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Curriculum changes must tackle the lifelong consequences of NZ's alarming literacy and numeracy declines

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Literacy and numeracy are under the spotlight as Aotearoa New Zealand grapples with how to improve student performance in these basic skills.

At the beginning of 2023, the government rolled out its new history curriculum. But further changes to the curriculum were deferred to put the focus on maths and literacy.

This decision followed a damning report revealed that by the age of 15, two out of five children are either only just meeting or failing to meet literacy standards.

It is clear the warning bells are ringing over student learning – maybe just not loud or urgently enough.

Our research shows just how essential it is that education policy addresses these basic skills now. If we don't, struggling students – particularly in already disadvantaged groups – face lifelong consequences that reach well beyond educational success.



Changes to NCEA deferred so schools can prioritise maths and literacy

The state of New Zealand education

There is a growing sense something is wrong with New Zealand's education system.

Level 1 National Certificates of Educational Achievement (NCEA) results have been steadily decreasing since 2017. A 2022 trial of new NCEA literacy and numeracy tests – due to become compulsory in 2024 – produced abysmal results and caused alarm for a number of principals.

Against international benchmarks, New Zealand's trends in literacy and numeracy paint a gloomy picture.

Read more: 'I always have trouble with forms': homeless people on how poor literacy affects them – and what would help

A global study found a sharp decline in New Zealand students' proficiency in reading and mathematics.

In 2009, 14% of students fell below the baseline threshold for literacy proficiency and 15% fell below in maths. In 2018, those falling below the baseline climbed to 19% and 22% respectively.

The OECD considers the baseline level to be one that enables students “to participate effectively and productively in life”.

For Māori students, the decline in basic literacy and numeracy is even more significant. In 2009, 24% of Māori students fell below the literacy baseline. This increased to 30% in 2018. Over the decade, the number of Māori students who fell below the baseline in maths went from 27% to 37%.

The decline was smaller for Pacific students, although their starting point was less favourable. More than a third fell below the literacy baseline in 2009, with this share increasing only slightly to 36% in 2018. For maths, 40% of Pacific students fell below the baseline in 2009, increasing to 44% in 2018.

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Just parts of the new curriculum for the new NCEA Level 1 have been finalised seven months before it is due to be introduced, minister Jan Tinetti confirmed on Q+A today 1news.co.nz/2023/07/02/jus...

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Why literacy and numeracy matter

Our research found literacy and numeracy skills correlate to the wellbeing of individuals. As such, they significantly influence life choices and outcomes.

Our ten-year study followed a cohort of rangatahi (young people) who were 15 years old in 2009. We found those with low reading and maths skills have poorer outcomes across a range of wellbeing measures including education, employment, income, and health and justice.

That those with low literacy and numeracy skills have poorer educational outcomes, particularly in attaining bachelor's degrees and tertiary qualifications, is unsurprising. They are also less likely to be employed and have lower earnings. The difference is particularly stark among women.

Read more: To lift literacy levels among Indigenous children, their parents' literacy skills must be improved first

But the impact of these low skills goes beyond education and employment – it also affects wider areas of wellbeing such as health and justice.

For example, those with lower literacy and numeracy skills have higher hospitalisation rates – 59% had at least one hospitalisation between the ages of 15 and 25, compared to 46% of those with higher core competencies.

They were also more likely to engage in criminal activity: just over a quarter of this group had a conviction by time they were 25, compared to just 8% of the group with above-baseline skills.

Importantly, while life outcomes are influenced by literacy and numeracy skills, we also found that higher core skills alone do not necessarily lead to positive wellbeing outcomes.

Ethnicity also plays a powerful role. For example, we found that at age 25, Māori with above-baseline literacy and numeracy skills have about the same average earnings as Pākehā with low skill levels.

Average annual earnings at age 25.

Using education to address systematic inequalities

There are myriad reasons why New Zealand needs a curriculum that ensures our future generations are equipped with the skills necessary to succeed and thrive in our fast-changing global economy.

Future generations need and deserve tools that will help them navigate the complexities of life within and beyond our shores. Failure to deliver on the government's literacy and numeracy goals for the new curriculum will merely perpetuate the existing inequities.

Most of all, failure will undermine the yet-to-be-realised potential in our individual rangatahi and across our collective communities of Aotearoa.