



Executive Summary



As the American educator considers the prospect of creating 21st century learning environments, he or she can feel a little like the traveler gazing out across an expanse of rugged, arduous terrain. One can see clearly the destination in the distance—a technology-infused environment designed to foster problem-solving, collaboration, instantaneous communication, innovation and equity of opportunity—as well as the best possible route there—robust broadband connectivity and well-managed networks. But with budget shortfalls, mounting priorities, the necessity of professional development and lack of access to broadband connectivity services, getting there can prove to be quite difficult.

Scott County School System (SCSS), TN, has achieved it. The district has realized full IP-convergence and is utilizing big broadband and small-district ingenuity to stream video, power its telecommunication voice system and erase distance with videoconferencing, distance learning and more. This is an ambitious endeavor to take learning to disenfranchised students—whether they be socio-economically disadvantaged, geographically isolated or have special needs.

(Left) Two United States Distance Learning Association (USDLA) board members flank Scott County distance learning Algebra teacher Tony Duncan as he poses with his Platinum Award for Excellence in Distance Learning Teaching from the USDLA. (Center) ENA President David Pierce was present when Scott County Technology Coordinator Mike Lay accepted the Computerworld Honors Program Laureate Medal on behalf of his school district. (Right) Mike Davis is presented the Computerworld Honors Program Laureate Medal.

Small, Rural District Earns Gigantic National Recognition

In fact, the small district has garnered gigantic recognition in the last couple of years, including three prestigious national awards in educational technology: a Computerworld Honors Program Laureate Medal, a Platinum Award for Excellence in Distance Learning Teaching by the United States Distance Learning Association and a National Title I Distinguished School Award.

While no small feat for any school district, it becomes perhaps an extraordinary achievement when one considers that Scott is an Appalachian county located in the Cumberland Plateau region of east Tennessee with 85 percent of its students qualifying for free or reduced lunch—which translates essentially to living at or below the poverty line as defined by the federal government.



A Burchfield Elementary School student practices his math skills using the web-based software CompassLearning Odyssey.

Customer Profile: Scott County School System, Tennessee

Scott County is situated atop the Cumberland Plateau, in the western foothills of the Appalachian Mountains. The county is bordered by the Cumberland Mountains to the east and the rugged Big South Fork National River and Recreation Area to the west, with mostly level-to-rolling plateau land in its center. The county seat is Huntsville.

As of 2000, the county population was 21,127, the per capita income for the county was \$12,927 and the median income per household was \$24,093. Seven schools and more than 2,600 students make up the Scott County School System (SCSS). Another school, Oneida High School, constitutes the Oneida Special School District. Eighty-five percent of SCSS students qualify for free or reduced lunch, a number roughly twice the national average.

“If Scott County Can Do It, Anyone Can”

“Basically,” explains Michael Lay, the district’s technology coordinator, “we are a classic small, rural school district. Yet we try to ignore that and our intent over the past few years has been to transition from a local LAN-based setup to a centralized, state-of-the-art, IP-based delivery system. Obviously, our success has been the result of a lot of things, not the least of which is the hard work of our teachers and students. But I attribute much of it to network-delivered education: CompassLearning Odyssey, Renaissance Place and our distance learning initiatives. We are committed to giving our students the future they deserve, and our technology investments reflect it.” Lay is fond of saying that if Scott County can do it, anyone can.

This white paper will explore how SCSS, in partnership with ENA, achieved educational equity through utilizing networked education technology and delivered 21st century education to its students. We will examine the four areas of technological improvement on which SCSS has primarily focused in the last several years:

1. Upgrading the network infrastructure
2. Migration of applications and curriculum from software- and LAN-based to centralized WAN-based delivery
3. Implementation of IP telephony throughout the district
4. Deployment of distance learning systems

Establishing Value Through Cost Efficiencies and Improved Outcomes

The results for education in Scott County have been dramatic. Through the implementation of education technologies, SCSS has:

- Improved student performance
- Enhanced learning opportunities
- Created technology and network efficiencies
- Documented significant cost savings