TIME TO STOP FIXATING ON FINLAND

The idea that Finland is an education nirvana that Australia should emulate is a persistent myth, argue **Blaise Joseph** and **Jennifer Buckingham**

The establishment of the International Maths and Science Surveys by the Institute for Education Assessment in 1964 was the beginning of a worldwide fascination with comparing and contrasting the performance of education systems around the globe.

The OECD followed suit with the Program for International Student Assessment (PISA) in 2000, the results of which have contained some surprises. The high-spending Western economic powerhouses of the United States and Germany performed relatively poorly while small countries like Finland and city-states like Singapore topped the tables. Over the last few rounds of PISA—which are conducted every three years—more countries have joined the program, upsetting the tables and generating even more interest in how to create high quality schools.

Australia is not among the top-performing countries on any of the recent international standardised tests, as Table 1 indicates.

With regard to trends in absolute performance over time, Australia's average results have significantly declined in PISA and stagnated or declined in TIMMS, although they have risen in PIRLS (see Figure 1). This generally disappointing trend—despite substantial increases in government spending per student over the same period—has driven the ongoing policy debate about how to improve Australia's school results.

A fascination with Finland has been an enduring aspect of this policy debate. Most recently, Finnish education expert Pasi Sahlberg, who will take up an academic post at the new Gonski Institute for Education at the University of New South Wales in September, has argued that his country's school system has a lot to teach Australia—especially in having more student play time and less standardised testing.[1] Various media outlets have promoted this viewpoint, including Channel Nine's *60 Minutes* program in a story called 'Can Do Better' that went to air in late January.[2]

It is true that Finland consistently outperformed Australia on the recent international standardised tests, and we should be willing to learn lessons from the top-performing countries. But how successful has Finland actually been in recent years?

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Table 1: Australia's relative performance in latest international tests[3]

International Test	Topic	Australia's Rank
Program for International Student Assessment (PISA) 2015 (15 year-old students)	Science	14th
	Maths	25th
	Reading	16th
Trends in International Mathematics and Science Study (TIMMS) 2015	Year 4 Maths	28th
	Year 8 Maths	17th
	Year 4 Science	25th
	Year 8 Science	17th
Progress in International Reading Literacy Study (PIRLS) 2016 (Year 4 students)	Reading	21st

Figure 1: Australia's results in PISA, TIMMS and PIRLS over time[4]

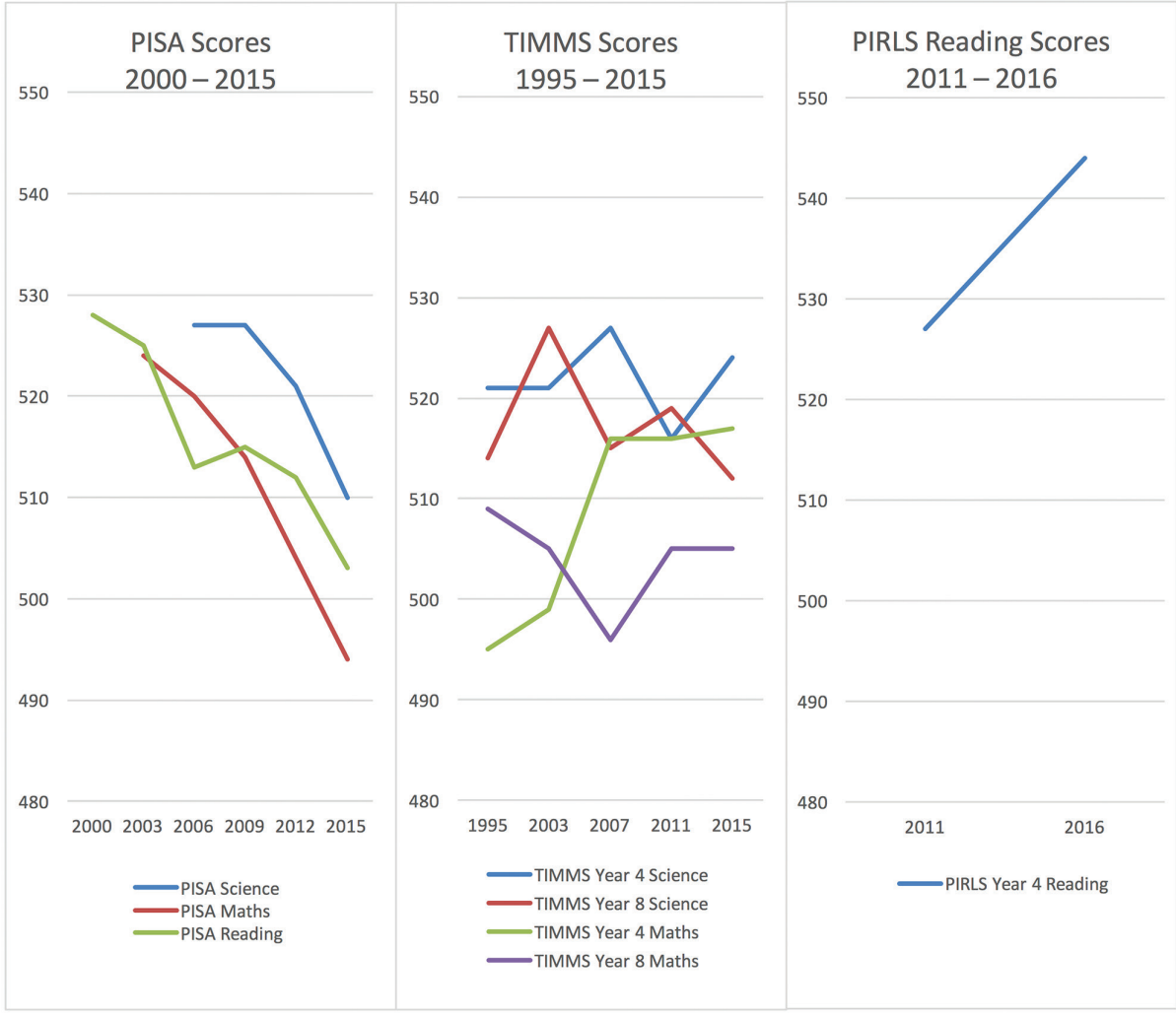


Table 2: Finland's relative performance in latest international tests[5]

International Test	Topic	Finland's Rank	Countries out-performing Finland
PISA 2015	Science	5th	Singapore, Japan, Estonia, Taiwan
	Maths	4th	Singapore, Hong Kong, Canada
	Reading	13th	Singapore, Hong Kong, Macao, Taiwan, Japan, Beijing-Shanghai-Jiangsu-Guangdong (China), Korea, Switzerland, Estonia, Canada, Netherlands, Denmark
TIMMS 2015	Year 4 Science	7th	Singapore, Korea, Japan, Russia, Hong Kong, Taiwan
	Year 4 Maths	17th	Singapore, Hong Kong, Korea, Taiwan, Japan, Northern Ireland, Russia, Norway, Ireland, England, Belgium, Kazakhstan, Portugal, United States, Denmark, Lithuania
PIRLS 2016	Year 4 Reading	5th	Russia, Singapore, Hong Kong, Ireland

Finland's recent decline

Finland received higher average scores than Australia on all recent international standardised tests: PISA, TIMMS (Finland only participates in the Year 4 tests, not the Year 8 tests), and PIRLS. Yet Finland was not the top-performing country in the world on any of these tests, as shown in Table 2. Singapore and other East Asian countries consistently outperform Finland. These results have generated significant interest, although Singapore is not widely held up as a model to emulate—unlike Finland.

However, a strong case can be made that because the number of participating countries changes each year, a more valid approach is to compare absolute performance by countries on these tests over time, rather than just the rankings between countries which only measure relative performance.

Looking at absolute instead of relative performance in terms of average test results, Finland's scores in PISA and TIMMS have significantly declined in recent years, while its performance on PIRLS has marginally dropped as well (see Figure 2).

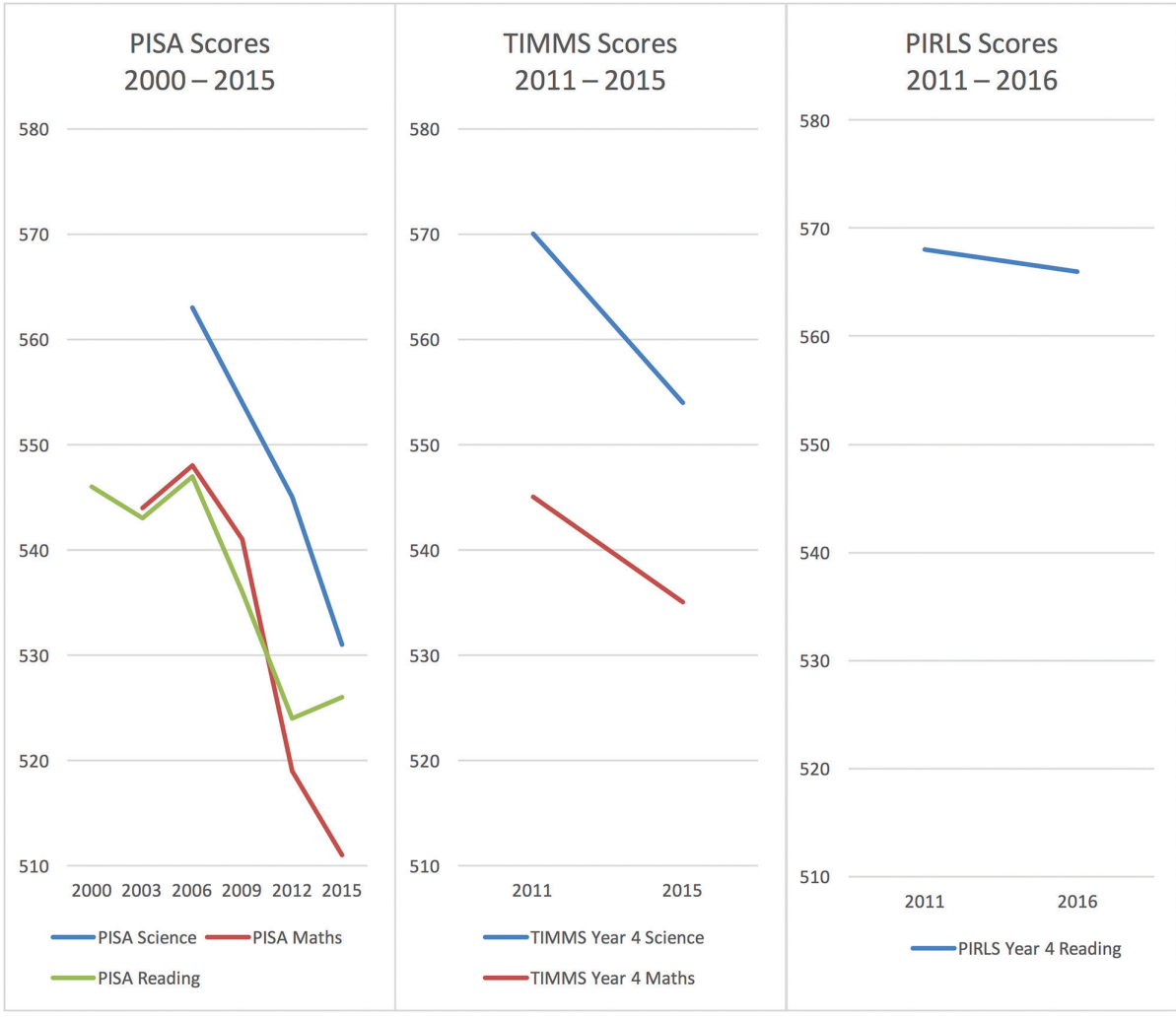
In trying to explain differences in relative performance it is inappropriate to ascribe differences in country rankings entirely to differences in their education systems. Non-school factors such as cultural differences also play a role, including differences in behaviour in school, motivation to learn, and motivation to do well on tests.

For example, since the PISA tests are 'low stakes' assessments for the students and schools that participate—there are no benefits or consequences for high or low performers—motivation to apply effort in the tests is not assured.

A number of researchers and commentators have speculated in recent years that performance on PISA may be a function of student motivation to do well on the test, and that the level of motivation may differ between countries. Students in more collectivist countries that place a high value on academic achievement—both personally and as a society—may have higher test performance than students in more individualistic cultures where social expectations are not as strong because intrinsic personal motivation to do well is higher. A US study from the National Bureau of Economic Research that considered the impact of student motivation on PISA scores in China and the US provides some evidence to support this theory.[6]

There are other reasons to apply a healthy dose of scepticism to Finland's apparent academic success. An open letter from more than 200 Finnish mathematics professors and lecturers in 2005 decried the standard of maths teaching and learning in Finnish schools.[7] And a study published by the Finnish government's Education Evaluation Centre in 2015 found that two-thirds of ninth graders were unable to calculate everyday math problems like price reduction percentages.[8]

Figure 2: Finland's results in PISA, TIMMS and PIRLS over time[9]



A problematic comparison

Even if it were desirable to emulate Finland's school system in Australia, there are many reasons why this would be difficult to do so.

For example, Finland has a small and geographically concentrated population, less cultural or racial diversity, and a lower immigration rate than Australia. This important demographic and cultural context is often overlooked in media coverage of the Finnish system.

Finnish is also one of the easier languages for native speakers to learn to read. It is a simpler language than English in terms of its writing system—how speech is represented in print. Finnish orthography—that is, its conventional spelling system—is 'shallow': each letter is represented by a single sound, and letter-sound relationships are highly consistent. In contrast, English is the opposite extreme and has a 'deep' orthography: single letters can have more than one sound, and vice versa, and there is a large number of letter-blends that make unique sounds.[10]

The relative simplicity of the written language in Finnish allows more rapid acquisition of the decoding skills required for accurate and fluent reading,[11] so it is relatively easier for native speakers to learn to read, which boosts school results in later years. One-third of Finnish children can already read simple text when they begin school, and one study found that three-quarters of children could accurately read sentences at the end of their first year at school.[12]

Researchers comparing reading acquisition among children in Scotland and non-English speaking countries (including Finland) have concluded there will be 'irreducible differences in rates of progress between learning to read English

or other deep orthographies and learning to read in shallow orthographies.'[13]

Analysing high-achieving school systems is useful, but given complicating factors such as language, it is a fallacy to suggest Finland provides a blueprint for other countries.

Other top-performing countries in literacy and numeracy like Singapore potentially have many lessons to offer Australia as well, although—as noted earlier—Singapore is not widely advocated as a model to emulate. The exaltation of Finland's education system is part of a broader myth that the Nordic countries are socialist paradises—ignoring that most socialists would pan Finland's corporate tax rate of only 20%, not to mention its lower life expectancy and higher teenage suicide rate compared to Australia.[14]

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The reasons for Finland's past success

Pasi Sahlberg's 2012 book *Finnish Lessons* put Finland's PISA success down to its adoption of progressive, child-centred pedagogies and rejection of educational policies he called the Global Education Reform Movement (or GERM). 'Harmful GERMs' include focusing on core knowledge and skills (that is, literacy and numeracy) and testing.[15]

However, it is problematic to ascribe student achievement in the early 2000s to the educational policies of that time. Those results are more likely to have been influenced by the policies of the prior years.

According to analysis by Cambridge University's Tim Oates[16] and Gabriel Heller Sahlgren of the Centre for Policy Studies,[17] policies and pedagogy in Finland in the years prior to the early 2000s PISA tests were more traditional, and involved annual testing and reporting. The country's previous rise in educational performance was more likely due to socioeconomic and historical factors, along with its traditional educational culture. This more traditional, teacher-centred school culture has been replaced by more 'student-centred' learning in recent years.

In other words, Finland's move to a more progressive model of education preceded its downward slide in PISA performance and its more recent decline in TIMMS and PIRLS results.

Nevertheless, there are some aspects of Finland's school system that are well worth considering. For example, Finland has higher teacher education standards than Australia—new Finnish teachers tend to be better qualified and it is harder to gain admission into teacher education degrees. In general the teaching profession in Finland has a higher social status than in Australia.

Too much testing and not enough playing?

Could more play time and less testing—as suggested by Sahlberg—be the keys to boosting Australia's school results?

There is little reason to believe Australian children don't have enough time to play or be physically active. About one quarter of every school day is given to recess and lunch breaks, there is additional school time devoted to physical education and sport, and the school day typically ends at about 3pm.

And a recent OECD study found that neither test anxiety nor test performance are related to the frequency of testing.[18] Besides, blaming the National Assessment Program—Literacy and Numeracy or NAPLAN for the lack of improvement in Australian schools is like blaming the thermometer when it is 40 degrees. NAPLAN identifies problems; it doesn't solve them or create them by itself.

NAPLAN is not a 'high stakes' test by the usual definition. Teacher salaries and school funding are not determined by NAPLAN scores. There is always the possibility of 'teaching to the test', but if that leads to fewer children finishing primary school unable to read then teaching to the test is arguably a good thing. The 2016 PIRLS test found that one in every five Australian year 4 students had reading levels below the international literacy benchmark.[19]

There is also a twisted logic in the argument that Australia should be more like Finland and have fewer standardised tests, on the basis that Finland's school system performs well on international standardised tests.

There is little doubt Australia's performance in international rankings has seriously declined, but this is not the World Cup. The trend in Australia's own absolute performance is more important, and perhaps the greatest benefit of international standardised tests like PISA is to provide an objective measure of a country's academic achievement over time. On this measure, unfortunately, Australia's trend is clearly downward, but blindly copying Finland and having more playtime is not the answer.

Endnotes

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