

# A way ahead for NCEA literacy and numeracy

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**A pilot study undertaken by the Ministry of Education suggests that many of New Zealand's students are not literate or numerate enough to thrive in an information-rich society.**

As part of a broad review of NCEA, the Ministry has developed new literacy and numeracy standards. The results of a recent pilot of the assessments for the standards were released under the Official Information Act (OIA 1287506). As shown in the table below, just over one third of the pilot achieved the writing standard, and about two thirds achieved each of the reading and numeracy standards.

	Number of students in pilot	Achievement rate
<b>Numeracy</b>	1,055	65.3%
<b>Literacy</b>		
Reading	590	66.9%
Writing	554	34.5%

The Ministry of Education has signalled an intention to make these standards corequisites for NCEA. That means that students would not be able to attain any level of NCEA without attaining all three (numeracy, reading and writing).

The pilot research included a range of schools across deciles and geographical locations. Though the sample was not perfectly representative, it provides a reasonable indication of the likely outcome if the standards are made a corequisite for NCEA.

The Ministry initially intended to make the new requirements corequisites for NCEA in 2023. However, on 28 June 2022, the Ministry of Education announced a year's delay to this timetable. The reasons they gave were that more piloting is necessary and that the education system needs more time to prepare.

The new standards are scheduled to replace two existing methods of meeting the literacy and numeracy requirements for NCEA. One is through the accumulation of 10 credits from an approved list of achievement standards for each requirement. The other is through the successful completion of specific literacy and numeracy unit standards.

A majority of students gain the requirements under the first method. A drawback of this method is that it is indirect. There is often no specific assessment of reading, writing or calculating involved. For example, achieving a history standard that requires reading or writing also yields literacy credits. Similarly, achieving a science standard that requires calculation also yields numeracy credits. Across all subjects, there are 75 standards that count towards the numeracy requirement. There are 720 that count towards literacy.

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In 2014, the Tertiary Education Commission (TEC) published research showing that the indirect method of assessing literacy and numeracy is very unreliable. Put simply, meeting the NCEA literacy requirement does not mean a student can read and write. Meeting the numeracy requirement does not mean a student can perform calculations.

The second method, using unit standards, is used by a minority of students. This method does entail direct assessment of literacy and numeracy. However, the 2014 TEC report revealed problems with this method too. The levels of literacy and numeracy it certifies are below those required to thrive in an information rich society.

To its credit, the Ministry of Education seems to have taken on board the TEC findings in its review of NCEA. It is likely that the TEC findings influenced the development of the new standards.

The pilot evaluation of the new assessments shows that the new standards are at an appropriate level. The assessments for them are valid and reliable. Less happily, the pilot adds to evidence from PISA that New Zealand's literacy and numeracy education needs urgent reform.

If and when the new literacy and numeracy requirements become corequisites for NCEA, students will have to achieve all of numeracy, reading, and writing to gain any level of NCEA. On the basis of the pilot, that would leave only about a third of all students attaining even Level 1 of NCEA. Even if writing was excluded from the new NCEA requirements, it would still mean that NCEA achievement rates would plummet from current levels.

Given the findings of the 2014 TEC report, the results of the Ministry's pilot are not surprising. But that does not make them any less concerning. The poor attainment of our students signals a need for urgent reform in the teaching of these key skills.

However, there is a dilemma for the Ministry of Education. The new literacy and numeracy would put in place a much-needed credential for these key skills. But should the Ministry go ahead with them if doing so mean that two thirds of New Zealand students would leave school without an NCEA certificate?

To solve this dilemma, we recommend:

1. Implement the literacy and numeracy standards, as planned in 2024, but not as co-requisites for NCEA. Instead, they should contribute to a stand-alone literacy and numeracy certificate. Students who hold it will be credentialled as having sufficient literacy and numeracy for work and life.
2. Respecify the literacy and numeracy corequisite for NCEA. They should be at the highest level possible that will maintain an acceptable attainment rate for NCEA.
3. Urgently reform literacy and numeracy teaching at primary level. To avoid perpetuating the poor literacy and numeracy of young New Zealanders evinced in the TEC and Ministry reports cited here. A scientifically proven, structured approach to teaching must systematically be adopted.
4. Introduce and fund structured literacy and numeracy programmes for Years 7-10. These are needed for students who have come through primary school without having been taught these key skills effectively.
5. Stipulate a time at which the piloted standards will become corequisites for NCEA. It is important that a specific time is stipulated. Otherwise, the impetus to reform the way in which literacy and numeracy are taught in New Zealand schools may be lost. The task of remediating the problem created by decades of ineffective teaching is formidable. Given the size of the task, implementation in about 2027 may be appropriate.