



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



## Intern Helps Teachers Engage Students with Technology

At T. H. Harris Middle School in Jefferson Parish, Louisiana, intern Holli Willis does not spend much time in one place. When she arrives each morning, she quickly checks in with Ruth Brewington, the school's technology coordinator and her mentor. With priorities in hand, she's soon off and running. Willis visits classrooms, the library, and the computer lab; helping teachers integrate technology into their lesson plans, showing them how to use software and hardware, and troubleshooting their technology problems.

Willis is a sociology major at Xavier University in New Orleans with minors in computer science and business. She was placed at Harris by Digital Opportunity Trust (DOT), a Cisco® 21st Century Schools Initiative (21S) partner that connects people with technology and helps them use new tools to improve their lives. DOT recruits and trains talented young people—university students and recent graduates—to share their knowledge in schools.

### Jefferson Parish Public School System

**LOCATION:**

Greater New Orleans area

**NUMBER OF SCHOOLS:**

87

**NUMBER OF STUDENTS:**

±44,000

**GRADES:**

Pre-K through 12

**SCHOOL STRUCTURE:**

Suburban

**PERCENT OF STUDENTS ELIGIBLE FOR FREE OR REDUCED LUNCH:**

75

## 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.



As part of a 21S grant to the Jefferson Parish Public School System, DOT interns were placed in 16 pilot schools. Before assigning interns to a school, DOT trains them in many areas, including technology, leadership, project management, facilitation, communication, and collaboration.

### Creating Time for Technology

A guiding principle of the 21S program is to put teachers first by providing them with appropriate professional development opportunities, resources, educational technology, and support. DOT interns help teachers integrate technology into classroom instruction and assist with training and support when technology is first introduced. "Teachers don't always have time to stay current on technology, so my purpose is to give them ideas about what's out there and how they can use it to improve student learning experiences," Willis explains. "And if they need to be trained or have technology issues that need to be solved, I can help with that too."

The internship is a natural fit for Willis, who has been taking apart computers and putting them back together since she was in junior high school. She enjoys the opportunity to apply her programming and technical skills in a work environment that involves a lot of interaction with people. "With computers, there's always something different that needs to be fixed or taught," she says. "But DOT focuses on empowering teachers to solve their own problems in the future, so I make sure that everything I do enables teachers to eventually do things for themselves."

According to Willis, it is important for teachers to have some form of support when implementing technology-based programs or ideas for the first time. "Teachers need to feel comfortable that they have a backup person in case something goes wrong or there's a question they can't answer," she explains. "If a teacher is going to be in the computer lab all day teaching students a new software program, I'll plan to be in the lab all day, too."

Occasionally, Willis works with teachers who have had limited exposure to computers and the Internet. One teacher in particular was intimidated by technology, but too self-conscious to ask for assistance. Willis spent extra time with the teacher, showing her how to use email, the Internet, and basic software packages. "One day I found her in a different classroom," Willis recalls. "She was showing another teacher how to use a software program! I couldn't have been happier—it was definitely worth the extra effort."

### Achieving Successes Large and Small

Willis considers the project that grew out of this discussion to be one of the biggest successes of her internship. She explains, "Every year since Hurricane Katrina, students take a field trip to New Orleans and use a different form of technology to express their perceptions and feelings about its effects. The first year they took simple photos using digital cameras. The second year, they combined photos and graphics software to create brochures. This year, we planned to make movies using free software that allows you to create home movies."

"A teacher told me about software that allows you to compose original music, record your band, create a podcast, or remix a song," she continues. "I thought it would be another way to get students engaged in the Katrina project. They could record their observations about the city and use the software to layer music and beats over the spoken word. I got a demo version to try out, and everybody loved the idea. So I emailed the software company to explain how we would use the software and asked for an education discount on a few copies. Within a few hours, they called me back and offered to give us as many licenses as we needed!"

The company ultimately donated 70 software licenses to the school, and Willis set up a training session for all the teachers. "They loved it, and the students loved it. The projects they created were amazing. So I definitely feel it had a positive impact," she concludes. Brewington concurs. "Holli has been a godsend to our school," she says.

For Willis, smaller achievements are as gratifying as major successes. For example, after participating in a workshop on how to use video creation and editing software, Principal Chip Guichet enlisted her help in making his first vodcast and posting it to the school's website. "The excitement of even small accomplishments can be contagious for the whole school," notes Willis. "Everybody was talking about Principal Guichet's vodcast."

### Helping Teachers Use Technology Effectively

Willis is enthusiastic about her role in supporting technology in the classroom. "As a DOT intern, I bring neutrality and balance to the classroom," she says. "Learning from a neutral outsider with technology knowledge is helpful because people appreciate working with someone they feel has no preconceived notions or biases. This allows teachers to discover the most effective ways to use technology."

"The DOT internship gave me the opportunity to help teachers learn about different ways that technology can be used in the classroom. I've been able to see firsthand that a school can successfully engage students using technology," Willis adds. "We have technology that can help prepare students for tests or allow them to virtually dissect a frog. Our students sit in the computer lab all day and play with spelling or reading comprehension games. They're learning and they don't even realize it!"

Inspired by what she has learned in her internship, Willis has decided to pursue a career in technology after graduation. She has been hired as an IT specialist for the Louisiana Supreme Court. "The DOT internship gave me the direct experience and exposure I need to be successful in this position," she concludes. "Without the partnership between DOT and Cisco, this opportunity would not have been possible for me."

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



"DOT focuses on empowering teachers to solve their own problems in the future. So I make sure that everything I do enables teachers to eventually do things for themselves."

Holli Willis  
T. H. Harris Middle School  
DOT Intern

# 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



**Americas Headquarters**  
Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
[www.cisco.com](http://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](http://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](http://www-europe.cisco.com)  
Tel: +31 0 800 020 0791  
Fax: +31 0 20 357 1100

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