

Shaping a brighter future through STEM education

Katrina Holewa didn't intend to become a teacher. Her first job was working as an environmental scientist in a coal mine.

"I quickly realised that, although I love science and am passionate about the environment, I was more suited to a job around people," Katrina explained.

"My favourite part of [that job] was talking to students, so my new career quickly became obvious."

Now, with more than two decades of teaching behind her, the Noosa District State High School teacher is a respected STEM education leader and has never looked back.

"I like knowing the STEM skills I give my students may help them to one day make the world a better place for future generations," Katrina said.

"As a science teacher, I want my students to use the science curriculum in a meaningful way, to go beyond learning facts and applying formulae. True STEM is more than mixing four related subjects together. It involves problem-solving, innovation, design and even entrepreneurship."

STEM education has led Katrina to fantastic opportunities. She's attended the STEM X Academy with other likeminded teachers and researchers across Australia, won the Queensland Showcase Award for Excellence in Teaching and has developed STEM programs for both students and teachers within her school and region.

"After mentoring a cohort in the 2017 Girl Power STEM Camp, I formed the Noosa District HS Girl Power STEM Ambassadors, a group of Year 9 and 10 students interested in STEM and excited to promote it," she said.

"It really took off and was the impetus behind the ATHENA Project, an Advanced STEM immersion project for young women in our region, in collaboration with the Noosa Shire Council Digital Hub.

"The absolute highlight of my career so far happened in August 2022, standing in front of an active volcano in Iceland and making a video about plate tectonics for my students back home.

"I have also had the chance to do a teaching exchange in Japan and work with a group of teachers nationally to facilitate the teaching of STEM across Australia.

"Teaching can be extremely challenging at first. I would encourage new teachers to stick it out until they can see the rewards that come with the job.

"The exciting thing about teaching is that there are so many areas that you can move into and so many new opportunities that come your way, so you can always grow as a teacher and learn new skills," Katrina said.

Katrina Holewa Noosa District State High School Noosa











