

From far left: Grace Nanukala, seven, and Shyrell Mawunymula, five, from the Yirrkala community, embrace the digital age in the Northern Territory's Arnhem Land.

# DREAM MACHINES

A little laptop can make a huge difference, as children in our most remote communities are finding out. Thanks to a new charity aiming to improve their education, disadvantaged kids are being connected to a world of possibility

SCOTT MCGALE





Far left: students in Arnhem Land's Dhalinybuy school are surprising everyone by making film clips. Above: Milikapiti kids discover a new world. Left: young students benefit early.



**F**or all its raw beauty, the tiny community of Dhalinybuy in north-eastern Arnhem Land seems a long, long way from the rest of the world. In this fly-speck settlement on the Northern Territory's Gove Peninsula, there are no televisions, no toilets and, barring one public telephone that rings incessantly waiting for a passer-by to pick up, no telephones. What electricity there is relies on an unreliable generator. The nearest shop is at the mining township of Nhulunbuy, 220km away – a two-hour drive down a rugged dirt road.

But, in a corrugated iron shed – one of a series planted on the red dirt alongside a makeshift airstrip – the world is coming to Dhalinybuy. Here, in the one-classroom school, where Yolngu is the native tongue and English a second language, 20 wide-eyed students are mastering the universal idiom of Google and YouTube. “The first thing they do when they get on the internet is to type in ‘Dhalinybuy’ to see where they are on the map,” says assistant teacher Sonia

Dhalinybuy has been caught up in a digital revolution that is sweeping across Australia’s isolated communities, courtesy of a global charity called One Laptop Per Child (OLPC). The brainchild of Nicholas Negroponte, founder of the Massachusetts Institute of Technology’s Media Lab, the aim of the non-profit OLPC is to put inexpensive, purpose-built laptops (called XO’s) into the hands of vulnerable and poverty-stricken children – to give every child in the world access to modern education.

And the plan has pulling power. Since the US-based project began five years ago, more than 1.5 million XO laptops have been distributed to more than 30 countries – from war-torn Afghanistan, where laptops are given to girls who cannot access an education; to Uruguay, Peru and Argentina, where every school-age child will receive their own link to a digital future.

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Munyarryun. “Then they go to YouTube and look up their favourite musician or locals – such as artists, didgeridoo players or the Chooky Dancers,” she says, referring to the East Arnhem kids who caused a YouTube sensation with their Indigenous take on “Zorba The Greek”. “No-one could have ever imagined this would be available to our homeland kids. It’s just magic.”

In Australia, the project focuses on children in isolated areas and, since launching in May 2009, 4000 laptops have been handed out in some 40 communities in the Northern Territory, Western Australia and Queensland, with the remaining states to follow. The lofty aim is to reach 15,000 kids by June next year. “The key focus is about engaging the children in their education,” explains

OLPC Australia executive director Rangan Srikhanta. “We don’t really give claims about literacy, numeracy and attendance improvements, but of course improvements in these areas are all by-products of the success of the program.”

That’s no surprise to Suzanne Brogan, principal of the picture-perfect Milikapiti community school located on the idyllic north coast of Melville Island – the bigger of the Northern Territory’s two Tiwi Islands. “Every child has the potential to succeed; to do well at school,” says Brogan, who, having taught in some of the nation’s most challenging environments for 32 years, can tick off the horror statistics: some of the worst literacy and numeracy levels in the Western world; poor attendance records; dysfunctional communities where alcoholism is rife; and disengaged students who lack a capacity to concentrate due to poor nutrition and general neglect.

“Every child is entitled to a quality school experience. While we all know things are not created equal, the thing is when you do offer this experience to kids, usually you’ll find they will lap it up and yearn for more,” explains Brogan.

While the Milikapiti school is located in one of the most remote parts of the country, at the very top of the Top End, it could not be further from the stereotypical image of rundown Aboriginal education; the grounds are pristine; the classrooms adorned with bright paintings by students; the kids are eager and respectful; the teachers are energised; and the parents want their children to get the best education possible. In terms of community spirit, ►



Left: Milikapita students from NT's Top End join the global village for the first time. Above: "Today, they are receiving a gift that tells them we have faith in them," says Principal Suzanne Brogan.

it could rival any better resourced city school. It's about to catch up in terms of technology, too. As Brogan speaks, the 72 students (aged between four and 16) are awaiting the arrival of 72 laptops.

"We tell our kids all the time if you're good, if you follow the rules, if you study hard, then opportunities will come your way. But you know what? There are a lot of broken promises in these kids' lives," she says, fighting back tears. "Today is about showing our kids that they are worth it. They deserve just as much opportunity as any kid in Australia. Today, they are receiving a gift that tells them we have faith in them. You can't put a price on that, can you?"

The distinctive lime green XO laptops they're getting are "built for the bush". They are waterproof, dust-proof, energy-efficient and kid-friendly, so they can be thrown around without fear of breakage. They incorporate many unique features such as a state-of-the-art screen that works in direct sunlight for students whose lessons are held outdoors, and they run on very small power wattage for communities with solar power or limited electricity supplies (up to 80 laptops can be powered at one time from one standard power point).

Brogan says the purpose-built units are packed with up to 40 educational programs like word processing, digital imaging, music editing, drawing programs and games to enhance numeracy, literacy and memory skills. The laptops also boast in-built wireless technology for school-based internet access, camera, video camera and microphone. Teachers have been given training in how to use the programs in the classroom, and how to serve as mini IT help desks for students. "The students are

simply captivated by the laptops; even the little kids just work things out by themselves," enthuses Brogan. "The parents want their kids to have a good education and this is another tool to encourage the students to continue their schooling and get skilled up."

**F**ive days a week, the red-dust shrouded shed that comprises the Dhalinybuy homeland school houses 20 students aged from four to 18. Visiting teachers are flown in by light plane three days a week (where they sleep in swags on the classroom's open verandahs). On the other days, the school is manned by Indigenous assistant teachers, the real backbone of the homeland schooling system. The homeland schools are part of a push to keep younger generations of Aboriginal kids with their families and elders in traditional communities on their ancestral lands, instead of sending them to city schools.

Sonia Munyarryun says while her community holds on fiercely to its ancient rituals of hunting, fishing, dancing and music, the community is just as passionate about their children's education and the laptops have already become invaluable. "Even after only a few weeks, the kids' recognition of the letters of the alphabet improved dramatically, as they are always looking for them on the keyboard," she says. "They also love to take photos and we are in the process of getting them to make a film clip. So they are taking lots of images of their families, their homes and their environment."

And OLPC's Rangan Srikhanta says the use of XO laptops in communities has had an unexpected side benefit. "One of the things we weren't expecting is the fact that many of the children are using the laptops to teach their illiterate

mothers and fathers how to read and write," he says. "That shows us the older people aren't scared about the impact of new technologies on their communities."

But the program suffers from a perennial problem: funding. While the local arm of the organisation receives sponsorship from big-hitting corporates like Telstra, the Commonwealth Bank and News Limited, OLPC is lobbying for funding from the federal government to secure future expansion. Each laptop costs about \$300 to buy, with an extra \$130 required for teacher training. To reach their five-year target of 400,000 children, they have to train 20,000 teachers and purchase 396,000 more XO laptops. "We have schools lined up, but we have to pay for the laptops as we go. We have reached 4000 children so far, which is no small number, but it's only one per cent of where we need to be."

Founder Nicholas Negroponte's aim to bridge the digital divide by getting XO laptops into the hands of as many underprivileged children as possible remains strong: "Some critics say, 'Why would a kid need a laptop, when they might not have food, don't have drinking water, probably in some cases don't live beyond the age of five, and the parents [earn] \$1 a day or less? Good grief, why should they have a laptop?' I say take the word 'laptop' and substitute the word 'education' and nobody would say that." ■



## SHOW SUPPORT

Help OLPC improve education in Australia by texting the word "laptop" to 044 SUPPORT (0447 877 678), or visit [www.ideasforgood.com.au](http://www.ideasforgood.com.au) and go to, "Click here to show your support." For every 100 messages, Telstra will give away an XO laptop to a needy child. Text or email as many times as possible until midnight, December 15.



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