



Technacy – key to the education revolution

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The ability of young Australians to wield technology – technacy – will be as vital to them as literacy and numeracy were to Australians who grew up in the 20th century.

That is one of the findings of a remarkable 18-month collaborative study between teachers and students from NSW, the Desert Knowledge CRC and the Centre for Appropriate Technology in Alice Springs.

The project has culminated in the ‘Alice Springs Declaration’ in which participants have called for the fostering of technacy and innovation capability throughout the Australian teaching curriculum.

“Technacy is still an unfamiliar word to many Australians – but it describes what their kids are already doing with technology: getting to know it and understand its uses, learning to apply it in new ways,” says chair of Teaching Australia, Dr Gregor Ramsey. “The real challenge is how we teach this in schools.”

The project has also demonstrated that the approach taken to technology by Aboriginal people and people living in remote areas can make a major contribution to how Australians in general respond to it, says coordinator Dr Kurt Seemann of DKCRC.

“Take something as simple as a flushing toilet, which works fine on the coast – but breaks down and wastes water and nutrients in a desert. This forces you to rethink the fundamentals of the technology and how it is applied – and what you learn also has relevance in coastal Australia and many other places where people are now trying to save water and nutrients too.”

“It all goes to show that there is thinking about technology in the desert that can help people solve their challenges all over Australia - including the challenge now being encountered in schools of how we teach technacy to young Australians.”

Dr Seemann said that for many of the teachers and students who took part in the study, it was a major revelation to find that the practical, hands-on way Aboriginal and desert people approached technology could apply just about anywhere.

“Australians who live along the coast, where wealth and power exist, are unaware of how much value they have to gain from the knowledge of people who live in deserts and who daily confront the challenges of remoteness and scarce resources – and solve them. This knowledge is transferrable and can apply almost anywhere.

“The world today needs new ways to think about technology and how we use it sustainably, so we can avoid the mistakes of the past which now confront us. Teachers are grappling with the challenge of how to teach this technacy to the coming generation of Australians.”

The 27 primary and secondary teachers and 4 senior students who took part in the project have signed a statement declaring:

"We will foster and advocate technacy and innovation capability across curriculum and in teaching practice, in the interest of our common sustainable future."

"We also acknowledge inspiration from desert people's ingenuity and the relationship between people, technologies and our environments that as a system offers both sources for innovations as well as challenges for assuring intergenerational fairness."

Teacher Karin Lisle of Bishop Druitt College says the group found the experience 'truly inspiring' and was invigorated by finding that a common understanding and approaches to technacy are starting to emerge at all levels of schooling.

"This is undoubtedly the start of an education revolution, as the word spreads," she says. "We live in a new era in which technology impacts on almost every aspect of a child's world, and they are learning to use it in ways many adults are quite unfamiliar with. We have to find new ways to reach out to them."

Ms Lisle said she was also delighted to find that many Aboriginal people were in control of their own technology development – not simply receiving what non-Aboriginal people thought best for them – and this was a principle which had as much relevance to coastal Australia as to the desert regions, and to all Australians.

"Literacy and numeracy were what we needed in the 20th century. Technacy will be the way of the 21st century," Dr Ramsey added. "It is already opening up a whole range of ways of communicating which the traditionalists of literacy and numeracy have barely heard of or dabbled in. In many cases our kids are moving far ahead of us in their ability to use these new technologies."

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