

# Summer school gives hope

Indigenous Australians are being shown what engineering offers, writes **Cameron Cooper**

**A** PROGRAM encouraging indigenous students to seek a career in engineering is changing lives. Launched in 1998, the Indigenous Australian Engineering Summer School is a week-long program held in January each year involving a group of about 20 Aboriginal and Torres Strait Islander students.

The live-in school, hosted at the universities of NSW and Newcastle, aims to expose students entering years 10 to 12 to engineering and lift the participation rate of indigenous Australians in the sector.

Dakoda Bradford, a year 11 student at Dubbo College in NSW, is effusive about the worth of the initiative, brainchild of Engineering Aid Australia. He credits the school, which he attended earlier this year, with turning around his attitude to college and providing inspiration for a future career.

"I went through year 10 not wanting to be at school; I didn't want to do anything," he says. "And that's where the summer school kicked in. It's changed everything. All my marks have gone up an extra 20 per cent. It's boosted me so much. I want to learn."

Apart from the week at the summer school, Engineering Aid encourages engineering firms to host students for work experience.

Dakoda teamed up with leading planning, environment and infrastructure firm Parsons Brinckerhoff. He says such programs are "very important" for indigenous students and that it was exciting to attend the school with other Aboriginal and Torres Strait Islander students.

"There were kids from all over. They were coming from the Northern Territory and everywhere. It was a different atmosphere and you get to know them and know what they are all about and what they want to do, and everything ends up just falling into place."

Jeff Dobell, founder of the summer school and a director of Engineering Aid, says he was inspired to set up the program in the late 1990s when he struggled to source indigenous engineers to work in disadvantaged communities. He was shocked to discover that the University of Sydney — which later became one of the early administrators of the summer school — had graduated just one Aboriginal engineer in the then 85-year history of its faculty of engineering.

Twelve years since its launch, Dobell says the summer school has proven its worth.

"The students repeatedly say it's a life-changing experience. It shows that indigenous children, if you give them the right support and encouragement and provide them with role models, can see that university is not just the province of the rest of us but that they have the opportunity to study as well."

Dobell says about 30 former summer school students have gone on to graduate as engineers. From the 2007 intake alone nine, including two women, are now studying engineering, while other students from that year are studying medicine or science.

"It's a significant number that have been encouraged to do tertiary study," Dobell says.

"And there are great opportunities here for young indigenous people to link up with engineering firms that are sponsors."

Parsons Brinckerhoff has been a sponsor of the summer school program since its inception and is the program manager for the \$672 million Strategic Indigenous Housing and Infrastructure Program across 73 communities in the Northern Territory.

Managing director Jim Mantle says the program fits with his firm's mission statement to support diverse communities, including indigenous townships.

"At the end of the day for the communities to be sustainable they have to have their own skills and training, and (a way to promote) leadership and role modelling."

He agrees it is important for indigenous communities to get engineers who have empathy for their culture. "They make all the difference. It's almost like trying to do technical work in a foreign language if you don't have the right cultural understanding."

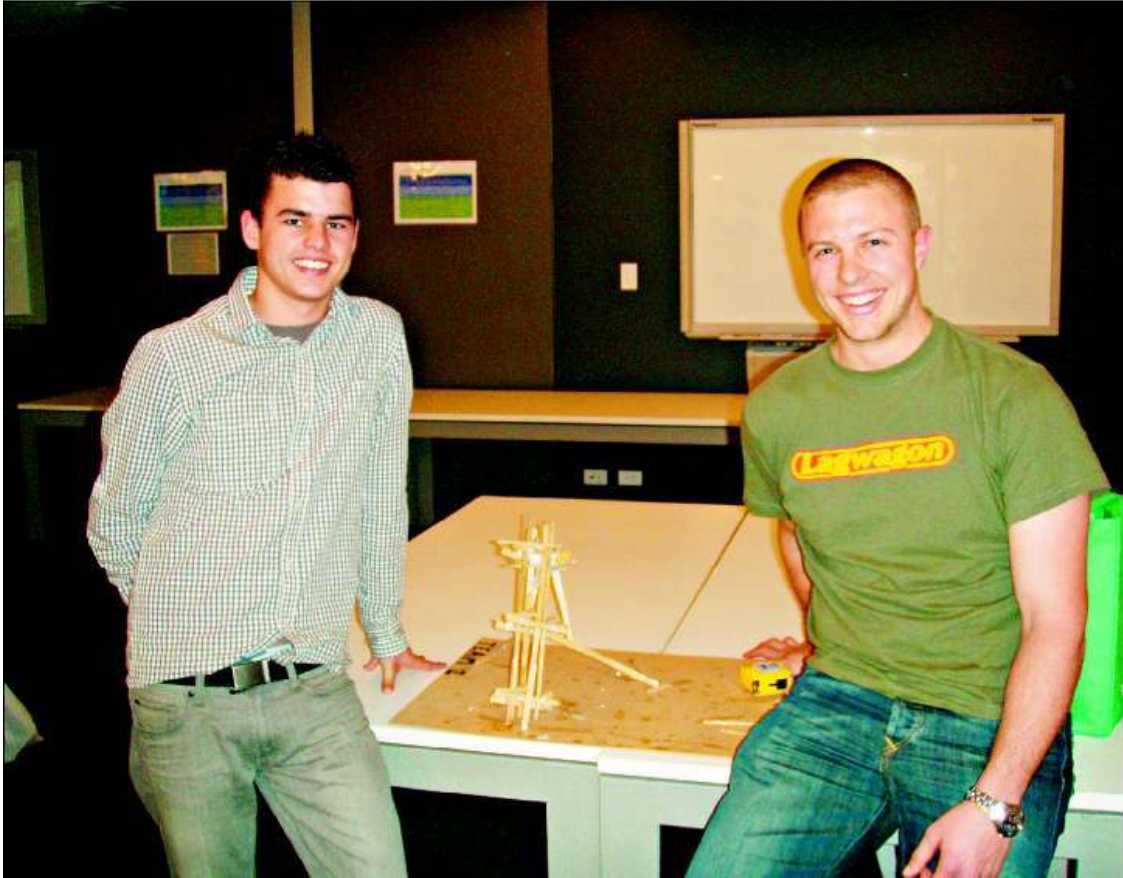
"It's really about realising there is opportunity out there. A lot of these kids can only see what they see from their communities in which they live. This big-city, university campus experience for a week is a marvellous, eye-opening experience for them."

Dakoda says the experience with Parsons Brinckerhoff put the prospect of a career in engineering into perspective.

"It was unbelievable, just learning about different types of engineering. They had me with the electrical and civil engineers and they got me involved in a heap of things."

Dakoda is now mentoring other students and encouraging them to attend the summer school. He says a long-term interest to enter architecture has now been supplanted by engineering. He is leaning towards a career in civil engineering, but feels in the long term the strength of the mining sector that will offer the best career prospects.

"I'm hoping to go out to the mines as a mining engineer in the future."



**On the job:** Dubbo College student and summer school participant Dakota Bradford, left, with Parsons Brinckerhoff engineer Chris Glissan