

DISCUSSION PAPER

GRADING OUR CURRICULUM: FAILING STUDENTS, TEACHERS, AND THE EVIDENCE TEST

MARYANNE SPURDLE

EXECUTIVE SUMMARY

In 2007, New Zealand followed other OECD countries that were adopting open, skills-based curricula designed to prepare learners for the new "knowledge economy." Since then, many countries have reverted to more content-rich curricula, following mounting evidence that educational outcomes suffer when there is a lack of attention to content knowledge and less coherence within disciplines.

New Zealand's national curriculum, meanwhile, continues to emphasise high-level competencies and lacks subject matter detail. As a result, there is little common understanding across schools about what students should be taught and when they should be learning it.

In addition, New Zealand lacks standardised testing. There is no feedback loop to help evaluate the success or otherwise of changes to the curriculum or other elements of education.

New Zealand's ranking in international studies, such as the Programme for International Student Assessment (PISA), shows that student achievement in maths and literacy began declining following the curriculum's introduction.

At the same time, the disparity between students has grown. New Zealand now has the largest difference between reading skills of advantaged and disadvantaged students of all English-speaking countries surveyed. While many factors contribute to such trends, OECD countries that have comprehensive and content-rich curricula are also more likely to have better student achievement and more equitable student outcomes.

Curricula that lack specificity also increase the burden placed on schools and teachers to decide what should be taught and how to teach it. Recent research shows that 76 per cent of New Zealand's teachers are responsible for finding their own instructional materials, and nearly half report having inadequate access to high quality instructional materials.

This not only adds many hours a week to most teachers' workloads, it also adds variability to the quality of what students are learning and undermines the appropriate sequencing of the content they learn.

Both the curriculum and NCEA—which serves as a de facto curriculum in many secondary schools—are undergoing a revamp. While a more structured pedagogical approach has been promised, educators who have seen early drafts are not convinced that the curriculum's deficits are being adequately addressed. Whoever makes up the next government have an opportunity to return to a more content-rich curriculum for the betterment of our students, teachers and our society's future.

INTRODUCTION

Behind everything we learn in school lies a blueprint that determines why we watch Shakespeare's plays or learn the Pythagorean theorem but never find out what genus the meerkat belongs to. That blueprint "represents the aims or purposes of a school system and defines what we mean by equal access or equal opportunities," according to educational theorist and sociologist Michael F.D. Young.¹ In this country, the New Zealand Curriculum sets out the knowledge our society considers important for the next generation to study.

A curriculum names the necessary disciplines, organises and stages the topics within those disciplines, and identifies the knowledge and skills that students should acquire at each level. The difficulty with a national curriculum is that we never reach a consensus on all of the knowledge and skills it should contain. However, steadily declining student achievement and increased teacher workloads have provoked scrutiny of the New Zealand Curriculum, which was first introduced in 2007.

With plans underway to refresh the curriculum and political parties presenting their visions for our education system, we stop to ask: How has the current New Zealand Curriculum impacted the quality of teaching and students' academic achievement?

We start by describing its foundations and characteristics, including the challenges to evaluating its success and the student-centred approach to teaching that the Ministry of Education encourages for its delivery. Then we evaluate the strengths and weaknesses of New Zealand's NCEA qualifications, which, at the secondary school level, often serve as a de facto curriculum. For both, we consider evidence that they are contributing to a decline in academic achievement and a persistent disparity between students who are the most and least advantaged.

Then we look ahead to both the curriculum refresh that is underway and to the plans that our political parties vying for government have for our education system. After decades of the education pendulum swinging away from a prescribed curriculum, there are signs it may be swinging back.

THE 2007 NEW ZEALAND CURRICULUM

The New Zealand Curriculum introduced in 2007 sought to adapt New Zealand's schools to the new "knowledge economy" that, experts believed, would require a greater emphasis on critical thinking and creativity. It is markedly different from those that preceded it.

In part, this curriculum was a reaction to a utilitarian approach that had emphasised testing students and ranking and comparing schools. However, it retained an emphasis on preparing students for workplaces while embodying principles of "child-centred learning."² This type of enquiry or project-based learning focuses attention on students' individual interests and levels of engagement.

Progressive educators here and overseas came to believe that the most important knowledge is that which each student finds relevant, and that knowledge itself is "a process" that "develops to be replaced, not stored."³ Our current curriculum, which grew out of this context, contains just a fraction of the content of the one that preceded it. Curriculum statements for subjects once ran at least 60 pages in length, and sometimes twice that. Now, "achievement objectives for all of the learning areas at each of the eight levels in the 2007 Curriculum are largely confined to two double page spreads."⁴

New Zealand's education system followed countries such as the UK and South Africa when it moved in this direction. New Zealand contributed to, and received direction from, the OECD's influential Definition and Selection of Key Competencies. This framework, published in 2005, identified key competencies the OECD thought would be essential to thrive in a changing world. Under the header "Moving beyond taught knowledge and skills" it stated:⁵

In most OECD countries, value is placed on flexibility, entrepreneurship and personal responsibility. ... Many scholars and experts agree that coping with today's challenges calls for better development of individuals' abilities to tackle complex mental tasks, going well beyond the basic reproduction of accumulated knowledge.

MISSING KNOWLEDGE

Thus in 2007 Aotearoa New Zealand witnessed a rapid swing from a curriculum that was prescribed and evaluative to one that is relatively unmeasured and open. Despite high expectations for its innovative approach, the curriculum has overseen years of declining academic achievement.

In place of declarative knowledge, the New Zealand Curriculum emphasises competencies. The first part of the curriculum relates to five "key competencies" that include thinking, relating to others, and using language abilities that students develop naturally. The second part of the curriculum speaks to eight "learning areas," covering what are traditionally known as subjects.

In the 2007 version of the Curriculum, those learning areas were vague enough that, according to John Etty, Associate Headmaster at Auckland Grammar School, it was theoretically possible to effectively ignore the curriculum while still, technically, operating under it.⁶

"Some classrooms may have seen too much rote learning of facts, too little engagement and too few opportunities for crucial thinking or student agency," wrote Briar Lipson, Senior Fellow at The New Zealand Initiative. "However, the solution was not to transform the curriculum by placing disciplinary learning secondary to competencies. By doing that, the NZC undermined the organising framework—subject disciplines—that previously held knowledge and skills together. It also implied 'knowing that' is somehow inferior to (and unnecessary for) 'knowing how'."⁷

Some education experts who supported a move away from an overly prescribed curriculum, such as Bronwyn Wood, still challenged the emphasis on the process of learning over content and knowledge itself:⁸

While we do not seek to devalue these "new" approaches, we suggest that such an overt focus on procedural learning holds the potential to obscure the importance of content knowledge and disciplinary coherence that is found within curriculum areas. ... [W]e fear that a downplaying of knowledge in the New Zealand Curriculum could have serious implications for disadvantaged and marginalised students by failing to provide them with the conditions by which they can acquire the foundations for powerful, intellectual work.

After studying early adopters of the 2007 curriculum, Bronwyn Wood and Mark Sheehan expressed concern about "the absence of discussion about how the prevailing focus on student-directed pedagogies and subject integration impacted on conceptual and contextual knowledge that underpins disciplinary knowledge within subjects."⁹

CURRICULUM CONTENT BRIDGES GAPS

One justification for diminishing the "knowing that" elements in the curriculum is the belief that they contribute to inequality of student achievement. A significant reason students fail (the theory goes) is that knowledge prescribed for all students will not be relevant to all. Educational theorists, such as Michael F.D. Young in the UK, promoted this idea long before the NZ Curriculum embodied it. He has since changed his mind:¹⁰

One conclusion was that the failure of working-class pupils was not the fault of their parents or their families but the consequence of an alien middle class curriculum being imposed on them; no wonder they failed! This was where I, and others, made a well-intentioned mistake.

A few decades later he wrote that, while he was correct not to blame students' families, he was wrong to attribute poor performance to a prescribed curriculum. He came to this conclusion after testing whether a curriculum that "arose out of pupils' lives could be developed that would not be alien to them":"

The attempts to develop such curricula were no more successful than the earlier compensatory education programmes; the pupils found the new 'community-oriented' curricula equally alienating. What had gone wrong? Many years later, I came to realise that we had not understood the true meaning of a democratic curriculum or a curriculum based on equality. It was not about treating all knowledge equally but about making sure all pupils had equal access to the same curriculum. ... Pupils on ['community-oriented' curricula] will have no future and sooner or later they will know it; pupils do not come to school to learn what they already know.

By the time New Zealand adopted a curriculum that emphasised "how to" knowledge over declarative knowledge, other countries were already well down that track. France had adopted a skills-focused curriculum in 1987, and for the following 20 years French students' achievement had been declining. According to Dr Nina Hood:¹²

International research routinely finds that those countries or provinces that deliver a comprehensive, contentrich curriculum which ensures that students acquire a broad general knowledge, achieve higher and more equitable student outcomes than countries with skills-based or more open curricula.

She observed that OECD data show that the best performing and most equitable school systems "require students to follow the same, sequenced curricula."¹³ Estonia and Portugal both adopted new curricula around the same time as New Zealand. However, theirs are detailed and knowledge-rich. Both countries have seen improvement in reading and maths in the Programme for International Student Assessment (PISA) scores over that time.¹⁴

CURRICULUM CONTENT SUPPORTS TEACHERS

One of the ways well-developed curricula support learning is by supporting teachers. The labour required to develop content not provided in the curriculum is one of the factors that the PPTA reported contributed to high teacher workloads in its 2015 Workload Taskforce Report: "integrating curriculum programmes and providing individual pathways considerably increases the complexity of programme planning, resource writing and assessment, especially at NCEA levels." This exacerbates what is already a significant problem; more than 90 per cent of teachers and middle management surveyed for the report said that their workload had increased since 2010.¹⁵

Creating a coherent curriculum is a "complex and specialised task that requires deep subject knowledge and expertise," Briar Lipson wrote. The fact that teachers are creating their own curricula, lessons and materials "is a prodigious waste of time that makes teachers' jobs many times harder than necessary."¹⁶

In a survey of New Zealand teachers, Dr Nina Hood found that half them are spending at least four hours a week searching for and developing their own instructional materials, and 10 per cent spend at least nine hours.¹⁷ She also found considerable variability in the type and the quality of resources that teachers use. They rely most on the resources they develop themselves, but also adapt materials from online resources and social media along with more traditional sources such as textbook publishers, their own school, and the Ministry of Education.¹⁸

When asked if other teachers at their school have a "common understanding of what effective instructional materials look like," only 52 per cent agreed. This could just reflect different approaches. However, Hood points out that "even if individual materials are of a high quality, their impact will not be as great if they are not part of a carefully sequenced learning experience."¹⁹

Because of the devolved nature of the curriculum, that careful sequencing must be created from scratch by each school, or it will not exist. More than one third of the teachers surveyed believe that there is not a "clear progression in curriculum content between year levels or within a single year level" at their school, and more than half of all teachers have had no "effective professional development on curriculum design."²⁰

Why do these gaps remain 16 years after this curriculum was introduced? One reason is that little has been done to ensure that it is working as advertised:²¹

If there had been ongoing evaluation and feedback loops in place following the release of the widely acclaimed 2007 curriculum, for example, it would have quickly become clear that teachers needed clearer expectations, more detail about progressions and more focused support to use progressions to ensure more equitable learning opportunities and more equitable learning outcomes.

SHORTCOMINGS IN ASSESSMENT

Measuring the impact of changes to our education system is challenging because New Zealand lacks standardised testing. The best benchmarks for student progress don't provide data that is regular, granular, and universal.²² Overseas, standardised tests such as Key Stage in England and NAPLAN in Australia allow for comparisons between schools and within schools across time. New Zealand has no equivalent.²³

The National Monitoring Study of Student Achievement (NMSSA) does provide a picture of students' reading comprehension in Year 4 and Year 8 in state and state-integrated schools where instruction is in English. It replaced the National Education Monitoring Project in 2012.²⁴ However it only identifies trends, as it takes a representative sampling of students, so it doesn't provide helpful information for parents or teachers of individual students.²⁵ It is about to be replaced with "a new curriculum insights and progress study," according to Ministry of Education Curriculum Centre leader Ellen MacGregor-Reid. This will focus on maths and literacy.²⁶

Two international studies provide comparisons across time and in relation to other countries: the Progress in International Reading Literacy Study (PIRLS), surveying Year 5 students every five years; and PISA, which surveys every three years. Both take a sampling of students and extrapolate averages relating to student characteristics such as gender, ethnicity and socioeconomic background.

These provide a snapshot of how students compare to previous years' students and to those of the same age in other countries. They also identify inequalities, such as achievement gaps by gender or socioeconomic status. While they are helpful to identify broad trends and signal weaknesses, they cannot identify which teaching practices or course content are successful or otherwise.

Teachers do have access to "norm-referenced tools" to help track students' progress. However, it is up to each school to choose whichever test they prefer. These tools are particularly important to identify students who struggle with literacy and numeracy—the ones who are most likely to fall further behind in school and, after school, have poorer outcomes on measures ranging from personal health to criminal involvement.²⁷

Between 2010 and 2018, when it was scrapped, a policy requiring national standards for literacy and mathematics provided an assessment-heavy way of monitoring student achievement. Its brief existence highlighted the challenge of getting testing that could inform effective teaching without being seen to eclipse good teaching. The purpose was to increase accountability by measuring outcomes. However, it also encouraged "teaching to the test" and was unpopular with the New Zealand Educational Institute, the union for primary teachers.²⁸ It has not been replaced by anything that supports evidence-based research into educational best practice, and there is currently a void.

The Ministry of Education does plan to introduce national literacy and numeracy assessment between 2024 and 2027 as corequisites for students to attain NCEA at any level. These, in the final years of secondary school, will be the only compulsory national tests students will undertake.²⁹ In an early trial of the writing test, schools reported that between half and—in at least one instance—all of the students who participated failed.³⁰ It remains to be seen whether the tests will be rewritten to match the abilities of most students, or the pass level will remain high to encourage more targeted teaching in those areas, or a compromise between the two will be found.

THE CASE FOR A BALANCED CURRICULUM

In this environment, which lacks feedback loops, New Zealand's schools have largely continued down the same path for a generation. The expectation of a rapidly changing information age opened the door to a teaching ideology—student-centred learning—that was not new but had not yet been tested here at scale. A student-centred approach to teaching emphasises the differences between students rather than their similarities, promoting an individualised approach to learning along flexible pathways. The theory is that "student-driven enquiry" will result in children being more engaged, less bored, and primed to become lifelong learners. The current curriculum created a platform for this to be tested.³¹

In 2007, with the new curriculum, the Ministry of Education predicted that because teaching would place a greater emphasis on "how to learn, solve problems and innovate," students' exam scores would improve over time.³² However, by placing the emphasis on students' interests it undermined the framework for systematic, knowledge-based teaching.³³ The fact that students' numeracy and literacy abilities have declined since the curriculum was introduced reflects the fact that knowledge and structures of knowledge are prerequisites to problem-solving and innovation.³⁴

In place of teaching to transmit information, Bronwyn Wood said that learning initiatives were introduced that "focus on constructivist, learner-centred and progressive pedagogies that are typified by student-driven inquiry and questioning."³⁵

Does this matter in an age when access to information is as free as it has ever been? The place of rote learning is debatable in the era of Google. However, the position that learning must be either highly prescribed or student-led—exemplified by the Ministry of Education's policies and interactions with schools³⁶—is hard to defend. Education can, of course, be both creative and standardised, focusing both on individuals and the collective.³⁷ This is simply a matter of balance.

That balance is necessary because without the explicit transmission of information learners will struggle to progress and be more likely to disengage. Discoveries in cognitive science over the past few decades help explain why. To start with, learning requires information to pass from short-term memory into long-term memory. To do so, it must be processed by "working memory"— "the cognitive system that maintains information in awareness while we reflect on and mentally manipulate it."³⁸

Working memory can only hold and process so much information at a time. It relies on long-term memory as well as the senses to process new information. With this sentence, for instance, you recognise each word in a fraction of a second because your long-term memory is informing what your eyes are scanning. And you can remember that sentence long enough to connect its meaning to the information in the sentences that come before and after it because your working memory is focused on one simple job. However, if the same sentence had been written in Sanskrit or it talked about mathematic principles you have had limited exposure to, how long would it take to decode? How soon would you give up?

The function of working memory is part of Cognitive Load Theory. According to Michael Johnston, currently "most ITE [Initial Teacher Education] providers are ignoring the implications for teaching, of the cognitive processes involved in human learning. Teachers' lack of knowledge in this area is arguably the greatest weakness in our education system. It has ... profound implications for teaching skills like literacy and numeracy, and much more."³⁹

Constructivist teaching methods are based on the theory that minimal guidance—which a minimalist curriculum enables—will lead to better student engagement. However, student-led learning relies on students' own prior knowledge to inform their learning.⁴⁰ What happens to students who lack the tools to engage?

This question is relevant from the first years of school. The sizes of children's vocabularies, for instance, are strongly correlated to their parents' socioeconomic status. Vocabulary size, in turn, impacts reading comprehension and reading enjoyment. One study estimated that the least advantaged children observed had been exposed to 30 million fewer words by the age of four than the children of professional parents.⁴¹ As Briar Lipson wrote:⁴²

When you know a little about a topic, reading more about it helps add more knowledge and detail; it makes it easier to gain yet more knowledge. The flip side is that if you lack sufficient knowledge to understand in the first place, reading is less likely to help you accumulate more knowledge. It is also likely to be demotivating.

A student who lacks adequate instruction, is missing relevant background knowledge, and who has the burden of decoding information and ideas absent from their long-term memory will be less engaged. To level the playing field, students need more direct instruction, not less.

Education policy in countries including England and Australia has shifted due to evidence-based research into cognitive science.⁴³ England began these changes more than 10 years ago, introducing a new national curriculum that "reinstated the role and importance of subject knowledge as both the route to skills and the

birth right of every child."44

South African educators have been on a similar journey, placing knowledge back at the centre of the curriculum. They expressed it this way in the third curriculum review:⁴⁵

What we have learnt is that, despite the good intentions of past efforts, an underspecified curriculum advantages those who are already advantaged—those who already have access to the knowledge needed to improve their life chances. What we need to provide is a clear statement of the "powerful knowledge" ... that provides better learning, life and opportunities for learners.

And this may be the greatest flaw of an underspecified curriculum that encourages student-centred learning: the most disadvantaged students are also the worst served.

COMPOUNDING FAILURE

There is mounting evidence that inequalities in New Zealand's education system are growing rather than narrowing. "By transferring all curriculum decision-making to teachers and schools," Briar Lipson wrote, "the NZC has turned the curriculum into a lottery."⁴⁶ This is clear in international studies such as the 2018 PISA results. New Zealand recorded the largest difference between reading skills of advantaged and disadvantaged students of all English-speaking countries surveyed.⁴⁷ This gap is also evident in the PIRLS study, where it has been widening for a decade.⁴⁸

In real terms, as measured by NMSSA data, this means that average reading ability for Year 4 students at a low decile school is nearly two years behind those at a high decile school. Students aren't likely to catch up with this kind of deficit; the 17-scale point gap the study recorded for those in Year 4 was a 16-scale point gap in Year 8.49

Inequality is also exacerbated along gender and ethnic lines. The 2022 National Monitoring Study of Student Achievement (NMSSA) found, for mathematics scores, "statistically significant declines in the average scores at Year 8 for Māori learners, Pacific learners, and for girls."⁵⁰ Overall scores did not decline, however; those who were already less likely than the average to achieve well are the ones slipping further behind.

There will always be variability in teaching methods and content. However, if a curriculum doesn't prescribe the fundamental knowledge necessary for students to progress in each field of study, and not every child wins the "teacher lottery," many students will be left with gaps in their learning.

According to Bronwyn Wood:51

High autonomy is supporting the highest decile schools fine. We have teachers that run with that, and their highly resourced communities then support and build up some of the gaps in knowledge that might have been there. But in our poorer communities, this high autonomy model that relies on very high teacher professionalism and support from the wider community—what we call cultural capital—if it's not there, then the gaps emerge even more than if we had a prescribed curriculum because people get an eclectic exposure to knowledge.

She cited a 2019 study by ERO that looked at the integration of key competencies in primary schools. There was high variability between schools in their interpretation of those competencies, and "most had emphasised key competencies as a means to enhance student behaviour rather than deepen cognitive learning."⁵² The data shows that deficits in students' learning aren't the only ones compounded by a high autonomy model; the gap

between elite and non-elite schools also grows:53

... approaches that favour "doing" rather than "knowing" may actually serve to increase educational inequalities between those schools that retain "powerful knowledge" and those which rarely include such knowledge in their curriculum options. This potentially reduces the potency of knowledge and reinforces inequality by fostering powerful knowledge among the elite schools and shutting out students from non-elite schools who do not generally have access to this knowledge.

Some schools, such as Manurewa Intermediate, have re-introduced rote learning while embracing the "innovative inquiry" encouraged by student-centred philosophies. Despite being classed Decile 1 under the now-retired decile system, the Education Review Office has noted:⁵⁴

The school's data show it is very effective in engaging students in learning and accelerating their progress in reading, writing and mathematics over their two years in the school.... School performance has been sustained over time through well-focused, embedded processes and practices. This school has successfully addressed in-school disparity in educational outcomes. ... Relevant assessment and moderation practices underpin this good progress.

Student-centred teaching does not have to replace the more prescribed teaching of information. Instead, when it is combined with a good foundation of knowledge, it helps both those students who need proactive support as well as those who are already on track to flourish.

NCEA'S CONTRIBUTION TO WHAT STUDENTS LEARN

The curriculum's lack of specificity has resulted in the National Certificate of Educational Achievement (NCEA) driving curriculum content in many secondary schools.⁵⁵ NCEA was introduced in 2002 as the main qualification for students from Year 11 to Year 13. Level 1 is optional, however for about 10 per cent of school leavers that will be the highest level they attain.⁵⁶

Earning NCEA credits is cumulative. It allows a piecemeal approach to learning as students can accumulate credits across a wide range of topics without integrating the knowledge. The goal of earning an "achieved" or higher "motivates students and teachers to focus more on accumulating credits than on deep understanding of curriculum content." So even ambitious students can accumulate a good number of credits and still leave school with gaps in their knowledge.⁵⁷

NCEA does allow for more practical experience and the ability to study subjects in depth, both of which appeal to educators like Andrew Saunders. His career in education includes a decade as Deputy Principal at Selwyn College, and he has overseen teaching both before and after the introduction of NCEA. He appreciates its emphasis on processing and applying information, the practical components of NCEA, and the broader range of subjects offered in some disciplines.⁵⁸

However, the mastery of subject matter is more reliant on teacher guidance and student initiative than it would be if the progression in subjects was more prescribed. As with the curriculum, its open-endedness does not hinder excellent teaching but that does make good instruction far more critical. If the standard of teaching is lacking, NCEA provides few safeguards to ensure that students will still be taught foundational knowledge in each subject area. NCEA has also been criticised for grade inflation, which is linked to its focus on knowledge and abilities (criterion referencing) rather than performance relative to others (norm referencing). Andrew Saunders said that NCEA has contributed to a dumbing down of the curriculum because students can progress if they receive an "achieved"—which may be "substantially less than a 50 per cent under the old system." He said that there are minimal criteria to progress in maths and English, in particular.⁵⁹

The subjectivity of students' NCEA scores becomes clear when they are compared to international scores over the past two decades. In the PISA study, New Zealand's scores in maths, reading and science have all declined steadily. In PIRLS, a study of 400,000 children in more than 60 countries, New Zealand's ranking fell from 13th in 2001 to 27th in 2023. But at the same time, the percentage of school leavers who attained NCEA Level 2 or higher climbed from 61 per cent in 2004 to 79 per cent in 2018 before slumping to 75 per cent in 2023.⁶⁰

There is also a mismatch between the way students navigate NCEA and how they will be expected to perform in future workplaces and places of study. Teacher trainers we spoke to observed that recent graduates who are training to be teachers suffer from a disconnect between the philosophies of secondary and tertiary education, one that shows up in (for example) meeting deadlines.

"With NCEA there's this attitude that there's no real set date," one said. "You submit your work when you can, and you can have as many goes to submit as you need to. While the intentions of NCEA are lovely and inclusive, it's not necessarily preparing our young people for the reality of tertiary and workplace environments."⁶¹

Secondary schools are increasingly offering students alternatives to NCEA, such as the internationally recognised Cambridge International Examinations and the International Baccalaureate. Students who want to enrol in prestigious universities overseas or competitive programmes at home prefer them to NCEA. According to Crimson Education CEO Jamie Beaton, students applying to the University of Auckland's medical school with those qualifications are about six times more likely to be successful than students who have completed NCEA.⁶²

Some schools have opted out of NCEA Level 1 altogether. It isn't a prerequisite for Levels 2 or 3, or required for any further academic or professional pursuits. School leaders who dropped it have said the teaching time dedicated to it wasn't better preparing students for higher-level thinking and created an unnecessary burden of assessments.⁶³ Schools such as Auckland Grammar in Auckland and St Margaret's College in Christchurch have introduced their own diplomas as alternative qualifications, deciding what academic and extracurricular pursuits they want their students to focus on.⁶⁴

The Ministry of Education made some changes to NCEA in 2018 in an attempt to make it less fragmented and require fewer assessments. An overhaul of Level 1 is being piloted and should be in place in 2024. Changes to Level 2 are expected in 2026 and Level 3 in 2027.⁶⁵

While educators and parents wait to see what this means for secondary education in New Zealand, changes to the curriculum as a whole are also on the horizon.

CHANGES TO THE CURRICULUM

Even the Ministry of Education is expressing reservations about the implementation of the New Zealand Curriculum. Its website says that "the way things are is not working well for all learners and we are trying to make it work better." It is part way through a curriculum overhaul set to be fully implemented from 2027. The

Ministry of Education promises a more structured pedagogical approach and an emphasis on fundamentals: "This strategy's focus emphasises more explicit attention to literacy and numeracy in learning across the curriculum."⁶⁶

Does this mean that New Zealand may be following Australia and the UK in a shift away from student-centred teaching? After the Ministry for Education in the UK adopted a more prescribed curriculum in 2014, PISA scores began improving following more than a decade of decline and stagnation.⁶⁷

However here in New Zealand, the Ministry of Education's stated goals suggest that much of the flavour of the current curriculum will remain: "We don't want a focus on these foundational skills to lead to a narrowing of the curriculum." The refreshed curriculum "will support every *ākonga* (learner) to experience success in their learning. It will give effect to Te Tiriti o Waitangi, and will be inclusive, clear about the learning that matters, and easy to use from year o to year 13."⁶⁸

Clues as to what the curriculum will look like can be seen in recent drafts of the new curriculum that have been released to educators for feedback. According to Michael Johnston, senior fellow at The New Zealand Initiative, the ones he has seen are "threadbare" and won't support teachers well—particularly at the primary school level, where most aren't trained in the sciences and may not be able to fill in curriculum gaps themselves. Once again, the better resourced schools can compensate for the curriculum, increasing the education gap between the top and the bottom.

"You can't think critically until you've mastered quite a lot of knowledge," Johnston said. "The idea seems to be to get young people involved in taking action ... but they need good sound knowledge before they can make a meaningful contribution to changing the world."⁶⁹

According to John Etty, who has reviewed drafts in his role at Auckland Grammar School, the avenues for feedback are tightly controlled and subject specialists are concerned about the new curriculum's content.⁷⁰ He said that the history curriculum draft contains "declarative knowledge" and doesn't foster the kind of disciplinary thinking he would expect—how and why things came to be, and how and why some things get written about and understood more than others—so that students learn to evaluate and compare historical records themselves. "It doesn't fill me with hope that we'll be training up a generation of people who can think critically," he said.

Etty is also concerned with a lack of context in the subject matter. In dealing with New Zealand history, for instance, the curriculum doesn't address global events that would inform local ones. He said that "New Zealand's experience exists in a weird vacuum."⁷¹

One arts teacher who reviewed the technology and arts drafts identified "the problem with such a generalised curriculum was that it did not acknowledge each art form had a specific and established history, terminology and skills."⁷²

Educators who reviewed a draft of the science curriculum that circulated in July also found key elements missing. For instance, it contained no mention of physics or chemistry. Instead, it divides the sciences into four contexts: the earth system; biodiversity; food, energy and water; and infectious diseases.⁷³

"It's the same mistake that they made with maths and literacy," said Secondary Chemistry Educators New Zealand co-chairperson Murray Thompson. "They said, 'here's the system, here's the way' and the maths was

all about problem-solving and written problems and all that stuff without the basic skills."74

Another change in the new curriculum will be to incorporate Mātauranga Māori—traditional Māori knowledge in each subject area. This has raised questions around the feasibility of integrating it into certain subject areas.⁷⁵ In addition to that, the majority of teachers haven't been trained in Mātauranga Māori or in how to integrate it into the subjects they teach. Some are already expressing concern that the requirement will be introduced without the tools to accomplish it well.⁷⁶

Criticism has been tempered by the hope that foundational skill sets would still be taught to meet NCEA requirements, and contributors to the curriculum were confident that the curriculum didn't need to specify disciplines to ensure they will be taught.⁷⁷ However, many subject areas, particularly in science and maths, require a great deal of "scaffolding" to bed in fundamental concepts before increasingly complex ideas can be learned. Content-rich curricula can reduce educational inequalities because they protect against the loss of key knowledge.⁷⁸

The release of these drafts raises concerns that lessons haven't been learned from the shortcomings of the 2007 curriculum. It should "set national expectations," according to Michael Johnston, but neither the current curriculum nor drafts of its successor are detailed enough to do that.⁷⁹

Michelle Johansson has been tracking the progress of the curriculum refresh from her vantage point as Kaitiaki of Ako Mātātupu: Teach First NZ, an employment-based trainer of secondary school teachers. She has reservations about the way the curriculum overhaul is being accomplished, particularly the siloed approach that others have also flagged.⁸⁰

Additionally, Johansson said the timing would be better if it was released before the new NCEA requirements not after, as currently planned. The new curriculum "has the potential to be world class and game changing," she said, but she is concerned poor timing and lack of cohesion could undermine that.⁸¹

The release of the new curriculum, NCEA updates, and its corequisite tests are all running behind schedule.⁸² In some cases, the reason for delays is to spread out the burden on schools and teachers as they will be tasked with learning and implementing these changes. That is in itself an admission that overhauling elements of the system create short-term deficits and shouldn't be a regular occurrence.⁸³

EDUCATION IN AN ELECTION YEAR

One feature of our education system—or a bug, depending on your perspective—is that it is inextricably linked to the political system through the Ministry of Education. Each state and state-integrated school has its own local school board, and curricula like the current one can allow for a broad range of applications. However, government policies strongly influence the framework those schools work within and have the potential to address the problems identified here.

What do leaders of our political parties have to say about what our children are—or should be—learning in school?

The current "curriculum refresh" began on the current Labour Party's watch, and the previous refresh of the 2007 Curriculum took place during the previous Labour Party's tenure. Their election-year priorities also include amending the law to ensure schools are teaching maths, reading and writing the same way from 2026,

and making financial literacy compulsory in schools from 2025 along with history instruction.⁸⁴

As we've discussed, the nature of the refreshed curriculum is still open to speculation. Labour's intention to legislate the content of instruction is a more direct way of establishing what students learn, but it is also more controversial. This transfers agency away from schools and professional bodies and towards the government of the day.

National⁸⁵ also wants to introduce policy regarding classroom instruction, requiring an average of one hour of instruction a day each for reading, writing and maths at primary and intermediate schools. This is a blunt attempt to address deficiencies that trace back to teacher training and curriculum design, and—as with Labour's policies—it gives legislators and not educators the final say.

However National also intends to "rewrite the curriculum to include clear requirements about the specific knowledge and skills primary and intermediate schools will need to cover for each school year in reading, writing, maths and science."⁸⁶ This signals a preference for a more content-rich curriculum. The evidence we've discussed points to such a curriculum being crucial to addressing our widening educational inequities.

National also plans to introduce standardised assessment in reading, writing and maths, and provide clear reporting to parents. The question of how assessments should be conducted has no straightforward answer, but standardised testing is an important tool for identifying successful teaching practices.

Finally, the party wants to develop an online resource bank for lesson plans. Depending on the quality of the material, this idea has the potential to reduce teachers' workload and reduce the variability of what students learn.

ACT's⁸⁷ policies focus on opening up the marketplace by attaching education funding to each student, rather than funding schools directly. Students could then attend any government-approved school that will admit them.

In this scenario, schools' success would depend first on meeting national standards, and then by providing the education that parents and students most desire. Curriculum options are likely to be diverse, as a wider range of schools would emerge. Within individual schools and related schools, however, variability of what is being taught would inevitably decrease as each school's defined character becomes critical to its success.

The whole educational landscape would be significantly different if ACT's policies were to be implemented. However the effect on school curricula, specifically, would probably be a growth in the variety of curricula on offer and a decrease in the variability of curriculum delivery. Many schools' curriculum design and content would be determined by educators, and would be unlikely to be affected by changes in government.

The Green Party⁸⁸ intends to "provide advice and support on implementing the breadth of the National Curriculum in local contexts," and "establish a unit within the Ministry of Education designed to support schools, and the education system in general, to listen and respond to the voices of children." The intention to support schools addresses the unmet need the current curriculum has created for course content and teaching materials. However expanding the Ministry of Education itself without providing a more robust curriculum or better equipping teachers is unlikely to move the dial.

Regarding curriculum content, the party would "incorporate Te Tiriti o Waitangi" and "resource the universal

teaching of te reo Māori and tikanga Māori in all public schools." The party's policies make no mention of curriculum areas where student performance has been declining.

Similarly, Te Pāti Māori's curriculum-related policies all address the teaching of Māori language, culture, and history.⁸⁹

CONCLUSION

The evidence is that our curriculum needs more content, our schools need more support implementing it, and our students need more direct instruction than the 2007 curriculum prescribes.

According to Bronwyn Wood, those who are creating the refreshed curriculum should be looking for a middle ground:⁹⁰

We need to find ways to navigate beyond those binary and dichotomous positions of being progressive and child-centred and focusing on the child, and being conservative and focusing on the ways things have always been done. One of the challenges I find for policy, for curriculum-making and for teaching, is to find ways to break down those extremes, and to find ways that recognise the strengths that both have. ... To find a way in the middle is a far more nuanced and careful position to take.

This position was echoed by Briar Lipson, who in 2020 wrote:91

A new curriculum need not determine every detail of every subject. It need not forget competencies. However, after years of neglecting subject knowledge, New Zealand does need a concerted effort to reinstate knowledge transmission as its primary objective—one through which other objectives can and should be achieved....

A liberal, knowledge-based curriculum could be designed to reflect and respect the tensions inherent in modern New Zealand. The process of creating it would be both cathartic and constructive. It would help the nation progress towards maturity.

ENDNOTES

1. Michael F. D. Young, "Can educational research be about social justice? Opening a debate," Pacific-Asian Education Vol. 24, No. 1, 2012 at 11.

2. Bronwyn Wood, "Bronwyn Wood & Rowan Light on Education, History, and the NZ school system," Maxim Institute, 26 February 2021, https://www.maxim.org.nz/article/education-history-nz-school-system/.

3. Bronwyn E. Wood and Mark Sheehan, "Dislodging knowledge? The New Zealand curriculum in the 21st Century," *Pacific-Asian Education* Vol. 24, No. 1, 2012 at 17–30.

4. Nina Hood, Variable in/by design: The variable nature of curriculum design and instructional materials in Aotearoa New Zealand schools, The Education Hub, 2023 at 14.

5. OECD, The Definition and Selection of Key Competencies: Executive Summary, 2005, accessed 6 July 2023, https://www.oecd. org/pisa/35070367.pdf.

- 6. John Etty, interview with the author, 29 June 2023.
- 7. Briar Lipson, New Zealand's Education Delusion, The New Zealand Initiative, 2020 at 48.

8. Wood and Sheehan, above n 3, at 17–30.

9. Ibid.

10. Young, above n 1, at 12.

11. Ibid.

- 12. Hood, above n 4, at 9-11.
- 13. At 9.
- 14. At 10.

15. PPTA, "Workload Taskforce Report," April 2016, accessed June 2023, https://www.ppta.org.nz/advice-and-issues/teacher-workload/document/133.

16. Lipson, above n 9, at 100.

- 17. Hood above n 4, at 37.
- 18. At 34.

19. At 19.

20. At 23-25.

21. Michael Absolum, Adrienne Carlisle and Mary Chamberlain, *Reviving the Flames of Excellence: Igniting a System that Learns*, NZAI 2023, accessed 20 September 2023, https://www.nzai.org.nz/wp-content/uploads/2023/06/Reviving-the-Flames-of-Excellence-Final-20062023.pdf.

22. Ministry of Education, "Reading literacy at Year 5: New Zealand's participation in PIRLS 2021," at 18, 62.

23. Lipson, above n 9, at 81.

24. Ministry of Education, "New Zealand PIRLS 2021 Encyclopedia," at 12.

25. New Zealand House of Representatives, "2021/22 Education Sector Annual Reviews and Report of the Ombudsman," at 7.

26. *New Zealand Herald*, "National Monitoring Study of Student Achievement finds more than half of students still failing Year 8 maths," 19 July 2023.

27. Ministry of Education above n 24 at 12, and Lisa Meehan, Gail Pacheco and Thomas Schober, *Reading and mathematics skills and the life-course outcomes of young people in NZ: Evidence from PISA and linked administrative data*, NZ Work Research Institute, 2022 at 38.

28. Lipson, above n 9, at 82.

29. Michael Johnston, *Save Our Schools: Solutions for New Zealand's Education Crisis*, The New Zealand Initiative 2023 at 21, and Ministry of Education, "The NCEA Literacy and Numeracy corequisite," accessed 11 July 2023, https://assets.education.govt.nz/public/Documents/News/News-2022/Fact-Sheet-NCEA-Literacy-and-Numeracy-corequisite.pdf.

30. Radio New Zealand, "Low pass rates in trial of NCEA literacy and numeracy tests alarm principals," 7 September 2022, accessed July 2023, https://www.rnz.co.nz/news/national/474261/low-pass-rates-in-trial-of-ncea-literacy-and-numeracy-tests-alarm-principals.

31. Wood and Sheehan, above n 3, at 20.

32. Ibid.

33. Lipson, above n 9, at 97, 101.

34. Wood and Sheehan, above n 3, at 17–30.

35. Ibid.

36. Lipson, above n 9, at 53.

37. At 84.

38. Johnston, above n 29, at 39.

39. Ibid.

40. Wood and Sheehan, above n 3, at 17–30.

41. Lipson, above n 9, at 74-75.

42. Ibid.

43. Conor Duffy, "Universities given two years to overhaul teaching degrees after education ministers' meeting," ABC News 7 July 2023, accessed 8 September 2023, https://www.abc.net.au/news/2023-07-07/review-of-university-teacher-degrees-at-ministers-meeting/102564402.

44. Lipson, above n 9, at 104.

45. At 97.

46. At 45.

47. OECD, PISA 2018 Results (Volume II): Where All Students Can Succeed, 2019 at 17.

48. Ministry of Education, above n 22, at 62.

49. Nina Hood and Taylor Hughson, Now I don't know my ABC: The perilous state of literacy in Aotearoa New Zealand, The Education Hub, 2022 at 11.

50. National Monitoring Study of Student Achievement, "Achievement in Mathematics and Statistics at Year 4 and Year 8," accessed July 2023, https://www.educationcounts.govt.nz/__data/assets/pdf_file/0007/221758/A3_NMSSA_2022_Summary_Mathematics_FINAL_MoE.pdf.

51. Interview with the author, 16 February 2021.

52. Bronwyn E. Wood, "Contours of contested curriculum," Teachers and Curriculum, 21(1), 55–58, 2021.

53. Wood and Sheehan, above n 3, at 28.

54. Education Review Office, Manurewa Intermediate, accessed 11 July 2023, https://ero.govt.nz/institution/1353/manurewa-intermediate.

55. Johnston, above n 29, at 33.

56. Education Counts, "School leaver's attainment," accessed 18 September 2023, https://www.educationcounts.govt.nz/statistics/ school-leavers.

57. Johnston, above n 29, at 34.

58. Andrew Saunders, interview with the author, 14 June 2023.

59. Ibid.

60. Lipson, above n 9, at 16, and Radio New Zealand "Fifteen percent of school leavers had no NCEA qualifications last year," 2 August 2023.

61. Interview with the author, 6 July 2023.

62. 1 News, "High schools offering alternative qualifications to NCEA on the rise," 4 June 2023, accessed June 2023, https://www.1news.co.nz/2023/06/04/high-schools-offering-alternative-qualifications-to-ncea-on-the-rise.

63. Radio New Zealand, "Why are so many schools ditching NCEA level 1," accessed 10 July 2023, https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018892645/why-are-so-many-schools-ditching-ncea-level-1.

64. Gianina Schwanecke, "Class Struggles: Growing number of schools dropping NCEA level 1, but one is bringing it back," *The Post*, 26 June 2023.

65. New Zealand Government, "New maths and literacy assessment prioritised as other NCEA changes slowed," 19 April 2023, accessed June 2023, https://www.beehive.govt.nz/release/new-maths-and-literacy-assessment-prioritised-other-ncea-changes-slowed.

66. Ministry of Education, "Curriculum and assessment changes," accessed July 2023, https://www.education.govt.nz/our-work/ changes-in-education/curriculum-and-assessment-changes/#Refresh-TNZC.

67. PISA Data Explorer, accessed June 2023, https://pisadataexplorer.oecd.org/ide/idepisa/dataset.aspx and UK Department for Education, "National curriculum," accessed July 2023, https://www.gov.uk/government/collections/national-curriculum.

68. Ministry of Education, above n 66.

69. The Platform NZ, "NZ Initiative's Michael Johnston on the controversial new science curriculum," accessed August 2023, https://www.youtube.com/watch?v=85xrwA76C-w.

70. Etty, above n 8.

71. Ibid.

72. New Zealand Herald, "School curriculums for technology, arts: New drafts under fire from teachers," 17 July 2023.

73. Stuff, "Teachers shocked at leaked draft of science curriculum—'Where's the science?'" 5 July 2023.

74. Radio New Zealand, "'Where's the science?' Teachers shocked at draft school curriculum," 5 July 2023, accessed 10 July 2023, https://www.newstalkzb.co.nz/news/education/teachers-shocked-at-leaked-draft-of-science-curriculum-where-s-the-science.

75. Ashleigh McCaull, "'I don't know enough'—Science teacher concerned about integrating mātauranga Māori," RNZ, 6 July 2023, accessed July 2023, https://www.rnz.co.nz/news/te-manu-korihi/493288/i-don-t-know-enough-science-teacher-concerned-about-integrating-matauranga-maori.

76. Ibid.

77. Stuff, above n 73.

78. Hood, above n 4, at 12.

79. New Zealand Herald, above n 72.

80. Michelle Johansson, interview with the author, 13 June 2023, and *New Zealand Herald*, "School science curriculum changes: The science is being minimalised—wake up, writes Andrew Rogers," 5 July 2023, accessed 5 July 2023, https://www.nzherald.co.nz/ nz/andrew-rogers-school-science-is-being-minimalised-wake-up/UMCLSNDOQNAQNPMGZE7AEJELXQ.

81. Johansson, above n 80.

82. 1 News, "Just parts of new NCEA Level 1 finalised months before introduction," 2 July 2023, accessed July 2023, https://

www.1news.co.nz/2023/07/02/just-parts-of-new-ncea-level-1-finalised-months-before-introduction.

83. New Zealand Government, "New maths and literacy assessment prioritised as other NCEA changes slowed," 19 April 2023, accessed May 2023, https://www.beehive.govt.nz/release/new-maths-and-literacy-assessment-prioritised-other-ncea-changes-slowed.

84. Labour, "Release: Compulsory financial skills in schools," accessed 19 September 2023, https://www.labour.org.nz/financial_skills_schools, and Labour, "Education," accessed 10 July 2023, https://www.labour.org.nz/education.

85. National, "Teaching the Basics Brilliantly," accessed 10 July 2023, https://www.national.org.nz/teaching_the_basics_brilliantly.86. Ibid.

87. Act, "Education," accessed 24 August 2023, https://www.act.org.nz/education.

88. Greens, "Education Policy," accessed 10 July 2023, https://www.greens.org.nz/education_policy.

89. Māori Party, "Education & Training Policy," accessed 10 July 2023, https://www.maoriparty.org.nz/education_training.

90. Wood, above n 2.

91. Lipson, above n 9, at 101.