

# It takes a village to raise a geek

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**Michelle Mannering**



## Friends and families can encourage girls into tech. By Will Brodie.

**H**ow do we entice girls to embrace careers in technology? Experts say it might take a village. Sarah Moran, Girl Geek Academy co-founder and CEO, urges "mums, aunts, grandparents, neighbours, and definitely teachers to learn how to code alongside kids".

"By upskilling the teachers and parents alongside kids, girls instantly have a role model in their classroom or household who shows confidence and interest in technology and can work with them on coding games and STEM school work. They can speak the same language."

In Australia, less than one-third of technology jobs are filled by women and fewer girls study STEM (science, technology, engineering and maths) subjects each year.

Digital literacy is essential to participate in a technology-focused world. And society needs women's input to such a dominant industry.

Michelle Mannering is the epitome of the young technology success story, working for software development icon GitHub while running her own business, mishmanners.com, which conducts Hackathons - intensive, focused software collaborations.

She believes in combatting technology's male-dominated culture from "multiple angles".

"Yes, women need to continue to speak up, but men also need to support and advocate for their female peers," she says.

**Michelle Mannering, top; Lisy Kane, below left, Sarah Moran and Marie Howarth.**

The bottom line is a source of optimism. "In the age of the digital world and a highly competitive commercial landscape, only companies who support diversity will thrive. Therefore, it's in the best interest of companies within this industry to encourage women in their careers and create a culture where women are welcomed."

Mannering says schools can showcase less "generic" career choices via tour days, guest speakers and Hackathons.

"Schools need to be showing students more possibilities so they can make their own decisions. For example, many young students have been involved in Hackathons and it has opened their eyes to the world of technology."

"Not all of them will choose careers in this area but at least they know that it's an option for them."

Lisy Kane, co-founder of Girl Geek

Academy, says schools "definitely still have social structures and norms in place that discourage young women from exploring technology".

She wants children to engage with technology from the age of six.

"By the time they reach their teen years, they already have formed ideas about gender and gendered roles."

Working with primary school students and teachers, Girl Geek Academy's #MissMakesCode creates courses where kids have fun with interactive projects such as building and programming their own robots.

Moran says these interventions must excite young minds.

"Problem-solving is the crux of what makes technology so fun. And, as with anything that involves fixing, building or making, you have to get comfortable with not getting it right every time."

Marie Howarth, director, communications and engagement with industry association Women in

Technology, sympathises with schools trying to keep up with rapid technological changes.

"Some of the biggest growth areas are things most of us hadn't even heard of 10 years ago, like virtual reality, 3D printing and artificial intelligence."

But she's firm on the need for proper mentorship.

"Superficial one-off engagements are a waste of time. Students can do a lot to help themselves if we show them where to look. That means there must be a continuing program that connects students as they grow."

"Being face to face with real scientists and technologists is absolutely crucial. It's so important to have a majority female mentor pool at this stage as it is influential for both young girls and boys to see women actively portrayed in the STEM arena."

Howarth also says that fun is the key for kids.

"Reaching younger students is about connecting technology to the world they understand. It is about making it entertaining. That is why the world needs more female celebrity scientists, technologists and mathematicians who bring that element of fun to topics that are of real-world importance."

"We believe that it is important to give them scientific literacy but that needs to be presented in context so they can see why it is valuable."

Women in Technology and other organisations are there for those who engage, offering scholarships, development programs, and mentorships.

So, maybe making technology cool for girls takes a village, cultural change ... and a talented, fun-loving multimedia superstar.

