



Opening a window of education

Natasha Robinson finds child-friendly technology can stimulate learning, especially where it's most needed

IT is Rangan Srikhanta's favourite party trick and it never fails to arouse gasps of astonishment from wide-eyed schoolchildren. Holding a green and white laptop computer in his hands, the Australian executive director of the charity One Laptop per Child flings the small machine across a room.

It hits the floor with a loud thump and bounces. No harm done, he tells his audience. These little machines cost only \$300 each and they're virtually indestructible.

Srikhanta is leading the rollout of the XO laptops across remote Australia. About the size of a small textbook, the machines are given to students aged five to 15. They are dustproof, waterproof and specifically developed as an education aid.

Four hundred laptops are in the hands of children in three communities in the Northern Territory's Top End and Western Australia, and last week 50 laptops were handed out to children in Australia's most remote desert community, Kiwirrkurra, 670km from Alice Springs near the West Australian border.

The Aboriginal children already using the laptops join hundreds of thousands of children in 29 countries including Uruguay, Rwanda, Afghanistan and Mongolia who have also been given the machines.

Though originally developed for children living in developing nations, the XO laptops are being seen as a useful tool in the fight to lift education levels in remote schools across Australia.

The charity — launched in 2005 by architect and computer scientist Nicholas Negroponte, who is also the founder of the Massachusetts Institute of Technology's Media Lab — plans to give a laptop to each child in remote Australia within five years.

That means that with the help of corporate partners — the Commonwealth Bank is a founding partner of OLPC in Australia — the

charity will deploy 400,000 laptops at a rate of 10,000 a month in some of the most remote corners of the country. "People might think it's a pipe dream, but it can be done," Srikhanta says. "Uruguay did it in less than three years. It's just [having the] will."

Children who previously had no access to a library or the internet now have a world of information at their fingertips. The machines are programmed with maths and spelling programs, paint and media applications as well as picture books. They have screens that children can read outside under the desert sunlight and they are not affected by the humidity of the Top End. They can be charged by solar power so even outstation communities that have no access to power can use them.

Because the laptops are given to individual children rather than collectively to a school, students can take the machines home and continue their learning outside of school hours, which they are keenly doing, according to the acting principal of Kiwirrkurra School, Colin Hollier.

"The children absolutely love it," he says. "It's the first time I've seen children actually stop kicking a football to use a computer."

"The kids live on the edge of three deserts here. They see red soil and sandhills, they don't see the rivers, the oceans. Now they can see all of that. And they can interact with it."

Kiwirrkurra is the first school to be given laptops under OLPC's Window of Opportunity initiative, in which remote schools team up with an urban school to support the rollout and ongoing training and maintenance associated with the laptops. The Sydney Anglican girls school Roseville College, on Sydney's wealthy north shore, is Kiwirrkurra's partner in the initiative.

Roseville College principal Briony Scott says the school's involvement in the program has allowed students to connect with an aspect of Australia that has previously remained



elusive. “We’re really saying to our kids, this is an extraordinary country, we want so much more for you than just to live and die on the north shore,” Scott says.

“We want them to be able to understand that there are different communities and they’re raised in different ways.”

Australia is one of only a few developed countries that is participating in the OLPC program. But the initiative may never have got off the ground here were it not for the determination of Srikhanta, who gave up a lucrative career at international accounting and consulting firm Deloitte to manage the charity in Australia.

Srikhanta’s family has had first-hand experience of the effects of colonisation.

“When I went out to some of these indigenous communities it hit me, that this is exactly what happened in Sri Lanka,” says Srikhanta, Sri Lankan born and a Tamil.

“When the British left India it left a massive power vacuum. And that’s happened in a lot of these communities as well when the missionaries left. It has kind of changed the social fabric and I’ve seen that in my own personal situation. “And that actually guided what we’re doing in the sense that we are not trying to form a big bond with the community.

“We’re not trying to create a dependency relationship. We’re trying to have a small footprint and step back and let the kids take ownership [of] it. And that’s the only way this is going to succeed.”

When he took on the job of running OLPC in Australia, Srikhanta found himself in an enviable position. Before he had even begun knocking on corporate doors, he had been contacted by Commonwealth Bank executive Michael Harte, who had heard of the laptops and was keen for the bank to get involved in the program. Sponsorship of the OLPC program is a key part of the bank’s reconciliation action plan.

In Top End schools at Elcho Island and Newcastle Waters, and at a school in the

remote WA desert community of Punmu, a preliminary evaluation by the Australian Council for Educational Research has indicated the computers are having a beneficial effect on school engagement and attendance.

The computers are most commonly being used to improve student literacy, according to ACER. In one school, students have been using photos taken with the laptop’s camera as a stimulus for constructing independent sentences on the laptops. Student are also able to access websites about books they’re reading.

The computer has a function that allows children to speak into the laptop, and students are enhancing their aural learning by typing their weekly spelling words into this program, then hearing the word spoken back to them. Teachers have reported that students are displaying greater letter recognition.

Srikhanta says the key to the success of the laptops is that the desire for learning they inspire comes from the bottom up; it’s driven by the children.

“When every kid in the community has one there’s this kind of joint contract formed among all the kids, where they start sharing, learning with each other, becoming engaged in their own education,” he says.

And in Kiwirrkurra, children’s horizons are already expanding as a result of the machines.

“I think the benefits will be immeasurable,” Hollier says. “Already some of the secondary school boys are starting to see that there are other things they can do in their lives.

“Now that they’ve got this access to technology, one of them is saying, ‘I can be in a rock band, I could be like you and be a teacher.’ They are starting to see that there are other things to do, not just the jobs that they see in Kiwirrkurra.”

For more on the program One Laptop per Child Australia:



www.olpc.org.au



World at a click: Tanella West and Rita Gordon from Kiwirrkurra with their robust laptops for remote learning



Make a difference: One Laptop per Child's Rangan Srikhanta