



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



Cisco's Professional Development Program Teaches How To Integrate Art Across Disciplines Using Technology

Professional Learning and the 21S Vision

To help students flourish in the 21st century global economy, the Cisco® 21st Century Schools Initiative (21S) focuses on essential skills such as critical thinking, problem solving, communication, creativity, collaboration, and information literacy, as well as life skills such as leadership, adaptability, self-direction, and personal and social responsibility.

To help educators promote these skills and educate their students for the 21st century, 21S includes an ongoing, job-embedded professional development component. Educators at every level learn how to better engage students, manage change, promote authentic learning, and implement new instructional technologies.

The following school districts—all affected by Hurricane Katrina in August 2005—attended the Cisco-Smithsonian American Art Museum Institute in June 2008:

MISSISSIPPI DISTRICTS:

- Forrest
- 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.



“Our goal is to make 21st century pedagogy more tangible and real for teachers,” explains Beth Bellemore, Cisco 21S Fellow. “After teachers discover the potential of 21st century approaches to teaching and learning, they overcome the fear factor and become advocates. They transform their own classrooms and inspire others with their enthusiasm.”

Developing 21st Century Skills at the Smithsonian

As part of the 21S implementation, Cisco invited cross-disciplinary teams of teachers from the seven participating school districts to visit Washington, D.C. for a professional development program at the Smithsonian American Art Museum (SAAM). The weeklong training focused on using technology to integrate art into instructional activities across disciplines. Each team of teachers developed a cross-curricular lesson plan based on a piece of art in the SAAM collection

Before attending the training, teachers collaborated on a Cisco-Smithsonian social networking site that introduced them to blogging activities and the technology tools that would be used during the program. “The pre-institute assignments were awesome,” says Rachel Mercer, a technology integration specialist from the Moss Point School District in Mississippi. “They gave us the background information we needed to get started.”

Teachers also learned about the vast array of resources available at SAAM—from lesson plans, content sources, and ideas for teaching visual literacy to using art to teach social studies, history, and language arts. They explored virtual tours and videoconferencing field trips, as well as 21st century tools such as interactive whiteboards, podcasting, blogs, and digital video.

Many teachers expressed relief and excitement at overcoming their apprehension about integrating art into the curriculum. “I was unsure about how this would fit into my subject area,” says Lamar County teacher Jennifer Clark, “but we learned to use art to teach observation and inference. That connected with me as a science teacher, because we are always trying to teach students how to make better observations and understand the difference between observation and interpretation.”

Building a Community of Educators

A major goal of the program was to help the teachers participate in a community for ongoing support and idea exchange. They learned how to use online collaboration tools, work with other educators, and use Google Docs to capture and share team notes. After the training, many teachers and integration specialists made plans to work together to offer workshops.

“I’m grateful for the opportunity to work with teachers outside of my district,” says Suzanne Nugent, a teacher from the Jefferson Parish Public School System. “Several of us have discussed going to each others’ schools to help present the information to other faculty members and work together to make improvements.”

Rediscovering the Joy of Teaching

One aftereffect of the Smithsonian visit that has been widely noted by the participants and the district administrations is that the teachers rediscovered their passion for teaching over the course of the weeklong program and became evangelists for a new way of educating students in the 21st century.

“This institute was one of the greatest experiences of my professional career,” says Cathy Lee, a teacher from the Lamar County School District. “There was so much information that I will use in my classroom. My students will benefit for years to come from my having been a part of this experience.”

Many teachers expressed their excitement at the potential impact on student motivation and performance. “This will help students develop their critical thinking skills and inquire, rather than just memorize,” says Petal School District teacher Janet Tichnell. After their return, many teachers became motivated to continue expanding their knowledge and skills by signing up for additional classes and workshops.

Scaling Up the Program District-Wide

A core component of the 21S vision is scalability. To help scale the impact of the SAAM training, Cisco asked the participating teachers and technology integration specialists to train others in their districts after their return from the Smithsonian Institute.

During the summer after the workshop, six Jefferson Parish teachers trained 1200 teachers at the INTECH conference, one Lamar County teacher trained 80 teachers in her district, and a Moss Point teacher trained several educators in the Petal School District and Jefferson Parish Public School System.

“We’ve been delighted to see the enthusiastic response to the Smithsonian professional learning program,” says Superintendent Dr. James Hutto of the Petal School District. “The teachers who participated have returned with the enthusiasm and skills to train their colleagues.”

Transforming Education with the Support of Technology

In the past, technology in schools has often been viewed as an end in itself rather than supporting or transforming instruction, and teachers have rarely had the necessary skills to take advantage of the transformative experience technology can offer, as noted in a recent National Education Association (NEA) report.

“Experts believe that teachers should be prepared to use technology to deliver alternative types of pedagogy, such as inquiry learning, models, and simulations to help student 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.)

The 21S vision supports the full integration of technology into education by fostering the skills and confidence teachers need to engage students and transform their classrooms into vibrant 21st century teaching and learning environments.

According to SAAM workshop attendee Dr. Betsy Almerico, a technology integration specialist from the Jefferson Parish Public School System, “The true integration piece is using technology as a tool. We’re not just using the Internet to use the Internet, or making a podcast to make a podcast. By giving students something that is real, by allowing them to present it in a real way using a podcast or a blog—that makes it theirs. They buy into it, they want to share it, and they want it to be good.”

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



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Beth Bellemore
Cisco 21S Fellow

Cisco Recommended Ecosystem Partners for System Transformation

Information on Integrating Technology

- **Metiri Group**
(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)
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)
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)
A community of collaborative classrooms engaged in cross-cultural exchanges, project sharing, and language learning
- **History Channel**
(www.history.com)
Television station that offers free programming related to history and culture
- **Jing Project**
(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)
Program that provides activities and information related to science, technology, engineering, and mathematics
- **National Geographic**
(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)
An online platform that allows individuals and groups to create their own collaborative networks
- **Promethean Planet**
(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



Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

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