

## In Defence of Excellence and Diversity

Address to The First Asia Pacific Congress on Creating Inclusive Schools: Reflect – Shift – Transform by Nyunggai Warren Mundine 2 May 2014

A few months ago, I caused a stir when I said I did not support school curriculum requiring Indigenous cultural perspectives to be taught in all subjects and particularly in science and maths.

My reasoning on this is pretty simple. When teaching an internationally recognised discipline – like maths or science – students need to be taught according to the universal norms of that discipline.

To me – as an Aboriginal person – the idea of an Indigenous science doesn't resonate. Nor would it make sense to me to speak of Irish science or Italian science or Chinese science. It's different of course if you are teaching the history of a discipline. Then Italian science might include studying Galileo or the Roman aqueducts, for example. As a discipline, however, science changes and evolves with new knowledge and theories. Galileo's theories, in themselves, are not modern science. In fact, some of his ideas weren't correct.

These comments created quite a stir. It unleashed some outrage on twitter and NSW's Deputy Opposition Leader, Linda Burney – one of the architects of the current school curriculum – told The Australian I didn't know what I was talking about. She said, "being a fitter and turner does not qualify you to speak on this, it qualifies you to talk on plumbing".

Now it might be hard to take a shower in the Burney household if she's getting fitters and turners to do her plumbing. But the essence of her comment is very relevant to inclusivity in education.

## About NyunggaBLack

NyunggaBlack provides strategic business advice drawing on broad networks and expertise to help clients solve problems and grow their businesses in specific sectors. Our consulting services focus on Native Title, Employment and Mining and Energy and also on how clients can ensure their Reconciliation Action Plans deliver real outcomes as well as business growth.

NyunggaBlack also works in partnership with key clients to deliver managed service business opportunities for commercial and economic opportunities in Aboriginal communities and for Aboriginal & Torres Strait Islander people.

I'm a parent and an employer. I depend on the education system to prepare my kids for the job market and to prepare people I hire or rely on professionally to do the job I need them to do. I'm also an Aboriginal man. My children and grandchildren are amongst the people Indigenous cultural perspectives in education are supposed to benefit.

So my opinion on Australia's education system is very relevant. Building an inclusive education system isn't about telling people what is right, it's also about listening to people and scrutinising the prevailing wisdom with an open mind. If educators are dismissive of parents or employers or anyone who disagrees with the status quo then our education system isn't equipped for today's world.

So I'm going to tell you what I think about education and in particular about where Indigenous knowledge fits within in our curriculum and the inclusive education of Indigenous children. And I'll do it with all the insight a mere fitter and turner can muster.

I was educated at a time when Australian children weren't taught much about Aboriginal culture or society in school. Or, if they were, they were generally given the impression Aboriginal people knew nothing of value and achieved nothing of substance, except wandering around the bush and telling children's stories.

This was demeaning but it was also wrong. Extensive research on Indigenous societies, languages and cultures has demonstrated this. I've been privileged during my career to work with some of Australia's most talented anthropologists and historians in these areas and to see some of this research first hand.

There are a lot of urban myths about Indigenous people from past eras. One is that traditional Indigenous societies couldn't count past three. You might have heard it said that that Aboriginal people counted "One – Two - Many". This is a fallacy. It arose because linguists studying Indigenous languages didn't find counting words corresponding to all the English counting words. So they concluded Indigenous people couldn't count and were at an inferior stage of human development.

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Indigenous people did count, but they didn't rely solely on counting words to do it. In some languages, the word for "hand" for example was also used to mean "five" or "two hands" meant ten. There were other verbal and non-verbal tags used in counting. Sometimes the linguists simply failed to identify the relevant words.

The point is that people in traditional Indigenous societies could enumerate a set of items using a method everyone understood, could apply this method to any set of items and the end product represented a number to them. So they counted - as much as they needed to and with as much precision as they needed to.

Another urban myth was that Indigenous societies had no methods or systems for navigation and just wandered around aimlessly. This is also wrong. It seems outsiders simply didn't notice that Indigenous people navigated over long distances or couldn't figure out how they did it. Indigenous people also traditionally kept some of this knowledge a secret.

In the end, the science that explains how a boomerang works is the same science that explains how the bow and arrow works or how an aeroplane works. The science that explains the Brewarrina fish traps is the same science that explains the Great Wall of China and the Roman aqueducts. There is one science.

Actually Indigenous people were capable of navigating and had trading routes. They used the sky and the stars as a navigational tool. Fascinatingly, they also used songlines and stories – such as songs and stories about their ancestors or creator spirits - as a means of navigation.

By following the information in these songs and stories, and actually singing their way through the landscape, people were able to find their way over long distances. The songs and stories were essentially oral maps. Some tribes had also figured out that the moon influenced the tides at a time when Galileo was still convinced they did not.

We also know that Indigenous people managed the land. They didn't farm in the way that people from the northern hemisphere did and they didn't need to develop mass production or cater for major seasonal shifts in food availability. However, they did intervene in and change the environment to improve food sources and availability.

The Brewarrina Fish Traps are an example of clever engineering to farm fish. The boomerang used in hunting demonstrates that Aboriginal people had developed an intuitive understanding of some aerodynamics.

These achievements demonstrate ingenuity, imagination and skill, as needed for the time and place those societies existed in. And they do reflect a form of scientific thinking - in the sense of figuring out how aspects of the natural world work and knowledge to achieve building that practical results. Essentially these kinds of achievements were ancient forms of technology and innovation. However, they don't represent modern scientific theory. It's a bit like my earlier example of Galileo.

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So we do have to question how much of this content belongs in the study of science—as opposed to, say, the study of ancient history or the study of human societies. We could spend a lot of time in maths and physics teaching about how different people in the world did things hundreds or thousands of years ago but not at the expense of teaching children to understand maths and science as a universal discipline and equip them for the modern world.

One of the motivations to include Indigenous cultural perspectives in the national school curriculum was to counter the myth that Indigenous people are primitive. Linda Burney spoke about this in her rebuke of me.

But enforcing "Indigenous cultural perspectives" in a broad-brush approach across the whole curriculum is a blunt instrument that doesn't do justice to the depth of knowledge and information about Indigenous societies and cultures.

Under our national curriculum, children must study Indigenous culture, environmental sustainability and Australia's engagement with Asia in every subject. How is this even possible? How do you study Indigenous culture when studying foreign languages for example?

The maths curriculum says Kindergarten children learning to count should "read stories from other cultures featuring counting in sequence to assist students to recognise ways of counting in local languages and across cultures".

As a person who has taught people about Indigenous kinship systems, I can tell you this is a poor way to teach about then. And given the complexity and nuances in Indigenous kinship systems, I'd be surprised if kinship systems were the most effective tool to teach geometry either.

I don't understand how this helps children learn to count *or* how it helps them learn about Indigenous cultures. Children need to learn to count. If we want to teach about other cultures, why would we do it during counting instead of Human Society and its Environment, for example?

The curriculum also suggests Year 6 student can "investigate the use of rotation symmetry in the diagrammatic representations of kinship relationships of Central and Western Desert people" when studying geometry. As a person who has taught people about Indigenous kinship systems, I can tell you this is a poor way to teach about them. And given complexity and nuances in Indigenous kinship systems, I'd be surprised if kinship systems were the most effective tool to teach geometry either.

I have a better idea. Rather than children learning about kinship systems in some half-baked way during maths, let's teach Australian primary children a stand-alone unit on Indigenous kinship systems and let's get people with the relevant expertise and qualifications to teach them.

The curriculum also suggests Year 4 students learn to "investigate the use of fractions and sharing as a way of managing Country: for example taking no more than half the eggs from a nest to protect future bird populations." This is a political statement. And frankly, as an Aboriginal man, I find it insulting that learning about Indigenous cultures, history and society is reduced to a tokenistic example in a fractions lesson.

I doubt there are teachers in Australia today who believe Indigenous people are incapable of counting or are part of a primitive race. If there are, they should be driven out of the teaching profession because it is they who are primitive.

Indigenous children are just as capable of learning and excellence as everyone else is. The problem is they are not. And this misconceived curriculum isn't going to help them - or any Australian student - achieve excellence. Nor will it create respect for Indigenous cultures.

In fact, when it comes to excellence we are going in the opposite direction. Despite decades of reform in education, Australia's students are falling behind the rest of the world.

Figures published by the OECD last year show Australian high school student performance in maths and reading has declined over the past 10 years. Australia's rankings fell in all subjects, from 15th to 19th in mathematics, 10th to 16th in science and 9th to 14th in reading since 2009. Large gaps continue to exist based on wealth, location, gender and whether students are Indigenous.

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Government spending on education in Australia has increased substantially in the past few decades. There have been reforms in curriculum and teaching methodology based on the new educational theories – including moving away from rote learning and phonics – and lower class sizes. And now children must study Aboriginal culture, environmental sustainability and Australia's engagement with Asia in every subject.

And despite all of this, our performance against global educational benchmarks is falling. You have to question whether these initiatives are working.

We can't allow this decline to continue.

Having spent some time talking about the ancient past, let's turn our attention to the not too distant future.

Australia is part of the fastest growing and most populous regions in the world, a region that has experienced huge transformations since the end of WW2.

Around 20% of the world's population lives in China. India's population is over 17% of the world's population. China's population is predicted to peak in a bit over 10 years' time and India's is projected to continue to grow indefinitely. By 2028, India will be the most populous country in the world.

Our education system needs to equip Australian children for a future as adults in a global marketplace.

Australia represents only 0.33% of the world's population. To put that in context, we think of Indigenous people as being a small minority of Australia's population at 3%.

Technology and connectivity are likely to continue to develop exponentially. Technology will replace some kinds of jobs and create others. Developed economies like Australia will have fewer and fewer jobs for low to middle skilled workers but a shortage of workers for high-skilled jobs.

India and China are highly focussed on education and the education levels of their citizens are growing. The next few decades will see increased global migration especially for work. It's been estimated that, by 2030, China, India and Brazil will be the world's largest exporters of skilled talent.

So a child sitting in an Australian classroom today not only has to compete with their classmates and other Australian students, they also have to compete with students currently sitting in classrooms 10 or 15 thousand kilometres away.

In the future, poverty and disadvantage will be less and less a function of geography and more and more a function of education, skills and motivation. The uneducated and unskilled will be the new poor. People who don't have the education - and ambition - to hold their own in a global talent pool will be marginalised, even if they live in prosperous developed economies.

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At a bare minimum, this means every Australian child needs to leave school with strong levels of literacy and numeracy. Gone are the days when people could carve out a livelihood and a future without functional literacy and numeracy. It isn't an option any more – whether you live in Sydney or Perth, or the Northern Territory or Tasmania. Every child who leaves school without literacy and numeracy is condemned to a future of poverty and marginalisation.

Despite Australia's prosperity, and despite its huge investment in education over

decades, there are still people in this country who are not functionally literate or numerate.

We know Indigenous literacy and numeracy rates are well below those for the rest of the population. Some figures put literacy levels in remote Indigenous communities as less than 20%. I've been to communities where the last group of adults who learned to read were the ones educated by the mission schools and they are my age.

First, our education system needs to be strong in the fundamentals. And the most fundamental ingredient to educating our children is school attendance.

But it's not just Indigenous communities where we see this problem in Australia. The Australian Bureau of Statistics has reported that half of all people living in Tasmania aged 15 to 74 are functionally and illiterate more than half functionally innumerate. Earlier this year, I spent some time with friends in rural Tasmania. What they described of the local primary school - with high truancy and children unable to read or write - sounded very similar to the problems I've seen in remote Indigenous communities.

I expect if you look closely at literacy and numeracy in outer urban and regional communities with high multi-generational welfare dependence and poor socioeconomic status you would see some similarly disturbing statistics.

There was a time when a person who was functionally illiterate or innumerate could still find work in Australia. This is less and less the case. Even in manual jobs, a minimum level of literacy is required to complete workplace safety training. And in any event, there will be fewer and fewer jobs for low skilled workers in Australia. So we are already seeing the seeds of the new poor being sown.

So how do we ensure Australian children are ready to compete in the global talent pool?

First, our education system needs to be strong in the fundamentals. And the most fundamental ingredient to educating our children is school attendance. School attendance is the number one priority in education. And we can't have inclusivity in schools if we don't have children attending schools every day.

Without education, people are condemned to a life of poverty, and if kids don't attend school, they won't get educated.

I get really angry when I hear educators and education union representatives dismissing the initiatives to get Indigenous children to school. I was disappointed earlier this year when teachers in the Northern Territory went on strike and one of the reasons for the strike was because the new truancy officers bringing more students into remote schools was putting

teachers under pressure. On the day of the strike around 24 remote areas schools closed but most Darwin schools remained open.

This action punished Aboriginal children and communities and it undermines the important work we are doing in improving school attendance.

I get particularly angry when people suggest the mainstream education system isn't suitable for Indigenous children, especially those in traditional communities. This is nonsense. I've written extensively about this. I'd invite you to read my blog and articles on the subject and the case study on the Australian Indigenous Chamber of Commerce website about the traditional community of Yilpara in the Yolngu homelands.

I want to see educators get behind the push for school attendance in Indigenous communities and in the other Australian communities where this is a problem. Including everyone in this room.

Other fundamentals are the quality and expertise of teachers and the proper resourcing of schools. There are many problems in Indigenous schools. Some schools in remote areas do not have qualified teachers, or teachers fly in for only a few days a week. And if all the children who should be attending school actually turned up most of those schools wouldn't have enough furniture, equipment or teachers.

and territory governments State education departments need to fix these problems. And unless all Indigenous children go to school every day governments and departments continue avoid addressing them. The best way for Indigenous people to expose these problems and force governments and departments to provide quality education and deliver real educational outcomes for Indigenous children is to send their kids to school every day.

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Getting the fundamentals is essential. But we are a prosperous and developed economy and we can do much more.

I want to see Indigenous cultures, societies and languages taught in Australian schools. Not as add-ons to other subjects but as part of thorough and rigorous courses taught by qualified educators with the appropriate expertise.

Inviting a local Aboriginal elder to come in and talk to students may be valuable for students but we can't expect that person to have the depth of knowledge and expertise needed to teach a course of study; any more than you might expect your grandmother to come in and teach Australian history. Some topics should be compulsory for all children – such as the study of Indigenous kinship systems. Kinship systems are the most fundamental aspect of any learning about traditional Indigenous cultures and all Australian children can and should learn about them. Some topics would be optional.

Australian history subjects should include a study of the full history of this continent. This includes a proper study of the history of Indigenous societies before 1788 and traditional Indigenous nations through to the history of our modern nation.

It also includes the contribution and achievements of European settlers and immigrants through the years, our participation as a nation internationally such as in war. British history is also a part of Australia's history.

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The conflict between Indigenous and European people in Australia is a significant part of our history and should be taught. History should not be sanitised to make people feel better or to make them feel worse. Teach the facts and the

ambiguities and let people have a proper discussion.

We also should critically evaluate teaching methods and theories impassively and without ideology prejudice. An example is in the ongoing debate on the merits of whole reading versus phonics. There is no place in this discussion for barracking for an ideological position or arguing for what you believe should work. Test the theories, obtain hard evidence and data, understand what works most effectively and implement it. Even if it means doing the opposite of what you've always thought was right.

For children who are failing we need early intervention. We must not allow children to leave school without reaching minimum standards or reading, writing and numeracy. We must stop waving failing students through the system.

Australian students need to be proficient in English. In China, all students learn English. For Australians, having English as the mother tongue is a great natural advantage in a global marketplace.

We should also teach Indigenous languages. There are Indigenous children in Australia whose traditional language is their first language and they cannot speak much (if any) English when they start school. English may actually be their third of fourth language. We know these Indigenous children will do better at school if they learn using both their traditional language and English. It's also important

for self-esteem and identity. This isn't a new challenge in our education system – there have been children in Australia who start school with English as a second language for many years.

I also want to see Indigenous languages that are not widely spoken offered as subjects of study. I'm not talking about every school offering several hundred different language courses. But we can start by leveraging off the Indigenous language learning centres and language "nests" that have been set up in many areas of Australia and build from there. Indigenous and non-Indigenous students who want to learn an Indigenous language could choose to study a course run by a centre in their area.

Do not underestimate the power of enabling Indigenous students to learn the language of their ancestors. Language is a strong and potent source of pride for many Indigenous people; especially given many Indigenous people in the past were discouraged or even banned from speaking their native language.

Those of you who have seen the movie *The Sapphires* will recall the scene where Kay – who'd been removed from her community

as a child and raised by a white family in the city – speaks to a Viet Cong solder in her native language. That scene is immensely moving and powerful for Indigenous people.

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Australia is one of the youngest nations in the world and it is home to the oldest nations in the world.

This country has the oldest continuous living cultures in the world. And today it sits on the doorstep of the most rapidly growing region on the planet.

The history, cultures and languages of Indigenous societies are unique Australia. They represent Australia's ancient history. And all Australian children should know about them. If we build in Australian children a strong sense of identity and pride based around this country's shared and distinctive heritage, our children will be stronger and more resilient in meeting the challenges of a globalised and interconnected world and better positioned to thrive in a global marketplace.

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Highly respected and influential businessman, political strategist and advocate for empowering Australia's First People to build a sustained economy and to create business opportunities, Warren's life and career have been shaped by a personal commitment to the Australian and Australia's First Peoples' communities. More than 26 years' experience working in the public, private and community sectors, Nyunggai Warren Mundine is a member of the Bundjalung and Gumbaynggirr peoples from the North Coast of NSW and South East Queensland.

