

# Spreading the ICT Gospel With Cisco Network Academy Program

By  
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## 1. Introduction

Educators and policymakers agree that student learning occurs best when high-quality curriculum, instruction, and assessment are standards-based, aligned and reinforcing each other. The Cisco Networking Academy Program is NOT just a virtual class or an online course. The Cisco Networking Academy is a dynamic educational program that teaches students relevant technology skills. This increases students' competitiveness in the global marketplace and opens doors to different employment opportunities. The Academy program provides students with the Internet technology skills essential in a global economy. It prepares students for the demands of the workplace and leads to continued education and learning.

The Academy program creates opportunities and contributes to countries' development through IT education and skills development. The short-term and long-term impact in communities that are created contributes to a global economy through IT education by empowering underserved populations with high quality IT education, promoting social and economic opportunities. As a result, local business have skilled workforce for a higher productivity and community sustainability.

## 2. Cisco's Solution: The Cisco Networking Academy Program

Public Private Partnership between Cisco, governments, educational institutions and NGOs are created to teach students how to design, build and maintain computer networks thereby equipping them with the skills to be economically active in an area of employment vital to the new Internet economy.

### 2.1 History of Cisco Networking Academy Program

The Academy program was launched in October 1997 with 64 Academies in the United States. A Cisco initiative helped schools design practical, cost-effective networks, but they lacked the financial and human resources to maintain them. Cisco worked with instructional designers and educators to develop a curriculum to teach educators and students how to design, build and maintain computer networks.

Students, after completing the Academy curriculum, gained practical skills and real work experience. The program rapidly expanded to become an IT career development program. Academies quickly spread to schools, colleges and universities, and other not-for-profit educational institutions around the world.

### **2.1.1 Partnerships Worldwide**

The Academy program is delivered through educational institutions around the world like Universities, technical schools, community colleges, high schools, community based organizations and others. Content is developed and maintained through IT industry leaders like Cisco Systems, Hewlett-Packard, and Panduit.

Fluke on the other hand, provides state-of-the-art test equipment for Academy labs at discounted rates, while CompTIA provides certification and job placement opportunities for Academy students.

Cisco has partnered with education, business, government, and community organizations around the world to ensure that Academy students have maximum opportunities for success inside and outside of the classroom. Successful partnering is a key component of the e-learning model, where content providers, educators, suppliers, and students are all important members of an educational ecosystem. Cisco believes that partnering is a key success factor in the Internet Economy and has made partnering one of its top priorities. To extend its strength in the education field, WWE has been engaged in building a strong ecosystem since its inception.

### **2.2 Why is the Program Important?**

The program is creating short-term and long-term impact in communities, one student at a time. Cisco is giving back to the community – not just because it is smart for the business, but because it's the right thing to do. Cisco Systems creates social and economic value. The Networking Academy program demonstrates that information technology is changing education

### **2.3 Consistent Quality Around the World**

Standardized curriculum ensures consistent quality globally. All Academy students, in any country, receive the same high quality education. Instructor-led

online curriculum and hands-on labs. Measured through skills-based exams and online assessment

Quality is an important component of the Academy program and Cisco ensures quality in the program. The curriculum, training, certification, and on-going support ensure consistent quality among Academy programs around the world.

Instructors receive professional development on an ongoing basis through the Cisco Academy Training Centres (CATCs), and Train the trainer (train instructors), etc. Table 1 presents the curriculum and certification mapping for the students.

**Table 1. Curriculum and Certification Mapping**

Curriculum	Certification
CCNP 1-4	CCNP
IP Telephony	"Cisco IP Telephony Specialist"
Network Security	Cisco Firewall Specialist
Fundamentals of Wireless LANs	Cisco Wireless LAN Support Specialist
CCNA 1-4	CCNA
HP IT Essentials II	CompTIA Server+ (when combined ITE 1 curriculum)
HP IT Essentials I	CompTIA A+

Source: Cisco Systems

## 2.4 Potential Career Paths: Foundation for Most Careers in the Information Economy

A student that went through the program has many different potential career paths. S/he can follow a Network Design and Administration path where s/he can be a:

- Network Administrator
- Network Engineer
- System Administrator
- Network Analyst
- Internet Network Specialist

A Telecommunications Industry path where s/he can be a:

- Cabling Installation Technician
- Telecommunications Technician
- Cabling Installation Coordinator

A Technical Support Professional path where s/he can be a:

- PC Support Specialist
- Help Desk Technician
- Network Technician
- Hardware Installation Coordinator
- Software Applications Support

Or Programming and Software Engineering career path where s/he can be a:

- Visual Programmer
- Programmer/Analyst
- Software Applications Analyst
- Quality Assurance Analyst
- Technical Writer

### **3. Cisco Networking Academy Program: Impact Since 1997**

There are currently more than 11,000 academies running the Cisco Networking Program in 155 countries worldwide. As of the moment, more than 1.9 million students are already trained by more than 32,000 instructors in 9 different languages. The total number of exams taken is more than 48 million. Figure 1 below presents the participating students by region. The US is the single largest NetAcad Country. It is the second largest Region behind Western Europe. Other countries throughout the world that have a mature NetAcad program are also experiencing a decline in Participating Students and Academies, while Africa is the fastest growing Region - 45% YoY growth.

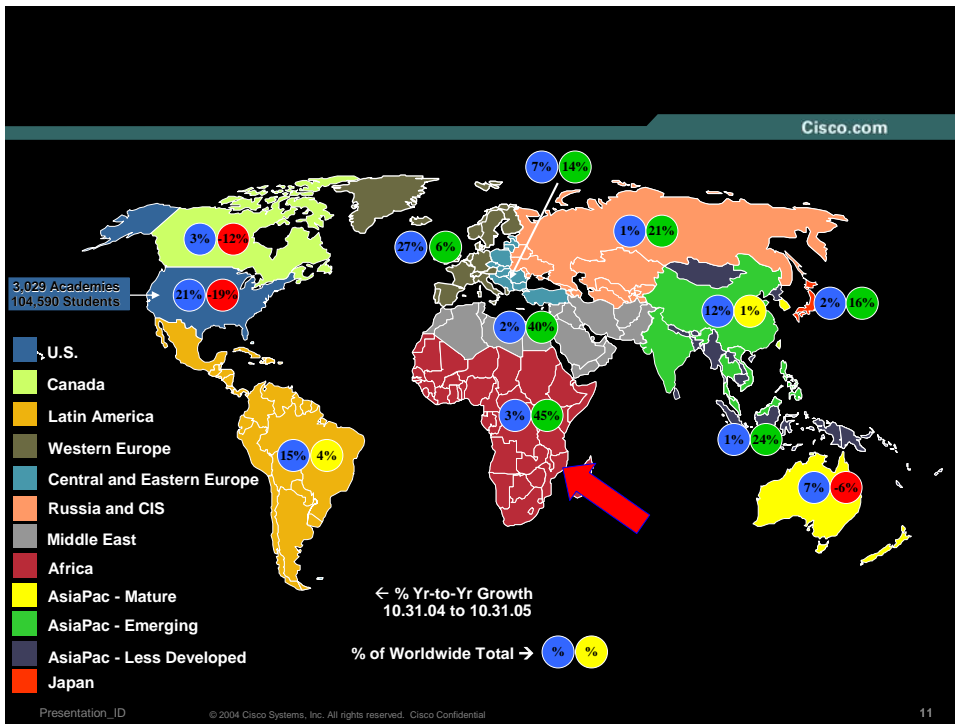


Figure 1. Participating Students by Region (450,000+ Students)  
Source: Cisco Systems, 2006

### 3.1 Equalizing Opportunity

E-learning, the combination of the Internet and education, eliminates barriers of time, distance and socioeconomic status. The Academy is crossing Digital Divides around the world by establishing Academies in disadvantaged regions and recruiting target populations. Cisco is not alone and our partners make key initiatives possible:

The LDC initiative partners with international development organizations and has established 90 Academies in 32 of the world's poorest countries. The Gender initiative supports the recruitment and retention of women at all Academies. An Academy in the country of Jordan is helping women gain economic independence. Academies have been established in economically disadvantaged regions with attention to recruitment and retention of minority groups. Curriculum supports learning for persons with disabilities.

### 3.2 Networking Academy Program in Africa as of June 2006

In Africa, there are more than 250 Academies and 14,600 participating students in Sub-Saharan Africa with a 40% Yr/Yr Growth. In Kenya alone, there are 14 academies, 12 local academies and 2 regional academies. The total number of

students participating in IT Essentials, CCNA, Wireless, and Security in July 2006 is 1,696.

In East Africa, there are 60 academies with 14,394 students participating in July 2006. Of this total number of students, 28% are female. There is also high enrolment of 53% Fiscal Year 2005 enrolling in IT Essentials, CCNA, Wireless, Security, and CCNP.

The following are the participating countries in East Africa: Eritrea, Ethiopia, Kenya, Rwanda, Seychelles, Uganda, Burundi, Djibouti and Tanzania.

#### **4. Conclusion**

The current model in our education system is that children will go to primary and secondary schools then proceed to higher educational institutions and/or professional training. It was expected that there are many skilled workers available to do the jobs in the industry. However, over the past many years, this is not the case. Very few skilled workers were available. Cisco Academy is filling in the gap. Many who didn't manage to enter university, including those who finished university and remained unemployed are getting these skills to make them productive and competitive in the job market.

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