



Cisco's Global Education group is actively engaged in the work of transforming education systems to meet the needs of 21st century learners, educators, and organizations. This transformation will require a shift in the way teachers teach, leaders lead, and students learn.

# Case Study



## 21S Initiative Supports New Educational Paradigm in Post-Katrina Schools

### **Gulf Coast Communities Prepare Students for the Global Economy**

Educators and researchers are increasingly aware of the need to better prepare U.S. students to compete in the global marketplace. Many share Thomas Friedman's belief that, "In the international competition to have the biggest and best supply of knowledge workers, America is falling behind" (*The World Is Flat: A Brief History of the Twenty-First Century*, 2005).

Superintendent Diane Roussel of the Jefferson Parish Public School System (JPPSS) agrees. "Our international competitors understand the key role that their education systems play in producing workers prepared for a globally competitive 21st century economy," says Dr. Roussel. "We also need to understand this and act on our understanding."

The following school districts— all affected by Hurricane Katrina in August 2005—are participating in the Cisco® 21st Century Schools Initiative (21S), along with the Mississippi and Louisiana Departments of Education:

#### **MISSISSIPPI DISTRICTS:**

- Forrest
- Forrest County Agricultural
- Harrison
- Hattiesburg
- Lamar
- Moss Point
- Petal

#### **LOUISIANA DISTRICT:**

- Jefferson Parish

## The 21S Holistic Approach to Education Reform

After Hurricane Katrina struck in August 2005, Cisco unveiled an initiative, known as the 21st Century Schools Initiative (21S), to help rebuild the devastated Gulf Coast schools and communities. In addition to equipping each school with instructional technologies and advanced networking equipment, the focus of 21S is to develop a blueprint for 21st century education based on a holistic approach to education reform, supported by Cisco's business experience in management and system change.

21S is a multiphase initiative that aims to create a sustainable, scalable, and replicable model of education reform that will extend beyond Mississippi and Louisiana. The 21S model incorporates transformative technology, tools, and training; backed by the expertise of a dedicated technology and business partner. Support for every implementation is provided by an onsite Cisco Fellow.



To help students flourish in the 21st century workplace, 21S focuses on essential skills such as critical thinking, problem solving, communication, collaboration, and information literacy, as well as life skills such as leadership, adaptability, self-direction, and responsibility. According to Cisco Chairman and CEO John Chambers, "The 21S initiative is about empowering our children to thrive in the twenty-first century economy, with the Gulf Coast schools as our catalyst."

### Working with Educational Leaders

A major focus of the 21S initiative is developing and mentoring educational leaders, who become the drivers of educational transformation. The Schlechty Center for Leadership in School Reform, a Cisco partner, promotes the development of district and community leaders and works with them to develop a joint vision, build a shared understanding of accountability, and review best practices.

### Engaging Students

The Schlechty Center's pioneering professional development work is based on the core belief that the key to improving schools lies in providing students with engaging work. The Schlechty Center helps the 21S schools organize themselves around students' work rather than teachers' work. Two other partners, November Learning and the Metiri Group, help guide the schools toward increased student motivation with new strategies for using technology to engage students.

### Supporting Professional Learning

In the past, teachers have rarely had the skills needed to use technology to truly transform education, as noted in a recent National Education Association (NEA) report:

"Teachers should be prepared to use technology to deliver alternative types of pedagogy, such as inquiry learning, models, and simulations to help students develop higher-order thinking skills. However, such uses are not widely observed...The full integration of technology into teaching and learning will require a systematic and balanced approach that goes beyond just acquiring computer hardware and using limited technology skills" (*Access, Adequacy, and Equity in Education Technology*, May 2008).

21S includes an ongoing, job-embedded professional development component designed to help educators engage students, manage change, and increase authentic learning, while implementing new instructional technologies. Professional development takes place under the guidance of senior leadership focused on strategies for increasing skill levels through the use of technology.

In addition, 21S districts design and produce their own Web 2.0 professional development workshops, with support from Cisco, the Cisco 21S Fellows, and 21S partners. "I learned so much at the November Learning conference," says Moss Point integration specialist Rachel Mercer. "It just didn't make sense anymore to try to produce handouts for all of my trainings when I can just post them online on my wikispace. I plan on using the wikispace and blogs for all my professional development workshops."

### Building a Technology Backbone for the 21st Century

Core infrastructure upgrades have dramatically improved network response times, reliability, and robustness in 21S schools, and Cisco advanced technologies such as voice, video, and mobility are helping to create a 21st century learning environment.

Teacher laptops and interactive whiteboards are being installed in phases, so that teachers can leverage a variety of applications to engage students, collaborate with parents, and exchange ideas with their colleagues.

Teachers have reported that the new technologies are making a difference. "After using the Promethean interactive board for only a few months, I don't know how I would go back to teaching without it; teaching the old way, says Eleanor Grimbball, a fifth grade teacher in the JPPSS district. "This is my 33rd year of teaching. You know, if I can do it, anybody can do it."

## Public–Private Collaborations

Cisco brings partners with different strengths and skills together to help catalyze education reform. Based on the philosophy that a collaborative effort is required to meet every objective, Cisco worked with the 21S school districts to determine what needed to be accomplished, how Cisco could help, and what other products and services would be needed.

Many diverse partners joined the 21S initiative. In addition to November Learning and the Schlechty Center for Leadership in School Reform, professional development was supported by the Harvard Graduate School of Education, the Metiri Group, the Partnership for 21st Century Skills, and the Smithsonian American Art Museum.

One Economy Corporation offered affordable computers to families in 21S communities, Digital Opportunity Trust supplied interns to help 21S teachers integrate technology into the curriculum, and the Education Development Center conducted an independent program evaluation to determine the impact of the 21S program on participating school districts. Technology products and services were provided by Promethean, School Messenger, Wireless Generation, and others.

## Improving Performance

Many 21S districts have seen indicators of improved student outcomes since the start of the program. The Petal School District's dropout rate declined from 17.7 percent in 2006 to 7.3 percent in 2007, and its graduation rate climbed from 74 percent to 83.3 percent. Louisiana Education Assessment Program scores have steadily improved across all grade levels in the JPPSS 21S schools. At Moss Point High School, enrollment in AP courses increased by 10 percent, and in the Harrison School District, the number of superior performing schools increased from two to six. Districts report across-the-board improvements in student engagement and teacher enthusiasm.

The districts attribute this improved performance to the interplay of many factors that accelerate student progress, including ongoing support from Cisco and 21S partners, and the integration of new technologies such as online assessment tools, which facilitate faster intervention, small group instruction, and individualized instruction.

## Making a Difference in the Local Economy

“A major component of the 21S vision is the impact of education on the local community,” said Mary de Wysocki, 21S director and Cisco Fellow, “since quality education supports a sustained economy.”

The Jefferson Parish Economic Development Committee agrees. A recent report commends the district's progress to date: “Over the past five years, state of the art technology has been implemented; internal accountability has been strengthened; and curricula have been diversified and improved.” The committee has indicated its support with several grants and funding initiatives.

## On the Path to a New Paradigm

The 21S school districts have begun their journey toward increased student engagement and achievement, with leadership, technology, partnerships, and professional development all playing an essential role in the transformation.

For more information about Cisco Global Education , please visit our website at <http://www.transformglobaleducation.org>.



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Mary de Wysocki  
21S Director and Cisco Fellow

# Cisco Recommended Ecosystem Partners for System Transformation

## Information on Integrating Technology

- **Metiri Group**  
([www.metiri.com](http://www.metiri.com))  
Education consultant that provides a broad range of services that empower educators to advance effective teaching and learning, use technology in powerful and meaningful ways, and foster 21st century skills.
- **November Learning**  
([www.novemberlearning.com](http://www.novemberlearning.com))  
An organization that promotes the effective use of information and communication technologies to support and enhance learning for children and communities
- **Partnership for 21st Century Skills**  
([www.21stcenturyskills.org](http://www.21stcenturyskills.org))  
An advocacy organization that is focused on infusing 21st century skills into education; Cisco is a founding member
- **WIDE World – Harvard Graduate School of Education**  
(<http://wideworld.pz.harvard.edu>)  
Offers online learning programs for professional development and using technology in classrooms

## Online Content and Tools

- **Discovery Education Streaming**  
(<http://streaming.discoveryeducation.com>)  
A digital video-on-demand and online teaching service to help improve students' retention and test scores
- **ePals Global Community**  
([www.epals.com](http://www.epals.com))  
A community of collaborative classrooms engaged in cross-cultural exchanges, project sharing, and language learning
- **History Channel**  
([www.history.com](http://www.history.com))  
Television station that offers free programming related to history and culture
- **Jing Project**  
([www.jingproject.com](http://www.jingproject.com))  
An online resource that offers free software that allows teachers and students to capture and share videos and other content
- **NASA Education Program**  
([education.nasa.gov](http://education.nasa.gov))  
Program that provides activities and information related to science, technology, engineering, and mathematics
- **National Geographic**  
([www.nationalgeographic.com/education/](http://www.nationalgeographic.com/education/))  
Online resource for lesson plans, activities, and information related to geography, history, culture, animals, and other topics
- **Ning**  
([www.ning.com](http://www.ning.com))  
An online platform that allows individuals and groups to create their own collaborative networks
- **Promethean Planet**  
([www.prometheanplanet.com](http://www.prometheanplanet.com))  
An online resource that includes lessons and professional development materials related to interactive whiteboards
- **Smithsonian American Art Museum**  
(<http://americanart.si.edu/index3.cfm>)  
Provider of education resources such as state standards-based, multidisciplinary lesson plans that span the fields of art, design, science, technology, history, culture, and language arts



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