

Cisco Networking Academy: Michigan State Profile

Educating the Architects of the Networked Economy

Studies worldwide show a gap between the IT jobs available and qualified candidates to fill them. The Cisco® Networking Academy[®] educates the architects of the networked world, enabling students to pursue higher education in engineering, computer science, and related fields. Academies provide students with the technical skills they need to succeed in a wide range of careers, and ultimately, to aid in the development of their countries and local economies.

Since the program's creation in 1997, more than 1.6 million students have enrolled at more than 10,000 academies located in high schools, technical schools, colleges, universities, and community-based organizations in more than 160 countries.

Table 1.	Cisco Networking Academies in Michigan
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Students currently enrolled in the Networking Academy	1541		
Distinct cumulative Networking Academy graduates (have successfully completed a course)	10,188		
Number of different Networking Academy curricula currently being taught			
Total estimated cumulative contribution value to Michigan Networking Academies*	\$5,717,418		
Data included in this profile, including the list of actively teaching Academies, is updated annually on Oct. 3			

Source: AME/MRE rpt 1163 1221All State Stats as of 10.31.06 corrected 11.21.06 Date: As of Oct 31, 2006 Graduates are distinct; therefore, each graduate is only counted once. *Source: AME/MRE rpt #1209 130112.13.06

Date: As of Dec 13, 2006

Table 2. Networking Academy Curriculum in Michigan

Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
Number of Networking Academies actively teaching the curriculum in Michigan	52	5	11	2	1

Source: AME/MRE rpt 1163_1221All State Stats as of 10.31.06 corrected 11.21.06 Date: As of Oct 31, 2006 An Actively Teaching Academy has a class currently in session or has taught a class within a six-month period.

Table 3.	Michigan Actively	Teaching Networking Academies by Education Level	

Education Level	Number of Michigan Networking Academies	Percentage of Michigan Academies
Secondary schools	39	68%
Community colleges	7	12%
Universities	10	18%
Other	1	2%
Total number of institutions actively teaching Networking Academy curricula	57	100%

Partial listing of educational-level options for self-reporting purposes

Source: AME/MRE rpt 2451 12.28.06 as of 10.31.06

Date: As of Oct 31, 2006

Learn More

For additional information about the Cisco Networking Academy, visit http://www.cisco.com/go/netacad.

Cisco Networking Academy: Workforce Development

If the United States is to remain competitive in this global economy, leading experts believe we must have a trained and educated workforce. And yet, the number of U.S. students pursuing careers in science, technology, engineering and math—critical areas for educating the workforce of tomorrow—continues to decline.

The Cisco Networking Academy addresses this gap by providing students with the skills needed to succeed in the wide range of careers available today and tomorrow. In addition to integrating IT skills, the Networking Academy also embeds math, science, and language arts skills in the curriculum.

IT Occupational Data

Occupation	Employment		Employment Change		Average	Occupational	
	2002	2012	Numeric	Percent	Annual Openings	Employment as of May 2005*	
Computer Support Specialists	506,800	660,230	153,430	30	21,580	499,860	
Computer Systems Analysts	461,000	645,590	184,590	40	23,680	492,120	
Network and Computer Systems Administrators	251,370	345,270	93,900	37	12,180	270,330	
Network Systems and Data Communications Analysts	172,860	277,040	104,190	60	12,450	185,190	
Computer and Information Systems Managers	284,140	386,760	102,620	36	15,420	259,330	

Table 4. Selected IT-Related Occupations in the United States

Bureau of Labor Statistics, Monthly Labor Review Nov 2005, <u>http://www.bls.gov/opub/mlr/2005/11/art5full.pdf</u> *Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (US), <u>http://stat.bls.gov/oes/current/oes_nat.htm</u>

Table 5.	Selected IT-Related Occupations in Michigan
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Occupation	Employment		Employment Change		Average	Occupational	
	2002	2012	Numeric	Percent	Annual Openings	Employment as of May 2005 [^]	
Computer Support Specialists	12,780	15,530	2,750	22	430	14,540	
Computer Systems Analysts	17,280	22,720	5,450	32	740	16,130	
Network and Computer Systems Administrators	6,430	8,370	1,940	30	270	6,960	
Network Systems and Data Communications Analysts	3,220	4,690	1,470	46	190	4,870	
Computer and Information Systems Managers	7,320	9,400	2,090	28	340	7,680	

Bureau of Labor Statistics, <u>http://www.bls.gov/oco/oco20024.htm</u>, referencing State Occupational Projections, <u>http://www.projectionscentral.com/</u>
^Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (by state),
<u>http://stat.bls.gov/oes/current/oessrcst.htm</u>

Top IT Job Growth Categories 2004 to 2014 (Source: U.S. Bureau of Labor Statistics)

• 81.51% Network Systems Analysts

- 58.1% Network Systems Administrators
- 62.5% Computer Software Engineers
- 41.99% Information Systems Managers



Michigan Student and Graduate Profile

The partnership that Focus: HOPE created with a local business proved to be a rewarding stepping stone for Cisco[®] Networking Academy[®] student Brian Collins. After losing two jobs within four years, Brian decided it was time to do something different before taking on a new position. In 2004, he returned to school and began working toward a new career in networking.

Brian received a bachelor's degree in management from Southern University in Baton Rouge, Louisiana in 1986 and joined the military, where he attained the rank of Marine captain. After returning to civilian life, he began working in the software industry.

"If you look at my resume I could have just picked up another job somewhere else," says Brian, "but I wanted to learn something in an area I enjoy. I already knew the software side [of computers], but I wanted to learn the hardware and networking side. I saw a Focus: HOPE commercial that talked about the Networking Academy. I'd always wanted to obtain Cisco certifications and I figured the timing was right."

Brian enrolled in Focus: HOPE's Information Technologies Center (ITC), which prepares adult learners for industry certifications to help them succeed in the computer industry. During his training, Brian participated in a paid internship at Comcast. Interns from Focus: HOPE were paid an hourly wage at the Comcast call center. The interns gained entry-level experience, learned about Comcast operations, and could demonstrate their abilities and apply for a permanent position with Comcast after graduation.

In 2005, Brian completed his Cisco Certified Network Associate (CCNA[®]) coursework and obtained his CCNA certification. Although Brian was offered a full-time position with Comcast at the end of the internship, he ultimately wanted to do what

was best for his family, and decided against relocation. "The opportunity to intern as a tech support specialist with Comcast helped me relate to customers in a very professional way," says Brian. "The skills I attained during the internship will help me succeed in my new technology career."

"The Networking Academy has provided me with a solid foundation in networking. This program reinforced what I always wanted to do and will pursue in the future."



Brian Collins

In 2006, Brian was hired as a network infrastructure analyst in Detroit, Michigan. He credits his success to his internship experience and the skills and knowledge he gained through the Networking Academy. "The Networking Academy has provided me with a solid foundation in networking," says Brian. "This program reinforced what I always wanted to do and will pursue in the future."

Brian is currently working toward his Cisco Certified Network Professional (CCNP[®]) certification for network professionals, and ultimately hopes to obtain his Cisco Certified Internetwork Expert (CCIE[®]) certification.

To learn more about the Cisco Networking Academy at Focus: HOPE, visit www.focushope.edu



Actively Teaching Cisco Networking Academies in Michigan

U.S. Congressional District Database

Data for this report was gathered using the U.S. Congressional District Database. This tool was developed to communicate with congressional representatives about Networking Academy implementation in their home districts. The database maps actively teaching Cisco Networking Academies by congressional district or by all districts within a state, providing academy name, city, state, and congressional district. A listing by state is updated annually. Custom reports by Congressional districts may be run upon request by contacting Melody Buchanan at <u>Melody.Buchanan@ciscolearning.org</u>.

Table 6. Networking Academies in Michigan Congressional Districts

Number of Michigan Congressional Districts	Number of Michigan Congressional Districts <u>with</u> Networking Academies	Number of Michigan Congressional Districts <u>without</u> Networking Academies	% Michigan Congressional District Penetration
15	15	0	100%

Source: MRE/Academy Connection, U.S. Congressional District Database

Actively Teaching Michigan Cisco Networking Academies by Congressional District

* Indicates Cisco Networking Academy Training Center Source: MRE/Academy Connection, U.S. Congressional District Database

Congressional District 1

• Inland Lakes Schools (Indian River)

Congressional District 2

- Baker College of Muskegon (Muskegon)
- Mona Shores High School (Norton Shores)
- Newaygo County Intermediate School District (Fremont)

Congressional District 3

- *Davenport University-Western Region Grand Rapids (Grand Rapids)
- East Kentwood High School (Kentwood)

Congressional District 4

- *Davenport University Saginaw (Saginaw)
- *Davenport University-Midland (Midland)
- Ferris State University (Big Rapids)

Date: January 8, 2007

Date: January 18, 2007

- Midland County ESA (Midland)
- Northwestern Michigan College (Traverse City)

Congressional District 5

- Bay-Arenac ISD Career Center (Bay City)
- Fenton (Fenton)
- Saginaw Career Complex (Saginaw)

Congressional District 6

- Buchanan Community Schools (Buchanan)
- Davenport University Western Region Kalamazoo (Kalamazoo)
- Hartford Public Schools (Lawrence)
- Lake Michigan College (Benton Harbor)
- *New Buffalo Area Schools (New Buffalo)

Congressional District 7

- Calhoun Area Technology Center (Battle Creek)
- Kellogg Community College (Battle Creek)

Congressional District 8

• Pinckney Community Schools (Pinckney)

Congressional District 9

- Baker College of Auburn Hills (Auburn Hills)
- Bloomfield Hills Model High School (West Bloomfield)
- Groves High School (Beverly Hills)
- Oakland Community College (Farmington Hills)
- Royal Oak Cisco Academy (Royal Oak)
- Troy Athens High School (Troy)
- West Bloomfield High School (West Bloomfield)

Congressional District 10

- Baker College of Port Huron (Port Huron)
- Huron Area Technical Center (Bad Axe)
- Lapeer ISD Education and Technology Center (Attica)
- Sanilac I.S.D. (Peck)
- Utica Community Schools (Sterling Heights)

Congressional District 11

- Livonia Career/Technical Center (Livonia)
- South Lyon High School (South Lyon)
- Walled Lake Central High School (Commerce Township)
- Walled Lake Northern High School (Commerce Township)
- Walled Lake Western (Commerce Township)

Congressional District 12

- Casa (Oak Park)
- *Davenport University Eastern Warren (Warren)
- Macomb Community College (Warren)
- South Lake High School (Saint Clair Shores)
- Warren Woods Tower High School (Warren)

Congressional District 13

- Southeastern High School of Technology (Detroit)
- Wyandotte Public Schools (Wyandotte)

Congressional District 14

- A.P. Randolph Career Technical Center (Detroit)
- Baker College Allen Park (Allen Park)
- Breithaupt Career and Technical Center (Detroit)
- Davenport University Eastern Region-Dearborn Campus (Dearborn)
- Focus: Hope Information Technologies Center (Detroit)
- Grosse Ile High School (Grosse Ile)
- Hamtramck High School (Hamtramck)
- Southgate Community School District (Southgate)

Congressional District 15

- Annapolis High School (Dearborn Heights)
- *Henry Ford Community College Regional (Dearborn)
- Lincoln High School (Ypsilanti)
- Michael Berry Career Center (Dearborn Heights)



Cisco Networking Academy: Promoting IT Careers

Through our Promoting IT Careers initiative, the Cisco[®] Networking Academy[®] engages students early in their classroom experience by providing information about careers in IT and networking. The Promoting IT Career Website provides valuable tools for helping students navigate the IT landscape.

Visit the Promoting IT Careers Website, http://www.cisco.com/go/promoteitcareers, which is dedicated to the following:

- Increasing awareness and interest in opportunities in IT and networking
- Creating interest in IT and networking as a profession
- Helping students establish career goals
- Providing tools and resources to support success as students pursue IT careers
- Creating opportunities for students and graduates to transition from classroom to careers

Five Ways to Promote IT Careers

The following events and activities engage students at all levels of experience. Valuable tools and resources for each event are available through the Promoting IT Careers Website.

1. Host Your Own All Academy Day

All Academy Day is a competition that gives students the chance to show off the skills they have learned in the Networking Academy and to explore career pathways by interacting with IT professionals. Teams of students participate in three hands-on events: network cabling, router configuration, and a quiz bowl. For more information, visit: http://www.cisco.com/go/allacademyday

2. Help Students See Your Shadow

Job shadowing can be an important first step in pointing students toward IT careers. You can put on a full **Job Shadow day** or offer an event as simple as a guest speaker in your classroom. Hearing first-hand about the world of work from IT professionals helps students relate their classroom experiences to the workplace and can inspire students to pursue careers in math, science, and technology. For more information, visit: <u>http://www.cisco.com/go/jobshadowday</u>

3. Introduce Young Students to the World of IT

Packetville is a public e-learning portal filled with interactive and educational resources for introducing students aged 8 to 14 to the world of IT. Lesson plans, which are aligned with the standards of the International Society for Technology in Education, include community service projects and career exploration. For more information, visit: http://www.cisco.com/go/packetville

4. Connect Students with Employers

Cisco and the Networking Academy are addressing the increasing demand within the Cisco Channel students and alumni with employers by hosting **NetWork Strategic Recruiting events** throughout the United States. For more information, visit: <u>http://www.cisco.com/go/networkevents</u>

5. Explore the Landscape of IT

This series of **Virtual Field Trips** helps Networking Academy students and instructors explore and understand the landscape of IT and prepare for networking careers, all without leaving the classroom. Designed to engage students early on in their Networking Academy experience, the videos cover a range of topics that encourage students to continue their education and begin early to build their career path. A companion module that accompanies each video reinforces the content from the video. For more information, visit: <u>http://www.cisco.com/go/virtualfieldtrip</u>

Learn More about IT and Networking Careers

- Certification Magazine, *Hot Jobs & Skills for 2007* <u>http://www.certmag.com/articles/templates/CM_gen_Article_template.asp?articleid=2521&zoneid=1</u>
- CNNMoney.com, Skilled Worker Shortage Hurts U.S.
 <u>http://money.cnn.com/2007/01/04/news/economy/jobs_outlook/index.htm</u>
- Job Data Resources
 - U.S. Department of Labor Bureau of Labor Statistics, Occupational Employment Statistics <u>http://data.bls.gov/oes/search.jsp</u>
 - State-Level Job Projections
 <u>http://www.projectionscentral.com</u>
- Robert Half Technology, CIOs Project Solid Growth in First-Quarter Hiring: Largest Net Increase in Hiring Levels
 Since 2001, Survey Shows
 http://www.roberthalftechnology.com



Cisco Networking Academy: United States

Educating the Architects of the Networked Economy

Studies worldwide show a gap between the IT jobs available and qualified candidates to fill them. The Cisco[®] Networking Academy[®] educates the architects of the networked world, enabling students to pursue higher education in engineering, computer science, and related fields. Academies provide students with the technical skills they need to succeed in a wide range of careers, and ultimately, to aid in the development of their countries and local economies.

Since the program's creation in 1997, more than 2.1 million students have enrolled at more than 11,000 academies located in high schools, technical schools, colleges, universities, and community-based organizations in more than 160 countries. In the United States alone, there are more than 69,500 currently enrolled academy students and more than 2600 actively teaching academies.+

^Source: MRE/Academy Connection, Impact Data	Date: As of Nov 20, 2006
⁺ Source: AME/MRE report 1163_1221All State Stats and report 2451	Date: As of Oct 31, 2006
An Actively Teaching Academy has a class currently in session or has taught a class within a six-month period.	
A Currently Enrolled Student is enrolled in a class that is in session on the date specified. It does not include future c started.	lasses that have not yet

Table 1. Cisco Networking Academies in the United States

Students currently enrolled in the Networking Academy	69,512
Distinct cumulative Networking Academy graduates (have successfully completed a course)	466,610
Total estimated cumulative contribution value to U.S. Networking Academies*	274,076,036

Data included in this profile, including the list of actively teaching academies, is updated annually on Oct. 31

Source: AME/MRE report 1163_1221All State Stats as of 10.31.06 corrected 11.21.06 Date: As of Oct 31, 2006 Graduates are distinct; therefore, each graduate is only counted once. *Source: AME/MRE report 1209_130112.13.06 Date: As of Dec 13, 2006

Table 2. Networking Academy Curriculum in the United States

Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
Number of Networking Academies actively teaching the curriculum in the United States	2239	175	892	107	109

The five curricula above represent the core Cisco Networking Academy curricula. PNIE, Java, and UNIX are also available.

Source: AME/MRE report 1163 1221All State Stats as of 10.31.06 corrected 11.21.06

Date: As of Oct 31, 2006

Education Level	Number of U.S. Networking Academies	Percentage of U.S. Networking Academies
Secondary schools	1712	65.3%
Community colleges	780	29.8%
Universities	163	6.2%
Other	85	3.2%
Total number of institutions actively teaching Networking Academy curricula	2620	100%

 Table 3.
 Actively Teaching U.S. Networking Academies by Education Level

Partial listing of education level options. Academies may select multiple options. Source: AME/MRE rpt 2451 Date: As of Oct 31, 06

Cisco Networking Academy: Workforce Development

If the United States is to remain competitive in this global economy, leading experts believe we must have a trained and educated workforce. And yet, the number of U.S. students pursuing careers in science, technology, engineering and math—critical areas for educating the workforce of tomorrow—continues to decline.

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IT Occupational Data

Table 4.	Selected IT-Related	Occupations in t	the United States
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Occupation	Employment		Employment Change		Average Annual	Occupational	
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Bureau of Labor Statistics, Monthly Labor Review Nov 2005, http://www.bls.gov/opub/mlr/2005/11/art5full.pdf

*Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (US), http://stat.bls.gov/oes/current/oes_nat.htm

Learn More

For additional information about the Cisco Networking Academy, visit http://www.cisco.com/go/netacad.



U.S. Model of Practice

National Science Foundation Grants Benefit Academy Students and Communities

As developing nations increasingly educate their workforce in science and technology, the United States must keep pace with the changing nature of the competition. To that end, the National Science Foundation (NSF) has awarded \$3-million grants to several two-year community colleges, some of which are Cisco[®] Networking Academies[®], to help develop the technical knowledge of leaders and maintain U.S. economic competitiveness.

"The ATE centers respond to national industry needs by equipping students with key skills required to excel in high-tech workplaces, increasing enrollment in educational programs that serve critical sectors, and serving as clearinghouses for exemplary instructional material and professional development tools," says Arden L. Bement Jr., Director, NSF.

The NSF project grants support Advanced Technological Education (ATE) initiatives, which focus on enhancing technician and teacher education, technical expertise, students' laboratory experiences, and applied research. Projects use multifaceted approaches to add rigor to Science, Technology, Engineering, and Math (STEM) courses; infuse industry standards and workplace competencies into classroom instruction; and provide educators with opportunities for professional development. The NSF grants also support ATE centers, which serve as change agents in their fields through strategic partnerships with regional and national employers.

"The Networking Academies leverage NSF resources while ATE centers provide advanced curricula and flexible training models to create successful collaborative partnerships that address critical workforce needs."

Gene Longo, Senior Manager for U.S. Field Operations, Cisco Networking Academy

"The Networking Academies leverage NSF resources while ATE centers provide advanced curricula and flexible training models to create successful collaborative partnerships that address critical workforce needs," says Gene Longo, Senior Manager for U.S. Field Operations, Cisco Networking Academy.

NSF is an independent federal agency that supports fundamental research and education across all fields of science and engineering. For more information about NSF, visit <u>http://www.atecenters.org/</u>

ATE Centers That Are Making A Difference

CREATE: Santa Clarita, CA, www.create-california.org

The California Regional Consortium for Engineering Advances in Technological Education (CREATE) project is a joint effort between six community colleges, five universities, and more than 50 high-tech engineering and technology employers. Since 1997, the CREATE ATC consortium has offered a regional approach to workforce preparation and training by creating innovative, flexible strategies that teach students about the latest technological advances in a range of high-demand technology fields.

As a Cisco Academy Training Center (CATC), CREATE offers instructor training for Cisco CCNA[®] courses, Cisco CCNP[®] courses, and the Network Security curriculum in a train-the-trainer model. CREATE's instructional skills and pedagogy

workshops enhance the quality of teachers who deliver Networking Academy courses in the community college setting. "We're not just training teachers to teach the curriculum, we're helping them become better teachers through professional development," says Kathy Alfano, Executive Director, CREATE. "They're learning how to create structured lessons, address various learning styles, and motivate their students while teaching rigorous content."

CREATE's impact on pedagogy training spans beyond California, with regional hubs offering workshops in 14 states across the nation. "To help keep our costs down," says Alfano, "we're piloting a program with NSF to develop 'master trainers' who can train groups of facilitators to broaden our program reach and offer more learning opportunities to teachers."

CREATE's technology courses are offered to students for credit and are pathways into degree programs at various 4-year institutions in the region, including five California State University campuses. Since 1999, CREATE has helped educate more than 20,000 students, developed and implemented 30 new degree programs and 105 new courses, and facilitated more than a million dollars in additional funding through innovative industry and college partnerships.

CyberWATCH: Washington, D.C. Area, www.cyberwatchcenter.org

In 2005, to address the growing demand for cybersecurity technicians throughout metropolitan DC, NSF awarded a \$3-million grant to establish a virtual regional center called CyberWATCH, which stands for Cybersecurity: Washington Area Training and Consortium Headquarters. The center consists of members from the Metropolitan Council of Governments, five Cisco Networking Academy high schools, and several other higher-education institutions that contribute to the development of a skilled workforce in computer and Internet security.

Prince George's Community College, a regional academy, provides leadership and coordination among the seven CyberWATCH community colleges involved in the consortium, including the development of two model curricula for information assurance and information security. "We've agreed to adapt and adopt one model among all the institutions so students can have a clear and seamless pipeline when pursuing a degree in this field," says Dr. Vera Zdravkovich, Director, CyberWATCH.

The cybersecurity curriculum leverages Networking Academy courses, which provide real-world activities and virtual labs, and can lead to industry-recognized certification. In addition, it maps to National Security Administration (NSA) standards and articulates to the five CyberWATCH university partners, including George Mason University, George Washington University, Towson University, University of Maryland College Park, and Johns Hopkins University.

"The Networking Academy is widely recognized in the industry and lends itself well to the curriculum. It has helped raise the standard of what is being taught, which has impacted both faculty and student development."

Dr. Vera Zdravkovich, Director, CyberWATCH

"The Networking Academy is widely recognized in the industry and lends itself well to the curriculum. It has helped raise the standard of what is being taught, which has impacted both faculty and student development," says Dr. Zdravkovich.

As cybersecurity rapidly becomes an essential function in virtually every field, CyberWATCH is working to infuse its materials into a broad array of disciplines offered at its institutions, including science, economics, political science, business, and law. To address the limited pool of instructors currently trained in cybersecurity, the Center is offering a graduate program to 15 faculty members for certificates in information assurance and information security, which will help increase the instructional capacity in the region.

"I think it's amazing what can be accomplished by such different institutions when there is strong collaboration, commitment, and a unifying goal," says Dr. Zdravkovich.

Center for Systems Security and Information Assurance (CSSIA): Palos Hills, IL, www.cssia.org

CSSIA is an NSF-supported consortium consisting of seven academic institutions in five states that are dedicated to meeting the needs of the evolving information technology (IT) industry, particularly as it relates to the field of cybersecurity. Led by Moraine Valley Community College, a CATC, CSSIA is the first comprehensive IT security center in the Midwest and has become a national leader in cybersecurity and information assurance training. As an integral part of the Moraine Valley Community College CATC, CSSIA offers advanced technology training programs to community colleges, university faculty, and students to address the need for highly-qualified IT security professionals.

The CSSIA center has developed nine undergraduate courses, nine graduate courses, and a variety of workshops that address IT security. By forming strategic partnerships with organizations such as Cisco, Grant Thornton, Ascendant Learning, CompTIA, and Illinois Working Connections, CSSIA has gained access to numerous sources of curriculum content and workbased learning opportunities to meet its specific needs including customized educational programs for faculty and business professionals, remote IT security labs, student internships, and faculty externships. In addition, the center offers support to educational institutions regarding curriculum mapping and state processes for course and program approvals.

John Sands, IT Professor at Moraine Valley, says, "The NSF grant allows us to provide extraordinary opportunities for minority and female students who are interested in careers in IT. Through partnerships with inner-city schools such as Mirta Ramirez Computer Charter School, high school students can participate in college courses taught by college professors. Students from Mirta Ramirez have taken classes in IT Essentials, Fundamentals of Wireless LANs, and Network Security. These students also traveled to Washington, DC to receive recognition from NSF for community service as part of the annual NSF ATE conference.

According to principle investigator Erich Spengler, "CSSIA has had tremendous impact on capacity building in the area of information assurance." CSSIA has offered approximately 100 workshops, serving more than 1200 college and university faculty from across the nation. Course offerings range from entry-level topics to advanced IT security and emerging technologies. Many of these classes prepare faculty members to teach and earn industry-based certifications. The center's classes are designed to provide comprehensive learning experience including course content, teaching techniques, lab management, and student assessment.



U.S. Competition Helps Technology Students Build Confidence

SkillsUSA Model of Practice

Nearly 10 years ago, Cisco[®] employees helped create an Internetworking contest for the SkillsUSA competition, which allows students to showcase their skills and build confidence, while providing a networking opportunity for students, teachers, and industry leaders in technology.

"Successful Model of Employer-Driven Youth Development Training"

SkillsUSA is a national nonprofit organization that helps high school and college students prepare for careers in trade, technical, and service occupations. SkillsUSA programs help establish industry standards for job skill training and promote community service. The U.S. Department of Labor describes SkillsUSA as a "successful model of employer-driven youth development training."

The SkillsUSA competitions are designed to recognize the achievements of career and technical education students while encouraging them to strive for excellence in their chosen occupations. At the annual, national-level championships, more than 4600 students compete in 84 occupational and leadership skill areas.

About the Internetworking Competition

During the last nine years of the Internetworking competition, more than 25,000 contestants have competed at a local, regional, or state level in all 50 U.S. states. More than 500 of those competitors have qualified to attend the national contest in Kansas City, Missouri. To date, all of the contestants who have placed in the national Internetworking competition have participated in the Cisco Networking Academy[®].

To date, all of the contestants who have placed in the national Internetworking competition have participated in the Cisco Networking Academy.

Bob Schoenherr, national chairman of the Internetworking contest, says, "The SkillsUSA Networking Academy contestants know their Internetworking and enjoy being involved. It's inspiring to see how hard they try to do their best for our technical committee. It's a wonderful experience for both the contestants and the members that help run the contest."

Working against the clock and each other, participants prove their expertise in Internetworking technology through three main areas of the competitions:

- The networking design challenge tests a contestant's ability to ensure the functionality, scalability, adaptability, and manageability of an Internetworking system.
- The written exam tests a student's knowledge of Internetworking concepts.
- The hands-on component tests the contestant's ability to make cables, troubleshoot network systems, configure routers and switches, and deliver customer service in a technical assistance center environment.

The national Internetworking competitions are designed by industry leaders such as Cisco, Communication Workers of America, Fluke Corporation, Adtran Corporation, Panduit, Network Development Group, SBC, and Aries Technology, as well as teachers from across the United States.

2005 Sliver Medalist: "My Involvement in SkillsUSA Helped Me Gain Confidence in My Abilities"

Kat Kolmo, 2005 SkillsUSA silver medal winner, says the training she received in the Networking Academy, along with the experience she gained through SkillsUSA, enabled her to interview confidently and perform successfully on the job. "My involvement in SkillsUSA helped me gain confidence in my abilities," says Kat, who earned her associate of applied technology degree from Central Georgia Technical College and began working at Marriott International's headquarters in Washington, D.C. Kat has also been hired as the lead technician for several retail chains in the D.C. area, and is a regular volunteer with the Georgia State SkillsUSA Internetworking competition, where she serves as the technical chair.



Kat Kolmo (center) at the 2005 competition

2006 Gold Medalist: Network Engineer for a Company He Co-Owns

Since 2002, to recognize gold medal winners and their advisors, Cisco and Cisco Gold Certified Partner SIGMAnet have hosted a site visit at Cisco's headquarters in San Jose, CA. Cisco engineers and Networking Academy management coordinate a day of learning that includes a formal presentation in the Executive Briefing Center (EBC), state-of-the-art lab tours, and a networking lunch.

"It was truly fascinating to see the scale of operations at Cisco and the kind of engineering issues the company deals with on a day-to-day basis," says Lucas Tomicki, a 2006 SkillsUSA gold medal winner who participated in a recent site visit. "I was very impressed from a technical perspective."

Lucas came to the United States from Poland while in high school and completed the Networking Academy in less than six months. He now works as a network engineer for JS Computek, a computer company in Columbia, Missouri, which he also co-owns. In addition to his technical skills, Lucas has a strong interest in business and investments. "In the next five years I plan to run my own hedge fund and hopefully retire by the age of 30," says Lucas.

To learn more about SkillsUSA, visit http://skillsusa.org



Lucas Tomicki (center) at the 2006 competition



U.S. Congressional District Database

Data for this report was gathered using the U.S. Congressional District Database. This tool was developed to communicate with congressional representatives about academy implementation in their home districts. The database maps actively teaching Cisco Networking Academies by congressional district or by all districts within a state, providing academy name, city, state, and congressional district. A listing by state is updated annually. Custom reports by Congressional districts may be run upon request by contacting Melody Buchanan at Melody.Buchanan@ciscolearning.org.

Table 6. Networking Academies in U.S. Congressional Districts

Number of U.S. Congressional Districts	Number of U.S. Congressional Districts <u>with</u> Networking Academies	Number of U.S. Congressional Districts <u>without</u> Networking Academies	% U.S. Congressional District Penetration
440	431	9	97.95%

Source: MRE/Academy Connection, U.S. Congressional District Database

Date: Jan 25, 2007



Cisco Networking Academy: Summary of U.S. Federal Government Agencies

Educating the Architects of the Networked Economy

Studies worldwide show a gap between the IT jobs available and qualified candidates to fill them. The Cisco[®] Networking Academy[®] educates the architects of the networked world, enabling students to pursue higher education in engineering, computer science, and related fields. Academies provide students with the technical skills they need to succeed in a wide range of careers, and ultimately, to aid in the development of their countries and local economies.

Since the program's creation in 1997, more than 2.1 million students have enrolled at more than 11,000 academies located in high schools, technical schools, colleges, universities, and community-based organizations in more than 160 countries.[^] In the United States alone, there are more than 69,500 currently enrolled academy students and more than 2600 actively teaching academies.⁺

This total includes the following U.S. federal government agencies: U.S. Department of Defense Education Activities Schools (DoDEA), U.S. Department of Labor's Job Corps, and the U.S. military (U.S. Air Force, Army, Marine Corps, and Navy).

^Source: MRE/Academy Connection, Impact Data

*Source: AME/MRE report 1163_1221All State Stats and report 2451

Date: As of Nov 20, 2006 Date: As of Oct 31, 2006

An Actively Teaching Academy has a class currently in session or has taught a class within a six-month period.

A Currently Enrolled Student is enrolled in a class that is in session on the date specified. It does not include future classes that have not yet started.

Table 1. Cisco Networking Academies in the United States Federal Government Agencies

Students currently enrolled in the Networking Academy	1438
Distinct cumulative Networking Academy graduates (have successfully completed a course)	9647
Total estimated cumulative contribution value of the Networking Academies in the U.S. federal agencies*	\$3,643,149

 Data included in this profile, including the list of actively teaching academies, is updated annually on Oct. 31

 Source: AME/MRE report 2684 federal AVP packet 04.26.07

 Date: As of Oct 31, 2006

Graduates are distinct; therefore, each graduate is only counted once.

Date: As of April 19 and March 3, 2007

Table 2. Networking Academy Curriculum in the U.S. Federal Government Agencies

*Source: AME/MRE reports 2644, 2647, 2649 dated 3.19.07 and MRE rpt 2685 dated 4.3.07

Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
Number of Networking Academies actively teaching the curriculum in Federal Government Agencies	67	1	39	3	1

The five curricula above represent the core Cisco Networking Academy curricula. PNIE, Java, and UNIX are also available.

Source: AME/MRE report 2684 federal AVP packet 04.26.07

Date: As of Oct 31, 2006

Cisco Networking Academy: Meeting the IT Workforce Needs

If the United States is to remain competitive in this global economy, leading experts believe we must have a trained and educated workforce. And yet, the number of U.S. students pursuing careers in science, technology, engineering and math—critical areas for educating the workforce of tomorrow—continues to decline.

The Cisco Networking Academy addresses this gap by providing students with the skills needed to succeed in the wide range of careers available today and tomorrow. In addition to integrating IT skills, the Networking Academy also embeds math, science, and language arts skills in the curriculum.

IT Occupational Data

Occupation	Emplo	yment	ent Employment Change		Average Annual Openings	Occupational Employment	
	2002	2012	Numeric	Percent		as of May 2005*	
Computer Support Specialists	506,800	660,230	153,430	30	21,580	499,860	
Computer Systems Analysts	461,000	645,590	184,590	40	23,680	492,120	
Network and Computer Systems Administrators	251,370	345,270	93,900	37	12,180	270,330	
Network Systems and Data Communications Analysts	172,860	277,040	104,190	60	12,450	185,190	
Computer and Information Systems Managers	284,140	386,760	102,620	36	15,420	259,330	

Table 3. Selected IT-Related Occupations in the United States

Bureau of Labor Statistics, Monthly Labor Review Nov 2005, http://www.bls.gov/opub/mlr/2005/11/art5full.pdf

*Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (US), http://stat.bls.gov/oes/current/oes_nat.htm

Statistics do include federal government but not the U.S. military

Learn More

For additional information about the Cisco Networking Academy, visit http://www.cisco.com/go/netacad.



Cisco Networking Academy: U.S. Department of Defense Education Activities (DoDEA)

Educating the Architects of the Networked Economy

Studies worldwide show a gap between the IT jobs available and qualified candidates to fill them. The Cisco[®] Networking Academy[®] educates the architects of the networked world, enabling students to pursue higher education in engineering, computer science, and related fields. Academies provide students with the technical skills they need to succeed in a wide range of careers, and ultimately, to aid in the development of their countries and local economies.

Since the program's creation in 1997, more than 2.1 million students have enrolled at more than 11,000 academies located in high schools, technical schools, colleges, universities, and community-based organizations in more than 160 countries. In the United States alone, there are more than 69,500 currently enrolled academy students and more than 2600 actively teaching academies.+

^Source: MRE/Academy Connection, Impact Data Date: As of Nov 20, 2006 *Source: AME/MRE report 1163_1221All State Stats and report 2451 Date: As of Oct 31, 2006 An Actively Teaching Academy has a class currently in session or has taught a class within a six-month period. A Currently Enrolled Student is enrolled in a class that is in session on the date specified. It does not include future classes that have not yet started.

Table 1. Cisco Networking Academies in the U.S. DoDEA

Students currently enrolled in the Networking Academy	532
Distinct cumulative Networking Academy graduates (have successfully completed a course)	1122
Total estimated cumulative contribution value to U.S. DoDEA Networking Academies*	\$799,989

Data included in this profile, including the list of actively teaching academies, is updated annually on Oct. 31

Source: AME/MRE report 2684 federal AVP packet 04.26.07

Graduates are distinct; therefore, each graduate is only counted once.

*Source: AME/MRE reports 2644, 2647, 2649 dated 3.19.07 and MRE rpt 2685 dated 4.3.07

Table 2. Networking Academy Curriculum in the U.S. DoDEA

C	Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
	Number of Networking Academies actively eaching the curriculum in U.S. DoDEA	28	_	28	-	-

The five curricula above represent the core Cisco Networking Academy curricula. PNIE, Java, and UNIX are also available.

Source: AME/MRE report 2684 federal AVP packet 04.26.07

Date: As of Oct 31, 2006

Date: As of April 19 and March 3, 2007

Date: As of Oct 31, 2006

Cisco Networking Academy: Workforce Development

If the United States is to remain competitive in this global economy, leading experts believe we must have a trained and educated workforce. And yet, the number of U.S. students pursuing careers in science, technology, engineering and math—critical areas for educating the workforce of tomorrow—continues to decline.

The Cisco Networking Academy addresses this gap by providing students with the skills needed to succeed in the wide range of careers available today and tomorrow. In addition to integrating IT skills, the Networking Academy also embeds math, science, and language arts skills in the curriculum.

IT Occupational Data

Occupation	Emplo	Employment Emplo			Average Annual Openings	Occupational Employment as of
	2002	2012	Numeric	Percent		May 2005*
Computer Support Specialists	506,800	660,230	153,430	30	21,580	499,860
Computer Systems Analysts	461,000	645,590	184,590	40	23,680	492,120
Network and Computer Systems Administrators	251,370	345,270	93,900	37	12,180	270,330
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Table 3. Selected IT-Related Occupations in the United States

Bureau of Labor Statistics, Monthly Labor Review Nov 2005, http://www.bls.gov/opub/mlr/2005/11/art5full.pdf

*Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (US), http://stat.bls.gov/oes/current/oes_nat.htm

Learn More

For additional information about the Cisco Networking Academy, visit http://www.cisco.com/go/netacad.



U.S. Department of Defense and Cisco Provide Global Learning Opportunities

U.S. Department of Defense Education Activities Model of Practice

Shortly after the end of World War II, the United States established permanent military bases overseas and invited families to join military personnel abroad. This created a need for educational facilities to teach the children of those in service and U.S. Department of Defense (DoD) civilians stationed throughout Europe and the Pacific. As a result, the DoD created the Department of Defense Education Activity (DoDEA), a civilian agency headquartered in Arlington, Virginia.

DoDEA operates more than 200 fully-accredited public schools in 12 countries, seven U.S. states, Guam, and Puerto Rico, and employs approximately 8700 teachers serving 87,000 students. In 2001, the DoDEA partnered with the Cisco[®] Networking Academy[®] and began offering IT Essentials and the Cisco Certified Networking Associate (CCNA[®]) curriculum. "The Networking Academy is our flagship offering," says Patrick Kilkenny, program analyst for DoDEA. "The rigorous curriculum and opportunity for professional certification hold high value with our students."

No other academy serves as many students internationally as the DoDEA. Course offerings in computer, technical, and career education help students prepare for college and careers by linking what they learn in school with knowledge and skills that will support their success in the global workforce.

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In September 2006, Cisco announced the winners of its 3R Recognition Award Program, which was developed by the Networking Academy to recognize students, instructors, and schools in the United States that demonstrate excellence in the categories of Rigor, Relevance, and Relationships. The DoDEA received an award in the Rigor category for developing a robust instructor training program that supports a community of teachers around the world. CCNA instructors within the DoDEA attend a three-day professional training program in either Okinawa, Japan for Pacific academies, or in Wiesbaden, Germany for European academies.



DoDEA instructors build a PC with a classmate during an instructor class at the West Virginia University training center.

"The DoDEA's commitment to the quality of local academies and continuing education Virginia University training cer of instructors is superlative in every respect," says Bob Meyers, academy legal main contact at WVU-Morgantown, which serves as the regional academy for the DoDEA. "We developed workshops for the DoDEA to present advanced CCNA concepts in a way that challenges instructors to further develop their technical and pedagogical skills."

Frank Pendzich, instructor of professional technical studies at Wiesbaden High School in Germany says, "The DoDEA provides exceptional continuous development opportunities to help instructors acquire the level of mastery required to teach complex subject matter, and provide students with highly-skilled and knowledgeable educators."

To learn more about the DoDEA, visit www.dodea.edu.



Cisco Networking Academy® Mind Wide Open[™]

Cisco Networking Academy: U.S. Department of Labor's Job Corps

Educating the Architects of the Networked Economy

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^Source: MRE/Academy Connection, Impact Data
 ^Source: AME/MRE report 1163_1221All State Stats and report 2451
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 An Actively Teaching Academy has a class currently in session or has taught a class within a six-month period.
 A Currently Enrolled Student is enrolled in a class that is in session on the date specified. It does not include future classes that have not yet started.

 Table 1.
 Cisco Networking Academies at U.S. Job Corps Locations

Students currently enrolled in the Networking Academy	174
Distinct cumulative Networking Academy graduates (have successfully completed a course)	495
Total estimated cumulative contribution value to Networking Academies at U.S. Job Corps locations*	\$375,793

Data included in this profile, including the list of actively teaching academies, is updated annually on Oct. 31

 Source: AME/MRE report 2684 federal AVP packet 04.26.07
 Date: As of Oct 31, 2006

 Graduates are distinct; therefore, each graduate is only counted once.
 Date: As of Oct 31, 2006

*Source: AME/MRE reports 2644, 2647, 2649 dated 3.19.07 and MRE rpt 2685 dated 4.3.07

Date: As of April 19 and March 3, 2007

Table 2. Networking Academy Curriculum at U.S. Job Corps Locations

Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
Number of Networking Academies actively teaching the curriculum at U.S. Job Corps locations	6	-	4	-	_

The five curricula above represent the core Cisco Networking Academy curricula. PNIE, Java, and UNIX are also available.

Source: AME/MRE report 2684 federal AVP packet 04.26.07

Date: As of Oct 31, 2006

Cisco Networking Academy: Workforce Development

If the United States is to remain competitive in this global economy, leading experts believe we must have a trained and educated workforce. And yet, the number of U.S. students pursuing careers in science, technology, engineering and math—critical areas for educating the workforce of tomorrow—continues to decline.

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IT Occupational Data

Occupation	Employment		Employment Change		Average Annual Openings	Occupational Employment	
	2002	2012	Numeric	Percent		as of May 2005*	
Computer Support Specialists	506,800	660,230	153,430	30	21,580	499,860	
Computer Systems Analysts	461,000	645,590	184,590	40	23,680	492,120	
Network and Computer Systems Administrators	251,370	345,270	93,900	37	12,180	270,330	
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Table 3. Selected IT-Related Occupations in the United States

Bureau of Labor Statistics, Monthly Labor Review Nov 2005, http://www.bls.gov/opub/mlr/2005/11/art5full.pdf

*Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (US), http://stat.bls.gov/oes/current/oes_nat.htm

Statistics do include federal government but not the U.S. military

Learn More

For additional information about the Cisco Networking Academy, visit http://www.cisco.com/go/netacad.



Job Corps and Cisco Team Up to Provide Valuable Skills to Young Adults

U.S. Department of Labor's Job Corps Model of Practice

Job Corps is a comprehensive, residential education and training program administered by the U.S. Department of Labor. Since 1964, Job Corps has provided integrated academic, vocational, and social skills training to more than two million disadvantaged youths between the ages of 16 and 24, enabling them to pursue additional education or secure high-paying jobs. Job Corps currently serves nearly 70,000 students a year at 118 centers throughout the United States.

Through a successful partnership with the Cisco[®] Networking Academy[®], Job Corps centers across the United States are helping youth gain the skills necessary to establish successful and promising careers in technology. The Networking Academy provides interactive IT curricula and hands-on experience to support the development of networking skills, while Job Corps provides career counseling and transition support for up to 12 months after students graduate from the program to ensure a successful transition into the workforce.

Networking Academy students at Job Corps also benefit from partnerships with local businesses and nonprofit institutions that offer valuable workplace learning opportunities to help students develop their skills and find jobs locally.

Making a Difference in the Community

Pittsburgh Job Corps Center – Pennsylvania

The Pittsburgh Job Corps Center, which opened its doors in 1972, currently serves approximately 850 young men and women. The center, which is operated by ResCare, provides career training, social skills counseling, and wellness services. Since 2001, the center has offered the Networking Academy to a diverse population of students seeking marketable workforce skills.

"We're proud of the results of our students. [They] find good IT jobs, but more importantly, they keep them. Some of our students have been with their employers for years and are advancing in technical expertise and income."

Karen Bobick, Pittsburgh Job Corps Center instructor

"We're proud of the results of our students," says Karen Bobick, academy instructor at the Pittsburgh Job Corps Center. "We strive to give them real-world experience while they're in the program through internships, work-based learning, and part-time employment. Our goal is long-term results," adds Karen. "Our students find good IT jobs, but more importantly, they keep them. Some of our students have been with their employers for years and are advancing in technical expertise and income."

The academy at the Pittsburgh Job Corps Center plays an active role in the community. Working in conjunction with Wireless Neighborhoods, they have designed and installed computer networks for local nonprofit organizations. These experiences have helped the students build their resumes and secure jobs in the IT field.

Andre Thompson enrolled in Job Corps after dropping out community college for financial reasons. He was assigned the lead role in coordinating several work-based learning projects through Job Corps, and helped design and install networks for community centers in the Pittsburgh area.

"I was able to develop my leadership and management skills while troubleshooting and delegating tasks among team members" says Andre. "It was a very valuable experience."

Andre completed four semesters of the Networking Academy and passed his Cisco Certified Networking Associate (CCNA[®]) Certification Exam on the first try. He currently works at National Software Testing Lab as a cell phone applications test engineer and plans to obtain his bachelor's degree in information technology.

Collbran Job Corps Center - Colorado

When Ben Morris graduated from high school, he didn't have the financial resources or the desire to attend college, and was unsure of his plans for the future. His brother, a U.S. Navy recruiter, informed Ben that Job Corps offered a technical track in networking and encouraged him to sign up. Although Ben had never owned a computer and had very little networking experience, he signed up for the Networking Academy at the Collbran Job Corps Center in February 2004.

Ben quickly began to apply himself as a learner. "It was challenging at first to understand the coursework," says Ben. "I never liked to read and then suddenly my brain became a big sponge. I discovered that I liked to learn and get my hands into the technical stuff."

Ben completed IT Essentials I and II and the Cisco CCNA courses and then did something that no other student in Job Corps history had done; he went on to complete his Cisco instructor training and by October 2005, began simultaneously teaching courses while continuing his studies. Ben completed his instructor training for all the CCNA courses before completing the Networking Academy in February 2006.

"The Networking Academy moved Ben from an interest in IT to skills he can build upon."

Karen Currier, Collbran Job Corps Center instructor

When reflecting on the impact the Networking Academy has had on his life, Ben says, "It gave me a better understanding of who I am and what I like to learn. It also provided job skills and direction to design my own career plan." His academy instructor, Karen Currier, saw him as a self-motivated student. "The Networking Academy moved Ben from an interest in IT to skills he can build upon," says Karen. "He pushed himself to the limit to get as much as he could out of the program."

Ben currently works for Sitel in Colorado Springs, providing customer service at the help desk. He plans to continue his education at Pikes Peak Community College in Colorado Springs and ultimately would like to own his own business, an Internet and retail café.

Since the Networking Academy was introduced at the Job Corps center in Collbran, more than 70 students have completed one or more of the courses offered, and many of those who have graduated are working in the IT industry or continuing their education. "Our primary goal in offering the Networking Academy is to prepare students for better job placement," says Karen.

Sacramento Job Corps – California

The Sacramento Job Corps Center began offering the Networking Academy in 2002. Its relationships with schools, businesses, and community and faith-based organizations throughout the Sacramento area have provided rich learning opportunities for students, who perform community service, participate in work-based learning, and are placed in jobs and postsecondary education and training.

The work-based learning program integrates job shadowing, site visits, mentoring, internships, and vocational skills training into a comprehensive approach to developing students' technical and soft skills through hands-on and experiential learning.

For example, academy students installed a Cisco network in a local school system and helped a local organization build a wilderness rescue site.

A six-year partnership with the California Department of Motor Vehicles has placed Job Corps trainees in telephone help desk positions for the DMV's automated system, where they provide support for several different services including vehicle registration. Academy students also interface with customers by providing technical assistance at self-help kiosk and computer terminals in the DMV lobbies.

Academy students were also involved in the expansion of the Sacramento Job Corps Center's network infrastructure. Last year, they helped install over 100 drops and 6000 feet of cable, reorganize wiring closets, and update documentation.

"We're providing students with a strong focus on job readiness through hands-on experience and certification preparation through rigorous study."

George Raymond, academy instructor at the Sacramento Job Corps Center

"We're providing students with a strong focus on job readiness through hands-on experience and certification preparation through rigorous study," says George Raymond, academy instructor at the Sacramento Job Corps Center.

To learn more about Job Corps, visit: http://jobcorps.dol.gov/

For comprehensive list of Cisco Networking Academies at Job Corp Centers throughout the United States, please contact Carroll McGillin at cmcgilli@cisco.com.



Cisco Networking Academy: U.S. Military

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*Source: MRE/Academy Connection, Impact Data *Source: AME/MRE report 1163_1221All State Stats and report 2451 Date: As of Nov 20, 2006 Date: As of Oct 31, 2006

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	Students currently enrolled in the Networking Academy	Distinct cumulative Networking Academy graduates	Total estimated cumulative contribution value to U.S. military Networking Academies
U.S. Air Force	25	823	\$288,757
U.S. Army	677	7040	\$2,013,131
U.S Marine Corps	30	35	\$95,991
U.S Navy	-	132	\$66,788
Total U.S Military	732	8030	\$2,467,367

Table 1. Cisco Networking Academies in the U.S. Military

Data included in this profile, including the list of actively teaching academies, is updated annually on Oct. 31

Source: AME/MRE report 2684 federal AVP packet 04.26.07

Date: As of Oct 31, 2006

Graduates are distinct; therefore, each graduate is only counted once.

Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
U.S. Air Force	8	-	2	-	-
U.S. Army	11	1	1	1	-
U.S. Marine Corps	6	_	2	1	-
U.S. Navy	1	_	_	_	_
Total U.S. Military	26	1	5	2	_

 Table 2.
 Number of Networking Academies Actively Teaching the Curriculum in the U.S. Military

The five curricula above represent the core Cisco Networking Academy curricula. PNIE, Java, and UNIX are also available. Source: AME/MRE retort 2684 federal AVP packet 04.26.07 Date: *A*

Date: As of Oct 31, 2006

Cisco Networking Academy: Workforce Development

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IT Occupational Data

 Table 3.
 Selected IT-Related Occupations in the United States

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*Department of Labor, Bureau of Labor Statistics, May 2005 State Occupational Employment and Wage Estimates (US), http://stat.bls.gov/oes/current/oes_nat.htm

Learn More

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Academy Provides Technical Skills Training to U.S. Soldiers

U.S. Military Model of Practice

Fort Gordon, a U.S. Army installation in Georgia, provides advanced training to Signal Corps military personnel. Fort Gordon partnered with the Cisco[®] Networking Academy[®] in August 2000 to train U.S. troops with the latest networking technology, while having the flexibility to offer an academy based on their needs.

"Fort Gordon was looking for a way to efficiently train its soldiers," explains Herold Spencer, a Cisco engineer. "The Networking Academy allows them to offer the most relevant technology training available in the field."

"Fort Gordon was looking for a way to efficiently train its soldiers. The Networking Academy allows them to offer the most relevant technology training available in the field."

Herold Spencer, Cisco engineer

Fort Gordon trains more soldiers than any other branch of the U.S. Army in the critical area of military communications. As a regional academy, Fort Gordon provides Cisco Certified Network Associate (CCNA[®]) training support to local academies based in Fort Meade; Fort Bragg; the National Guard Professional Education Center in Little Rock, Arkansas; and Seoul, Korea. Since the implementation of the Networking Academy, 7498 soldiers have completed Cisco courses through Fort Gordon. In addition, Fort Gordon supports a local academy that delivers Cisco Security training at Camp Lejeune. The academy at Camp Lejeune also offers IT Essentials, CCNA, and Cisco Certified Network Professional (CCNP[®]) courses.

Major Bernard Smith of the U.S. Army's 311th Theater Signal Command (TSC) at Fort Meade says, "The Networking Academy is a testament not only of the ingenuity of the Army Reserve in overcoming the challenge of maintaining war readiness with only 62 training days per year, but also of the commitment level of the reservists who are willing to spend 12–16 hours a week of their personal time to maintain technical proficiency."

Though the courses are primarily designed to train soldiers to use equipment in the field, they are encouraged to acquire Cisco's industry certifications at Fort Gordon's on-site test center.

"Technicians and Signal Corps soldiers who complete the training gain proficiency in understanding and designing network architectures in an integrated environment," says David Kenney, academy instructor at Fort Gordon. "The Networking Academy enables participants to understand plug-and-play operations," adds David. "Whether you provide satellite, voice, or data communications, it all links to a router. Having someone trained to configure those routers and associated network designs is critical to successful operations in today's network-centric army."

Soldier Success Stories

Freeman Myers joined the U.S. Army in October 1987 and served in Operation Desert Storm and Operation Iraqi Freedom, working in the systems integration branch. He enjoyed working with technology and gained experienced in putting data packages together, including routers, switches, and firewalls, which provided services to combatants.

In 2005, Freeman decided to further his education by enrolling in the Networking Academy at Fort Gordon. Within five months, he graduated from the academy and received his CCNA certification. He enjoyed the experience so much that he decided to start teaching the Networking Academy curricula to his fellow soldiers in November 2005.

"I know I'm making an impact on these soldiers," says Freeman. "It's critical to have networking knowledge in this field. In homeland security, these folks are ensuring that America stays safe through secure networks." Freeman plans to continue his education and earn his CCNP and Cisco Certified Internetworking Expert (CCIE[®]) certifications.

John Paul Shafik is a 24-year-old U.S. Army Operations Officer who recently returned from deployment in Afghanistan as part of Operation Enduring Freedom. He was introduced to the Cisco curriculum at Fort Gordon during a 20-week course, where he studied IT Essentials and networking.

John Paul credits the Cisco curriculum for providing him with industry knowledge in a challenging environment. "Through the Networking Academy, I was able to learn both strategic and tactical skills, which have helped me succeed in a challenging work environment," says John Paul. While in Afghanistan, he worked on several multi-million dollar NETCOM communication projects and was responsible for overseeing a satellite dish and fiber-optic network. John Paul hopes to continue studying IT and is currently working on his jurist doctorate degree.



John Paul Shafik



Actively Teaching Cisco Networking Academies in the U.S. Federal Government Agencies

An Actively Teaching Academy has a class currently in session or has taught a class within a six-month period. * Indicates Cisco Networking Academy Training Center Source: AME/MRE report 2684 federal AVP packet 04.26.07

Date: As of Oct 31, 2006

U.S. Department of Defense Education Activities

- Department of Defense Educational
- DoDDS/Belgium Brussels Elementary High School
- DoDDS/Germany Bamberg High School
- DoDDS/Germany H.H. Arnold High School
- DoDDS/Germany Hohenfels High School
- DoDDS/Germany Kaiserslautern High School
- DoDDS/Germany Mannheim High School
- DoDDS/Germany Patch High School
- DoDDS/Germany Ramstein High School
- DoDDS/Germany Vilseck High School
- DoDDS/Holland AFNORTH High School
- DoDDS/HQ
- DoDDS/Italy Aviano American High School
- DoDDS/Japan Kinnick High School
- DoDDS/Japan Kubasaki High School
- DoDDS/Japan Perry High School
- DoDDS/Japan Zama High School
- DoDDS/Korea Pusan Elementary School/High School
- DoDDS/Korea Seoul American High School
- DoDDS/Korea Taegu Elementary/High School
- DoDDS/Okinawa Kadena High School
- DoDDS/Spain Rota High School
- DoDDS/Turkey Incirlik American High School
- DoDDS/UK Alconbury High School
- DoDDS/UK Lakenheath High School

- DoDDs/Japan EJ King High School
- DoDEA/USA Camp LeJeune High School
- DoDEA/USA Fort Knox High School
- DoDEA/USA Fort Campbell High School
- DoDEA/USA Quantico High School

U.S. Department of Labor: Job Corps

- Boxelder Job Corps
- Collbran Job Corps Center
- Columbia Basin Civilian Conservation Corps
- Loring Job Corps Center
- Pittsburg Job Corps Cisco Networking Academy
- Sacramento Job Corps Center

U.S. Military

U.S. Air Force

- 15th Comm Squadron, Hickam AFB
- AFB MacDill
- Eglin SOJT
- Fort Indiantown Gap
- Global Hawk Ground Communications
- Hill AFB Cisco Academy
- Langley SOJT
- Wright-Patterson SOJT

U.S. Army

- 201st Signal, 41st Signal Battalion
- 256 Combat Communications Squadron
- 311th Theater Signal Command
- 4th Infantry Division Cisco Academy
- Army National Guard Professional Education Center
- Carlisle Barracks
- Information Systems Division, 551st Signal Battalion
- Joint Communications Unit
- *U.S. Army School of Information Technology



- U.S. Army School of Information Technology Officer Division
- USMA

U.S. Marine Corps

- I MEF Cisco Academy
- II MEF Cisco Academy
- III MEF Cisco Academy
- Marine Corps
- Marine Corps Communications and Electronics School
- *Marine Corps Regional Academy

U.S. Navy

• Navy – Norfolk Virginia



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