This document contains five issues of "NewsWire," a newsletter created for the SouthEast and Islands Regional Technology in Education Consortium (SEIR-TEC). Topics addressed in these issues include: leadership and educational technology; technology program development; resources for teaching and learning with technology; U.S. Department of Education funding for SEIR-TEC; a web-based collection of projects that promote collaborative constructivist learning; technology planning materials; research on the impact of technology on teaching and learning; SEIR-TEC partners; Gates Foundation challenge grants for leadership development; seven exemplary and promising educational technology programs; technology standards in the South; virtual courses; online staff development; adventures of the SEIR-TEC traveling mascot bear; interview about the Florida Virtual School; an online learning institute; online learning opportunities for adults; educational Web portals; EvaluTech software evaluation database; building a statewide virtual classroom; online learning resources; collaborative Web projects; and handheld technologies in schools. (AEF)
NewsWire
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By: SEIR-TEC at SERVE Inc.
Leadership

Educational Technology: Are School Administrators Ready for It?

(Atlanta: Southern Regional Education Board, 1999) Executive Summary

School administrators have to deal with many issues, and often the school’s technological needs are overlooked. What should administrators and principals know about technology and its practical uses in the school and classroom? Should they be trained in the use of technology during their college years? This report addresses these and other issues.

Three states in the SEIR•TEC region have taken the bold and timely step of addressing the need for school and district leaders to demonstrate leadership in technology decisions and actions.

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Dear Reader:

Over the past four years, SEIR•TEC has been working intensively with fourteen schools across the Southeast and Islands. This work has been a rich opportunity to look at the ways technology is or isn't used in schools and to observe some of the factors that affect teachers' and students' use of technology in classrooms. Planning, professional development, technical support, infrastructure, and evaluation are all important, but our experience tells us that the most important factor is leadership. Schools and districts that have leaders who support and promote a vision for the ways technology can enhance teaching and learning are the schools and districts where technology is making a difference in student performance.

So what is it that effective leaders for technology do? First, they have a vision of what is possible through the use of technology, and they are able to work with others to achieve the vision. Without this vision, and the translation of the vision into action, lasting school improvement is almost impossible.

Equally important, effective leaders lead by example. Think of the powerful messages that principals and superintendents send when they use technology fluently, or when they participate actively in professional development opportunities with their teachers and staff.

In addition to modeling the use of technology, effective leaders understand and promote best practices for teaching with technology. They know what good teaching with technology looks like, and they support teachers as they learn and try out new skills. Support means securing the resources for professional development, finding time for teachers to experiment with new teaching strategies (and making it okay to fail sometimes), and ensuring that technology is readily available when teachers need it. Supportive leaders also highlight the efforts of teachers who are using technology effectively. We know a couple of principals who give first dibs on new equipment to teachers who frequently use technology rather than placing it in a classroom where it might not be used. Others find funds for their technology—using teachers to share best practices at state or national technology conferences.

This is not to suggest that leadership for technology has to come from the central office or the principal's office. School technology committees play an important role in making decisions that reflect the needs of the total school community. Administrators can help this happen by showing both interest and trust in decisions the group makes. We have found that the most effective committees are those that are representative of the total faculty and staff and are selected by a method other than being appointed by the principal.

We have also seen many schools where leadership comes from groups of classroom teachers. Sometimes, for example, teachers get together to conduct research on promising practices for technology and then work together in adopting the strategies in their own school. In other cases, teachers of the same grade level or subject area study the state curriculum and then work together on strategies for using technology in their lessons to enhance student performance.

In schools and districts where technology is an integral and substantial element of teaching and learning, leadership is evident at the central office, in the principal's office, and in classrooms. We believe that SEIR•TEC's role is to provide information that helps leaders as they move their technology programs forward—thus, this special issue of NewsWire. We hope you find it useful.

For more information about the factors that affect the use of technology in schools, look on the SEIR•TEC web site <www.seirtec.org> for our publication Factors Influencing the Effective Use of Technology for Teaching and Learning: Lessons Learned from the SEIR•TEC Intensive Site Schools.

Sincerely,

Elizabeth Byrom, Ed.D.
SEIR•TEC Director

Visit our Web site at http://www.seirtec.org/seir-tec
Each state has approached the task in a different way. One is establishing a new facet of an existing program in technology leadership, one is providing a 10-day residential program devoted exclusively to leadership issues relating to instructional technology, and one is establishing technology standards with associated training for administrators.

The destination for each approach is the same: for the state to have school and district leaders who are leaders in technology for educational purposes. As the following descriptions of these programs illustrate, whichever road is taken to building leadership in technology each state needs to begin this journey now.

**Kentucky**

**Establishing Standards**

Kentucky educational technology leaders currently are establishing leadership and administrator standards. Leadership for technology decision making and support is not a new idea in the Commonwealth of Kentucky. For several years educators in Kentucky have had the opportunity to participate in the Kentucky Instructional Technology Leadership Program (ITLP). This program is designed to prepare educators to provide leadership, assistance, and support in the implementation of the Kentucky Educational Technology System (KETS).

The ITLP mission is to identify and train instructional technology leaders in every school district to support the curriculum and enhance student learning through the use of technology. There are three program goals:

1. Recruit and increase the number of ITLs (instructional technology leaders) to impact the instructional program.
2. Communicate and demonstrate learning through technology to one or more persons with the expressed purpose of increasing awareness of how instructional technology can impact student achievement.
3. Provide professional development in a variety of formats on ways to integrate technology as a tool through the curriculum.

Participants in the ITLP represent the entire education community. They are principals and assistant principals, curriculum coordinators, library media specialists, STLP (Student Technology Leadership Program) coordinators, elementary teachers, middle school teachers, high school teachers, preservice teachers, school and district technology coordinators, and representatives from several other categories. The vast majority are classroom teachers who give their time to help others within their teaching day. Most do not have release time for ITLP activities. Even so, through their work they exemplify leadership in technology for teaching and learning.

A variety of resources are available to the ITLs on the program website at www.kde.state.ky.us/oet/customer/itl. One resource of particular note is the ITL University, an on-line delivery model that provides professional development resources for ITLs, teachers, and administrators. The on-line activities include links to resources and workshops. Michael Dailey, coordinator of ITLP who is known as "Pop ITLP," finds that one of the most rewarding aspects of the program is the development through the website activities of an electronic community of teachers who continually connect to report, share, request collaboration, and interact with fellow ITLs. These instructional technology leaders are building technology leadership capacity within their schools and districts by working one-on-one with individuals and small groups.

The ITLP is not the only leadership initiative in Kentucky. In the past two years, the Kentucky Department of Education (KDE) has been actively formalizing teacher technology standards as part of its Standard IX-Demonstrates Implementation of Technology. (See www.kde.state.ky.us/otec/epsb/standards web page.) Now that those standards are approved,
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the Kentucky Department of Education has initiated a new project to determine how best to support teachers and administrators to fulfill the new standards. A part of this project is a focus on Leadership and Administrative Standards. Specifically, the goal is to identify how KDE leadership and school administrators can maximize their knowledge and use of technology as a tool for communication, research, and time management.

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In April 1999, the KDE staff outlined a five-step process and schedule:

1. Form the advisory committee (composed of administrators, KDE leadership, business and community leaders, teachers, parents, and others) and gather research data from across the nation by October 31, 1999.

2. Write the first draft and present to full advisory committee and other professional organizations for consensus by January 30, 2000.

3. Present the project at the Kentucky Teaching and Learning Conference on March 2–4, 2000, for additional input from teachers, district leaders, and others.

4. Write the final draft seeking final approval by May 15, 2000.

5. Plan professional development and leadership credit opportunities for KDE leadership and school administrators to learn and understand the components of the final adopted standard.

As this effort was beginning, KDE was invited to participate in a national initiative to write technology standards for school and district administrators. The goal of this national effort—to improve the capability of administrators to provide leadership for the effective uses of technology in schools—complements the KDE project goal. The first activity for the national effort is to create standards for preK–12 school administrators pertaining to the use of information technology in schools. Thus the leadership in KDE’s Office of Education Technology/Division of Customer Support Services modified the state project schedule to benefit from the research and decisions of the national effort. The national time line is

1. January 2000—Establish Steering and Drafting Committee

2. January–February 2000—Develop resource documents for the Drafting Committee

3. February 2000—Obtain consultant report on process

4. February–April 2000—Obtain data from field

5. April 2000—First meeting of Drafting Committee

6. June 2000—Second meeting of Drafting Committee

7. August–September 2000—Audit by national certification for standards

8. October 2000—Final meeting of Drafting Committee


As KDE leaders participate in the national project, they are conducting a parallel effort that is a modified version of their original plans. They have their own drafting committee, which will review the national committee’s recommendations. A state committee consisting of school and district leadership, district technology coordinators, KDE leadership, classroom teachers, and state-level representatives of each of the national leadership associations, higher education, and professional associations will begin defining technology standards for Kentucky leadership. These standards will enable the leadership to lead the state’s initiative in education technology and improved
student performance on state and national assessments. The ultimate aim is to implement the school and district administrator standards and KDE leadership technology standards for Kentucky following the completion of the national effort.

Lydia Wells Sledge, director of the Division of Customer Support Services, states that the involvement of Kentucky in the national effort will benefit both Kentucky and the SEIR•TEC region. With only two state departments involved in the national effort, both SEIR•TEC members, she believes that the region is definitely in the forefront in setting technology leadership standards.

For further information, visit the Kentucky website at www.kde.state.ky.us/oet/customer/Standards/adminstandards.asp

Information provided by Lydia Wells Sledge, Director of Division of Customer Support Services

Michael D. Dailey

North Carolina

Participating in a Residential Leadership Program

Beginning in 1984, public school administrators in North Carolina have had the opportunity to participate in a residential leadership program, the Principals' Executive Program (PEP). The PEP mission is to provide high-quality professional development for school leaders. Operating under the auspices of the University of North Carolina General Administration, PEP offers a variety of programs addressing the needs of school principals, school assistant principals, central office staff, and district superintendents. In 1997, the North Carolina General Assembly appropriated funds for PEP to offer technology training to program participants. Ongoing technology training and technology leadership development sessions became part of the regular PEP program. Specific professional development events on using instructional technology to improve teaching and learning were also developed. As a result of these offerings, Dr. Sheila Cory, director of Technology Services for PEP, recognized a very clear need for a program on technology leadership for administrators. She realized that the integration of technology into the existing PEP program was not adequate to help the PEP participants understand how to provide technology leadership in their schools.

During the 1999–2000 school year, PEP began three new initiatives in the technology strand:

- **The Principals as Technology Leaders (PATL)**
- Taking a Good Look at Instructional Technology (TAGLIT)
- Technology Leadership Standards

Principals as Technology Leaders (PATL), Taking a Good Look at Instructional Technology (TAGLIT), and Technology Leadership Standards. PATL is a residential program on leadership issues related to instructional technology. TAGLIT is a suite of assessment tools for school leaders to use in gathering, analyzing, and reporting information on technology use for teaching and learning. It is being used in the PATL program as well as by the BellSouth Foundation in its edu.pwr3 Power to Teach grants. With respect to the Technology Leadership Standards initiative, Dr. Cory is a leader in the national effort to develop Technology Leadership Standards, serving on the Leadership/Governance Team of the national effort. She brings to this group the multiple...
successes from the PEP technology program and the PATL program structure.

Of particular interest to other states as they develop or enhance their efforts to build leadership for technology within their school administrator community would be the structure of the PATL initiative. The program is open to all public school principals, assistant principals, and central office instructional staff. The PATL goal is to help school administrators improve teaching and learning through effective applications of educational technology. Educators spend four two-day sessions, for a total of 10 days, in project-based learning and collaborative research activities. The PATL session topics are technology planning, student learning, professional development, and community connections. Between the sessions, PATL attendees participate in on-line discussions about educational technology in general and as related to their school.

Session themes are to
1. Develop a vision and the role of leadership in making it happen
2. Focus on teachers
3. Focus on students
4. Focus on community connections and moving forward

Each participant receives a laptop computer for the duration of the program and produces a web page on how his or her school is using technology for teaching and learning. At the conclusion of the program, each participant makes a 20-minute presentation about his/her school and technology, using the personally developed web page to demonstrate concepts in the presentation. The PATL program website provides participants the program schedule and activities and includes a link to the class pages, complete with pictures.

Dr. Cory states that the two program components that participants in this first-year session have reported as meaning the most to them are (1) the opportunity for hands-on work on major projects similar to what they expect their teachers to do and (2) the use of the TAGLIT assessment tool in their school. By actually creating a web page, they have increased confidence and capability in their own technology skills. In using TAGLIT tools, they have been able to get their faculty involved in discussions, thus increasing the awareness and knowledge level of the entire faculty as to the uses of technology for teaching and learning.

The first year of PATL and the initial uses of the TAGLIT tools have been well received by the North Carolina PEP participants. Dr. Cory is excited about the possibility of extending these opportunities to all principals and superintendents in North Carolina and is including that plan in a proposal to the Bill & Melinda Gates Foundation's State Challenge Grant for Leadership Development. The combination of her role in the national effort to develop technology standards for school administrators with the other two initiatives, Dr. Cory believes, mark PEP as a national leader in providing technology training for public school administrators.

For further information, visit the Principals as Technology Leaders section of the PEP website at www.ga.unc.edu/pep/rppatl.html

Information provided by
Dr. Sheila Cory,
Director of Technology Services,
PEP
Stepping Up to the Standards

Technology standards are not new for Mississippi educators. Since October 1995, the Mississippi Department of Education has had in place technology standards for teachers. By the summer of 1999, educational technology leaders in the state agency saw a need to revise the standards. Betty Lou Pigg, technology professional development coordinator with the Office of Academic Education/Mississippi Department of Education states, "The standards were fine for 1995, but by 1999 the statements were not substantial enough to prepare teachers to use technology for teaching and learning." In fact, she commented that as the state technology leaders and a work group of teachers and administrators began examining the teacher standards, they found administrators asking why they were not included. Thus began an effort to create a comprehensive package: technology standards for teachers and technology standards for administrators plus performance indicators for the standards and state professional development sessions (see Figure 1).

The first step in creating this comprehensive package was to form a state team to outline a process and develop a framework for both sets of standards. Dr. Helen Soule, director of educational technology for the state education agency, directed the team, which consisted of the state technology professional development coordinator, a school superintendent, a middle school principal, and a high school science teacher. The team attended the SEIR-TEC State Academy in July 1999 with the goal of developing a process and draft standards. By the end of the four-day professional development process based on the Authentic Task Approach (developed by Learning Innovations, a division of WestEd and a SEIR-TEC partner), the Mississippi team had accomplished its goal and was ready to return home with a process and a framework for the standards.

The design for their Action Plan would serve as a guide for other state leaders. It consists of a statement of the current status of technology standards in Mississippi, the desired status, the strengths to recognize about the current status, the barriers to overcome in ensuring that all teachers/administrators meet the standards, and the steps to take. Those steps consisted of developing the technology standards and performance indicators, obtaining buy-in and adoption by the state board and all involved, addressing licensure issues, creating an evaluation process for the initiative, and disseminating information on the existence of the standards (see Figure 2).

Since, the state technology leaders and the academy team wanted input from across the state and from all levels of education they hosted a videoconference and a forum for administrators. The comments and feedback on the concept of having technology standards for administrators were overwhelmingly positive. In fact, according to Dr. Soulé, the major response they received was, Why were the standards not going to be mandated? Her response was that the state would not issue that mandate but that the local district or school could mandate that administrators master the standards. The standards will serve as the basis for administrator technology training, which all administrators take for recertification.

After reviewing the comments and suggestions, the state technology leaders organized two work groups in the fall of 1999. The work groups consisted of teachers, superintendents, members of the higher education community, district central office staff, licensure
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specialists, state education agency
technology staff, and representatives
of educational organizations. Using
e-mail mainly, these individuals
conducted initial discussions about
the draft standards. In November
1999, the state leaders convened the
two work groups for an intense
two-day retreat. One group was to
examine the suggested revisions to
the technology standards for teach-
ers and the other was to react to
the feedback about the standards
for administrators and develop a
draft set of standards. SEIR•TEC
consultants facilitated the work
of the two groups. By the end of
the retreat the groups presented
their suggested standards to each
other and found that the two sets
meshed well.

From November 1999 to April
2000, the state leaders obtained
reactions to these standards and
suggested performance indicators.
When the standards and the action
plan were presented to the State
Board of Education members in
December, their reaction was very
positive. Until the total approval
process is completed, the standards
will remain labeled “draft.” The
current version of the standards
and performance indicators
for administrators consists of
seven standards:

1. Communicates to all
   stakeholders a vision of the
   role of technology in teaching
   and learning. (Vision)
2. Develops, implements,
   and monitors a long-range
   technology plan. (Funding
   and Long Range Plan)
3. Indicates and supports
   professional development
   processes that produce effective
   uses of technology in teaching
   and learning. (Professional
   Development)
4. Models the effective use of tech-
   nology in support of teaching,
   learning, and administrative
   functions. (Model User)
5. Creates a learning environment
   that empowers staff to infuse
   technology into teaching and
   learning. (Learning Environment)
6. Ensures the implementation of
district, school, and classroom
   strategies that prepare students to
   be successful in a technological
   world. (Student Learning)
7. Communicates the legal, ethical,
   and security issues related to
   technology. (Legal, Ethical, and
   Security Issues)

Each standard has from two to
six performance indicators, with
Standards 5 and 6 having six
indicators each. The performance
indicators are statements that clarify
the standard as well as establish a
level of proficiency to document.
An example of a performance
indicator for Standard 5 (Learning
Environment) is “Encourages staff to
seek new and innovative ways to
integrate technology into curriculum
and instruction.”

In January, Dr. Soulé was invited
to join the national effort to develop
educational technology standards
for school administrators. Her
involvement has been a benefit to
the Mississippi process by affirming
that it was on the right track and a
benefit to the national effort through
her sharing of the Mississippi
process and draft standards.

Both Dr. Soulé and Ms. Pigg
attribute the success and the
accelerated time frame for the
entire initiative to the assistance
from SEIR•TEC and to the use of a
committee model which involved
representatives from almost every
sector of the education community
and its supporters. They are excited
about having technology standards
for teachers and administrators in
place this summer and are willing to
share their experiences and work
with other state colleagues.

Information provided
by Dr. Helen Soulé,
Director of Educational Technology
and Betty Lou Pigg,
Technology Professional
Development Coordinator
Mississippi Administrator-Action Plan

Current Status
No recognized technology standards for administrators

SEMI in place (10 day re-certification requirement)

Current Barriers
Not all schools have infrastructure
Failure to appreciate the value of technology in education
Lack of time
Lack of funds

Current Strengths
Some Administrators are knowledgeable users
Most have access to technology
District Administrators have infrastructure in place with 25 GroupWise e-mail accounts

Steps to Achieve Desired Status

1. Propose technology standards and develop performance indicators for administrators

2. Buy-in from administrator groups

3. Adoption of Standards

4. Licensure and Accreditation Incentives
   • Develop on-line course components for SEMI
   • Tie training to e-rate, TLCF, and Technology plan
   • Develop an approved list of courses by OETTS that meet Administrator Standards including on-line, IHL/CC courses

5. Evaluation
   • Statistics based on re-certification, workshop/class participation
   • Require annual technology plan evaluation to address implementation of Administrator Technology Standards

6. Dissemination
   • Information to administrators in the Superintendent Monday Memo and organization newsletters
   • MDE web sites and e-mail reminders

Desired Status
Adopted and approved standards for administrators

100% of administrators to meet standards for technology

School climate is reflective of the positive vision of the administrators for technology integration

Figure 2. Mississippi Team Action Plan
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Participants in the National Effort to Develop Educational Technology Standards for School Administrators

1. American Association of School Administrators
   www.aasa.org

2. National Association of Elementary School Principals
   www.naesp.org

   www.nassp.org

4. National School Boards Association
   www.nsba.org

5. International Society for Technology in Education
   www.iste.org

6. North Central Regional Technology in Education Consortium, North Central Regional Educational Laboratory
   www.ncrte.org

7. Southern Regional Education Board
   www.sreb.org

8. Consortium for School Networking
   www.cosn.org

9. Kentucky Department of Education
   www.kde.state.ky.us

10. Mississippi Department of Education
    www.mde.k12.ms.us

11. Principals' Executive Program — University of North Carolina
    www.dpi.state.nc.us

12. College of Education — Western Michigan University
    www.wmich.edu/coe/ets
are more than $1 billion. With expectations and funding levels at all-time highs, are school leaders adequately prepared to provide the quality leadership necessary? The Southern Regional Education Board conducted two surveys to determine what superintendents and principals have available in training, information and technical support, and networks to give them the skills and knowledge they need to lead schools in keeping up with rapidly changing technology.

The findings indicate that there is little connection between the demands of educational technology in schools today and the capability of school leadership. The people who make decisions about policies and finances in schools have little or no training in educational technology and few resources to make informed decisions. School administrators do not appear to be prepared for their emerging role in technology, and their lack of understanding and resources sometimes creates barriers to change and improvement. There is no strong link between school leadership and educational technology.

The first survey focused on the amount and types of technology training in educational administration programs, and the results are not encouraging. An increasing number of educational administration faculty (71 percent) use technology tools such as e-mail, PowerPoint, spreadsheets, databases, and to some extent, the Internet. Still, issues and topics related to technology do not appear to be broadly incorporated into college and university programs to prepare school administrators. Some colleges did offer the encouraging news that "changes are being made." They at least seemed to recognize the importance of technology and are modifying programs and courses accordingly. A few colleges have succeeded in integrating technology into their programs to prepare future school principals and superintendents.

The second survey was designed to gather information from practicing superintendents about how and to what extent they use and promote technology in their roles as school leaders. They were asked to describe how technology leadership affected student learning. While the administrators may not personally use the instructional hardware and software, do they actively guide and support what is being adopted? As technology has become more available in schools, 72 percent of the superintendents said they have increased their use of technology tools to improve communications and management of the schools. For instance, the superintendent's office and central administrative staff increasingly use e-mail to communicate.

School superintendents appear to view technology plans as an important part of promoting technology goals within their school districts. Many superintendents involve staff, parents, business partners, and other community members in the development of these plans. Such involvement can be important as technology plans are implemented. The danger is that these planning committees can lack a comprehensive perspective. If planning committees are biased, they can promote poor solutions to educational technology issues. Committees can support strong leadership in educational technology, but they cannot supplant it.

How well are school administrators and colleges of education addressing technology? The survey results and other information gathered raise serious questions about how school administrators promote technology in their daily work, how they demonstrate the use of technology, and what they expect of those with whom they work. These issues have been largely overlooked. No single resource is likely to address the numerous issues and topics related to educational technology that face public school administrators. A strong link between educational technology and school leadership is necessary to support improvements in education. It makes sense to invest more into improving school administrators' ability to spend wisely the technology dollars that stream in.

Most school superintendents do not have ready access to quality information resources. State and regional efforts to provide quality, unbiased support and guidance should be promoted. Business connections also should be encouraged in a manner that would avoid conflicts of interest but would provide vital information to school leaders. Colleges of education need to establish alliances among their departments of educational administration, the schools they serve, and the technology community.

For a copy of the full report, contact SREB Publications at 404-875-9211, or on the web: http://www.sreb.org/Main/LatestReports/latestreports.html
A Positive Attitude Makes the Difference for the Drew School District

By Jeanne Guerrero

"What do we want? Higher test scores. When do we need them? Now, now, now!" These words have long spurred educators trying to increase test scores in their schools and school districts. A few administrators are particularly sensitive to this issue because they are threatened with the possibility of having their school district taken over by their state board of education if test scores are not raised. These same educators and administrators also feel additional strain because their state boards have mandated that they focus on adding or increasing technology in classrooms. By focusing on improving the attitudes of teachers instead of directly on test scores and technology, however, the Drew School District has found a way to achieve both goals.

Success Restores Hope in a Small Community

Located in the middle Delta region of Mississippi, the town of Drew is not a wealthy area. It is home to approximately 2,300 inhabitants. The nearest local store is a Family Dollar where until recently it was the only place the townspeople could buy supplies. Most of the children attending schools in the Drew School District are being reared at or below poverty levels. Families come mainly from farming backgrounds. With the emergence of large corporate farming, making a living farming is becoming harder and harder, and the town offers students few opportunities.

Yet a spirit of hopefulness has grown among the citizens in this town. The ray of hope comes from the success of the Drew School District. In the past four years, the school district has raised its Mississippi Performance-Based Accreditation Rating from 1.5 to 2.9, an increase of over 24 percent. The school district that was once in danger of being placed on probation is now one of three top-ranked school districts in Mississippi.

Drew has placed a lot of technology throughout their schools, but administrators attribute much of their success to the change of attitudes in teachers about how they use the technology in their classrooms. "You have to get teachers to care about what happens in your school district. Otherwise, you're gonna be on probation," according to Dennis Silas, Drew School District assistant superintendent. "Once the teachers believe they can make a difference, then their positive attitudes carry the load."

The major turning point for Drew came in 1996 when the State of Mississippi Department of Education mandated schools to complete a technology plan for the schools to receive funding. The school district received a $154,000 Technology Literacy Challenge Fund (TLCF) Grant the following year. Silas says that he knew the district had to be responsive to the state's request so the district tried to make the transition as easy as possible. Drew School District used the TLC money to purchase multimedia computers for every K–6 teacher "to make sure every teacher had a computer in his/her hands." Currently, every K-6 classroom has between one and three computers with Internet access.

After the computers were installed, the school district began training the teachers to incorporate the technology into their classroom activities. "We first got computers in the hands of the teachers and then set up minicourses to train teachers right from the start," Silas notes. "We realized early on that training in technology was the most important factor in getting teachers to actually use the computers in the classroom." But it was up to the administration to show the teachers the value in using the computer in teaching.

During that first year of funding, the district provided teachers with more than seven hours of technology training sessions each week for a year. Some of the classes offered
were Windows Basic, Microsoft Word, and Microsoft PowerPoint, the Internet. Dot Bright, a second-grade teacher at James Elementary in Drew, says that learning to use the computer was an invaluable experience for her: "I literally knew not one thing about the computer when we first started. I was always afraid I might break it. But now, I couldn't live without it."

She adds that getting to use a computer has also been a tremendous help to her personally. When Bright was diagnosed with breast cancer two years ago, she found lots of comfort through support groups she met on the Internet. Bright says that if she had not been able to get support from people on the Internet, she probably would not have had the therapy at all: "I would have had to travel three to four hours to the nearest town hosting a support group, and there's no way I could keep up kind of travel."

Cameron Able, who teaches sixth- and seventh-grade English at Hunter Middle School, says that his most rewarding experience with technology in the school has been watching his students progress in their work. "Technology will engage anyone regardless of learning style or intelligence," he says. "It has really become a motivating instrument for the students to use on a regular basis."

When the local newspaper went bankrupt, Able and his students leaped at the opportunity to put their computer skills to real-world use—and perform a tangible service to the community. They now use the classroom computer systems to write, edit, and publish the town newspaper. As Able puts it, "We may be a rural school and we may not have as much money as some, but we're doing the best we can with what we have."

**Hard Work Has a Price**

All the recent success of the school district did not come without a lot of sacrifice. Silas says. When technology was initially put in the classrooms, his teachers had mixed reactions: "A lot of teachers jumped on board right away. A lot jumped on board later." But many were not prepared for the changes taking place in Drew. "We began to see a high turnover among teachers for a couple of years," Silas says. "We had to have the courage to cut some folks because those folks were not on board and will forever keep you on the bottom."

When asked about how they filled available teaching slots when many school districts around the country are experiencing a teacher shortage, Silas notes that "once you improve discipline and student achievement, and give teachers training and tools, you will have teachers coming to you." He says that in spite of the economic
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problems of the region, they had to focus on what they could improve within their own school district. “We know the Delta has some problems...we can’t do anything about,” Silas says. “The district administration focused on what it could do something about—the teaching.”

Once the teachers felt that they could affect the lives of their students through positive teaching methods, Silas saw many teachers’ attitudes turn 180 degrees: “I spent an hour talking to a teacher one afternoon about how his history scores had gone up consistently for the past four years and ways he could go up further. This wouldn’t have happened before 1996.” Cameron Able states that the technology gave teachers at Hunter Middle School the boost they needed.

Around 1996, “several of the teachers were frustrated and close to retirement or thinking about it. When we brought in these tools, it was like everyone got a second wind... I think the teachers now look at their teaching as a new and exciting job.” Able states that the most important factor for the teachers and the students is that technology has given them the edge to compete against students anywhere in the world: “Even though we are in a rural town, we’re not cut off from society. It has been a rewarding experience throughout.”

Other Changes Happen

Along with the training, teachers also had an AmeriCorps representative as a technical resource when they had problems. Silas says an AmeriCorps person has been in their school district every day each school year since 1997. He says he connected with this service when he went to Delta State University seeking more direction for their technology program. One of the instructors at the university introduced him to Jerry Robinson, director of the Center for Community Development there, who arranged for an AmeriCorps person to work with them. The AmeriCorps representative serves as a technical contact as well as a Mississippi Reads Program tutor for students in Drew.

Teachers are not the only people who benefit from the advantages of technology. Administrators in the district are also encouraged to receive technology training. According to Silas, currently over 50 percent of their administrators have attended Phase I and II computer training provided by the Mississippi State Department of Education. They have also encouraged administrators to take the School Executive Management Institute (SEMI) program. This 10-day course is designed to build skills in word processing, spreadsheets, PowerPoint, and database applications. “I saw many of my colleagues begin the course with absolutely no computer skills whatsoever. By the time the course was over, we were all comfortable using the software,” Silas states. They are also implementing a student database program across the district. With SAMS, teachers can keep grades and attendance on the computer, which Silas says “will force some of the teachers who have lagged behind to catch up.”

Silas is quick to point out that Drew has started other programs in the school district to raise test scores through motivating students. He says that the district has also bought bikes and boom boxes, as well as presenting students with $50 and $100 gift certificates at award ceremonies after conducting the Illinois Test of Basic Skills (ITBS), which is the grading system for ranking schools in Mississippi. They also gave prizes to teachers as well as students for good attendance and provided summer school programs and after-school tutorials. These rewards made teachers and students “feel that we’re all in this thing together,” Silas says. “What happens in this school is in their hands.”

The school district has also been able to involve its parents and community leaders in its transformation. After Silas and several teachers attended a seminar at the University of Mississippi showing how to wire a school district for Internet access, Silas and his teachers felt that the task was impossible for them to accomplish in Drew. They felt that they lacked the expertise and the money to take on such a task. But when they planned a “Net Day” to enlist the assistance of local technological resources in wiring the schools, they were rewarded with an overwhelming response from the community. BellSouth contributed wiring and materials, parents came out to help pull the wires, and a Memphis company provided training on how to place the wires. Silas found it “like magic” to see it all come together.

Only nine months before this project, administrators thought something like this could never happen in Drew, Mississippi. But it did. Drew School District has been successful in its technology effort, Silas says, “because people made it happen.” “We don’t have tons and tons of technology that other teachers have. What we do have is teachers whose perceptions and attitudes show that anything is possible.”
Principal Connections

Principal Connections is a CD-ROM and companion Web site designed to help school leaders recognize, promote, and evaluate effective technology use in their schools. Leaders can work at their own pace to examine their roles as technology leaders, identify barriers to integrating technology into their schools, learn strategies to help teachers become more accepting of technology, make informed decisions about allocating technology resources, and much more.

The CD-ROM is divided into the following seven program areas:

**You're the Leader** helps administrators examine their roles as technology leaders and identify barriers to integrating technology into their schools. This section includes an interactive technology skills assessment.

**Technology as a Tool** looks at the various ways technology can be integrated into learning. An implementation assessment is coupled with context-sensitive strategies for increasing access and integration.

**Foster the Environment** details strategies administrators can employ to help teachers become more accepting of the use of technology as a teaching tool.

**Classroom Close-Up** features videos that enable administrators to practice classroom observations.

**Log On** looks closely at effective Internet use. It addresses bolstering the skills of novice users and key issues related to Internet use in schools, and it provides practical advice on developing an electronic communications acceptable-use policy.

**Tools of the Trade** helps administrators make informed decisions about allocating technology resources, including hardware and software. This segment contains a software evaluation tool that can be printed for widespread dissemination.

**Planning for Tomorrow** looks at the technology planning cycle and helps school leaders understand the total cost of technology ownership.

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The Principal Connections Web site allows SEIR•TEC to regularly update information related to the CD-ROM.
SEIR•TEC PARTNERS

Appalachia Educational Laboratory (AEL)

Learning Innovations (LI),
a division of WestEd

National Center on Adult Literacy (NCAL)

Southern Regional Education Board (SREB)

Southwest Educational Development Laboratory (SEDL)

SouthEastern Regional Vision for Education (SERVE)

University of Central Florida (UCF),
Instructional Technology Resource Center (ITRC)

The SouthEast and Islands
Regional Technology in Education
Consortium (SEIR•TEC) is a
partnership of national, regional,
and university-based organizations
that work collaboratively to
help communities of learners
use technology effectively.
SEIR•TEC is part of a
national network of six
consortia funded by
the U.S. Department of
Education. It works to
provide technology-
related assistance
through awareness,
policy development,
and planning, as well
as staff development and
evaluation. SEIR•TEC serves
states, jurisdictions, school
districts, preservice training
ingstitutions, adult and family
literacy programs, and other
educational organizations in
Alabama, Arkansas, Florida,
Georgia, Kentucky, Louisiana,
Mississippi, North Carolina,
South Carolina, Tennessee,
Virginia, West Virginia, Puerto
Rico, and the Virgin Islands.
RESOURCES for Teaching and Learning with Technology

Are you looking for information on, or links to, online materials about technology for teaching and learning? Look no further. SEIR-TEC—the SouthEast Initiatives Regional Technology in Education Consortium—might have just what you need. The consortium has both print and online resources to share with educators in the six southeastern states of Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. Following is a sampling of resources:

- SEIR-TEC website (www.seirtec.org): This website consists of news, technology planning and evaluation information, activities for students, materials for teachers and technology planners, technology policy briefs, and links to state and national technology sites. One of the most frequently visited pages is the SEIR-TEC Publications page. There you'll find online versions of popular SEIR-TEC resources such as:
  - Internet Search Tools Quick Reference Guide
  - Factors Influencing the Effective Use of Technology for Teaching and Learning: Lessons Learned from the SEIR-TEC Intensive Site Schools
  - Technology Integration Progress Gauge

- Policy Briefs such as Teacher Technology Standards and Rights, Risks and Responsibilities—Students and the Internet
- Planning into Practice

Planning into Practice: Resources for Planning, Implementing, and Integrating Instructional Technology is the newest publication on the website. This guide for moving from technology planning to implementing the plan includes templates to use in collecting information and examples of how schools have tackled the challenge of implementing technology programs, as well as URLs of related documents.

A new online resource for teachers and students is a collection of resources for integrating technology in schools. GRITS—Great Resources for Integrating Technology into Schools—consists of student activities, collaborative projects, resource files of pictures and sounds of the South, and links to sites that focus on themes and places for the six southeastern states. The website, www.gritsonline.org, was first posted in November 2000 and will continue to grow in content and offerings. (See the related story: GRITS: A Big Helping of Resources.)

News: SEIR-TEC offers two news publications. The SEIR-TEC
newsletter, NewsWire, is a publication focusing on a specific topic and is distributed twice a year to every school in the Southeast. SEIR News, the monthly online news blast of web resources, is available on the website under Publications and is sent by e-mail to participants in SEIR TEC events.

Print Publications: Limited copies of the Internet Search Tools, Planning into Practice, Lessons Learned, Technology Integration Progress Gauge, and recent NewsWire issues are available in hard copy upon request. As future print products become available, they will be announced on www.seirtec.org.

Academies: Two SEIR TEC Academies are scheduled each year. Both are designed to support and promote leadership for technology. One Academy is for school or district teams that have identified a problem or issue related to instructional technology on which they want to work together. The other Academy is for state education teams developing a response to a state need in the area of technology impacting teaching and learning. The Academy model is based on the Authentic Task Approach (ATA), developed by SEIR TEC partner Learning Innovations at WestEd. In this model, teams of five or more people who are involved in resolving an issue or problem attend a four-day academy to work on the issue. They have an ATA-trained facilitator to guide them through the process of identifying proper steps, locating resources, and developing an implementation plan or response. Attendance at the Academies is by application: information on the Academy schedule, location, and application forms are posted on www.seirtec.org. Check the website’s Announcements or under SEIR TEC Initiatives for the latest information about the Academies.

As the SEIR TEC staff members continue to identify needs and issues common to educators in the six southeastern states, they will share new resources and opportunities by posting information on the website. So, make a habit of visiting www.seirtec.org to find the latest news and resources about technology for teaching and learning!

Netting the Resources on www.rtec.org

In addition to tapping available resources from SEIR TEC, you can obtain useful materials from other Regional Technology in Education Consortia (RTEC). Begin by going to www.rtec.org, which is the central website for the overall RTEC program. From there, you can click on each project.

Of special note are some of the resources from High Plains, North Central, and Northwest RTECs. Check out Profiler—a web-based survey tool—and Trackstar—a template for developing a theme-based web page—from High Plains RTEC at www.hprtec.org. (See the article on page four about SEIR TEC’s use of Profiler.) Many educators rave about the North Central RTEC’s The Amazing Picture Machine—a collection of pictures for use in publications and presentations, complete with information on how to credit the artist. Go to www.ncrtec.org, and use the search tool to find The Amazing Picture Machine. If you are interested in distance learning, the Digital Bridges information from the Northwest RTEC (NETC) at www.netc.org is a sure bet for good information. NETC also has several videos on integrating technology in project-based classrooms, which are described on their website. Whatever your need, there are a lot of resources that can be found at www.rtec.org.
SEIR•TEC, the SouthEast and Islands Regional Technology in Education Consortium from 1995 to 2000, is now the SouthEast Initiatives Regional Technology in Education Consortium for the 2000-2005 grant period. Similar to the previous project, SEIR•TEC continues to promote and support the effective use of technology to enhance teaching and learning, particularly for students in resource-poor environments. In addition to the name change, the U.S. Department of Education has changed the states that SEIR•TEC serves. Instead of serving 12 states and the two territories of Puerto Rico and the U.S. Virgin Islands as we did before, we now work primarily in Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina.

The University of North Carolina at Greensboro (UNCG) and SERVE are the lead organizations. Partners are the Southern Regional Education Board (SREB), the Instructional Technology Resource Center at the University of Central Florida (ITRC), Learning Innovations at WestEd (LI), and the National Center on Adult Literacy (NCAL) at the University of Pennsylvania. These partners work collaboratively to provide high-quality professional development, technical assistance, and products to educators in state departments of education, colleges and universities, local school districts, and community programs. Project activities are grounded in research, built on the experiences gained from successfully operating a consortium for five years, and represent best practices.

SEIR•TEC strategies for the new grant period are guided by three themes: leadership, authentic professional development, and curriculum and standards. Activities include SEIR•TEC Academies that develop and promote leadership for technology in schools, districts, and state education agencies; online conferences, workshops, and mentoring; curriculum-based, technology-enhanced research projects to solve problems associated with low academic performance; documentation of the impact of technology on teaching and learning; and print, video, and web products that address educators' informational needs and promote effective practices. More information about the consortium is available at www.seirtec.org.
GRITS: A BIG Helping of Resources

The Great Resources for Integrating Technology in Schools (GRITS) initiative is a major component of the new SEIR•TEC. This web-based collection of projects is designed to be a catalyst for engaging teachers and students in the development, use, and assessment of standards-based activities that promote collaborative constructivist learning. As the thematic and collaborative projects are developed, they will be based on, correlated to, and searchable by curriculum standards in reading/language arts, math, science, social studies, and instructional technology. The resources on the site consist of scheduled activities for classes to participate in with others, ongoing collaborative projects among classes, copyright-cleared pictures and audio files for use in presentations and publications, and connections to existing web quests and primary resources. The five categories of resources and activities for GRITS are Southernscapes, Southern Portraits, Southern Tales, Southern Sounds, and Southern Trails.

The form and substance of the project results from the intensive collaborative work among SEIR•TEC staff, consultants, and interdisciplinary teams of PreK–16 educators in the region. They help develop collaborative projects, link content to state standards, develop multiple means of assessing student learning, design professional development, and investigate emerging technologies that support the project goal. The GRITS content will reflect a spectrum of relevant, interdisciplinary, and interwoven resources that will support teachers from the Southeast as they become both active participants in the GRITS online activities and developers of their own problem-based, standards-based learning ventures.

Currently, GRITS offers four thematic projects (Auto-bug-ography, Digital Quilt, Trailing DeSoto: Then and Now, and Soup to Nuts); links to other websites for online projects, resources, and state standards; an initial set of pictures and sounds of the Southeast; and the collaborative project for the year—On the Road with Gritzley Bear. Additional projects, links, and resources will be added each month. Check out www.gritsonline.org today, and come back again for another helping of GRITS!

Announcing
On the Road with Gritzley Bear

Check out the first online collaborative project for GRITS, which began in March 2001—On the Road with Gritzley Bear. The project focuses on the similarities and differences of the region, from food to music to stories and tall tales to recreation areas. Participants introduce Gritzley to the flavors and adventures of their part of the region and pack his suitcase with souvenirs and a bit of their homework for his next adventure. Check out www.gritsonline.org for details!
Planning into Practice

Planning into Practice: Resources for Planning, Implementing, and Integrating Instructional Technology, a book that grew out of the SEIR•TEC partners' long-term work in 12 K-12 school systems, is now available. Our work was aimed at helping the schools build their internal capacity to successfully integrate technology into the ongoing educational program and thereby improve teaching and learning.

Planning into Practice is intended to assist the reader in creating a strategic educational technology plan. What's the point of technology planning? Perhaps more importantly, how might planners connect the words in the plan with the actions that must occur in classrooms? What actions might a teacher take to implement the goals and objectives of the technology plan in the classroom?

Answers to these and many other questions are provided through a combination of articles, checklists, tip sheets, and worksheets ready to be used as is or adapted to fit the school's or district's needs. Experiences of several schools and districts are used as illustrations. Throughout the text, many URLs to online resources and other materials are included.

This publication is available at www.seirtec.org for downloading. Check out the Publications section. A limited number of complimentary print copies have been distributed to state education leaders and SEIR•TEC education affiliates. Print copies are available for $30 each from SEDL (www.sedl.org or call Lori Foradory at 800-476-6861) or from Learning Innovations at WestEd (www.wested.org/wested/news/pressreleases/p2p_pr.html).

Progress Gauge and Profiler

Looking for a way to reflect on the progress of your technology program? The SEIR•TEC Technology Integration Progress Gauge is just the tool. Designed for individual or group reflection about technology progress, the Gauge covers five domains: student engagement, teacher engagement, resources, organizational support, and community involvement. The Progress Gauge can be downloaded from www.seirtec.org. Users circle the level that includes the indicators most closely matching their status. By making periodic reflections, educators are able to track progress over time.

A revised version of the SEIR•TEC Technology Integration Progress Gauge is now available online as an interactive tool. The original 13-page document has been condensed into 35 discrete statements that can be accessed through the High Plains RTEC's Profiler (www.hprtec.org). With the Profiler version of the Gauge, users can instantly assess their school's or district's areas of strength and identify areas of need.
New SERVE Videos

SERVE has two new additions to its video series on Promising Practices in Technology. Designed to inspire and inform educators about the exciting possibilities of effective uses of computers and multimedia components, these videos are a must for every school and district.

Promising Practices in Technology: Recognizing and Supporting Teaching with Technology

This video demonstrates the stages that educators experience as they learn to use technology for teaching and learning, and it provides examples of each stage in practice in the classroom. Additionally, ideas of how administrators might recognize and support teachers in this progression are discussed, and resources and tools for administrators are highlighted.

Promising Practices in Technology: Using Technology to Enrich Teaching

Watch three teachers as they plan, implement, and assess lessons infused with technology. In addition, view examples of how teachers focus on the curriculum while incorporating technology resources to reach different student learning needs.

The two earlier videos in the series are Promising Practices: Effective Models of Professional Development in Technology and Promising Practices: Technology as a Tool for Student Assessment. Each of the four videos is $9.95 per copy plus $2.50 shipping and handling. Call 800-352-6001 or visit www.serve.org for more details.

Looking for Good Resources?

Knowledge Loom is Rich in Resources! The Knowledge Loom is a web-based resource on what works in teaching and learning. It offers a growing, searchable collection of effective practices in teaching and learning and shows how to use those practices to create your own models that work. Visit often at www.ed.gov/initbs/bestpractices.
What Does the Research Say?

By Frances Bradburn, Director, Instructional Technology Division, North Carolina Department of Public Instruction

Extensive research on the impact and effectiveness of technology on teaching and learning is being reported. The following statements, with their citations, may be just the wording you need for a technology plan, report, grant proposal, or presentation.

The use of technology as a learning tool can make a significant difference in student achievement as measured by standardized tests.


In order for learning to take place, computers should be used less for drill-and-practice and more as open-ended thinking tools and content resources.


Students in computer-based instruction classes have higher exam scores than students who are taught by conventional methods without computer technology.


One computer for every four to five students, located in the classroom, is necessary if technology is to help students make significant achievement gains.


Students score an average of five to ten points higher on reading tests if their school library media programs incorporate the latest information technology, such as:

◆ Online catalogs and databases
◆ LAN access to library resources
◆ Internet access


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Students of teachers who had appropriate technology professional development score higher on a variety of tests than students whose teachers do not.


Students in schools with well-equipped school media centers and professional media specialists will perform better on achievement tests for reading comprehension.


Computer use appears to have a positive impact on students' self-image, self-confidence, and attitude toward learning.


Technology has more impact in middle schools than in elementary schools.


Essential conditions to maximize student achievement:

- Better access to technology
- Updated systems
- Learning environments
- Professional development


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**www.ed.gov—Packed with Information**

The home page for the U.S. Department of Education is so much more than education headlines and organizational data. A quick glance alerts the viewer that information on funding sources, free publications and products, and links to related sites are only a click away. Check out www.ed.gov regularly for the latest news and products.
SEIR•TEC Partners
Add Expertise

SEIR•TEC is a consortium of five organizations that work together to improve the use of technology for teaching and learning. Each organization brings to the project special areas of expertise and experience.

SERVE at the University of North Carolina at Greensboro

SERVE’s mission is to promote and support the continuous improvement of educational opportunities for all learners in the Southeast. In addition to SEIR•TEC, SERVE operates the federally funded regional education research and development laboratory for the Southeast, the Eisenhower Consortium for Mathematics and Science, the Anchor School Project for migrant students, and the National Center for Homeless Education. Links to these websites can be found at www.serve.org. SERVE’s main office is at the University of North Carolina at Greensboro.

As the lead agency in SEIR•TEC, SERVE staff members provide leadership in planning, implementing, and evaluating professional development and technical assistance services and for product development and dissemination.

Southern Regional Education Board (SREB)

The Southern Regional Education Board, founded in 1948 at the request of southern governors, was the nation’s first compact for education. Over the years, SREB has worked to improve every level of education—from early childhood education to doctoral degrees and beyond. The board is composed of each member state’s governor and four other people selected by the governor. At least one of those appointees must be a legislator, and at least one must be an educator. The SREB member states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

SREB’s role in SEIR•TEC is to collect and make available policy documents from the region. This activity contributes to long-term reform in education by providing policymakers with access to needed information to inform their decisions. SREB’s primary focus is on state educational policy.

(continued page 10)
The Florida Instructional Technology Resource Center (ITRC) at the University of Central Florida is dedicated to providing K-12 teachers help in integrating technology effectively into their classrooms. In operation for over 17 years, the current focus of the Center is assisting teachers in the integration and use of online tools and resources to extend teaching and learning.

The ITRC brings to the SEIR•TEC partnership many years of technology integration experience and is currently responsible for providing technical assistance in creating effective online environments for SEIR•TEC activities. These environments include online bulletin boards, web-based searchable databases, and interactive video and audio-enhanced websites.

Learning Innovations (LI) leads and supports educational improvement focused on ensuring that all children have the opportunity and support to learn and achieve. With offices in Stoneham, Massachusetts, and Williston, Vermont, LI—a division of WestEd—is a research, development, and service agency headquartered in San Francisco. LI’s areas of expertise include professional development design and facilitation, program evaluation, special education, curriculum alignment and integration, science education, and technology integration.

The work of LI with SEIR•TEC focuses mainly on providing training and professional assistance with the Authentic Task Approach (ATA) model, originally developed by Learning Innovations and used in SEIR•TEC academies. The ATA model is a professional learning design that provides participants with a focus on getting real work accomplished, learning more about what needs to be done in the process, and how to do it. Each team of participants is expected to leave the academy having accomplished their initial goals, and each team plans to continue the work when they return home.

The National Center on Adult Literacy (NCAL) is a Research and Development Center within the Graduate School of Education of the University of Pennsylvania. Its mission is to enhance the quality of literacy work by pursuing three primary goals: a) to improve understanding of adult learners and their learning, b) to foster innovation and increase effectiveness in adult basic education, and c) to expand access to information and build capacity for adult literacy service provision.

As a SEIR•TEC partner, NCAL creates professional development resources and provides technology training and technical assistance to adult literacy agencies within SEIR•TEC states.
Over the past few months, several states in the SEIR•TEC region have received grants from the Bill and Melinda Gates Foundation:

A coalition of state education, business, and government leaders, led by the Mississippi Department of Education, received $1,194,000 from the Bill and Melinda Gates Foundation to expand current leadership development programs for school principals and superintendents. The grant is part of the Foundation’s commitment to recognize and encourage high-achievement models and to develop strong leadership in education.

The grant supports the Technology Academy for School Leaders (TASL), which builds on the success of the state’s current technology training programs that have provided hands-on experience and cutting-edge information to more than 300 school administrators. The new program includes a focus on developing skills and gaining knowledge to effectively integrate technology into the learning environment, as well as enhancing leadership skills to encourage data-driven decisions. Over the three-year term of the grant, TASL will reach administrators from 70 percent of the state’s school districts.

Partners in this program include the Mississippi Department of Education, the Office of the Governor, the Mississippi Economic Council, BellSouth Foundation, SERVE/SEIR•TEC, Mississippi Association of School Superintendents, Institutions of Higher Learning, Howard Industries, Consortium of School Networking (COSN), Connected University, and others.

The University of North Carolina received $2,950,000 from the Bill and Melinda Gates Foundation to expand the state’s current leadership development program for school principals and superintendents.

The grant builds on the success of Principals as Technology Leaders (PATL), a professional development program offered by the University of North Carolina’s Principals’ Executive Program. PATL, directed by Dr. Sheila Cory, is designed to improve the ability of school administrators to lead their schools to high-quality use of technology for teaching and learning. The grant will allow the program to reach 1,971 principals and superintendents, or 80 percent of the state’s public and private school administrators, over the next three years.

The Florida Department of Education received $5.5 million from the Bill and Melinda Gates Foundation to implement new and expand current leadership development programs for school principals and superintendents. The grant is part of the Foundation’s commitment to recognize and encourage high achievement and develop strong leadership in education.

The three-year grant funds Florida Leaders.net, a program that builds on existing leadership programs. The program focuses on knowledge and skills to effectively use technology in promoting student learning. Program strategies include training of trainers, one-on-one mentoring, and electronic support to increase student achievement.
U.S. Department of Education Announces Exemplary and Promising Educational Technology Programs

The following seven programs were designated as exemplar or promising out of a total of 134 educational technology programs submitted to the U.S. Department of Education's Educational Technology Expert Panel. Selections were based on the following criteria: (1) Quality of Program, (2) Educational Significance, (3) Evidence of Effectiveness, and (4) Usefulness to Others. Check www.ed.gov for details.

### Exemplary Programs

1. Challenge 2000 Multimedia Project Joint Venture: Silicon Valley Network (CA)

**Challenge 2000 Multimedia Project** (Multimedia Project) infuses K-12 classrooms with a model of project-based learning supported by multimedia. Students learn course content and technology skills by completing curriculum-based projects that culminate in multimedia products. The production process involves reading, writing, interviewing, text-based and Internet-based research, and use of multimedia software applications. Students define problems, brainstorm, debate solutions, collaborate, plan and schedule tasks, make decisions, self-evaluate, and design and produce multimedia products. Activities are student-centered, interdisciplinary, and integrate real-world issues and practices. This model fosters workplace competencies such as teamwork, communication, planning, and problem solving.

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### Promising Programs

1. Maryland Virtual High School CoreModels Project, Montgomery Public Schools (MD)
2. Middle-School Mathematics through Applications Program, WestEd (CA)
3. Modeling Instruction in High School Physics, Arizona State University (AZ)
4. One Sky, Many Voices, The University of Michigan (MI)
5. The WEB Project, Montpelier School District (VT)

**Maryland Virtual High School CoreModels Project** (MVHS CoreModels) has two main goals: (1) to use computer modeling to help students achieve state and national standards and (2) to develop and refine a process of peer leadership and support to help teachers implement modeling activities as part of their regular classroom activities. Modeling packets available in biology and physics are built around the content and process of Maryland Science Core Learning goals and incorporate systems thinking and modeling processes. Students practice their mathematics skills and build their own understanding of scientific concepts involving equilibrium processes, feedback, and causal relationships.

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Within a collaborative environment, teachers reflect on teaching practices, facilitate change in science education, and integrate theory and practice in school settings.

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**Middle-School Mathematics through Applications Program (MMAP)** is a comprehensive mathematics program for grades 6–8 that engages students with real-world problem-solving and software tools while requiring them to grapple with mathematical concepts. The content goals of the technology-integrated, project-based units reflect the NCTM Standards. Units, which are developed around four real-world work themes (architecture, population biology, cryptology, and cartography), emphasize proportional reasoning and algebra/functions while also including statistics, probability, measurement, and geometry. MMAP software components are interactive mathematical resources for the group-based projects and are the environments for the design work, generation of math opportunities, and data for analysis.

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**Modeling Instruction in High School Physics** uses computer models and modeling as a focal point to develop the content and pedagogical knowledge of physics teachers who then serve as local experts in the use of technology in teaching and learning science. In eight weeks of modeling workshops over two summers, teachers revamp their current high school physics course to incorporate technology and insights of educational research. In the revamped course, instruction is organized into modeling cycles that engage students in all phases of model development, evaluation, and application. Students collaborate in planning and conducting experiments, use software to organize and analyze data, and present to the class a summary of their group's experimental procedure, interpretation, and findings.

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One Sky, Many Voices (OSMV) is a research-focused learning environment that promotes the study of current issues in atmospheric and environmental science. Although middle-school focused, it has served students in grades four through nine. The curriculum is a flexible shell containing core activities that every site is expected to enact at approximately the same time so that they can share and coordinate work products. A Daily Scientist identifies and updates locations of interest for the day's study and provides scientifically correct explanations of the day's science concept. Software tools include an Internet browser for retrieving current weather and environmental science data and imagery, archived imagery and movies, and web-based message boards.

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The WEB Project is a consortium of community organizations, small businesses, and educational institutions that engage new technologies to effect systemic reform in school systems throughout Vermont. Housed in the Montpelier School District, the project utilizes multimedia production and telecommunications as an educational environment for student inquiry and expression, a medium for presenting and assessing student work, and a virtual faculty room for professional discussions about work. Program initiatives include art, literature, history, and music composition. The program is designed for students in elementary school through high school, and student standards are specified for each initiative.

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Web Resources for Electronic Accessibility & Assistive Technologies

The following are links to some websites that provide information on current research, services, products, tools, and resources to assist educators in meeting the learning needs of individuals with disabilities.

www.ed.gov/offices/OSERS—U.S. Department of Education Office of Special Education and Rehabilitative Services—provides links and resources supporting programs that assist in the education and rehabilitation of individuals with special needs.

www2.edc.org/NCIP—The National Center to Improve Practice (NCIP)—provides a variety of resources focusing on the use of technology to enhance learning for students with sensory, cognitive, physical, and social and emotional disabilities.

www.naric.com—The National Rehabilitation Information Center—provides online databases that include research, literature, organizations, and other information pertaining to disability and rehabilitation.

http://wgbh.org/wgbh/pages/ncam—The CPB/WGBH National Center for Accessible Media (NCAM)—provides information on existing and developing technologies that create access in public broadcasting and how these technologies can be used to make media more accessible in schools.

www.ncddr.org—National Center for Dissemination of Disability Research—provides research and information, including funding opportunities, state technology assistance projects, and technology for access and functionality.

www.ataccess.org—Alliance for Technology Access—provides information and support services on the use of assistive and information technologies for persons with disabilities.

www.genasys.u.s.m.maine.edu—Generating Assistive Technology Systemically—provides information on assistive technology and web accessibility, particularly pertinent for preservice educators.

www.cast.org—CAST—perhaps best known for Bobby, the web-based tool that analyzes websites for accessibility to persons with disabilities, CAST also provides other resources, including research, learning models, and tools.

www.w3c.org—World Wide Web Consortium—establishes common protocols that promote the evolution and interoperability of the World Wide Web. This site provides extensive resources on WWW issues, including guidelines for ensuring website accessibility.

This information can also be found with links and in a pdf file at www.seirtec.org.
Teacher Technology Standards in the South

SEIR•TEC partner SREB has recently surveyed the southern states to identify their requirements for teacher technology standards. Their document, New Directions—Teacher Technology Standards, provides an overview of recent actions by the states, particularly in the area of pre-service technology standards in the context of several national initiatives, including the Preparing Tomorrow’s Teachers (PT3) program from the U.S. Department of Education, the CEO Forum’s Teacher Preparation STaR Chart: A Self-Assessment Tool for Colleges of Education, and the National Council for Accreditation of Teacher Education’s NETS-T (teacher standards). A two-page table offers an excellent comparison of actions taken within each state toward teacher technology standards and licensure as well as how the standards are being applied and supported.

For further information or to obtain a copy, contact Jennifer Burke at SREB at (404) 875-9211 or via e-mail at jburke@sreb.org. The document is also available online in the publications section of www.seirtec.org or www.sreb.org.
Virtual Courses: What Educators Need to Know

By Jennifer Burke

Virtual high school courses offer many students the opportunity to take challenging courses that may not normally be offered in their school. Some of the benefits of virtual courses include the following:

◆ Students can personalize their education to make sure they get courses they need for college entrance.
◆ Students can fit courses they need to graduate into their “regular” school-day schedule.
◆ Small and rural schools can use online courses as a way of supplementing their curricula.

Providing online courses to high school students can offer some interesting policy challenges. To document these challenges, the Southern Regional Education Board, a SEIR-TEC partner, surveyed 16 state departments of education to identify policy questions and possible solutions regarding online courses. Although there is no single best answer for all schools, discussion of these questions may help schools make better decisions about virtual courses. The following policies have been identified as barriers to offering online courses to high school students. School administrators (and parents) should ask questions about these issues to determine whether, when, and which online courses are good options for their students.

1. Teacher certification policies, standards, and training for teachers of online courses—In New Jersey recently, a court found that a student could not be awarded credit for a completed online course because the teacher was not certified to teach in New Jersey. Do teachers of online courses offered in your state have to meet state certification requirements in addition to those required of “regular” teachers? Does your state require that teachers of online courses offered in your state hold valid state teaching certificates? Do higher education faculty who are teaching online/distributed courses (such as AP) have to meet state teacher certification requirements to teach high school students online?

2. Evaluation of “virtual” teachers—How does the “virtual” school principal evaluate course delivery of his or her teachers? Are “virtual” teachers evaluated using criteria in the receiving state? Are students and parents involved in the teacher evaluation process? The quality of the online teacher, including interaction with students, is an important

(cont. on page 2)
factor in the success of students taking the course. One major reason students dropped out of online courses was that they did not receive sufficient and timely feedback or have interaction with the course teacher.

3. **Student credit policies**—Will the student be awarded credit for taking the online course? The agency that will award the course credit should be verified before students enroll in an online course.

4. **Seat-time restrictions**—Does your state have seat-time requirements for high school students? Are “virtual students” exempt from seat-time rules in your state? When they participate in virtual high school courses, are students counted as students of their own school or the school offering the virtual course? Do high schools in your state expect students to take online courses in a school lab setting at a designated time, or are they allowed to work at home?

5. **Assessment issues**—Does your state apply more performance-based or other types of assessments to determine student learning in technology-facilitated classes? Does your state require end-of-course or end-of-year tests for all secondary students? Do these high-stakes tests limit course delivery possibilities? Online courses offer the benefit of being able to assess student learning immediately. The challenge is ensuring that course assessment is consistent with other assessments used by the school, district, and state.

6. **Payment for student participation in courses**—Who pays for the course? Under one model, the school where the student is regularly enrolled pays the provider directly for the cost of the course. Sometimes that payment is processed through another agency. When factoring in the number of participating students, this can be a very cost-effective model for schools when one considers the cost they would bear to hire a teacher for only a few students. Sometimes parents are asked to pay for tuition and materials for online courses. The goal should be to distribute costs through the school or district so that public school students do not have to pay extra for online courses. A manageable procedure should also be developed to process payments for course fees in a timely manner.

7. **Internet filtering, blocking, and safety issues**—Some schools have learned to their dismay that their Internet filtering technology does not permit the kinds of interaction required by online courses. In New Mexico, for example, an online teacher was forced to print e-mail and mail it to the students because the school’s filtering software did not permit e-mail and chat applications, and the students had no computers at home. In Kentucky, the instructional site of a private company offering online courses was temporarily blocked, so enrolled students couldn’t access their coursework at all. School administrators should have contingency plans, such as the ability to disable the filtering software temporarily in the event sites required for online coursework are blocked.

8. **Intellectual property issues**—If your teachers are involved in developing online courses, who owns the content of these courses? How are teachers/developers compensated? Some states consider online courses developed by teachers to belong to the school or district where the teacher is employed. Teachers work very hard developing online courses, and their time and
effort are valuable. Most states do not yet have formal intellectual property policies in place to encourage or support teachers developing online courses.

9. Should we develop and deliver our own online courses?—If good quality courses are available from other sources that will meet the needs of your students, it is in your school's best interest to use those courses rather than develop your own. Developing high-quality courses for online delivery is time consuming and can be very expensive. Teams of teachers, instructional specialists, technicians, and graphic designers are needed to develop good courses, and many school systems do not have the personnel (or the time) to devote to this.

Some policy questions can only be answered by the state departments or boards of education. Others may best be addressed to the course providers—the agency, school, or private company that is offering the course. Sometimes school administrators must ask for waivers from the State Board of Education in order to use online courses. Local teachers and administrators can answer some questions, particularly those related to course quality and practical implementation issues. Whatever the challenge, schools and administrators (both state and local) should focus on the question: "What is the best option for this individual student?"
Online Staff Development: Lessons Learned

By Donna Baumbach

Who has time to attend staff development these days? With increasing demands on teachers and less time during the week, this is a dilemma for many educators. With the advent of online staff development, however, educators now have opportunities for learning anytime, anyplace.

Because online staff development is new, applied research is needed to guide professional development specialists and administrators in making the most of this exciting opportunity for meeting the increasing demands of educators for training and development. While research findings are just beginning to make their way into the literature, much is being written about distance learning, online training, and e-Learning. Courses and components are being developed, offered, evaluated, and revised. Participants are learning from online components, as are online instructors charged with facilitating the learning experiences.

We can learn from the states, districts, and companies that have been pioneering online staff development. The Instructional Technology Resource Center (ITRC) at the University of Central Florida, a SEIR♦TEC partner, has compiled over 150 lessons learned in online staff development and presents them in Online Staff Development: Lessons Learned. The document examines online learning from three unique perspectives: course developers, course facilitators, and course participants. The document is available online at www.seirtec.org/publications/html. From this site, it may be viewed in HTML format on the Web or downloaded in PDF format. Hard copies may be requested from the ITRC's Webstore at www.itrc.ucf.edu/about/free.html.

These lessons have been gleaned from a thorough review of the literature, both print and Web-based documents, which are listed in the Resources section. Additionally, a survey instrument presenting a draft of the lessons was e-mailed to over 200 developers, facilitators/instructors, and participants who reviewed, validated, and critiqued the lessons and then contributed additional lessons from their own expertise and experience. While not all lessons apply to all courses or components, educators involved (or contemplating involvement) in any way in online staff development should consider each lesson. As educators know, learning never ends, and now, through online staff development, there are increasing opportunities for educators themselves to continue to learn and to grow.

SEIR♦TEC News for Educators Online Now (NEON)

NEON is a free electronic news source designed to disseminate educational technology announcements and resources to educators all over the Southeast. It is also a way for YOU to let others know what you are doing. A project of the Instructional Technology Resource Center (ITRC) at the University of Central Florida and the SouthEast Initiatives Regional Technology in Education Consortium (SEIR♦TEC), NEON is published electronically through e-mail and the website once a month. To subscribe to NEON or to submit an article for future issues, visit the website at www.itrc.ucf.edu/NEON.
Learning from Gritzley's Travels

Gritzley, SEIR-TEC's traveling mascot bear, rested all summer after a busy spring travel schedule. He is really excited about the adventures across the Southeast that he has to share with students and teachers who visit www.gritsonline.org. In fact, as school began, he was working feverishly on his Web travelogue and postcards as well as posting on www.gritsonline.org all the materials his new friends shared with him.

Learning via the Web about the places Gritzley has visited is one of the more creative approaches to distance education. On the Road with Gritzley Bear, the GRITS online collaborative project, introduces viewers to Gritzley's travels in Mississippi, Alabama, North Carolina, and South Carolina as well as an early spring stop in Florida. Additionally, viewers can learn of activities Gritzley participates in when he comes to visit and how to schedule a visit from Gritzley. Check out the snippets of Gritzley's diary and some of his trip pictures to see where he has been and to learn about his new friends!

March 2001
Dear Diary:

It is a long way from Durham, North Carolina, (my home) to Booneville, Mississippi! Maybe because it was my first trip away from home it seemed so long. Anyway, I was surely glad to arrive in Ms. Mauney's classroom. Middle school! I felt all grown up with her seventh-grade science students. We had a blast in the short time I was with her class. They sent me home with four Southern LiterBEARY Portraits from the great state of Mississippi: Eudora Welty, John Grisham, Willie Morris, and William Faulkner. They even gave me a great coloring book they had made of their town, Booneville, to bring back home as a souvenir. But the best part was touring their town and getting my picture taken at the industrial park in front of their school (Booneville Middle School), sitting on the play equipment at KidsTown playground, and sitting on the back of the little red caboose at their old downtown train depot. They have invited me back, maybe for the Christmas Parade or the Fourth of July Parade. Mmmm. Wonder if I could actually drive that caboose in one of the parades? Great place to visit. See all my adventures at www.gritsonline.org/gritzley.html.

See ya!
Gritzley

After Gritzley returned from Mississippi, he only had a few days to rest before heading out for visits in North Carolina, South Carolina, and Alabama. Just take a glance at his diary entry from his visit with Mrs. Waud's kindergarten class at Brookwood Forest Elementary School in Birmingham, Alabama.
April 2001

Dear Diary:

Kindergartners have a lot of energy! Here I am in Birmingham, Alabama, with Ms. Waud's class. She and Ms. Mum are super and have a full schedule planned for me. The class is called "Waud's World"—after Ms. Waud. The students were so excited when I arrived. We are going on a field trip to eat a Doodle. No, I am not sure what a Doodle is but will let you know.

Sleepily,

GRITZLEY

Next Day

Dear Diary:

I ate a Doodle with one of the Waudos! A Doodle is an Italian ice, and a Waudo, of course, is one of my new kindergarten friends in Ms. Waud's class. I got my picture taken at the library at one of the new computer stations and at the Mountain Brook Parkway old mill house in the woods (felt right at home!). I also had my picture taken meeting a box turtle and playing Magic Circle math game with the Waudos. The Waudos are really doing a lot of research about their community for the Alabama Our Home book they are making as one of my souvenirs. They are also learning about some of the LiterBEARY folks in their area, like Caroline Lee Hentz and Nellie Harper Lee. For kindergartners they sure know a lot of stuff and are sending me home with all types of postcards and even a flag! It will be sad to leave the Waudos.

Sniff, sniff.

GRITZLEY

Gritzley's adventures at each stop always include information on the town and community (in the Where in the Southeast is the Gritzley Bear?), information on state literary figures (in Southern LiterBEARY Portraits), and a variety of local details (in Gritzley's Scrapbook and Souvenirs). While Gritzley is visiting, students might also make a quilt square in Digital Quilting with Gritzley, explore their past history with Settlers of the Southeast or the vegetation in Plants and Animals of the Southeast, or use the Internet and local media to make an online newspaper about happenings in their community.

Teachers participating in the bear's adventures have commented that having Gritzley visit has enabled them to combine technology and state standards through projects in the classroom. Priscilla Dollar, fourth-grade teacher, and Deborah Bradford, technology specialist, of Deep River School in Lee County Schools (Sanford, North Carolina) commented that Gritzley's projects were "excellent opportunities to combine technology in a classroom setting resulting in a finished project integrating social studies and research skills." They reported that the electronic journal—Gritzley's Scrapbook and Souvenirs—was "the Best of the Bestest!" The fourth-grade students went on several field trips around the school and county. The local businesses welcomed the students and Gritzley and presented him with souvenirs and lots of information. Gritzley's diary entry for his visit at Deep River School reflects the great time he had with Ms. Dollar's students.
I could not believe all the businesses we visited. The golf course and the Sanford Aircraft Services were favorites. Best of all was the pottery they make there. Lots of mud—excuse me, clay—is used to make some truly awesome pitchers. The fourth-graders even gave me a beautiful blue speckled pitcher from Cole Pottery. It is just my size, too.

GRITZLEY

Internet and distance education projects are enjoyable and add another dimension to the classroom learning. Jeff Royal of Butler Avenue School in Clinton, North Carolina, had Gritzley visit his fifth-grade class during early May. He stated that the "activities went along with our curriculum." This is definitely an objective of the online collaborative project and with all projects on www.gritsonline.org. Mr. Royal and his fifth-graders really enjoyed the LiterBEARY portraits project. They used their research and reporting skills from their language arts and media curricula and their technology skills to gather information and prepare a report on local author Betsy Byars. Gritzley made a special note about this project in his diary.

May 2001

Dear Diary:

These Butler Avenue School fifth-graders in Mr. Royal's class have found a great North Carolina author to research for my LiterBEARY portraits project. They are doing a biography of Betsy Byars, who has written over 50 children's books. They have collected information on their state and community, including the Sampson County History Museum and all the cool places in their county. Tomorrow is picture day! They say I will even get to have my picture taken on a "bike"—that's a motorcycle, not a bicycle.

Off to rest while the guys and gals prepare for their EOG test!

GRITZLEY

Gritzley is looking forward to sharing more adventures from his fall 2001 trips. Think about having him visit your school or, at least, learn about other places from his travelogue in the Pantry on www.gritsonline.org.
The Florida Virtual School Learning Experience: An Interview with Julie Young

By Jeanne Guerrero

The Florida Virtual School (FVS) began in August 1997 as a collaborative project between Alachua and Orange County Public Schools. Opening with 15 educators who served in administrative, instructional, or developmental jobs, the school offered Florida families and students a different educational choice. Now in its fifth year, FVS has over 6,900 students in grades 9–12 enrolled in 60 courses, including ten advanced placement courses. These students are from 65 Florida counties, and a growing number are from other locales. The technology behind the online courses offered at FVS is Jones Knowledge's e-education platform.

Recently, the Executive Director of FVS, Julie Young, took a few moments to share the FVS experience and lessons learned.

Jeanne: What is the online learning experience at FVS like for students?

Julie: The online learner experience is broad. Some students are 100% distance learners, and some are onsite working with a facilitator or teacher. The student logs into a course and sees the same information on the screen that a teacher would say in the classroom. The student then submits assignments to the teacher on a regular basis.

Jeanne: How does the student communicate with the teacher?

Julie: A student can communicate and get feedback from an instructor in many different ways. One, a student can directly "dial-up" the teacher for direct feedback. Two, students participate in a weekly chat session. Three, students can communicate one-on-one with other students involved in the class in person or via e-mail.

Jeanne: What makes the Florida Virtual School online classes different from what a student may receive in a regular high school?

Julie: Teachers and students know each other better than in a regular classroom experience. We try hard to make sure the students don't just log into a class in isolation. Our content is designed specifically to push the kids away from their computers and get them to interact with their community, family, and friends on a regular basis. The kids in many of these classes come up to me and say they can't wait to work on their assignments. I just don't see that type of energy in a traditional classroom setting.

Jeanne: How do you adapt your curriculum to suit different learning styles?

Julie: Often when students are given assignments, they have a variety of choices. Some examples
of opportunities students have are to take a traditional exam, create a movie, draw a brochure, or develop a marketing plan. The work is submitted to the teacher in the form of a digital picture, film demo, or publication.

Jeanne: How do the teachers grade these assignments?

Julie: Teachers make many authentic assignments, so they have a wide range of projects on which to grade the work of the students. Because the students do their work from a home setting, we require our teachers to make periodic calls to their students and their students' parents once a month and ask them a series of questions to assess their general comprehension of their class work. This gives the students a chance to clarify any questions with the instructor. It gives the instructor a chance to make sure the students are actually doing the work.

Jeanne: How much time does a student have to complete these assignments?

Julie: A student may take a traditional, extended, or accelerated pace. The traditional schedule ends at the end of a regular school year. The extended year can go from one to two years. The accelerated pace is scheduled to finish when the student has mastered the concepts. If the student has not achieved mastery, he or she does not pass. We are completely student-centered. We recognize that students have differences, and we take each at his or her own pace.

Jeanne: Is there a final exam?

Julie: The students have either a final exam or a final project. We used to have proctors and timed tests, but it became a very difficult process when we hit 2,500 students.

Jeanne: What advice would you give to another school or school district attempting to begin a similar online school process?

Julie: If they try something and it doesn't work soon, try something else. Our school learned early on that when we try something and it doesn't work, we change it immediately. We don't have the luxury of waiting to change a program because an entire class can be taken off schedule. Educators attempting a program like this must continually think out-of-the-box and figure out what they really want to provide. If all they want to do is have an online class take the place of a traditional classroom, they might as well place the information on a CD. If they focus on the immediate benefits for the kids, then the benefits will be more long lasting.

Jeanne: What types of comments do you get from the students and parents?

Julie: Ones we are very proud of! I would encourage your readers to go to our website at www.flvs.net and read some of the testimonials. There is lots more on the website also! ☺
Beginning with the 2001-2002 school year, the students in Mississippi schools have a new teacher: MOLLI—the Mississippi OnLine Learning Institute! Administered by Mississippi Department of Education, the mission is that all students and educators in Mississippi public schools will have access to an online learning community that will provide educational opportunities to expand the boundaries of the traditional classroom through Web-based delivery courses and instructional support.

How does MOLLI work? Mississippi teachers licensed in the subject area and proficient in Web-based course delivery teach the online courses from MOLLI. The courses have been developed or selected with teacher input and are aligned to National and Mississippi Frameworks standards. Credits for coursework will be granted by the local education agency, with all decisions guided by focusing on what is best for the learner while not supplanting local control and instruction. The MOLLI academic calendar is designed to coordinate with the districts’ calendars.

The target audience for MOLLI ranges from the highly gifted to the disadvantaged. MOLLI will enable public schools to:

- Support students who are unsuccessful in the traditional classroom setting
- Support students who are unable to attend school for medical or other reasons
- Support students who are interested in taking Advanced Placement courses or other courses not offered in their school
- Support students who need interventions or accommodations or are in alternative schools

The first year has just begun for MOLLI, but all signs indicate that the Mississippi Department of Education has indeed joined the online learning community in a bold way!

Online professional development is an important element of Proposed Technology Competencies for Florida Teachers, a document developed by SEIR-TEC’s partners at the Instructional Technology Resource Center at the University of Central Florida. Based on ISTE’s National Educational Technology Standards for Teachers and Students as well as the Sunshine State Standards, the Florida competencies were designed for in-service teachers and include skills in working with some Florida-specific tools as well as more general competencies. The standards include performance indicators, sample skills/checklist items, and online resources for teachers to learn more and sharpen their skills in each area. The document evolved during five rounds of public review. Websites for professional development were reviewed and recommended by a team of 15 technology-savvy Florida teachers from Monroe County, Florida. Teachers see the websites as helpful in setting their own goals for professional development each year, for self-assessment, and for learning more independently. Districts are finding them useful in writing district needs assessments and in planning professional development experiences for their teachers. The document is available for downloading in PDF or Word format online at www.itrc.ucf.edu/techstandards.
Adults Benefit from Online Learning

By Lynda Ginsburg

New online learning opportunities enable adults, as well as children, to improve their literacy and numeric skills. More and more online learning opportunities enable adults to learn at their own convenience, in privacy, and with or without interacting with fellow students or a teacher/facilitator. The main barrier, however, is that the very people who could benefit from online literacy and numeric instruction are those least likely to have access to their own computers, let alone Internet connections. The 1999 Department of Commerce report Falling through the Net, Defining the Digital Divide showed that only 16% of households belonging to adults having “some high school education” possessed personal computers, and only 8% of households in which adults had no more than elementary education had them. However, public access to computers in libraries and community technology centers is increasing.

Mere access to computers and the Internet, however, will not help adults improve their literacy and numeric skills. Structured, interactive, online learning programs geared to the needs and interests of adults and providing the kinds of support and help they need are required. One such program is LiteracyLink (www.pbs.org/literacy), which is being developed through a Star Schools partnership of PBS, the National Center on Adult Literacy, and Kentucky Educational Television. All of the instructional materials are being made available to adult learners at no cost.

Since September 1999, adults have been working on their skills using LiteracyLink’s Workplace Essential Skills in classrooms and on their own. The videos and corresponding interactive online units focus on the different aspects of literacy and communication in the workplace, including applying for jobs, interviewing, workplace safety, learning at work, the language of work, communicating with coworkers and supervisors, teamwork, writing memos and letters, following directions, reading reports and manuals, and solving mathematics problems at work.

LiteracyLink’s GED Connection includes two kinds of learning activities and assessment functions as well. The GED Learning Modules are extended, course-like units of instruction that take several weeks to complete. They can be used independently in a self-paced manner or can be facilitated by an instructor via the Virtual Classroom. One learning module will be available for each of the five content areas covered on the GED test, and every module is being built with writing skill development in mind, as well as content knowledge development. The open-ended questions are designed for extended response and cumulative skill/knowledge development, and responses are saved to learner portfolios. Modules incorporate video clips for instructional reference and enhancement where applicable.

The 40 GED Internet activities are instructional activities based on external websites (“destination sites”). They are short, skill-focused activities designed to...
provide practice in both GED content and in GED test-taking format by posting four to five GED-like, multiple choice items per activity. The responses to GED multiple-choice items are also saved to learner portfolios.

The program also features GED practice tests, which are half-length tests (just like the official practice tests) composed of multiple choice questions for each of the five content areas. Scoring is instantaneous, and feedback includes explanations of answer choices. The scoring reports a raw score (right/wrong/not answered) and also a breakdown of scores by type of question (e.g., comprehension, synthesis) so that a learner receives information on which types of tasks need additional practice within a given content area. All score records are saved to learner portfolios.

The GED practice tests may be taken at any time in the learning sequence—as a pre-test, post-test, or midway test—and a learner may re-take a practice test as many times as he or she likes with the re-take score subsequently replacing the previous score in the learner’s portfolio.

For the adult literacy community, issues of online course credit or test security are not as crucial as they are for K-12 schools. What is important is the challenge of harnessing online opportunities to reach adults in ways that enable them to improve their literacy, numeric, and work-related skills.

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**What is in Your Virtual Library?**

SEIRTEC is pleased to announce a new publication from SERVE. The publication, *Virtual Libraries in the Southeast: A Guide to Online Databases Available to Educators in the SERVE States*, details the resources available through the virtual library in each state in the region: Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. A virtual library, as described in this publication, is a collection of the licensed databases offered by each state, information on use of the databases, and links to related instructional resources.

The book also includes a chapter on basic search techniques for the databases and a chapter on Internet search tools. The two appendices consist of an alphabetical listing of the databases and a listing by vendors. A bookmark featuring search tools and listing the six virtual libraries is available with each book, upon request.

The book is available online at [www.serve.org/disc](http://www.serve.org/disc) and from SERVE Publications. Check for the publication ordering information at [www.serve.org/publications](http://www.serve.org/publications).
Educational Web Portals: Guidelines for Selection and Use

A guide to help school district administrators assess the quality, usefulness, and reliability of commercially provided educational Web portals designed for schools

By Jennifer Burke

What is an educational Web portal?

A Web portal is a website that provides access to many resources and services, such as instructional materials, lesson plans, news about current events, instant messaging and e-mail, and the ability to conduct controlled searches.

Why should school administrators be concerned?

Every day companies claim to be "the new center of the classroom community" or "everything for K-12 education." School administrators need to ask key questions before they select commercial Web portals. Each commercial Web portal provides different resources and services, which may include lesson plans, instructional materials, e-mail services, discussion forums, filtering services, current news, and classroom activities.

Administrators need to assess their schools' needs for portals and what features will be most useful for teachers, students, and parents, and then determine whether resources and services offered by the vendor are appropriate to the schools' instructional needs and goals. Administrators need to assess the quality and appropriateness of the portals and each of their parts.

Some commercial portal companies claim that what they offer is "free" to schools. Companies that offer "free" portals usually do not charge schools for access to the resources but may have advertisements on the sites or seek information about users. If it is a "pay-for-use" portal, the school needs to determine whether it is worth the cost. Will the school receive quality resources that otherwise are unavailable to its students and teachers? School administrators need to consider several questions related to the management of portals:

- Are teachers already trained to use the resources available from this Web portal provider?
- Will the portal company provide necessary training for teachers?
- What initial implementation and ongoing costs will the school district and schools have to pay for this Web portal? What will the provider charge?

"[A Web portal is] a website or service that offers a broad array of resources and services, such as e-mail, forums, search engines, and online shopping malls. The first Web portals were online services that provided access to the Web, but by now most of the traditional search engines have transformed themselves into Web portals to attract and keep a larger audience."

—Webopedia.
### Considerations

Content material provided by the portal company supports and is aligned with the school district's curriculum and instructional program.

Information is error-free, bias-free, current, timely, and is presented objectively.

The portal and information contained there are updated frequently.

Links to outside sites are relevant, authentic, up-to-date, and appropriate.

Concepts and vocabulary used to describe content are relevant to students' abilities (but may be differentiated by age or intended audience).

Images and graphics are bias-free.

Text throughout the site uses correct grammar, spelling, and sentence structure.

Designers and researchers who provide content for the site are experienced and reputable in their fields.

Contact information for the portal company is provided, and users are encouraged to suggest improvements.

Interaction through the portal is compatible with the physical and intellectual maturity of the intended audience.

Topical information adequately covers the subject for the intended audience.

The progression of topics within the portal and with external links is logical and relevant.

The portal offers information that is not readily available from other sources or offers unique ways of accessing the materials.

Materials on the portal are tailored for various users (students, parents, and teachers) who have different needs and abilities.

**Yes** | **No** | **Comments**
---|---|---
Yes | No | Comments
### Technical information — How does it work?

<table>
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<th>Considerations</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
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<td>Technical requirements are defined clearly so that the school can access and use the portal.</td>
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<tr>
<td>Classrooms have adequate, reliable Internet connections to use online resources.</td>
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<td>If the product requires the installation of proprietary software, this software will work seamlessly with school or district networks.</td>
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<td>The portal does not interfere with online instruction from other providers.</td>
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<tr>
<td>The local area network's or wide area network's security system (firewall) is compatible with the portal and any links to outside sources.</td>
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<tr>
<td>Images and text on the portal load in a reasonable time.</td>
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<td>The portal uses easily recognizable icons, menus, and directional symbols that encourage independent use.</td>
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<td>Links within the portal provide easy navigation through the site.</td>
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<tr>
<td>The site uses standard multimedia formats.</td>
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<td>Users can print or download text or graphics easily.</td>
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<tr>
<td>The portal follows good graphic-design principles.</td>
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<td>Screen displays are uncluttered and concise.</td>
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<tr>
<td>All graphics have captions, labels, or legends.</td>
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<tr>
<td>The text size is readable and appropriate for the intended audience.</td>
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<tr>
<td>Graphics and art are functional and appropriate for the material presented; they are not just decorative.</td>
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<tr>
<td>Information is presented through a mix of text, motion, still images, and sound.</td>
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<tr>
<td>The presentation of information stimulates imagination and curiosity and allows interaction.</td>
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<tr>
<td>Product advertising, if any, is not intrusive and does not conflict with school policy.</td>
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<tr>
<td>The portal can be accessed by physically challenged students or is &quot;Bobby-approved&quot; by the Center for Applied Special Technology.*</td>
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</table>

*Bobby is a free, Web-based program [www.cast.org/bobby](http://www.cast.org/bobby) provided by the Center for Applied Special Technology. The program identifies and repairs significant barriers to access of Web pages by people with disabilities.*
- What is the likelihood that this company will continue to provide services to schools over the next three to five years?
- What provisions are offered to subscribers in the event that the portal is no longer available?

**What can be done?**

*Web Portals: Guidelines for Selection* is intended to help school districts and school administrators select Web portal resources that support their districts' academic goals. Because commercial portals vary greatly—for example, some are extensive content-specific sites, while others are sites with many organized links—it is difficult to assess their value and quality. Educators should use these guidelines to identify issues and raise questions before selecting and purchasing portals. These guidelines should be applied to each Web portal resource under consideration to determine how well it meets school needs.

**Summary**

Implementing a portal that will be used by students, teachers, and parents requires careful planning based on the needs of the entire school. Producers of online materials often make direct sales presentations to school and district personnel and conduct demonstrations at regional and national technology conferences. Presenters sometimes imply that the Web portal is free to schools, but the hidden cost may be targeted advertising, some of which may be intended to build brand loyalty among portal users. Administrators should weigh all options carefully when selecting portals through which students and teachers access instructional materials on the Internet.
EvaluTech Software Evaluation Database Receives National Award

The EvaluTech software evaluation database, a joint effort of the North Carolina Department of Public Instruction and the Southern Regional Education Board (SREB), won the EdNET 2001 Pioneer Award. EvaluTech provides teachers, administrators, parents, and students with free online evaluations of computer software and instructional materials.

"Quality and reliability—these are the hallmarks of the work of the North Carolina Department of Public Instruction."

EvaluTech is the only program of its kind in the country, and thousands of teachers and educators have utilized the program since its inception in 1997.

EvaluTech is accessible on the Web at www.evalutech.sreb.org. Its searchable database contains more than 7,000 reviews of instructional materials, including computer software, CD-ROMs, videos, and books. The site receives more than 10,000 hits per week.

Teaching materials appropriate for grades pre-K–12 are reviewed in arts education, English language arts, character education, computer science, fiction, guidance, healthful living, information skills, mathematics, science, second languages, social studies, traditional literature, and vocational education.

EvaluTech’s database can be searched using key words, author, title, subject, publisher, grade level, format, and review date. EvaluTech includes only recommended instructional materials and connects these recommended materials to academic subjects and grade-level use. It also helps educators find materials that suit various learning styles and teaching methods. ☑

Bill Thomas, Director of Educational Technology at SREB, said, "EvaluTech is a nationwide program made possible by the good work in the North Carolina Department of Public Instruction. They initiated the evaluation program and then allowed the Southern Regional Education Board to share it with our 16 member states."

SREB President Mark Musick said, "EvaluTech is an excellent example of states sharing resources to improve teaching and learning in the SREB states. The North Carolina Department of Public Instruction and EvaluTech staff set the standard for quality in the evaluation of instructional materials."
LEARN NC, the North Carolina Teacher's Network sponsored by the UNC-Chapel Hill School of Education, has taken the next big step in integrating the Internet into classroom instruction! LEARN NC now offers the LEARN NC Virtual Classroom to North Carolina educators. Educators can access in-service offerings developed by their colleagues in other schools and by educators in the School of Education. The courses are open also to students enrolled on the UNC-CH campus. Soon, this service will offer access to a variety of quality instructional opportunities, such as Advanced Placement courses, to K–12 students in the smaller school systems and rural parts of the state. Currently, K–12 students are taking AP English through the Virtual Classroom.

The Virtual Classroom uses LearningSpace, an online course and collaboration software tool, to foster this statewide virtual learning environment. LEARN NC secured a statewide license for LearningSpace for K–12 schools. The license, the largest in the United States, encompasses 80,000 K–12 teachers, their students, the parents of those students, the North Carolina Department of Public Instruction, and the faculty, staff, and students at the School of Education at UNC-CH.

After one year of development and testing, 47 online courses are now offered through LEARN NC, which have more than 700 users enrolled. Another 75 courses are in some phase of development, and several courses are now available to be downloaded and taught in local school systems. Courses currently being offered or in development include the following:

- North Carolina Department of Public Instruction’s “Advanced Technology Competencies from Inservice to the Classroom”
- “Composing Web Pages 101,” from the Iredell-Statesville Schools
- “Chronicles of History I,” developed by the Rowan-Salisbury Schools’ Net Academy
- “North Carolina Computer Skills,” a course from Charlotte-Mecklenburg Schools that prepares students in grades 8–12 for the computer-proficiency graduation requirement

Jim Barber, Executive Director of LEARN NC, comments, “The interest in online professional development courses has been tremendous! School systems are looking to us to meet an increasing number of their continuing education needs.”

North Carolina educators: Are you interested in partnering with LEARN NC to develop a course for professional development? If so, or for further information on offerings in the Virtual Classroom, contact Ross White at ross@learnnc.org, or visit the LEARN NC Virtual Classroom at www.learnnc.org/learnnc/courses.nsf.
Resources for Learning Online

Sifting through the many Web-based resources related to online learning can be a daunting task. Here are some of the resources that SEIR•TEC staff and partners have found interesting and useful.

The Regional Technology in Education Consortia for the Northwest and Southwest provides information on videoconferencing and other forms of distance learning.

**www.netc.org**—Digital Bridges. This site provides information about using videoconferencing technology for instruction, communication, and collaboration. The site includes details of current videoconferencing projects in two districts (Oregon and Washington), a glossary for videoconferencing, information on research from the field, a session plan form, and numerous digital pictures. Two videos, available at $15 each, are *Promising Practices in K–12 Videoconferencing and Issues for K–12 Decisionmakers.*

**www.dlrn.org**—WestEd’s Distance Learning Resource Network. Here you will find information and resources on the Star Schools Program, current research, and news items. Using a searchable database, website visitors can find information on courses and resources available from the Star Schools projects, or they can use the online tools from WestEd for designing courses for Web-based instruction.

Other resources on the Web are:

- **http://illinois.online.uillinois.edu/IONresources/onlineoverview/StudentProfile.html**—What makes a successful online student? The Board of Trustees of the University of Illinois. 2000.

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First Printing 2001
Conferences in the SEIR•TEC Region and Beyond

January 29–30, 2002
Jackson, Mississippi
Mississippi Educational Computing Association Conference

February 20–22, 2002
Charlotte, North Carolina
North Carolina Association for Educational Communications and Technology

March 6–8, 2002
Orlando, Florida
Florida Educational Technology Conference

April 16–18, 2002
Savannah, Georgia
Georgia Educational Technology Conference

June 17–19, 2002
San Antonio, Texas
National Educational Computing Conference
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