A group of Grade 8 girls sat giggling around a table on Tuesday, their bright blue and green nail polish flashing as they carefully wired electric circuits into ribbons.

Emily Zheng, one of 40 female students from Glenview Jr. P.S., explained how her ribbon bracelet is meant to work. When it snaps together on her wrist, current will flow from a battery near one metal button, through conductive thread, to the other half of a button, brightening an LED bulb along the way. The science isn’t her problem.

“I’m having trouble, ’cause I can’t sew,” said Zheng. Still, she said, turning back to her needle and thread, she was having fun at Gr8 Designs for Gr8 Girls, a full-day workshop at the University of Toronto that aims to introduce girls to careers in science and technology.

The program was the brainchild of Michelle Craig, a U of T faculty member in the computer science department. Now in its fourth year, Gr8 Designs runs at two U of T campuses and three other universities. There’s often a GTA-wide waiting list for the day of techie activities, even though Craig’s idea for the project came when she realized that the gender balance of her students hadn’t changed much in the two decades she’s been teaching.

“In my classes it doesn’t feel that different than 20 years ago,” said Craig. Last year, the New York Times reported that women make up less than 10 per cent of new computer science undergrads. In 2002, women took home 19 per cent of
computer science undergraduate degrees at Canadian and American institutions. In 2007, that number was down to 12 per cent.

There are many theories about why this might be, from the fact that most video games seek male audiences, to the idea that a solitary life of programming is unappealing to highly social adolescent girls.

Craig wants girls to know that computers can be a fun way to work with other people. Another activity involves writing a program to run Mad Libs, the classic grammar game that creates funny sentences from random nouns and verbs.

“I found a peanut in my giraffe’s fur,” reads the computer screen. “I was so moody, I sold it for $16 on eBay.” Everybody laughed. After a quick lesson in a simple programming language called Python, Charlotte Glibbery and Samara Goldberg huddled at a computer to try writing their own Mad Libs game.

“I’ve never done any programming before,” said Goldberg. There was some fiddling with quotation marks and plus signs. Then, it was time to try it.

“Enter a number,” demanded the computer. “Now enter a mode of transportation.”

“It took me 14 hours to realize I was on the wrong bike,” read the silly sentence. The two were thrilled.

“Should we do another one?” Glibbery asked. Instead, they ran from desk to desk, trying out the Mad Libs programs their girlfriends had written.