

ADMINISTRATION AND SUPPORT SERVICES

The technology field is changing rapidly. It is virtually impossible for any one person within a school system to maintain the necessary knowledge regarding all aspects of schooling and school operations when planning for and implementing technology. Because of this, school personnel must plan collaboratively and continuously if the use of technology is to lead to improved student learning, increased productivity and more efficient operations. Effective integration requires district leaders who articulate and advocate a vision of what technology can do for teachers and learners and of school operations that facilitate the achievement of that vision.

Without leadership and capacity building at the campus and district level, educational reforms, including those facilitated by technology, seldom survive. Leaders need support to make ideas become programs, policies become practice, and vision to become a reality. It is not enough merely to install technology infrastructure—to connect schools to the Internet or to teach students to use software for gathering information.

The successful integration of technology into Texas schools, as outlined in the *Long-Range Plan for Technology, 1996-2010*, hinges on administrators knowing what their schools need and doing what must be done to fulfill those needs. Administrators facilitate the systems that allow our teachers and students to learn and use technology. As a result, successful integration of technology depends on the effective support of those administrators' efforts. Support is essential for not only keeping the network and computing infrastructure constantly available but also providing the instructional support teachers need to use the technology effectively in the classroom. Technology planning is an integral component to all campus and district planning efforts.

A variety of tools have been provided to assist campuses and districts in the planning process. The Texas STaR Chart is an online resource tool for use in technology planning, budgeting for resources, and evaluation of progress. The Campus STaR Chart has been used by Texas schools for several years. The Texas Teacher STaR Chart was released in August of 2004. These tools are available in print for training purposes and data is entered into the online STaR Chart System. The Texas e-Plan System was developed to assist districts in the planning process. This online planning system allows districts to create, edit, and submit an online technology plan. Data from the Texas STaR Chart is linked to the Texas ePlan System.

Along with careful planning, resources must be allocated to support technology in Texas schools. The Technology Allotment, E-Rate discounts, federal funds including NCLB Title II, Part D, as well as local resources and partnerships are essential. In 2003, the Technology Planning and E-Rate Support Center (TPESC) was established at the Region 12 Education Service Center to assist districts in coordinating these efforts.

To maximize the impact of the Enhancing Education Through Technology program outlined in Title II, Part D of No Child Left Behind, the Target Tech Center at the Region 10 Education Service Center provides technical assistance to districts across the state.

The Texas STaR Chart is a planning tool that has been developed around the four areas of the *Long-Range Plan for Technology, 1996-2010* and is designed to help campuses and districts determine their progress toward meeting the goals of that plan. The following chart shows results for the 2003-2004 school year in the area of Administration and Support.

**2003-2004 Texas Campus STaR Chart
Administration and Support**

Early Tech **280 campuses** **3.9%**

There is no campus technology plan. Technology is used mainly for administrative tasks. No technical support is onsite. There is no district technology coordinator. Technology Allotment is only source of funding.

Developing Tech **3,674 campuses** **51.1%**

Campus plan aligned with Long-Range Plan for Technology. Teachers and administrators have vision for technology. There is one technical support staff to 750 computers. There is a full-time district technology director. The Technology Allotment and local funding are used for purchases.

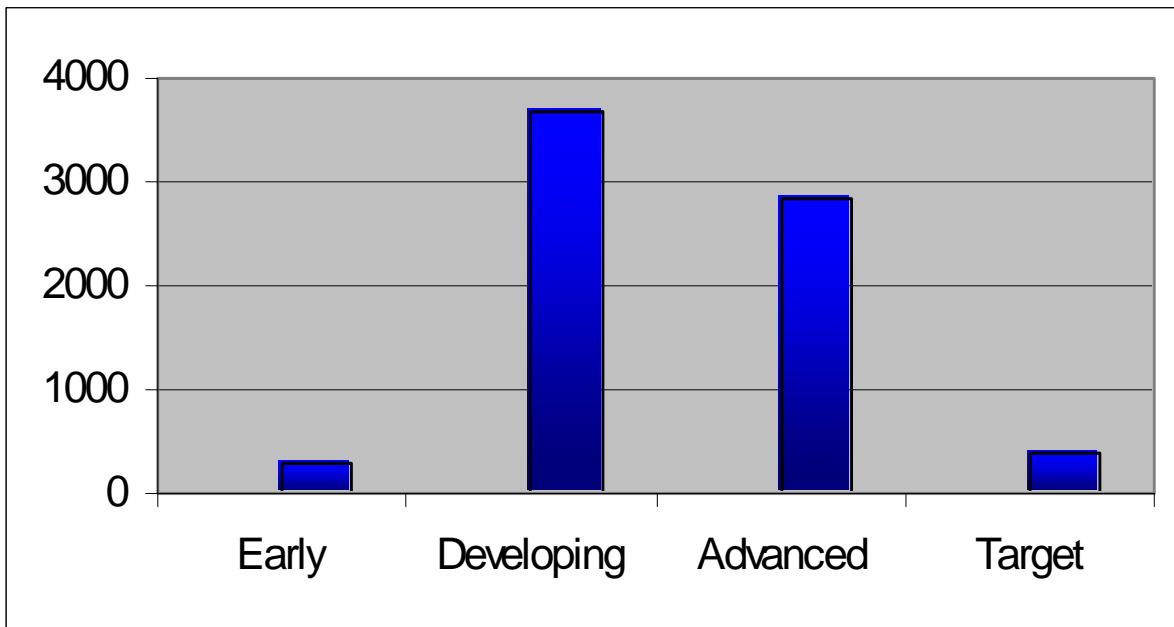
Advanced Tech **2,841 campuses** **39.5%**

Campus plan is board approved and supported by superintendent. There is one technical support staff to 500 computers, Full-time district technology director. Technology Allotment, e-Rate, competitive grants and local funds are available.

Target Tech **391 campuses** **5.4%**

Campus plan focused on student success, supported by board and administration. There is one technical support to 350 computers and campus instructional support staff. Technology Allotment, e-Rate, state and federal competitive grants and local funds are available.

Administration and Support



TECHNOLOGY PLANNING

Technology planning has been an integral part of school administration in Texas since 1988. The Texas Education Code charges the State Board of Education with the development of a long-range plan for technology (32.001). Texas led the nation with the first *Long-Range Plan for Technology, 1988-2000* which plotted the course for meeting educational needs through technology and for implementing changes in education from 1988 to 2000. Changes in legislation and technology required a new plan and the *Long-Range Plan for Technology, 1996-2010* was developed. An update was provided in 2002 to align with the No Child Left Behind Act.

Campus and district plans are aligned with the state plan and provide a vision and roadmap for meeting the educational needs of the 21st century.

EDUCATIONAL TECHNOLOGY ADVISORY COMMITTEE

The Educational Technology Advisory Committee is authorized in the Texas Education Code and was instrumental in developing the Texas Campus STaR Chart and Texas ePlan, the online technology planning and approval system. Current ETAC members include national and state leaders in educational technology, superintendents, technology coordinators, principals, teachers, ESC personnel and Agency staff.

The U.S. Department of Education will release the new *National Educational Technology Plan* in late 2004. States then are able to update their state plan to align with the new national plan as state eligibility requirements for Title II, Part D of

NCLB [SEC. 2413] include a new or updated statewide long-range strategic educational technology plan. This plan should address the educational technology needs of local education agencies that also are required to have an updated plan to qualify for Title II, Part D funds as well as E-Rate discounts.

To ensure that Texas is well prepared to meet this requirement, the committee is developing a comprehensive strategy that includes a new Texas Long-Range Plan for Technology that spans from 2006-2020 and corresponding updates to the planning tools provided for districts such as the Teacher and Campus STaR Charts and the online Texas ePlan system.

The timing is perfect to develop a new Long-Range Plan for Technology 2006-2020 and present it to the SBOE in the fall of 2006 and to the legislature December 1, 2006. The current plan, developed in 1996, will be ten years old by the time the new plan is ready for adoption. Stakeholders will have many opportunities to provide input to the plan.

Texas ePlan 
On-line Technology Planning System

Texas schools have been involved with technology planning for over a decade. In 2003, the new Texas e-Plan System was developed to assist districts in this process. This online planning system allows districts to create, edit, and submit an online technology plan. Eligibility for E-Rate requires that the district technology plan be approved by the state education agency. This is accomplished through a peer review at the regional level prior to submission to TEA.



TEXAS STAR CHART

The system is designed to inform districts as to whether their plan is aligned with *the Long-Range Plan for Technology, 1996-2010*, Title II, Part D of No Child Left Behind, and the federal E-Rate discount program. The online technology plan can be reviewed and approved online. Once plans are reviewed and approved, districts receive an electronic certification of approval for the plan. Plans submitted via this tool can be used for E-Rate and NCLB formula and competitive grants.

The Texas ePlan System was developed by the Educational Technology Advisory Committee and Educational Technology staff in partnership with the South Central Regional Technology in Education Consortium (SCRTEC) housed at Southwest Educational Development Laboratory (SEDL) and the Technology Planning and E-Rate Support Center (TPESC) at ESC Region 12. The Texas e-Plan is available at <http://www.sedl.org/e-Plan>.

This online planning system opened January 15, 2004 and all districts were required to submit their plan electronically for review and approval. Plans can be approved for one, two or three years. July 1 is the deadline each year for plan approval.

As of July 1, 2004

- 1,047 plans were entered, peer reviewed, and approved by TEA;
- 29 plans were submitted and reviewed but returned for modification;
- 94 plans are in the system under development but not submitted;
- Texas ePlan opens on September 1 for updates, completion of plans in the system and submission of new plans; and
- districts with one-year approvals must submit an update for review and approval by July 1, 2005

Schools in Texas also have a self assessment tool, the Texas School Technology and Readiness (STaR) chart, to assist in determining progress toward the goals of the *Long-Range Plan for Technology, 1996-2010* and No Child Left Behind. The Texas Teacher STaR Chart, released in August 2004, gives teachers their own tool to help determine their progress toward achieving the Target Tech level in true integration into the curriculum by transforming teaching and learning. Districts must complete a STaR Chart for each campus prior to submitting their technology plan via the Texas ePlan System. Completed STaR Charts are also required for federal and state technology grants. Districts and campuses can also print a variety of reports that illustrate the status of the district and each campus in meeting the goals of the *Long-Range Plan for Technology, 1996-2010*.

The Texas STaR Chart is online at www.tea.state.tx.us/starchart. The Campus STaR Chart site opened December 2003 and closed June 30, 2004 with 7,186 campuses completing the chart.

The 2004-2005 Campus Chart is distributed in the fall and the online system opens November 1st. The online version of the Texas STaR Chart automatically feeds into the Texas ePlan system and will generate statewide reports automatically. Training and distribution of the campus and teacher STaR Charts are coordinated through ESCS

Texas schools actively plan for technology. Campus STaR Chart data indicate that a significant number of campuses have a plan that is collaboratively developed, guides policy and practice and is updated regularly.

Texas Campus STaR Chart Data for Column M, Vision and Planning	
	Campuses
I. Early Tech No campus technology plan; technology primarily used for administrative tasks such as gradebook, word processing, budgeting, attendance	963
II. Developing Tech Campus technology plan aligned with state plan, integrated into district, used for internal planning, budgeting, applying for external funding and discounts. Teachers and administrators have a vision for technology use for direct instruction and some student use	2,763
III. Advanced Tech Campus technology plan is approved by the board and supported by the superintendent. Campus plan collaboratively developed guiding policy and practice, regularly updated. Campus plan addresses Technology Applications TEKS and higher order teaching and learning	2,536
IV. Target Tech Campus plan is actively supported by the board, collaborative develop and updated annually. Campus plan is focused on student success, based on needs, research, proven teaching and learning principles. Administrators use technology tools for planning and decision making	924

Source: 2003-2004 STaR Chart

Another key component of technology planning is appropriate budgeting for technology and leveraging multiple sources to fund that budget. Applications for various grant programs as well as the federal E-Rate discount program require effective budgeting and multiple support strategies for planned technologies. A wide variety of factors impact the technology budget and continuous monitoring and updating are essential to ensure effective implementation of the campus plan.

Texas Campus STaR Chart Data for Column P, Budget	
	Campuses
I. Early Tech Campus budget for hardware and software purchases and professional development	1,274
II. Developing Tech Campus budget for hardware and software purchases and professional development, minimal staffing support, and some ongoing costs	3,023
III. Advanced Tech Campus budget for hardware and software purchases and professional development, adequate staffing support, and ongoing costs	2,386
IV. Target Tech Campus budget for hardware and software purchases, costs for professional development, incentives for professional development, sufficient staffing support, facilities and ongoing costs. Appropriate budget to support the technology plan	503

Source: 2003-2004 STaR Chart

Changes in the economy provide additional challenges to schools as costs of fuel, facilities, utilities, personnel, and health care also contribute to the overall cost of the campus technology plan. These factors may also impact the cost of hardware, software, technical support, professional development and telecommunications. Changes in technology also require appropriate budgeting for refresh and replacement costs to maximize the investments already made.

TECHNOLOGY FUNDING

E-RATE IN TEXAS

E-Rate is the common name for the Schools and Libraries Universal Service Support Mechanism. E-Rate provides discounts to assist schools and libraries in obtaining affordable telecommunications services and Internet access. The Universal Service Administrative Company (USAC) administers the program at the direction of the Federal Communications Commission (FCC). USAC's Schools and Libraries Division (SLD) administers the program.

To be eligible to participate in the E-Rate program, public schools, school districts, charter schools, private schools, and libraries are responsible for filing the proper SLD forms by the timelines established by the SLD and the FCC, and must have a approved technology plan. In Texas, the Texas Education Agency (TEA) is authorized to approve technology plans ONLY for public schools and school districts, public charter schools and regional Education Service Centers (ESCs).

Texas schools received over \$400 million in E-Rate discounts this funding year (July 2003-June 2004) and over \$1 billion since the start of the program.

To assist Texas schools with technology planning and E-Rate applications, the Agency established the Technology Planning and E-Rate Support Center (TPESC) at the Region 12 Education Service Center <http://tpesc.esc12.net>. The TPESC provides assistance and support to Texas public and charter schools in:

- meeting the requirements for participation in the federal Schools and Libraries Universal Service Support Program, better known as E-Rate;

- meeting the planning requirements for the Title II, Part D Enhancing Education Through Technology Program of No Child Left Behind (NCLB);
- submission of an updated technology plan using the new online technology plan submission system - Texas e-Plan; and
- completion of the Texas STaR Chart data required annually by all campuses.

TITLE II, PART D ENHANCING EDUCATION THROUGH TECHNOLOGY

This section of the NCLB legislation combines several previous technology programs into a single State Ed Tech program. Funds are allocated to states who distribute 50% to schools through a formula program and 50% through a competitive grant program. At least 25% of the funds must be used for high-quality professional development to prepare teachers to integrate technology into the curriculum.

TITLE II, PART D PURPOSES

1. To provide assistance to states and localities for the implementation and support of a comprehensive system that effectively uses technology in elementary schools and secondary schools to improve student academic achievement.
2. To encourage the establishment or expansion of initiatives, including initiatives involving public-private partnerships, designed to increase access to technology, particularly in schools served by high-need local education agencies.
3. To assist states in the acquisition, development, interconnection, implementation, improvement and maintenance of an effective

educational technology infrastructure in a manner that expands access to technology for students (particularly disadvantaged students) and teachers.

4. To promote initiatives that provide school teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction that are aligned with challenging State academic content and student academic achievement standards through such means as high quality professional development programs.
5. To enhance the ongoing professional development of teachers, principals and administrators by providing constant access to training and updated research in teaching and learning through electronic means.
6. To support the development and utilization of electronic networks and other innovative methods, such as distance learning, of delivering specialized or rigorous academic courses and curricula for students in areas that would not otherwise have access to such courses and curricula, particularly in geographically isolated regions.
7. To support the rigorous evaluation of programs funded under this part, particularly regarding the impact of such programs on student academic achievement, and ensure that timely information on the results is widely accessible through electronic means.
8. To support local efforts using technology to promote parent and family involvement in education and communication among students, parents, teachers, principals, and administrators.

GOALS

The goals of Title II, Part D of NCLB are:

- to improve student academic achievement through the use of technology in elementary schools and secondary schools;
- to assist every student in crossing the digital divide by ensuring that every student is technology literate by the time the student finishes the eighth grade; and
- to encourage the effective integration of technology resources and systems with

teacher training and curriculum development to establish research-based instructional methods that can be widely implemented as best practices by State education agencies and local education agencies.

States receive Title II, Part D funding by formula based on each state’s current-year share of Title I, Part A funds. The state may retain 5 percent for state-level activities and technical assistance. States are to award 50 percent of the remaining funds to eligible Local Education Agencies (LEAs) by formula based on each LEA’s share of Title I, Part A funds for that year. States must use the remaining funds for competitive awards to high-need LEAs or partnerships that include high-need LEAs.

TITLE II, PART D FUNDING FOR TEXAS

Year One	\$50,721,663
Year Two	\$55,794,699
Year Three	\$59,385,629

FORMULA GRANTS

	Year One	Year Two	Year Three
LEAs that applied for Title II D formula funds	1158	1146	1171
LEAs that applied as independent projects	909	884	896
LEAs that applied as shared service arrangements	249	262	275

Formula awards ranged from less than \$20 to over \$2 million. Districts apply for formula funds as part of their consolidated application for NCLB funds. At least 25 percent of the funds must be used for professional development for educators in the integration of technology to support student success.

COMPETITIVE GRANTS

The **TARGET** Grants (Technology Applications Readiness Grants for Empowering Texas students and teachers initiative) are part of the state's implementation of the competitive grant program. Beginning in January, 2003, TARGET grants focused on serving high need students by accelerating implementation of the recommendations in the *Long-Range Plan for Technology, 1996-2010* and to ensure teachers and campuses are prepared to implement the Technology Applications Instructional Materials called for in Proclamation 2001. Effective use of these materials will assist the state in meeting the NCLB requirement that technology be integrated into all curriculum areas K-12 by December 31, 2006. All students and teachers must also be technology literate. The Technology Applications TEKS 6-8 define technology literacy for Texas students.

Year One 31 TARGET grants were awarded that included 293 districts and private schools

Year Two 31 TARGET grants were awarded that included 252 districts and private schools

Year Three 28 TARGET continuation grants were awarded to year one participants

Year Three TIP grants were awarded to 23 districts participating in the Technology Immersion Pilot Project

Texas STaR Chart data indicates that TARGET grants contributed to progress toward the Target Tech level. Over 94 percent of all campuses are at the Developing Tech level or above on the chart in all four categories. Approximately 35 percent are at the Advanced Tech level. However, with less than 5 percent at Target Tech, there is much more to be done.

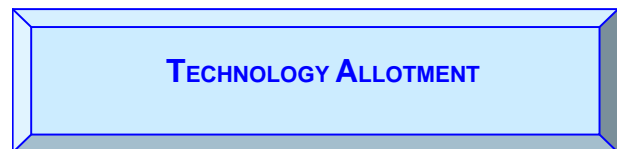
TITLE II, PART D TECHNICAL ASSISTANCE

States are required to provide technical assistance to districts in the planning and use of Title II, Part D funds. The Region 10 Education Service Center is our statewide Title II, Part D Tech-

nical Assistance Center and coordinates the following:

- development and implementation of the Target Tech Center Web Page;
- development and dissemination of the Texas Teacher STaR Chart;
- development of resources that tie directly with the standards for educator proficiency with technology as reflected on the online version of the Texas Teacher STaR Chart;
- technical assistance to schools in meeting the requirements in No Child Left Behind, Title II, Part D for technology literacy and technology integration;
- Technology Applications Professional Development Frameworks and Academies;
- Technology Applications Teacher Network (TATN) Web Site and Technical Support;
- Technology Applications Best Practices Event(s);
- technical assistance to TARGET grantees; and
- support for Technology Immersion Pilot (TIP).

The TPESC, established at Region 12 Education Service Center coordinates the online Texas STaR Charts and the Texas ePlan System. The TPESC provides technology planning assistance and E-Rate training and provides online resources and help-desk support. Region 10 and Region 12 coordinate activities and provide training to districts to maximize the use of the resources and tools provided by each center.



All school districts in Texas continue to receive a technology allotment for the purchase of technology in support of the goals of The Long-Range Plan for Technology. Technology Allotment funds were made available to schools beginning September of 1992. As a result of Senate Bill 1, passed by the 74th Texas Legislature, there have been changes to the method of payment for this allotment. The \$30 Technology Al-

allotment was funded from the Foundation Schools Program and then in 1995, it was funded through the State Textbook Fund. In 2003, the source of funds was changed to the Telecommunications Infrastructure Fund.

The Texas Education Code Chapter 32 §32.005 (B) states that the allotment may be used only to:

- provide for the purchase by school districts of electronic textbooks or technological equipment that contributes to student learning; and
- pay for training educational personnel directly involved in student learning in the appropriate use of electronic textbooks and for providing for access to technological equipment for instructional use.

As stated in TEC §31.002. Definitions. (1), an “electronic textbook” means computer software, interactive videodisc, magnetic media, CD-ROM, computer courseware, on-line services, an electronic medium, or other means of conveying information to the student or otherwise contributing to the learning process through electronic means. The definition of “Technological equipment” is found in §31.002 (4). “Technological equipment” means hardware, a device, or equipment necessary for:

(A) instructional use in the classroom, including to gain access to or enhance the

use of an electronic textbook; or
(B) professional use by a classroom teacher.

In previous legislation, the commissioner of education was authorized to deduct funds from the Technology Allotment for the purpose of supporting development and implementation of statewide technology initiatives. This changed in 1995 with Senate Bill 1. School districts then received the full \$30 per ADA. The state technology initiatives, including the Texas School Telecommunications Access Resource (T-STAR), Education Service Center Preview and Training Programs, the Texas Library Connection (TLC), the Texas Education Telecommunications Network (TETN) and Technology Demonstration Programs, such as the EdTech PILOTS, were funded through the Telecommunications Infrastructure Fund. Due to budget shortfalls in 2003, funding for the state technology initiatives was not available.

Technology Allotment funds flow to the district from TEA, and the district is held accountable for the use of those funds. How the funds are distributed in a district is a local decision, at the district level, as long as they are in compliance with the rules for the use of the funds. Expenditures of the Technology Allotment are coded in Public Education Information Management System (PEIMS). The Technology Allotment is the key state funding source for implementation and on-going support of technology use in Texas schools.

TECHNICAL SUPPORT

While Texas schools have made significant strides in technology planning and leveraging multiple sources of funds, one of the greatest remaining challenges is the need for ongoing maintenance and technical support. Many school districts have a centrally-located technology department that provides services to all campuses in the district. Their ability to meet the needs of individual campuses varies and often small and/or rural schools face greater challenges in se-

curing and sustaining technical support personnel. According to the Texas STaR Chart data submitted for the 2003-2004 school year, 1,123 campuses reported no technical support on site and response time greater than 24 hours. Only 14 percent of campuses report that they have central technology support that uses remote software management tools and have on site technical support at the campus level.

Texas Campus STaR Chart Data for Column N, Technical Support	
	Campuses
I. Early Tech No technical support on site, response time is greater than 24 hours	1,123
II. Developing Tech At least one technical support staff per 750 computers, response time is less than 24 hours	2,853
III. Advanced Tech At least one technical support staff per 500 computers. Technical support is centrally deployed and minimal campus-based support on site. Response time is less than 8 hours	2,202
IV. Target Tech At least one technical support staff per 350 computers, technical support on site; response time is less than 4 hours	1,008

Source: 2003-2004 STaR Chart

EDUCATION SERVICE CENTERS

Education Service Centers offer tools and training that allow students to increasingly take charge of their own learning and enable educators to help them do so in meaningful ways. High school students learn troubleshooting techniques for computers, as well as how to build computers and small local area networks (LANs) in courses offered by a number of ESCs. Through this program, students can take training and assessments that lead to industry standard certification. Through distance learning networks, ESCs provide students with high school coursework, advanced placement and dual or concurrent enrollment courses from local institutions of higher education.

By providing connections for videoconferencing field trips, students are able to visit geographically remote locations, interview experts in a variety of fields, as well as learn collaboratively with peers across the nation without leaving the campus. To offset the loss of the Texas Library Connection, ESCs have negotiated access to online database resources which include encyclopedias, maps, audio and video clips, journals, newspapers, and primary source documents.

Educators may browse each Educator Service Center website and professional development catalog to view technology services and professional development offerings. ESC websites frequently serve as a portal for online coursework, streaming video, library databases, teacher employee information as well as instructional and state assessment resources.

During the 2003-2004 school year the 20 ESCs websites received 11,380,987 hits.

To meet the varied needs of educators, ESCs developed extensive regional videoconference networks to deliver professional development or teaching and learning to educators and students. By linking regional videoconference networks to the TETN network, districts and campuses may connect to other videoconference networks outside the service area providing statewide access to teachers and other resources. The ability to receive services without leaving the district or campus has been popular with both educators and students.

Education Service Centers provided videoconference or online courses to 20,100 students during 2003-2004.