

Girls-only computer class hits refresh on IT's geeky-male image

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After more than three decades of teaching, Dan Harmer was tired of a trend he noticed year after year: His computer-science classes at Cardinal Leger Secondary School in Brampton, Ont., were filled mostly with boys, and the lone girls often sat quietly at the back.

Then, last fall, he had an idea. Mr. Harmer asked the school to pool the girls from all his Grade 10 classes into one. His hope was that the single-sex environment would create an atmosphere where the girls could reject the stereotype that [computers](#) are for boys, especially those who enjoy a steady diet of *Star Trek* and Cheetos.

“It worked, the intimidation factor was gone and the girls loved it,” Mr. Harmer said.

The class represents a victory for Mr. Harmer and the information and communication technology sector, where women account for less than 25 per cent of the work force. The trend is so entrenched that younger women are put off by the perception of an unwelcoming boys club. That’s a loss for them and the ICT sector in general: According to a report compiled for the Information and Communication Technology Council based on data from Statistics Canada, every province is facing a skills shortage in the field.

To help students succeed in careers in information technology and networking, and in an effort to address the shortage of skilled workers, [Cisco](#) Systems Inc., a U.S.-based computer networking company, has been forming partnerships with schools like Cardinal Leger for more than a decade. The partnerships, known as Cisco Networking Academies, offer a program that includes hands-on learning opportunities. Cisco provides the curriculum, access to online courses, and interactive learning tools for free, while equipment is provided at an educational discount. Academies have been formed in 165 countries and in all Canadian provinces.

When female engineers working at Cisco’s Toronto offices heard about Cardinal Leger’s all-girls program at the nearby Dufferin-Peel Catholic District school board, they invited the students for a visit.

“I think a lot of women don’t go into this field because they’re afraid of being the only girl,” said Hena Prasanna, a Cisco manager who met with the Cardinal Leger girls. “When we asked the

girls who worked in the tech industry, they said chubby guys with glasses. That's the impression they had and we wanted to change that."

Changing that impression could be the industry's best hope. The ICT council's report concluded that Canada is facing a skill shortage of 89,000 jobs unfulfilled in the next three to five years, and noted that recruiting women and aboriginals to the sector is an important step toward addressing the shortfall.

Men outnumber women everywhere in the industry, but Canada is particularly imbalanced: While women represent 21 per cent of Cisco academy students worldwide, they account for only 9 per cent of academy students here. Cardinal Leger's is not the first all-girl Cisco academy, but it is the only one in Canada, according to Cisco. All-girls classes are rare enough that in November, Cisco helped to arrange a teleconference between the Brampton group and an all-female academy in Nairobi.

One recent afternoon, the girls were learning how to make 10 base-T crossover cables, which can be used to connect two computers.

"My dad is mad because I know more than him now," said Ashley Pereira, 15. As she twisted and rearranged the coloured wires within her cable, she explained that the final product could be used to connect a computer to an Xbox, for example.

When asked, only one of the girls, Isabell Vongphakdy, 15, said she intended to pursue a career in information technology. "I'm going to be a computer engineer," she said.

Others said they still weren't certain what they wanted to do, but that since taking Mr. Harmer's class they considered information technology an option.

That's what Ms. Prasanna, and the entire industry, are hoping. "Companies are looking for young women to hire," she said, "we just need to encourage them to learn."