Bridging the Gender Digital Divide

The Cisco® Networking Academy® Program is a powerful example of how education and the Internet can increase access to the knowledge economy by enabling network-centric skills. The program combines e-learning and hands-on labs to empower individuals and underserved communities with greater opportunities for education and career advancement.

This data sheet demonstrates how the program has been used to encourage the participation of women in the IT industry. The ultimate goal of the program is to aid in social and economic development through digital inclusion and education.

The Gender Digital Divide in IT

Females around the world are lagging far behind males in terms of academic and professional participation in IT. This is not due to a lack of ability, but a lack of opportunity. Women are often forced into low-paying occupations with little room for growth. Without a concerted effort to bridge the gender gap in IT, women will continue to miss out on opportunities to promote economic development by gaining the necessary skills to compete in the emerging job market.
The underrepresentation of females in the IT field begins with academic participation. A study presented in 2005 at the World Summit on the Information Society in Tunisia showed that the percentage of females graduating with science and technology education is declining in about a third of the countries for which data is available. The study also shows that the gender divide extends into IT occupations, with women accounting for 21 percent of IT workers in India, 28 percent in Japan, 16 percent in Australia, and 35 percent in the United States. According to a Eurostat analysis, 30 percent of technology employees in Europe are women.

**The Gender Initiative**

In response to the growing disparity between males and females in IT, Cisco Systems® and the Cisco Learning Institute (CLI) developed the Gender Initiative project. This global initiative seeks to increase female involvement in the IT industry through greater access to IT training and career opportunities. One of the most significant resources used in collaboration with the Gender Initiative is the Cisco Networking Academy Program.

The Academy program encourages women to develop IT skills and earn industry-standard certifications to help narrow the gender gap and encourage greater female participation in the global economy. The delivery model allows women to overcome the barriers of time and distance that are often associated with continuing education. This enables women in remote areas to contribute to the development of the IT sector in their regions, while raising their standard of living.

**Tools and Resources**

Components of the Gender Initiative include strategies for the recruitment and retention of females in IT programs, marketing materials and websites, country gender assessments, and tools for organizing IT events for young women. Cisco and CLI are also working with parents, guidance counselors, school administrators, and community leaders to engage females in IT at an early age.

**Targeted Gender Projects**

Here are some examples of collaborations between Cisco and organizations worldwide to promote the digital inclusion of women.

**Least Developed Countries Initiative**

Women in developing countries face a unique set of obstacles regarding access to IT, often resulting from cultural norms, lack of economic resources, and low literacy and education levels. Cisco is establishing gender-focused Academies in the least developed countries (LDCs) to allow females to gain the necessary IT skills to compete in the global economy.

Cisco is collaborating with the United States Agency for International Development (USAID), the United Nations Development Program, the International Telecommunication Union (ITU), and the United Nations Volunteers to achieve at least 30 percent female enrollment in the LDC Academies and to create all-female Academy program classes.
Achieving E-Quality in the IT Sector in Morocco

In an attempt to provide more opportunities for women in Morocco, the United Nations Development Fund for Women (UNIFEM), USAID, and Cisco worked together to implement a project called “Achieving E-Quality in the IT Sector in Morocco.” The project goals are to empower women to benefit from the ICT sector and to narrow the existing gender gap by strengthening women’s capabilities and professional skills.

In collaboration with the Ministry of Education and State Secretariat for Professional Training in Morocco, the project participants identified 10 educational facilities to host Cisco Networking Academies. In less than six months, instructors successfully completed training and enrolled more than 500 students in the Cisco CCNA® course, achieving nearly a 50 percent female enrollment rate in the program.

Women in Technology Project: USAID and the Institute of International Education

USAID and Cisco Systems are working with the Institute of International Education (IIE) to provide US$300,000 in scholarships for women in Algeria, Morocco, Tunisia, Bangladesh, Nepal, Mongolia, and Sri Lanka to attend Academies in their countries. Over 500 scholarships were awarded to applicants in Asia and North Africa in 2004 and 2005.

Florida Girls Get IT

Cisco recently collaborated with the Florida Department of Education, Florida’s Agency for Workforce Innovation, and the Florida Community College System to launch the Girls Get IT project. The main objective of this initiative is to increase female participation and graduation rates in IT, science, and engineering and promote excitement about career opportunities in technology. The program targets female students at the middle and secondary school levels and includes activities such as IT camps, computer clubs, and special events featuring female role models in IT.

“IT training is crucial to the professional development of young women because it underpins nearly every other industry and its presence is not likely to be diminished in the future.”

– David Armstrong, Chancellor of the Florida Community College and Workforce Education System

Cisco Women’s Action Network

The Cisco Women’s Action Network is a group of Cisco female employees that participate in activities such as career counseling, mentoring, leadership development, and community outreach programs. The group is collaborating with the Networking Academy Program team to organize IT events for young women.

The purpose of these events is to encourage young women to consider career paths in the fields of science, math, engineering, and IT. The events give female students an opportunity to meet with female role models and learn more about career opportunities. These types of events are held in Asia Pacific, Europe, Latin America, and the United States and take place at local Cisco offices, schools, or science and technology museums.

“Research shows that one of the best strategies to help students enter a nontraditional career is to give them access to role models who look like them. Cisco is acting on its mission by giving girls the opportunity to meet with professional women in the IT field.”

– Mimi Lufkin, National Alliance for Partnerships in Equity
Sample of Country Profiles
Cisco Systems, in collaboration with several international organizations, has been working in targeted countries to achieve a greater female participation rate in the Networking Academy program. When possible, enrollment rates are measured against industry trends. Here are some examples of these projects:

Uganda
There are 11 Networking Academies in Uganda, including one established at the first women-oriented education facility in the country, Makerere University. Makerere University recruits female instructors and offers all-female and gender-balanced classes, with the aim of increasing the number of females in the IT workforce. Approximately 36 percent of Academy students in Uganda are female, which may encourage women to enter the IT sector instead of the most popular industry for women in Uganda—agriculture.

Rwanda
An all-female Networking Academy program class was established at the Kigali Institute of Science, Technology, and Management (KIST) in Rwanda. Although less than 10 percent of the students enrolled at the secondary school level in Rwanda are female, the female enrollment rate in the Academy Program at KIST is approximately 25 percent, resulting from focused recruitment efforts. The instructors at KIST believe that the Academy will play an important role in Rwanda's future by supporting the development of skilled personnel.

Cameroon
An all-female Academy was established at a nonprofit organization, Association pour le Soutien et l’Appui de la Femme Entrepreneur (ASAFE), which provides support to female entrepreneurs. Its students believe that IT skills are essential in securing employment and contributing to Cameroon’s economic development.

“With continued investment in Cameroon over the next five years, the country will be able to compete in the global IT market. When I finish my certification, I will be resourceful throughout the world, as well as in my country of Cameroon, which is undergoing such rapid development.”

– Doline Flaviette Ngueyap Patchong, Cisco Networking Academy Program student, ASAFE

India
Several all-female Academies have been established in India, resulting in a female enrollment rate of approximately 30 percent. More than 50 percent of students in the Academy Program at the Cummins Engineering College for Women in Pune, India, are recruited by IT companies. According to an article in *India Today* (2005), 25 percent of science and engineering graduates in India are women. The female enrollment rate in the Networking Academy program in India is slightly outpacing this industry statistic.

Mexico
The Instituto Alpes Querétaro, a secondary school in Mexico, became the first Networking Academy program in Mexico with 100 percent female enrollment. More than 100 students participate in the program and complete the hands-on labs with equipment donated by the United Nations Development Program and Cisco.

Romania
In Romania, where the female enrollment rate in the Networking Academy program is approximately 17 percent, strategies are being implemented to recruit and retain more female students and to establish all-female classes. Female graduates have indicated that the CCNA certification has had a significant impact on their employment opportunities.

“I wouldn’t have considered going to an engineering school were it not for the Networking Academy program.”

– Kasey Coleman, Cisco Networking Academy Program graduate

Get Involved
To learn more about the Gender Initiative and strategies that Academies can implement to increase female enrollment, please visit: www.cisco.com/go/gender.