 and 2000-2001, have been loaded and validated for Student "Enrollment" (Pre-Code), Staff and Certification (P.C.S.), PACT Test Score Results, and the School/District hierarchical organization (De-Code).
- A standard set of reports has been implemented and made available depending on two levels of user "security profile" -- "SDE User," for summary access only, or "Power User," for full detail and data base access. These reports address some of the more critical information needs in the school staffing and certification, student enrollment, and PACT Test performance areas of interest. Included is the ability to selectively "filter" report content.
- A few basic longitudinal (year-to-year comparative) reports have been added, but were limited by the shortened project timeline.
- A flexible query and analysis tool, BRIO, has been attached to the data warehouse, and all reports are generated by it. Report results may be produced in list, graph, and spreadsheet format, electronically or in hard copy.

Future enhancement, when funding can be made available, could include the following (not to be considered an exhaustive list):

- In$ite data for the loaded time frames. The relevant data warehouse tables have already been created, and an initial (untested) pass at load procedures coded.
- Additional test types and student or school-level scores.
- Additional student demographics, school schedules and calendars, staff assignment, and student and staff course (class) schedule information when available from SASIxp.
- Student attendance and discipline information when available from SASIxp.
- Report card results.

Efficient Use of Resources and Accountability

If you are measuring how well students are achieving curriculum objectives, you begin to force discussions within the schools and within the communities of how well are we doing, how well do we want to do, how well are we improving from year to year. Without that, those discussions are anecdotal. – Nancy Vaughn, Coordinator, Information Systems Department, Texas Education Agency.[12]

The Education Accountability Act of 1998 provides the foundation for the South Carolina Education Accountability System. One of the essential objectives measured by this system is student achievement in relation to the curriculum standards set by the State Department of Education. The Education Oversight Committee recognized the need for excellent content standards and the requirement for teachers to have the tools to teach the material to their student when the EOC addressed the strategic issue of Resources and Accountability.

Clearly, the EOC's Key Results (3) and (7) are reflective of one of the CEO Forum's key recommendations which states, "Schools should ensure technology is integrated across the curriculum and that standards, educational objectives, resource allocation and assessment are aligned." [13]

Key Result (3): 90 percent of teachers will report that equipment and materials are aligned with the content standards.

Actions: Content that is in alignment with the state's curriculum standards must be developed and digitized.

Results:

KNOWITALL.ORG

The growth and development of Knowitall.org, South Carolina Educational Television's K-12 Web portal, continued at an accelerated pace during FY 2001. The major efforts of the Knowitall development team were to increase the quantity of content available to South Carolina K-12 students, teachers, and parents and to deepen the ties of this content to South Carolina curriculum standards. The goal was to create

[12] Key Building Blocks for Student Achievement in the 21st Century: Assessment, Alignment, Accountability, Access, Analysis. The CEO Forum School Technology and Readiness Report. June 2001. P. 5.

[13] Ibid. p. 20.

an on-line educational resource of great richness and utility. New products were introduced and processes were put in place to ensure that content on Knowitall.org would indeed address curriculum standards, allowing easy integration into the classroom teaching environment. The Knowitall portal got a graphic and navigational makeover to improve clarity, enhance navigation, and allow for the seamless inclusion of new content.

On March 28, 2001, the Knowitall.org K-12 Web portal was officially launched with the participation of Governor Jim Hodges. The event took place at Hand Middle School in Columbia, and showcased not only the cutting edge technology embodied in Knowitall.org, but also the strong integration of digital technology into teaching and learning at Hand. This is part of the reason that Hand Middle School was honored as this year's Time Magazine School of the Year. At the Hand event, Gov. Hodges teamed with a Hand student as the two participated in an on-line scavenger hunt, designed to lead new users through all of the new content on Knowitall.org. This scavenger hunt was also available to teachers and students all across the state and was very useful as a way of introducing users to all Knowitall.org has to offer. Gov. Hodges was even able to take a sneak preview of the Let's Go! Virtual Tour of the S.C. State House and to navigate around an on-line version of his own office.

Martha Tinder, a teacher at Gaffney Middle School, shared this appraisal of the State House site: "Exciting! It's spring vacation, and I am browsing for sites to use with my ESL students, mainly from Mexico. The State House tour is beautiful. Please find sources related to influence of Hispanics in SC communities. More and more people from Mexico are moving into the Gaffney area."

CURRICULUM STANDARDS

In January of 2001, a Curriculum Standards Specialist was added to the Knowitall.org production team. Because of this, new Web content created for Knowitall.org is now being developed with specific ties to either South Carolina, or national curriculum standards, or both. During FY 2001, the Knowitall.org team began work on Scoot!, an on-line SC history "board game" tied directly to Grade 3 SC social studies curriculum standards. Scoot! was the first Web site on Knowitall.org to be designed specifically to address SC curriculum standards. Early in FY 2002, a second Curriculum Standards Specialist was due to be added to the Knowitall.org team, to further efforts at creating digital content tied to K-12 curriculum standards.

LET'S GO! SC STATE HOUSE

Let's Go! is a series of virtual field trips to notable South Carolina historic sites. Let's Go! allows students anywhere in the Palmetto State to experience a virtual visit to locations such as Brattonsville, the State House, or historic Charleston without incurring the expense of an actual field trip. The new virtual tour of the South Carolina State House premiered during FY 2001. In addition to enhancing the learning experience of users through more sophisticated implementation of QuickTime Virtual Reality technology, this new Let's Go! site was fully connected to SC social studies curriculum standards for Grades 4 through 12. Production on yet another Let's Go! visit, this one to Charleston's Old Exchange and Provost Dungeon, will likewise be tied to curriculum standards and will add to the appeal of this already-popular series.

HISTORY OF SOUTH CAROLINA IMAGE COLLECTION

Work on this massive and comprehensive set of over 960 historical images began in FY 2000 and was completed in FY 2001. This project is compelling in at least two ways. First, by bringing this valuable resource to the Web, it converted a costly slide-based image collection that was difficult to use into a fast, searchable, cross-indexed resource that can be easily used in the classroom or by the student at home. Unlike slides, the images in the History of South Carolina Image Collection can be downloaded and incorporated into student projects, making this a digital educational resource in the deepest sense. Additionally, this site was one of the very first in South Carolina state government to be created so as to allow maximum access to its content by users of assistive technology. The site proudly carries the "Bobby" seal from the Center for Applied Special Technology (www.cast.org) certifying that it meets important industry-accepted criteria for access by non-sighted, non-hearing, and motor-impaired users. The Image Collection was tested by Scott Brennan, Director of Technical Services, South Carolina School for the Blind, a non-sighted person who was able to rapidly and successfully navigate the entire site using a text-to-speech software product called Jaws. Scott expressed his great satisfaction at the depth of content available to him on the site, especially since he was a history major in college.

Even though SCoot! was primarily targeted at pre-middle school students, Peggy Harrison, Media Specialist at Brewer Middle School, shared how teachers in her school were using SCoot!:

"Our 8th grade social studies teachers use Scoot! With their classes as SC history is the core of their curriculum. The students really enjoyed reading the stories about the historical markers and other SC facts/symbols and answering the questions. The teachers appreciate the tests correlated to the standards."

SCoot!

SCoot! is an innovative on-line South Carolina history board game developed for third through fifth graders and tied to social studies curriculum standards for those grades. The game, which can be played by single students or in groups, at home or at school, ties to information on actual historic roadside markers located in each of South Carolina's 46 counties. Players are led on an itinerary across the whole state and must correctly answer quiz questions drawn from third grade curriculum and from the roadside markers themselves in order to achieve the highest scores. Players log in using their first name and a password so that their progress and scores can be recorded in a database. This allows players to play the game in segments, always returning to the point at which they quit previously with the score they had accumulated to that point.

DIGITAL STORYTELLER

The Digital Storyteller site, launched as part of Knowitall.org in June of 2001, is the result of a partnership among BellSouth, the South Carolina Department of Education, and South Carolina Educational Television. The Digital Storyteller project equips and encourages South Carolina high school students to create Web-based digital content around interviews with veterans of World War II and the Korean Conflict from their own communities. The project connects to curriculum standards at two points-by familiarizing students with primary-source historical research and by involving them in the creation of living history content written and produced by the students themselves. An additional benefit of the project is that it further promotes the integration of digital technology into the classroom. Throughout the academic year, teachers trained by

SCETV will lead their students in the creation of digital content that will then be posted on the Digital Storyteller Web site as a resource for all South Carolina students.

I have wandered around Web "educational sites" for several years with mixed emotions of potential worth to the targeted patron(s). And then NatureScene comes along with an interactive program to compliment its highly successful video series, which absolutely blows one away with its exhaustive content, which truly is a K-12 resource. Add to this an extremely intuitive manner of navigation making this site a joy to view…" - Boris Bauer, Media Specialist, Easley, SC.

NATURESCENE INTERACTIVE

FY 2001 coincided roughly with the fourth year of a five-year effort to bring eighty of the best episodes of the honored SCETV program NatureScene to the Web. The project aims to add interactivity, ties to national science curriculum standards, teacher and student activities, and a wealth of ancillary content to the streaming video of each NatureScene segment. Working in conjunction with the Midlands Improving Math and Science Hub (MIMS,) SCETV has continued to build this resource into an exciting, new resource. During FY 2002, a database element will be developed that will allow teachers to search through this immense resource by curriculum standard, finding only those episodes, or portions of episodes, that address the desired standard.

PROMOTION AND UTILIZATION

The Creative Services Department at SCETV, which is responsible for Knowitall.org, has continued to aggressively promote the portal and its ever-growing collection of standards-based digital content. Promotion is done through EdTech, through statewide subject area teacher conferences, through direct promotion to school media specialists, by direct mail, and on the radio and television airwaves of SCETV. Through these marketing efforts SCETV is "building relationships" with media specialists, DELC coordinators, regional technology center staff, school district public information officers, school curriculum specialists and public libraries statewide. During FY 2001, evidence emerged showing that teachers and students were responding to promotion efforts. Based on Web Trends reports, in the period from July 1, 2000 through December 31, 2000, total user sessions on Knowitall.org amounted to 17,033 sessions. A user session can range from use of the site by one individual up to its use by a computer lab of thirty students. In the second half of FY 2001, the period ranging from January 1, 2001, through June 30, 2001, user sessions on Knowitall.org totaled 45,391, for an increase of 266 percent over the previous six-month period.

MARCOPOLO

The State Department of Education formed partnerships with private industry, universities and other state agencies to offer technology resources to educators. One such resource is the MaroPolo Internet Content for Classroom, offered through the MCI WorldCom Foundation. The MCI WorldCom Foundation and leading educational organizations have teamed together to produce high-quality, standards-based, commercial-free Internet content for the K-12 classroom. MarcoPolo offers South Carolina educators more than 900 lesson plans in the areas of Economics, Geography, Humanities, Mathematics, Science and the Arts. All lessons are standards-based and have been reviewed by educational experts to ensure they feature high-

quality content that is appropriate for classroom use. South Carolina districts received MarcoPolo training free of charge.

DISCUS

"DISCUS has leveled the playing field for our schools statewide. It has given us access to resources, which are in direct support of our curriculum. Thanks!" instructional technology coordinator, Richland1

South Carolina's Virtual Library achieved several important goals during its third year of statewide service. New resources were added in direct response to user needs. All DISCUS resources became available to users from anywhere that they have Internet access -- 24 hours a day, seven days a week. South Carolinians obtained over 3.8 million full-text articles and other documents through DISCUS, a 10 percent increase over the previous year. Training and promotion materials and support were improved and expanded.

"I teach students to use DISCUS first. Students rarely use open web searching because of the web links from SIRS & Grolier. DISCUS is our primary research tool in high school for all curricular areas. It is great to have an online library of pre-selected, authoritative information." High school media specialist, Spartanburg 5

Administered by the South Carolina State Library, DISCUS uses K-12 School Technology funds to provide an electronic library of essential information and learning resources to all state residents through schools, colleges and public libraries. By year's end seventeen subscription Internet resources were available through DISCUS, providing desktop access to publications of high quality from reputable publishers. These resources contain millions of articles from general magazines, professional periodicals, newspapers, encyclopedias, other reference publications, and government documents. DISCUS resources also include lesson plans, student activities, maps, photographs and other images, historic documents and links to carefully selected web sites.

The State Library committed federal Library Services and Technology Act funds to add a large biographical resource and a full-text newspaper database to DISCUS in fall 2000. These were the top two content areas of need identified through user surveys. DISCUS further expanded its resources in January through re-negotiation of its license with one vendor and a modest cost increase with another. DISCUS was able to add two periodical databases, a service that guides students to appropriate web sites of high quality, and an expanded health and medical resource.

Home access to all DISCUS resources became a reality in January. The State Library negotiated a provision for statewide home access via username/password with all three DISCUS database providers. The State Library continued to provide public libraries with federal grants and consulting support to implement permanent technology-based home access systems to DISCUS and other Internet subscription sources for their users. Consulting support was also provided to colleges for such endeavors.

DISCUS continued its commitment to train library media specialists and other key technology and curriculum personnel in effective use and integration of DISCUS resources. Over 1700 attended hands-on professional development sessions conducted by database vendor trainers and State Library staff. In addition a wealth of training and promotion materials were prepared by the State Library and hosted on an expanded DISCUS web site for cost efficient delivery to librarians, teachers and Regional Technology Specialists, who in turn train and assist their students, teachers and other

"As a graduate student in the doctoral program at USC, I access DISCUS almost daily. It is so convenient to find articles from the comfort of my home, without having to make repeated trips to the library - DISCUS has saved me hours and hours of time, not to mention money." – technology coordinator, Florence 3.

users. DISCUS promotional items and activities were funded through federal Library Services and Technology Act monies, including production of a public service announcement, expenses for education conference exhibits and presentations, and promotional pencils, brochures and other promotion costs.

Challenges to DISCUS access were encountered during fall 2000 when InfoAve, the state's Internet service provider, suffered traffic congestion problems. Measures taken by InfoAve to rectify this problem disrupted access to DISCUS resources for many schools, public libraries and colleges over a two-month period. The State Library worked with Office of Information Resources staff and directly with InfoAve to resolve these problems, prevent their recurrence, and develop more effective communications for the future.

Looking ahead to FY2002, DISCUS made preparations at the end of the school year for changes that will streamline K-12 access to DISCUS resources and enhance the ability to promote DISCUS to the school community. Continued emphasis will be placed on cost-effective delivery of training and support materials and integrating the use of DISCUS resources into the curriculum. The State Library will continue to work closely with its DISCUS advisory bodies and cooperating institutions to plan additional improvements, including planning for acquiring additional resources in areas of identified need.

"There is no way that my students and faculty would have access to this great variety of resources without the availability of DISCUS! It is a funding miracle for small SC schools that we cannot afford to lose… And DISCUS helps students stay focussed when doing research. " high school media specialist, Newberry

Teacher Quality

Well-trained teachers are the key to creating dynamic digital learning environments. Students with more highly skilled and talented teachers score higher, every time…Schools and districts must continue to make the commitment to professional development by providing the necessary support, resources and time for teachers to learn both how to use technology , and more importantly, how to integrate it into the curriculum to achieve educational objectives.[14]

Improving teacher quality is a key focus area for the Department of Education. According to *Quality Counts 2002*, a survey published by the respected national magazine Education Week, the Department's efforts have had a positive effect. The national report card gave South Carolina's efforts to improve teacher quality the third-highest overall mark in the nation. A component of this improvement process has been administered by the K-12 School Technology Initiative and is in concert with the EOC's emphasis on teacher quality.

Key Result (3): 90 percent of teachers will report involvement in quality professional development which meets the national standards.

Results:

PROFESSIONAL DEVELOPMENT

South Carolina's collaborative K-12 School Technology Initiative has helped the state to be recognized as a national leader in technology with one hundred percent of South Carolina schools being wired to the Internet. South Carolina is also a leader in setting expectations for teacher use of technology through its Teacher Technology Proficiency Proviso whose purpose is to ensure that effective integration of technology is taking place in classrooms across South Carolina and that technology funding is utilized most productively. Each district must document teacher competency in the use of technology. To accomplish this requirement, each district is responsible for adopting teacher technology standards that are aligned with the International Society for Technology in Education Standards, and developing a Teacher Professional Development Plan that addresses how they will prepare teachers in meeting these standards. The K-12 Partnership provides opportunities for teachers to become proficient in technology by dispersing funds for technology professional development. These funds allow teachers to participate in technology conferences, workshops, graduate and recertification courses.

[14] Key buidling Blocks for Student Achievement in the 21st Century: Assessment Alignment Accountability Access Analysis. The CEO Forum School Technology and Readiness Report. June 2001. Pl. 24

The K-12 Partnership provided a total of $2,000,000 directly to districts for technology professional development in FY 2000-01. These funds enabled districts to pay instructor stipends, workshop fees, technology conference registration costs and to offer graduate and recertification courses. Technical course registration fees for building-level technical support personnel were also funded. These monies have enabled South Carolina to provide our schools and classrooms with telecommunications access and technology resources.

"Florence County School District Three - with its technology professional development funds Florence County School District Three provided two graduate level courses for teachers. These courses addressed the technology standards that were a part of the curriculum standards for ELA, math, and science, particularly in grades 5 and 8."

South Carolina's colleges and universities are valuable partners in providing professional development resources for educators. The State Department of Education has partnered with the University of South Carolina to link MarcoPolo lessons directly to the South Carolina State Standards. In addition, a partnership between SCETV and the State Department of Education supported a statewide Teacher Training Institute to train teachers on the use of technology in math and science.

TECHNOLOGY PROFESSIONAL DEVELOPMENT TRACKING SYSTEM

The State Department of Education has created an electronic tracking system for professional development activities taking place across South Carolina. Districts are required to report activities on the Professional Development Tracking System. This just-in-time reporting enables monitoring and documentation of professional development opportunities. The system also enables the sharing of technology professional development best practices and innovations among districts.

> "Technology professional development funds have allowed all school districts, large and small, to develop and maintain proficient technology professionals working public education. District technology staffs are able to receive the training necessary to setup and maintain the information technology needed to properly educate our children. In many rural districts, the technology professional development funds provided by the SC State Department of Education are the only means of acquiring and maintaining qualified technology professionals.
>
> As a technology professional that has worked in several school districts in South Carolina, I would like to express my gratitude for the SC State Department of Education's willingness to help school districts by providing funds for technology professional development. It has been a great tool in providing quality technology resources that will assist in education of the children of South Carolina." LeRoy Butler, Technology Director, Calhoun County

"Through Technology Training, Dillon School District One was able to train two teachers and a media specialist to be backup network administrators. They currently assist in maintaining our Novell network by adding users, assisting with new workstation setup, and the administration of our proxy/content filtering server. Most of their knowledge came from classes provided through state funds." Perry Ford, Technology Coordinator, Dillon School District One"

STATEWIDE TECHNOLOGY CONFERENCE

South Carolina EdTech 2000, the state's premier technology conference for educators, technicians, and decision-makers was held on September 26-28, 2000, at the North Charleston Convention Center in North Charleston, South Carolina. Attended by over 1000 persons along with 140 vendors, EdTech is the largest conference dedicated to educational technology in the state and is a major professional development opportunity for educators and technology professionals to learn about the latest in computing technology. The Office of Information Resources, South Carolina ETV, the University of South Carolina College of Library and Information Science, the State Department of Education, and BellSouth were among the 12 key state agencies, private businesses, and higher education sponsors or partners for the conference.

EdTech 2000 offered over 110 concurrent presentations that showcased best practices of technology integration into the classroom, hands-on experience, and practical workshops. A special section of the exhibit hall was dedicated to various state agencies that serve as resources for K12 schools in South Carolina.

EdTech 2001 was held in Myrtle Beach on October 17-19, 2001. Again, this year EdTech 2001 was be merged with the annual higher education technology and distance education conference sponsored by Alliance 2020 and the Technical College System. In light of recent funding restrictions and travel concerns, attendance was expected to be over 1200 educators and staff with 160 vendors. K-12 attendance was greatly enhanced by the encouragement of school districts to use funding for technology professional development provided through the K12 partnership for EdTech registration fees for their personnel. EdTech 2002 is scheduled for October 7-9, 2002.

TECHNICAL PROFESSIONAL DEVELOPMENT COURSES

Funding was also provided for technical course registration fees for district and school level technical support personnel. Statewide contracts were negotiated for $450,000 worth of training with two technical training providers offering both instructor-led and self-paced web-based courses. Technical coursework was provided for district and school personnel to support their district and/or schools' network. Seventy-nine districts and four special school districts took advantage of this professional development opportunity. Over 350 district personnel were trained in the classroom. Thirty-nine district personnel took advantage of the web-based training, seventy-five different courses were taken and 40 kits (manuals and CDs) were purchased.

The courses most requested were listed below:

Course	Number of Attendees
Novell Netware 5.1 Administration	***100***
Novell Workstation Management	***38***

Novell Netware 5.1 Advanced Administration	*29*
Novell Networking Technologies	*26*
Supporting Microsoft Windows 2000	*24*
GroupWise 5.0 Administration	*23*
ZEN Works for Desktops	*23*

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION FY 1996/97

Appropriation - $20,000,000

I.	$10,000,000	**Network Connectivity, Internet Access, Staff Development - Library/Media Software** (EIA Funds)
II.	$ 3,500,000	**ITFS/Tape & Delay Center Expansion** (7) [Renamed Distance Education Learning Center - DELC] (Instructional TV Fixed System) (Capital Reserve Funds)
III.	$ 3,500,000	**Satellite Dishes and Receivers -** Complete to all K-12 (Capital Reserve Funds)
IV.	$ 3,000,000	**Development of Local Video Distribution Systems -** Selected Pilot School Districts (Capital Reserve Funds)
	$20,000,000	Total - New Dollars for Technology - B&C Board
	$ 3,250,000	School Allocations (Continuing EIA Appropriation)
	$23,250,000	**TOTAL FOR TECHNOLOGY**

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION FY 1997/98

APPROPRIATION

Appropriated-

$25,116,516	As Appropriated to H63, 19.X.K Other State Agencies and Entities (F07**)**
$ 3,250,000	As Appropriated to H63, 19.X.C Aid to Subdivisions - EIA Technology
$28,366,516	**Total Appropriation**

ALLOCATION

I.	**$11,000,000**	**Continuation of Network Connectivity,** to SCINET & Internet for 1411 Schools & County Libraries, & Development & Training
II.	**$ 3,500,000**	**Complete the Remaining Tape & Delay Centers** (Renamed Distance Education Learning Center - DELC)
III.	**$ 1,500,000**	**Digitization** of SC ETV Video Resources
IV.	**$12,366,516**	**Total Available for Distribution to Schools:**
	$9,116,516	Purchase Personal Computers, File Servers, Software, Routers, and Related Training and Materials for School and District Personnel
	$3,250,000	EIA Technology Funds - Appropriated to SDE
	$28,366,516	**TOTAL FOR TECHNOLOGY**

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION FY 1998/99 – Page 1

APPROPRIATION

$25,116,516	As Appropriated to H63, 19.X.K Other State Agencies and Entities (F07)
$ 2,600,000	As Appropriated to H63, 19.X.C Aid to Subdivisions - EIA Technology
$ 650,000	From Other Funds Appropriated to SDE
$28,366,516	**Total Appropriation**

ALLOCATION

I.	**$7,892,516**	Continuation of Network Connectivity, to SCINET & Internet for 1411 Schools & County Libraries,
II.	**$2,169,715**	Professional Development and Training, and Computer Upgrade Project.
III.	**$ 554,285**	Digitization of SC ETV Video Resources and National Teacher Training Institute
IV.	**$1,5000,000**	School Library Access to Subscription Services(DISCUS).
V.	**$16,250,000**	Total Available for Distribution to Schools:
	$13,000,000	Purchase Personal Computers, File Servers, Software, Routers, and Related Training and Materials for School and District Personnel
	$3,250,000	EIA Technology Funds - Appropriated to SDE
	$28,366,516	**TOTAL**

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION FY 1998/99 – Page 2

CAPITAL RESERVE FUND APPROPRIATIONS

$5,150,000	As Appropriated From Capital Reserve Funds Budget and Control Board – School Technology
$5,150,000	**Total Appropriation**

CAPITAL RESERVE FUND ALLOCATION

I.	$1,220,000	Cable/Fiber Installation, Two Way Interactive Video and Assistance to Schools Needing Additional Support.
II.	$3,500,000	Complete Remaining Tape and Delay Centers – DELCs
III.	$ 430,000	Computer Upgrade Project
$5,150,000		**Total Allocation**

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION FY1999/2000

APPROPRIATION

$20,638,634	EIA Appropriations As Appropriated to H63, 19.X.K Other State Agencies and Entities (F07)
$16,500,000	Surplus (non-recurring funds)
$ 2,600,000	As Appropriated to H63, 19.X.C Aid to Subdivisions - EIA Technology
$ 650,000	Proviso 1A.56
$40,388,634	**Appropriation**

ALLOCATION

I.	$3,806,025	**Continuation of Network Connectivity**, to SCINET & Internet for 1411 Schools & County Libraries. (Total allocation for network connectivity is $10.5 million. $4,782,519 from ERATE funds received; $1,911,456 from anticipated ERATE refunds; $3,806,025 from appropriated funds.)
II.	$5,863,269	**NCS: Student Accountability System:** Includes funding for statewide software license, training, installation, project management and state required code.
III.	$ 350,000	**Training for Student Accountability System:** Contract with Midlands Tech to provide initial training for schools on the student accountability system.

IV.	$2,020,000	**Professional Development** Technical Courses: $ 400,000 District Flow Through: $1,620,000
V.	$ 134,000	**South Carolina Connects:** Graduate Credit Course for teachers at RTC.
VI.	$ 100,000	**Regional Technology Centers** Lab Assistants: $ 75,000 Software: $ 25,000
VII.	$ 60,235	**ETV/ITV Teacher Institutes:** Statewide workshops for teachers featuring ETV/ITV resource use. Partnership between SDE/ETV and Math-Science Hubs.
VIII.	$ 400,000	**Network Academies:** Expand Network Academies project to 20 high schools
IX.	$ 117,000	**Technologies for the Arts** USC Visual Arts: $ 78,000 Columbia College: $ 39,000
X.	$ 950,000	**Computer Upgrade Projects** Teachers Build CPUs: $ 850,000 Dept. of Corrections: $ 100,000
XI.	$ 200,000	**Data Warehouse:** Continue development of a data warehouse for public schools
XII.	$ 412,920	**Teacher Certification System:** Update teacher certification system to provide improved response and meet accountability requirements
XIII.	$ 3,500,000	**Two-way Video Projects: Evaluation and Expansion:** Pursuant to Proviso
XIV.	$ 1,500,000	**DISCUS:** South Carolina's virtual library
XV.	$ 2,546,729	**Elementary ITFS:** Funds to begin expansion of ITFS system into all elementary schools. (Currently 75 elementary schools have this service.)

XVI.	$ 500,000	**Digitization Project:** Continuation of the cataloging and indexing of additional programming from the ETV vault.
XVII.	$ 48,856	**Learning Link Expansion:** Provides internet access and training for teachers from home.
XVIII.	$ 1,579,600	**ITFS Network Services:** Provides for maintenance of receivers, towers and antennas. Replace equipment in the original 21 DELCs
XIX.	$16,300,000	**Total Available for Distribution to Schools**: Provide computers, wiring, software, telcom equipment, Teacher e-mail.
$40,388,634		**TOTAL**

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION
FY 2000-2001

FY01 APPROPRIATIONS

	$19,638,634	H4775 Recurring Funds
	$16,500,000	H3649 Supplemental
Appropriations		
	$ 1,354,000	H4776 Capital Reserve Fund
	$ 3,250,000	H4775 EIA funds
Total	**$40,742,634**	**Appropriations**

FY01 Allocation

I. $10,034,845 — **Continuation of Network Connectivity**, to SCINET & Internet for 1411 Schools & County Libraries. (Total allocation for network connectivity is $12 million: $1,965,155 from anticipated Phase III ERATE refunds; $10,034,845 from appropriated funds.)

II. $3,173,716 — **NCS: Student Accountability System:** Includes funding for statewide software license, training, installation, project management and state required code. (This represents the new money needed. Carryforward funds are available from FY00 to maintain a budget of $5,487,289)

III. $ 190,000 — **Training for Student Accountability System:** Contract with Midlands Tech to provide initial training for schools on the student accountability system and for professional development on SASI and ABACUS

SASI/ABACUS	$ 90,000
Midlands Tech	$ 100,000

IV.	$2,450,000	**Professional Development** Technical Courses: $ 450,000 District Flow Through: $2,000,000
V.	$ 0	**South Carolina Connects:** Graduate Credit Course for teachers at RTC. (This item will continue with carry-forward funds.)
VI.	$ 140,000	**Regional Technology Centers** Lab Assistants: $ 100,000 Software: $ 40,000
VII.	$ 66,258	**ETV/ITV Teacher Institutes:** Statewide workshops for teachers featuring ETV/ITV resource use. Partnership between DOE/ETV and Math-Science Hubs.
VIII.	$ 400,000	**Network Academies:** Expand Network Academies project to 20 high schools. ($200,000 will be in Category 2 funding.)
IX.	$ 351,715	**Technologies for Specialty Programs**
X.	$ 200,000	**Computer Upgrade Projects** Rebuild Computers: $ 200,000
XI.	$ 500,000	**Data Warehouse:** Continue development of a data warehouse for public schools. (In addition, carryforward funds of $200,000 will be available for this project.)
XII.	$ 135,500	**Teacher Certification System:** Update teacher certification system to provide improved response and meet accountability requirements
XIII.	$ 600,000	**Two-way Video Projects: Evaluation and Expansion:** Pursuant to Proviso ($2.9 million in Category 2 funding.)
XIV.	$ 1,500,000	**DISCUS:** South Carolina's virtual library

XV.	$ 2,500,000	**Elementary ITFS:** Funds to begin expansion of ITFS system into all elementary schools. (Currently 75 elementary schools have this service.)
XVI.	$ 1,000,000	**Digitization Project:** Continuation of the cataloging and indexing of additional programming from the vault for the archiving projects. Develop online applications. Move instructional component to the Internet.
XVII.	$ 100,000	**Learning Link Expansion:** Provides internet access and training for teachers. Add help component for teachers with regard to digitization.
XVIII.	$ 1,100,600	**ITFS Network Services:** Provides for maintenance of receivers, towers and antennas. Replace equipment in the original 21 DELCs
XIX.	$16,300,000	**Total for Distribution to Schools**: Provide computers, wiring, software, telcom equipment, Teacher e-mail.
	$40,742,634	**TOTAL**

K-12 School Technology Funding

TECHNOLOGY FOR PUBLIC EDUCATION FY1999/2000

E-Rate Funds

Background: Funds are currently being received by the Office of Information Resources from the Schools and Libraries Division of the FCC. These funds represent reimbursement for discounts for eligible telecommunications services used in implementing the K-12 School Technology Network from January 1, 1998 – June 30, 2001.

Strategy for use of E-Rate funds: Actual cash refunds realized in Phase I and Phase II of E-Rate reimbursement process will be used for the K-12 network. The total cost of providing network connectivity to the schools and libraries in FY00 is $10.5 million. The remaining cost for connectivity will be funded through state appropriations. ($4,782,519-ERATE funds received; $1,911,456-Phase II ERATE refunds; $3,806,025-appropriated funds.)

Phase I:	$4,782,519	Cash on Hand at 7/1/99
Phase I Allocation	$4,782,519	Continuation of OIR Operations and Network Connectivity, to SCINET & Internet for 1411 Schools & County Libraries
Phase II	$1,911,456	Cash on hand at 9/1/99
Phase II Allocation	$1,911,456	Continuation of OIR Operations and Network Connectivity, to SCINET & Internet for 1411 Schools & County Libraries
Total Refunds and Discounts:		**$6,694,065**
Total Allocations FY00:		**$6,694,065**
Balance		**0**

Section 1

Index