

# Packetville Press

Newsletter for Educators

## Is information technology the new universal language?

Nora Lopez would tell you it is. She came to the United States from Mexico nine years ago without the education or English language skills she needed for success. To bridge the language and cultural difficulties she faced, Nora turned to technology. She became an apprentice at a computer lab where she gained an understanding of computer hardware and software.

When she heard about the Cisco Networking Academy Program at Oxnard College, she enrolled. Nora not only completed the Academy program, she went on to earn her bachelor's degree in information systems security and is planning to become a network administrator.

Technology was the language that helped Nora move forward in her new life in America. She attributes much of her success to her studies in the Cisco Networking Academy Program.

Nora's story is just one example of how IT can enhance career opportunities for women.

## Career Capture

*It's more than a game....*

Maybe you've checked out Packetville's interactive games *Peter Packet* and *Penny's Search* and had your students assist Peter and Penny as they take on the responsibility for delivering packets safely through the Internet? The next game in the series is *Career Capture*. It's not exactly a game. It's more like an online adventure that introduces your students to women who made a difference in the field of information technology and women who are enjoying IT careers today.

Your students will learn about women of the past like a Chinese empress, the Countess of Computing, a cool chemist, a marine biologist, and an ancient stargazer. Then they'll be transported to Brazil to work with a telemedicine engineer, to the United States to meet with a technical marketing engineer, and to Australia for a jaunt with a marine biologist. The visits to Brazil, the United States, and Australia include video and text resources, along with loads of valuable web links.

When your students have finished their travels, their learning will be reinforced as they complete an online scrapbook of their adventures. All of the materials—photos, colors, scraps, page decorations—for completing the scrapbook are available with the click of the mouse. Text can be added anywhere on the pages, and items can be sized and rotated as your students want. They'll have a great time creating their scrapbook, and as they do, they'll

be internalizing the information covered in *Career Capture*.

## Using Career Capture

To help you introduce and work with your students on the content in this game, you'll want to take a look at the lesson ideas provided in the Packetville Educator section. In the Hacker Busters, for example, you'll find a general (30-45 minute) lesson as well as detailed lessons developed specifically for working with girls and boys separately. *Go Girls: Check Out the Cool Careers—No Boys Allowed* is a fun lesson, which gives girls the opportunity to see if they think like an engineer. To complete the lesson, they'll explore career paths and create their own plan for their future. *Boys' Only* helps boys learn about and consider careers in IT and engineering. During the lesson, your boys will study the greatest engineering achievements of the 20th century and will brainstorm ideas for the future of IT.

Career Capture is a great learning resource for getting your students, especially your girls, thinking IT. —And it's a special way to introduce them to some really smart and dynamic women.

(Note: If you are going to use *Career Capture* with a group of students, it's best to download the game to your classrooms computers.)



When your students ask, "What exactly do engineers and information technology (IT) specialists do?" You can answer:

*They change the world. Every day. And they use computers and the Internet to help them. They think of new ways to solve problems. You'll find them working in fields such as medicine, music, space science, law, sales, marine science, ecology, computer networking, video, and architecture—to name a few. Marine filmmakers, robotics surgeons, technology fashion designers, forensic scientists, for example, are engaging in careers that feature engineering and IT.*

# Getting Ready for IT Careers

## Think Cisco Academy

Who's a good candidate for the Cisco Networking Academy? Some people believe that the curriculum is only for students heading to vocational/technical schools or for students who want to find jobs right after high school or after two years in a community college. But what about students taking college prep programs in high school? What about students who are dreaming of becoming doctors, researchers, teachers, museum curators, and businessmen and women?

The Academy experience is a perfect way for students to get a head start in IT and engineering programs they want to pursue at 4-year colleges. Even if they don't decide to go into IT and engineering specific-careers, the background in technologies that the Academy provides will serve them well in other occupations.

Packetville content does a good job of introducing careers that make use of IT and engineering, but are not careers that students think of when IT and engineering are mentioned. Students hoping to pursue studies in marine biology, medical research, veterinary science, or music production don't usually consider these tech careers, but in so many ways they are. Students, parents, and teachers are often surprised at the number of careers that involve IT and engineering. In today's world, there are few occupations that don't demand some type of technology knowledge.

At Mariemont high school in Cincinnati, Ohio, where 90% of the graduates are college bound, Academy students have headed to colleges like Purdue and William and Mary. Principal Jim Renner says, "A majority of the members of our Academy have been members of the National Honor Society ...." While a number of Mariemont's Academy graduates go into engineering and IT, others select law, business, etc. The Academy is a popular choice at Mariemont, for students (and their parents) realize how this program can have an impact on their future. Find out more about Mariemont High School in the *Academy Success Stories* ([http://www.cisco.com/web/learning/netacad/success\\_stories/Mariemont.html](http://www.cisco.com/web/learning/netacad/success_stories/Mariemont.html)).

### Packetville

<http://www.cisco.com/go/packetville>

### Networking Academy

<http://www.cisco.com/web/learning/netacad/index.html>

## Florida Girls Get IT

*Florida Girls Get IT is a partnership between Cisco Systems, Inc., the Florida Community College System and the Florida Distance Learning Consortium to create gender equity in the areas of Information Technology (IT) and Science, Technology, Engineering and Mathematics (STEM).*

*Girls Get IT* is packed with facts you should know:

- 75% of future jobs in the United States will require the use of technology.
- Fewer than 33% of students in computer courses are female.
- Women receive less than 28% of the bachelor's degrees in computer science.
- Women comprise only 20% of IT professionals.

That's why the Florida Distance Learning Consortium, Cisco Systems, and a group of community colleges in Florida are working together to provide:

1. Access – For girls throughout Florida to participate in fun and educational activities related to technology, science and math
2. Innovation – New strategies and tools for teachers and students to discover the ever-changing world of technology
3. Collaboration – Among education, community and business organizations to develop best practices and information sharing capabilities
4. Opportunities – Empower young women to explore careers in IT and STEM by offering mentors, internships and a pathway into the workforce

The idea behind the project is to establish a network where girls can find both fun and educational resources about information technology. At *Girls Get IT*, they are introduced to IT careers in ways that help them overcome the stereotypes often associated with tech and engineering careers. They learn that IT is relevant to their lives and to their future. According to Gene Longo, Senior Manager of Cisco Networking Academy Field Operations, "The main objective of the Girls Get IT Initiative is to introduce more female students to technology in K-12 and college, and to ignite more excitement about potential careers in technology."

Packetville and *Girls Get IT* are working toward the same goals when it comes to encouraging girls to learn about and to consider the cool careers—careers in IT and engineering.

Project information is available at the *Girls Get IT* site: <http://www.flgirlsgetit.org/>.

