B.29[24h]

Ministry of Education: Promoting equitable educational outcomes



Photo acknowledgement: Truestock ⊚ Spid Pye Ministry of Education: Promoting equitable educational outcomes

Presented to the House of Representatives under section 20 of the Public Audit Act 2001.

October 2024

Contents

Auditor-General's overview	3
Our recommendations	7
Part 1 – Why we did this audit The focus of this report	9
What we looked at	10
Part 2 – Collaboration is needed to identify and address inequity	12
Schools are responsible for helping students to reach their potential The Ministry of Education is responsible for providing schools with resources and guidance Other organisations have a role in supporting equitable educational outcomes The Ministry of Education and schools must collaborate to identify and address inequity	12 13 14 14
Part 3 – The Ministry of Education needs better information	15
The Ministry of Education does not have comprehensive information about student achievement or progress in Years 1-10 NCEA results provide the most comprehensive view of achievement from Years 11-13 There are significant gaps in the Ministry of Education's information, especially for Māori-medium education The Ministry of Education needs to work with others to address gaps in its information	16 21 25 28
Part 4 – The Ministry of Education needs to improve how it uses information	30
A more detailed understanding of inequity would help with developing initiatives The Ministry of Education needs a systematic approach to evaluating its initiatives The Ministry of Education needs comprehensive information to better target initiatives	31 41 43
Appendices	
1 – How we carried out our work 2 – Information about student achievement, progress, and proficiency	46 47
Figures	
1 – Programme for International Student Assessment – mean scores for reading (2003-2018) 2 – Programme for International Student Assessment – mean scores for maths (2012-2022) 3 – Percentage of students who achieve University Entrance by school decile (2013-2022) 4 – Proportion of Māori students attaining NCEA Level 3 in different education settings (2011-2020)	22 23 24 25
4 – Proportion of Maon Students attaining NCEA Level 3 in different education settings (2011-2020)	25

Auditor-General's overview

E ngā mana, e ngā reo, e ngā karangarangatanga maha o te motu, tēnā koutou.

A well-educated population has enormous personal, societal, and economic benefits. Because of this, New Zealand invests significant public resources in primary and secondary education. In 2023/24, primary and secondary education received about \$8.5 billion of public funding. Therefore, it is important that this money helps all students to meet their potential.

The role of the Ministry of Education (the Ministry) includes supporting schools to provide quality education to all their students. As part of this support, the Ministry develops strategies, programmes, and initiatives that are intended to lift achievement levels and improve equity in educational outcomes.

Improving equity means that each student's educational outcomes reflect their abilities, rather than reflecting circumstances outside their control.

Although many students reach or exceed achievement expectations, some recent studies have shown declining student achievement in maths, science, and literacy. This trend is also seen in other developed countries.

For example, the Programme for International Student Assessment (PISA) is a significant international study that assesses 15 year olds' proficiency in maths, reading, and science. The 2022 PISA assessment saw, on average, a drop in performance throughout the Organisation for Economic Co-operation and Development (OECD) that can only partially be attributed to the Covid-19 pandemic. Scores in reading and science had already been falling before the pandemic, and negative trends in maths performance were apparent in several countries before 2018.

In international comparisons, New Zealand students continue to perform, on average, similarly to or better than their peers in OECD countries. However, local and international research shows that the gap in student achievement between New Zealand students from higher socioeconomic backgrounds and those from lower socioeconomic backgrounds is greater than the gap in many other countries. Therefore, addressing this gap is key to improving educational outcomes.

To improve equity, the Ministry needs access to high-quality information to be able to identify which student groups have inequitable educational outcomes and what factors affect their achievement and progress. I wanted to understand whether the Ministry uses comprehensive, current, reliable, and relevant information to inform its approach to promoting equitable educational outcomes in Years 1-13.

What we found

There are gaps in the Ministry's information about student achievement and progress

There is no comprehensive and authoritative summary of student achievement and progress in New Zealand.

In addition, the information that the Ministry has is more detailed for some students than for others. For example, National Certificate of Educational Achievement (NCEA) results provide consistent information about students in Years 11-13. However, there are gaps in the Ministry's information about student achievement and progress in Years 1-10.

The Ministry is aware of this. It recognises that has limited information about the:

- achievement or progress of students in Māori-medium education before NCEA;
- achievement or progress of students with disabilities and those with additional learning needs;
- abilities of new entrants (children starting their schooling); and
- effects of student transitions, such as the move from primary to secondary school.

Despite these gaps, the Ministry has used the information that it currently has to form a general understanding of some significant factors that affect student achievement and progress.

For example, the Ministry knows that many students not meeting achievement and progress expectations are from lower socioeconomic backgrounds. Many of those students are Māori or Pacific students, or students with disabilities. Data also shows differences in girls' and boys' achievement in different subjects in both primary and secondary education.

The Ministry has used this knowledge to develop initiatives aimed at supporting more equitable outcomes. These include developing an equity index to allocate additional funding to schools, a programme that provides lunch to some students, and initiatives intended to increase attendance and to reverse declining achievement in maths and literacy.

The Government recently announced that from 2025 schools will be required to carry out standardised testing in reading, writing, and maths for children in Years 3-8 twice a year. This means that the Ministry will be able to draw on more information to understand student achievement and progress.

However, the Ministry's knowledge of factors that affect student achievement and progress is not detailed enough to ensure that all initiatives are well targeted. For example, the Ministry has a limited understanding of why some students from lower socioeconomic backgrounds are able to reach their potential while other students in those circumstances struggle.

All parts of the system need to work together to better understand inequity in education

To support equitable educational outcomes, all parts of the education system need to understand in detail the inequity that exists. They also need to know what factors influence the achievement and progress of students affected by inequity. This is essential for schools to help students who most need support in the right ways and at the right times.

To form a more detailed understanding, the Ministry will need to work closely with schools and others in the education system (such as the Education Review Office and the New Zealand Council for Educational Research) to develop a plan for collecting more in-depth information about where inequity is occurring and what factors affect student achievement and progress.

In my view, the Ministry also needs a more systematic approach to evaluating its initiatives. This would help it to know how to improve them or whether it needs to change priorities. The Ministry does not currently have a planned approach to evaluation, and there is no central oversight of what initiatives are being evaluated, what initiatives are due for evaluation, and what initiatives have never been evaluated.

The Ministry also has opportunities to involve schools and teachers more when developing initiatives and to work with schools to ensure that they understand how initiatives can help them meet their students' needs.

Action is needed

Currently, students that could benefit the most from improved educational outcomes are those least likely to reach their educational potential. This includes students in lower socioeconomic communities, many of whom are Māori and Pacific students. The Ministry needs to improve its information so that it can improve support for schools and better target initiatives to address inequity.

Some factors that affect student achievement are outside the Ministry's direct control. During this audit, my auditors heard that some schools spend a lot of time dealing with the effects of poverty. Some students are dealing with homelessness, overcrowded housing, a lack of clothing, or a lack of food. Some

schools are helping students with serious issues, including mental illness, drug and alcohol issues, family violence, and transience.

A much wider response from the public sector is needed to address these types of challenges.

I have made five recommendations to help improve the information that the Ministry collects and its analysis of that information. Addressing these recommendations will help the Ministry to better support schools to meet the needs of all their students.

The Ministry has indicated that it broadly agrees with this report's findings and recommendations. It told us that work is under way to address some of them. This includes:

- working with others in the education system to assess the effectiveness of curriculum and assessment practices in schools;
- developing an evaluation action plan to help identify whether programmes are well targeted and delivering expected outcomes; and
- working with social sector Ministers to identify opportunities to use education data to reduce the number of students who are not in employment, education, or training.

Work to address our recommendations will also assist the Ministry in meeting the Government's priorities for education, which were announced in April 2024. These include implementing consistent modes of monitoring student achievement and progress, targeting interventions for students with additional needs, and using data and evidence to drive consistent improvement in achievement.

During my audit, the Ministry was involved in several significant change programmes. I thank staff from the Ministry for their support and co-operation during these challenging times.

I also thank staff from schools and other education organisations for sharing their views and perspectives with my audit team.

Nāku noa, nā

John Ryan

Controller and Auditor-General | Tumuaki o te Mana Arotake

2 October 2024

Our recommendations

We recommend that the Ministry of Education:

- 1. work with schools and other education organisations to identify what information it needs to develop a better picture of student achievement and progress and what factors can lead to inequity in educational outcomes;
- 2. work with schools and other education organisations to develop a plan to collect and share the information it identifies in response to Recommendation 1, including who will collect it, how often they will collect it, how it will be used, and who it will be shared with;
- 3. regularly analyse the information available about student achievement and progress alongside research about the factors influencing educational outcomes to develop more detailed knowledge of:
 - the specific student groups who are not meeting achievement or progress expectations;
 - how factors that influence achievement and progress interact and affect those specific student groups; and
 - the factors that the Ministry and schools can directly influence and those that need a broader response;
- 4. implement a more structured approach to evaluating its strategies, programmes, and initiatives that sets out what is evaluated and why, how evaluations are organised and resourced, and how results will be shared within the Ministry and with education organisations and the public; and
- 5. regularly bring together information from evaluations of the Ministry's initiatives with assessments of research on improving achievement and addressing inequity, and use the results to inform refinements to the design, targeting, and prioritisation of initiatives aimed at addressing inequity.

1

Why we did this audit

- 1.1 A well-educated population has enormous personal, societal, and economic benefits. Higher levels of educational achievement correlate strongly with improved overall health, active citizenship, and reduced levels of violence. Better educated people tend to live longer, engage in more civic activities, and feel happier.
- 1.2 Significant public resources go to primary and secondary education. In 2023/24, primary and secondary education received \$8.5 billion of public funding. As at 1 July 2023, the 2538 primary and secondary schools in New Zealand (including state, state-integrated, and private schools) had 831,038 students.
- 1.3 There is no comprehensive and authoritative summary of student achievement and progress in New Zealand. However, studies of educational achievement in different year levels and in selected subjects have highlighted some concerning trends, including a wide variation in student achievement.
- 1.4 For example, in 2023, the New Zealand Council for Educational Research looked at student achievement in maths and statistics for Years 4 and 8 between 2018 and 2022.³ At Year 8, there were statistically significant declines in the average maths scores for girls and for Māori and Pacific students. There was no statistically significant change in average scores for students as a whole during this time.
- 1.5 When compared with students in other countries, New Zealand students, on average, often perform similarly or better than their international counterparts. However, these studies have also highlighted wide variations in student achievement in New Zealand.
- 1.6 In 2018, UNICEF ranked New Zealand 33 of 38 countries for equality in education because of the wide variations in student achievement. UNICEF's study looked at countries that are members of the Organisation for Economic Co-operation and Development (OECD).
- 1.7 An OECD study from 2022 also highlighted wide variations in student achievement in New Zealand (see paragraphs 3.49-3.54).⁵
 - 1 The Treasury (2023), *Briefing to the Incoming Minister of Finance: Economic and fiscal context slide pack*, page 25, at treasury.govt.nz.
 - 2 Organisation for Economic Co-operation and Development (2013), "What are the social benefits of education?", Education indicators in focus, No. 10, at oecd.org.
 - 3 New Zealand Council for Educational Research and University of Otago Educational Assessment Research Unit (2023), National Monitoring Study of Student Achievement Report 30: Mathematics and statistics 2022 Achievement findings.
 - 4 United Nations Children's Fund (2018), Innocenti Report Card 15: An unfair start Inequality in children's education in rich countries, page 8, at unicef.org.
 - 5 OECD Education GPS, "New Zealand: Student performance (PISA 2022)", at gpseducation.oecd.org.

- 1.8 Equity in educational outcomes does not mean that all students achieve the same outcomes variations in achievement are to be expected. Instead, it means that a student's educational outcomes reflect their abilities rather than factors outside their control (such as their socioeconomic circumstances).
- 1.9 The Ministry of Education (the Ministry) acknowledges that there is inequity in student achievement. In its 2023 Briefing to the Incoming Ministers, the Ministry acknowledged that New Zealand's education system does not provide excellent and equitable outcomes for all:

New Zealand has long-standing excellence and equity challenges to deliver education success for Māori, Pacific peoples, deaf people and those with disabilities, and those from low socio-economic backgrounds.

These challenges are apparent in patterns of differential success, declining performance in some international benchmarks, in indices ranging from engagement, through educational progress and achievement to those for wellbeing.⁶

- 1.10 Persistent inequity in achievement and progress mean that some students are not able to achieve to the best of their ability. These students can miss out on the broader benefits that a good education brings.
- 1.11 Addressing inequitable educational outcomes is a critical priority for the Ministry.

 In March 2024, the Minister for Education was reported as saying that inequitable educational outcomes were the biggest challenge facing the education system.

The focus of this report

- 1.12 We wanted to assess how well the Ministry uses information in its work to promote equitable educational outcomes for Year 1-13 students.
- 1.13 To help address inequity, the Ministry needs to have enough information about which specific student groups are not meeting expectations, what factors (individually and collectively) influence achievement and progress, and how those factors affect different students.
- 1.14 The Ministry also needs to use this information to develop strategies, programmes, and activities (which we refer to collectively as initiatives) to lift student achievement levels and address inequity in educational outcomes.
- 1.15 We wanted to provide assurance to the public and Parliament that the Ministry's approach to promoting equitable achievement is well informed. We wanted to identify where the Ministry could improve its information and how it uses it.

1.16 New research is becoming available all the time, and the Ministry continues to analyse this information to gain greater insights into factors that affect student achievement and progress. Our findings are based on the evidence we had when preparing this report.

What we looked at

- 1.17 We looked at whether the Ministry, for Years 1-13:
 - knows what differences in student achievement there are for different student groups;
 - knows what underlying factors contribute to differences in student achievement for each group;
 - uses its knowledge to develop, target, and prioritise initiatives to support students to reach their potential; and
 - evaluates its initiatives to identify their effectiveness.
- 1.18 Multiple factors can affect student outcomes. We looked at how the Ministry responds to factors that contribute to success and inequity in achievement and progress. This includes factors that the Ministry and schools can directly influence and those that they need to work with other public organisations or community groups to address.
- 1.19 The scope of this audit includes students in schools that follow *The New Zealand Curriculum* and *Te Marautanga o Aotearoa*. This means that we did not look at information about students who are home schooled, who attend private schools, or who attend alternative education for students who have disengaged from mainstream schooling.
- 1.20 Appendix 1 sets out how we carried out our audit.

We use a range of different terms in this report:



Student progress means the difference in a student's abilities between two assessment points.



Student achievement means how well a student meets the expected curriculum standard in a subject, such as achieving a curriculum level or passing an NCEA subject or level.



Proficiency studies measure students' abilities but do not assess achievement or progress against the National Curriculum.



The **National Curriculum** sets the direction for student learning and provides guidance for schools. The National Curriculum consists of two documents. They are:

- The New Zealand Curriculum for English-medium education; and
- Te Marautanga o Aotearoa for Māori-medium education.*



When we refer to **schools**, we mean all state schools teaching the National Curriculum.



When we refer to **kura kaupapa Māori**, we mean state schools that operate under a whānau-based Māori philosophy and deliver Te Marautanga o Aotearoa in te reo Māori.**

^{*} In Māori-medium education, students are taught all or some curriculum subjects in te reo Māori at least 51% of the time.

^{**} Kura kaupapa Māori are the kura that follow the Te Aho Matua philosophy and are in Te Runanga Nui o Ngã Kura Kaupapa Māori. Kaupapa Māori education also includes kura affiliating to Ngã Kura a lwi.

2

Collaboration is needed to identify and address inequity

- 2.1 To identify and address inequity between students, the Ministry of Education needs detailed and regular information about student achievement and progress.

 Because New Zealand's education system is complex and highly devolved, getting this information can be a challenge.
- 2.2 New Zealand's education system includes schools, the Ministry, other public organisations, and various organisations that represent and support teachers, principals, and schools (such as unions and professional bodies). These parties have distinct roles and responsibilities, but they often need to collaborate to identify and meet students' needs.
- 2.3 In this Part, we discuss:
 - how schools are responsible for helping students to reach their potential;
 - how the Ministry is responsible for providing schools with resources and guidance;
 - the role of other organisations in supporting equitable educational outcomes; and
 - the importance of schools and the Ministry collaborating to regularly collect information to identify and address educational inequity.

Schools are responsible for helping students to reach their potential

- 2.4 Under the Education and Training Act 2020, each school is an independent Crown entity. Under the Act, schools are responsible for helping "each child and young person attain their educational potential".
- 2.5 Schools work within regulatory and resourcing constraints to decide how to meet their students' learning and well-being needs.
- 2.6 Schools are required to identify variations in their students' achievement and do what they can to address or compensate for causes of lower achievement. This could include:
 - changing teaching practices or how the school is run;
 - implementing initiatives to support students, including initiatives that the Ministry has developed; and
 - working with other public organisations (such as health, justice, and welfare
 organisations) to address any issues that limit an individual student's ability to
 reach their potential.
- 2.7 Each school is responsible for assessing their students' achievement and progress, and for reporting this to parents.

The Ministry of Education is responsible for providing schools with resources and guidance

- 2.8 The Ministry has described its role as shaping "an education system that delivers equitable and excellent outcomes".⁷
- 2.9 The Ministry supports the Minister of Education to act as a good steward of the public interest in the education system. This includes actively keeping the legislation that it administers up to date and providing advice on the longer-term implications of policies.
- 2.10 The Ministry also provides strategic leadership, advice, and services to the education system and other public organisations.
- 2.11 The Ministry works with schools to help them identify and meet the needs of their students. Because schools are independent Crown entities, the Ministry largely fulfils this role through collaboration and influence.
- 2.12 At a national level, the Ministry:
 - provides the National Curriculum, which sets the direction for student learning;
 - supports schools to provide quality education, including by providing guidance on how schools can gather, analyse, interpret, and use information about student achievement and progress and by designing initiatives that schools can use to support learning; and
 - ensures that there are enough resources for teaching, learning, student assessment, and professional leadership.
- 2.13 The Ministry supports schools more directly at a regional level. It has regional teams that include education advisors, curriculum leads, and learning specialists. With support from national staff, these regional teams help schools identify and meet their students' well-being and learning needs.
- 2.14 The Ministry also assists the Minister of Education in preparing and issuing statements about national education and learning priorities. School boards must consider these statements when preparing their strategic plans.
- 2.15 The current *Statement of National Education and Learning Priorities* has an objective to create barrier-free access that would put "great education opportunities and outcomes" within the reach of every student. Priorities under this objective include reducing barriers to education for all, including Māori, Pacific, and disabled students and those with learning support needs.⁸

⁷ Ministry of Education, "The role of the Ministry of Education", at education.govt.nz.

⁸ Ministry of Education (2020), The Statement of National Education and Learning Priorities (NELP) and Tertiary Education Strategy (TES), at education.govt.nz.

Other organisations have a role in supporting equitable educational outcomes

- 2.16 Other organisations have a role in supporting schools and the Ministry to achieve equitable educational outcomes. These include:
 - the **Education Review Office**, which evaluates and reports on how well schools educate and care for students:
 - the New Zealand Qualifications Authority, which manages the New Zealand
 Qualifications Framework and manages and provides quality assurance for
 secondary school assessment through the National Certificate of Educational
 Achievement (NCEA);
 - the **Teaching Council of Aotearoa New Zealand**, which is responsible for registering teachers, setting and maintaining professional standards for teachers, and ensuring that teachers are competent and fit to practice; and
 - the New Zealand Council for Educational Research, which is an independent organisation that carries out and disseminates education research. It receives some revenue from a government grant and the rest from contestable contracts and selling products and services.

The Ministry of Education and schools must collaborate to identify and address inequity

- 2.17 The Ministry has identified that enabling flexible and responsive local decision-making is a key strength of New Zealand's education system. Schools can draw on their knowledge of local contexts when making decisions.
- 2.18 However, the Ministry also recognises that a devolved system can lead to high levels of variability in both teaching practice and student outcomes.
- 2.19 To support more equitable student outcomes, the Ministry needs to provide the right support to schools. As with any public organisation, the Ministry needs quality information to make the policy, strategy, and investment decisions that will provide the right support and deliver value for money.
- 2.20 The devolved nature of the education system means that the Ministry needs to work with schools to get information about student achievement and progress.

 This information is needed to support the Ministry to:
 - identify which students are meeting achievement expectations and which are not;
 - identify the factors that support and the factors that may be barriers to student achievement;
 - guide effective decision-making and investment; and
 - ensure that the education system's collective efforts will lift student achievement and address inequity.

The Ministry of Education needs better information

- 3.1 Having more comprehensive knowledge about inequity in student achievement and progress would allow the Ministry of Education to identify what factors cause inequity and to design initiatives that schools can use to address inequity.

 The Ministry needs the right information to attain this knowledge.
- 3.2 We expected the Ministry to obtain and maintain the information it needs to:
 - have a comprehensive view of student achievement and progress for Years 1-13;
 - identify which students are meeting achievement expectations and which are not; and
 - plan to address any gaps in information that limit its ability to understand student achievement and progress.
- 3.3 In this Part, we discuss how the Ministry:
 - does not have comprehensive information about student achievement or progress, especially for Years 1-10 and for Māori-medium education; and
 - needs to work with others to address the gaps in its information.

Summary of findings

- 3.4 The Ministry gets information about student achievement from several sources, including schools, NCEA results, and international comparative studies. It also collects information through regular studies of the achievement of a sample of primary school students.
- 3.5 These sources provide some useful information about student achievement and proficiency.
- However, during our audit, the Ministry acknowledged that it needs better information about the achievement and progress of Year 1-10 students.
- 3.7 The Ministry told us that it also recognises that there are other gaps in its information, such as:
 - the achievement and progress of students in Māori-medium education in Years 1-10:
 - the achievement and progress of students with disabilities, students with additional learning needs (including neurodiverse students), and LGBTQIA+ students:
 - the abilities of new entrants; and
 - the effect of transitioning from primary to secondary school.

- These gaps limit the Ministry's knowledge about inequity in achievement and progress, including about which students are affected, what factors cause inequity, and how these factors interact for different student groups. This affects the Ministry's ability to design initiatives and interventions that best address inequity.
- 3.9 The Ministry has plans to address some of these information gaps, but we consider that it needs to do more. The Ministry needs to work with schools and other education organisations to identify what information is needed to fully understand student achievement and progress.
- 3.10 Although this work will be challenging and take time, it will be essential to enabling the Ministry to develop initiatives to address inequity using a wider range of evidence than is currently available.

The Ministry of Education does not have comprehensive information about student achievement or progress in Years 1-10

- 3.11 NCEA results provide the Ministry with comprehensive information about student achievement in Years 11-13. We discuss this further in paragraphs 3.55-3.59.
- 3.12 However, the Ministry does not have a framework or approach for receiving upto-date and comprehensive information about student achievement and progress against the National Curriculum for Year 1-10 students.
- 3.13 Instead, the Ministry gets information from:
 - sample studies of student achievement these were a sample of students in Years 4 and 8 before 2023, and a sample of students in Years 3, 6, and 8 from 2023;
 - student assessment tools developed to help teachers customise their teaching practice for individual students; and
 - international comparative studies of student proficiency in literacy, maths, and science.
- 3.14 Appendix 2 summarises the sources of the information that the Ministry has about student achievement, progress, and proficiency in Years 1-13.

The Ministry has 10 years' worth of information about student achievement in Years 4 and 8

3.15 The National Monitoring Study of Student Achievement (the monitoring study) is a formal sample study that produces a snapshot of student achievement against *The New Zealand Curriculum*. Originally, it collected information about student achievement in Years 4 and 8. The study was updated in 2023 and now collects information about Years 3, 6, and 8.

- The monitoring study is a collaboration between the New Zealand Council for Educational Research, the University of Otago Educational Assessment Research Unit, and the Ministry.
- 3.17 The original monitoring study was carried out over 10 years. It focused on different subjects in different years. For example, it reported on achievement in maths and statistics in 2013, 2018, and 2022, in science in 2012 and 2017, and in aspects of the English curriculum (such as reading or writing) in 2012, 2014, 2015, and 2019.
- 3.18 The last round of the original monitoring study (on maths and statistics) involved about 2000 students in each year level studied.
- 3.19 The monitoring study identified trends in achievement for students in Englishmedium education, including trends for particular groups of students. For example, trends are available for broad categories such as gender (boys and girls), ethnicity (European/Pākehā, Māori, Pacific, and Asian), and schools' decile band (which were based on the socioeconomic status of the community).
- The monitoring study highlighted inequity between these student groups for some subjects.
- 3.21 For example, the 2022 results for maths found that achievement was linked to school decile. Students from low to mid-decile schools did not achieve as well as those from higher decile schools. The monitoring study estimated that on average, at Year 8, the difference was equivalent to two and half years of progress.
- There were similar results in the 2019 study of achievement in English, which found that a higher decile band was related to higher achievement in writing, speaking, reading, presenting, listening, and viewing.
- 3.23 The monitoring study also found differences in achievement by students' gender or ethnicity. For example, when it compared the 2022 results for maths and statistics with the 2018 results, it found no statistically significant change in average scores for students as a whole. However, it found statistically significant declines in average scores for Year 8 Māori and Pacific students and for Year 8 girls.
- 3.24 The monitoring study consistently found that differences in achievement by socioeconomic status were larger than differences by gender or ethnicity.

- 3.25 The monitoring study had the following limitations:
 - It focused on students in English-medium education. It did not include students in Māori-medium education.
 - Its design and sample size meant that achievement trends are not available
 for other student identifiers. For example, the monitoring study did not collect
 information about students' neurodiversity, disability status, gender identity, or
 sexuality.
 - The monitoring study was limited in its ability to track student progress because each year's study looked at a different sample group of students. Although the results from each round of the monitoring study allowed student achievement at Years 4 and 8 to be compared over time, they could not show how particular groups of students had progressed between Years 4 and 8.

The monitoring study was updated in 2023 and now collects more information

- 3.26 After being updated in 2023, the monitoring study is now called the Curriculum Insights and Progress Study and assesses student achievement against expectations at Years 3, 6, and 8 instead of at Years 4 and 8.
- 3.27 The updated study will assess each subject in *The New Zealand Curriculum* once every four years. The original study assessed each subject once every five years.
- The updated study will also assess students with additional learning needs. This will allow the Ministry to look at the impact of any extra support these students receive.
- 3.29 The updated study will also assess the annual progress of a cohort of students in literacy and numeracy. The cohort study should provide the Ministry with reliable information about student progress in English-medium education for the first time. It will also provide additional data about student achievement.
- However, the updated study will not provide information about the achievement or progress of students in Māori-medium education. We discuss this further in paragraphs 3.60-3.72.

An online learning and assessment tool provides some insights about student achievement and progress

3.31 The Ministry developed and maintains the Assessment for Teaching and Learning online tool. Teachers can use it to assess student achievement and progress in reading, maths, and writing (in English-medium education) and in pānui, pāngarau, and tuhituhi (the corresponding areas in Māori-medium education).

- The assessments relate to curriculum levels 2-6 for reading and maths and levels 1-6 for writing. These correlate to students in Years 5-10 for reading and maths and in Years 1-10 for writing.
- 3.33 Schools can and do share the information from the Assessment for Teaching and Learning tool with the Ministry. When schools have carried out enough assessments, the Ministry may, with schools' permission, use this information to comment on aspects of student progress.
- 3.34 However, the Ministry told us that the Assessment for Teaching and Learning tool is not suitable for monitoring student progress or generalising about achievement for all students. This is because:
 - the Assessment for Teaching and Learning tool is mainly used in Englishmedium education and is not used in all school year levels consistently;
 - using the Assessment for Teaching and Learning tool is voluntary, which means
 that the information it produces does not come from a randomly selected
 sample of schools and might not be representative; and
 - fewer than half of all schools use the Assessment for Teaching and Learning tool, and some only use it occasionally.
- 3.35 As a result, information from the Assessment for Teaching and Learning tool has been of limited use in helping the Ministry to investigate what factors contribute to educational inequity.
- 3.36 We understand from recent announcements that schools are going to more consistently use the Assessment for Teaching and Learning tool to monitor student achievement from 2025.
- 3.37 Schools will be required to use either the Assessment for Teaching and Learning tool or another form of standardised assessment to test children in Years 3-8 in reading, writing, and maths twice a year.

International studies provide information on student proficiency

- The Ministry also receives information from international comparative studies (see paragraphs 1.5-1.7). These provide regular and valuable insights about students' proficiency in particular subjects.
- The studies do not test students against *The New Zealand Curriculum*. However, they do allow the proficiency of New Zealand students in specific subjects to be compared with students in other countries.
- These studies all focus on students enrolled in English-medium education and are carried out in English.

Trends in International Mathematics and Science Study

- 3.41 New Zealand has been involved in the Trends in International Mathematics and Science Study since 1994. This takes place every four years and looks at student proficiency in maths and science at Year 5 and Year 9.
- 3.42 The study uses questionnaires completed by students, their parents or caregivers, teachers, and school principals to find out about aspects of students' contexts for learning (such as students' attitudes to learning and their socioeconomic circumstances).
- The most recently published results (from 2019) show relative stability since 1994 in maths and science scores at Year 5 and a gradual decline in scores at Year 9.
- 3.44 The 2019 results also highlighted that socioeconomic status is a significant factor in achievement. For example, average results at Years 5 and 9 for students with greater access to learning resources at home (a measure of socioeconomic status) were significantly higher than for students with fewer resources.

Progress in International Reading Literacy Study

- 3.45 New Zealand is part of the Progress in International Reading Literacy Study, which began in 2001. This study takes place every five years and looks at reading literacy proficiency at Year 5.
- The 2021 results overall showed no significant changes in the average (mean) results, the distribution of scores, or the proportions of Year 5 students reaching each of the study's reading benchmarks compared to the 2016 study.
- 3.47 These studies have found that, on average, students with higher socioeconomic status score much higher than those with lower socioeconomic status. The 2021 results noted that this gap in average scores was higher than the gap found in many other countries.
- The average score for Māori and Pacific boys was lower than for Māori and Pacific girls. This occurred even though the gap in average achievement between all girls and boys was narrowing. The average difference between Pacific girls' and boys' achievement scores was the largest of any ethnic group.

Programme for International Student Assessment

The Programme for International Student Assessment (PISA) is a significant international study that the OECD carries out every three years. It assesses 15 year olds' proficiency in maths, reading, and science. New Zealand has participated in PISA since 2000.

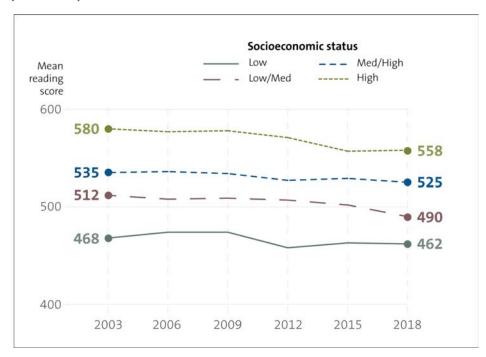
- Each assessment round tests one subject in detail. The main subject was maths in 2003, 2012, and 2022. Reading was the main subject in 2000, 2009, and 2018, and science was the main subject in 2006 and 2015.
- 3.51 Between 2003 and 2022, average scores in all subjects declined. This is true for New Zealand and many similar countries. 11 Throughout this period, New Zealand students have continued, on average, to perform similarly to or better than their international counterparts.
- The 2022 PISA results for maths show that the proficiency of low achievers declined by more than that of high achievers. The gap between the highest-scoring students (the 10% with the highest scores) and the lowest-scoring students (the 10% with the lowest scores) widened.
- 3.53 The same report found that, for reading and science, there was no significant change in the average results or the gap between high and low achievers.
- 3.54 As Figures 1 and 2 show, the results also revealed that students with higher socioeconomic status (the top 25%) significantly outperformed those with lower socioeconomic status (the bottom 25%). This gap was more significant than those for gender or ethnicity.

NCEA results provide the most comprehensive view of achievement from Years 11-13

- The Ministry's most comprehensive information about student achievement comes from NCEA results for Year 11-13 students. This information covers participating students and schools in all the subjects offered.
- 3.56 Since 2020, the number of students achieving all three levels of NCEA has declined slightly. The New Zealand Qualifications Authority reported that there is a "significant underlying equity gap" and that Māori and Pacific students attain NCEA Levels 1 to 3 at lower levels than European and Asian students.¹²

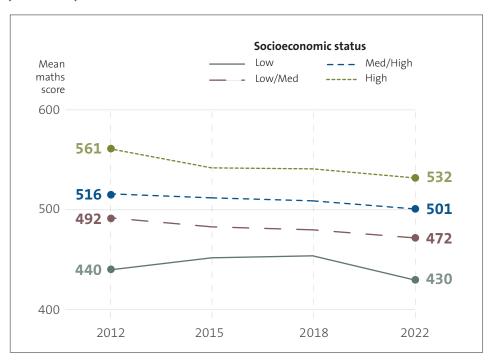
¹¹ For example, the 2022 PISA assessment saw, on average, a drop in performance throughout the OECD that can only partially be attributed to the Covid-19 pandemic. Scores in reading and science had already been falling before the pandemic, and negative trends in maths performance were apparent in several countries before 2018. See Organisation for Economic Co-operation and Development (2023), PISA 2022 results: The state of learning and equity in education, Volume 1, at oecd.org.

Figure 1
Programme for International Student Assessment – mean scores for reading (2003-2018)



Note: PISA scores are scaled to fit approximately normal distributions, with means of about 500 score points. Source: Education Counts (educationcounts.govt.nz).

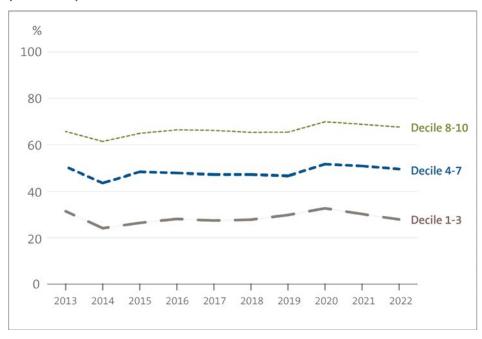
Figure 2
Programme for International Student Assessment – mean scores for maths (2012-2022)



Note: PISA scores are scaled to fit approximately normal distributions, with a mean of about 500 score points. Source: Education Counts (educationcounts.govt.nz).

3.57 Significant differences can also be seen when comparing how many students are awarded University Entrance (the minimum requirement needed for a student to go from school to a New Zealand university). Students at low decile schools achieve University Entrance at less than half the rate of those at high decile schools (see Figure 3).

Figure 3
Percentage of students who achieve University Entrance by school decile (2013-2022)



 $Source: Education \ Counts \ (education counts.govt.nz).$

- These equity issues are not consistent throughout the education system. For example, students in Māori-medium education attain NCEA Level 3 at rates significantly higher than Māori students in English-medium education.
- 3.59 A 2022 Ministry report looked at the qualifications attained by school leavers in 2020. It said that 64% of Māori students in Māori-medium education left school with NCEA Level 3 or above, compared to 59% for all school leavers (see Figure 4).

70 60 50 Proportion of school leavers 40 with NCEA Level 3 or 30 above 20 10 2012 2013 2014 2015 2016 2017 2018 2019 2020 Māori students in Māori-medium education All leavers Māori students in English-medium education

Figure 4
Proportion of Māori students attaining NCEA Level 3 in different education settings (2011-2020)

Source: Ministry of Education (2022), Ngā Haeata o Aotearoa 2020, at educationcounts.govt.nz.

There are significant gaps in the Ministry of Education's information, especially for Māori-medium education

- 3.60 Although NCEA results provide achievement information for Māori-medium Year 11-13 students, the Ministry has limited information about achievement and progress for students in Māori-medium education in Years 1-10.
- 3.61 As at 1 July 2023, 25,824 students were in Māori-medium education. The only information that the Ministry gets about these students is for Years 1-10 for literacy in English and te reo Māori, mainly through the Assessment for Teaching and Learning tool (see paragraphs 3.31-37) and the Progress in International Reading Literacy Study (see paragraphs 3.45-3.48).
- 3.62 In our view, this is a critical gap. The Ministry has a role in helping whānau, teachers, and schools to identify and meet the needs of students in Māorimedium education.

- 3.63 To do this, the Ministry needs to know whether there are differences in the achievement and progress of students in Māori-medium education compared to other students before they start NCEA. Understanding any differences could help the Ministry better identify factors that support achievement and progress for Māori students and factors that become barriers.
- 3.64 The Ministry also needs more information about children's abilities when they start school, which would provide a clearer picture of the progress students make during their first years at school. As we discuss in paragraph 3.86, the widely varying abilities of new entrants is a challenge for many schools.
- The Ministry could also strengthen its efforts to address educational inequity if it had information about:
 - how students are affected by transitions during their education, such as the move from primary school to secondary school; and
 - the achievement and progress of particular groups of students, such as students with disabilities, students with additional learning needs (including neurodiverse students), and LGBTQIA+ students.
- During our audit, the Ministry acknowledged that there are significant gaps in information about student achievement and progress, including those identified above.
- 3.67 It has also acknowledged these gaps in its publications. For example, the Ministry's 2022 report Ngā Ara o te Mātauranga the pathways of education stated that it has "relatively good information on [students'] participation and attendance" and "overall achievement at secondary school".
- 3.68 However, the report said that the Ministry has less information "on progress and achievement throughout schooling and the extent to which teaching is responsive and inclusive". The report also said that there is "very limited information on the success of [students] in Māori medium and kaupapa Māori settings" and "extremely limited information on the participation and success of disabled [students]".
- These gaps limit the Ministry's ability to gain a clear and detailed picture of when inequity in achievement and progress occurs, which students are affected, what factors are causing inequity, and how different factors might interact.
- 3.70 In turn, this limits the Ministry's ability to design initiatives and interventions that best address inequity in student achievement. We discuss the Ministry's approach to designing initiatives and interventions in Part 4.

There are opportunities for the Ministry to address gaps in its information

- 3.71 We understand that there have been discussions about setting up a study for Māori-medium education that corresponds with the Curriculum Insights and Progress Study (see paragraphs 3.26-3.30). However, when we wrote this report, no decisions had been made about this.
- 3.72 In our view, the Ministry needs to continue working with Māori-medium schools and kura kaupapa Māori on introducing such a study. This could help the Ministry better understand the achievement and progress of Year 1-10 students and what more the Ministry, kura, and schools can do to support Māori students to reach their potential and to better identify and address the challenges these students might have.
- 3.73 During our audit, the Ministry was developing assessment practices, tools, and guidance to support schools to use:
 - the Common Practice Model for reading, communications, and maths for English-medium education; and
 - the corresponding Ako Framework for te reo matatini and pāngarau for Māorimedium education.
- 3.74 The Common Practice Model and the Ako Framework identify the progress that students are expected to make at particular points throughout the National Curriculum. When the Ministry develops the related assessment tools, they should help teachers understand whether students are meeting achievement expectations.
- 3.75 Assessment tools are a way for teachers to identify any challenges that affect student learning. This means that they can customise their teaching practices to help students to progress.
- In our view, these developments could help the Ministry fill gaps in its information about student achievement and progress. We understand that schools can choose whether to use these assessment tools.
- 3.77 If enough schools use the assessment tools and agree to share the resulting information, it could provide the Ministry with a source of consistent and up-to-date information about the achievement and progress of Year 1-10 students in reading, communications, and maths.
- 3.78 Analysing this aggregated information would help the Ministry better understand variations in achievement for many more students (compared to the information provided by the Assessment for Teaching and Learning tool).

3.79 Aggregated assessments would also provide the Ministry with real-time feedback on the effectiveness of the refreshed National Curriculum and what improvements might be needed. They would also provide a feedback loop to schools, and provide context for the results of the Curriculum Insights and Progress Study.

The Ministry of Education needs to work with others to address gaps in its information

The Ministry needs more effective working relationships with schools and the wider education system

- 3.80 The Ministry will need to work closely with schools to improve its information about student achievement and progress. It will also need to work with other organisations, such as the Education Review Office and the New Zealand Council for Educational Research.
- 3.81 All those involved will need to have confidence that:
 - the relevant parties will collect information consistently and reliably;
 - the information will be used appropriately at all levels of the education system, from the classroom to the Ministry; and
 - parties supplying information will get feedback on how that information is used and the results of any analysis.
- 3.82 Schools can face multiple challenges that affect their ability to support students. Working with the Ministry to improve its access to information about achievement and progress might not be a top priority for some schools.
- A 2023 report from the New Zealand Council for Educational Research stated that many schools are prioritising students' basic needs making sure that children were fed, clothed, warm, and healthy so that they are able to learn.¹³
- 3.84 Some schools are funding breakfast and lunch for students and providing school uniforms, jackets, shoes, and socks. One school said in the report that many of its new entrants had not had hearing checks or immunisations, and they work with parents and health services to arrange for these to take place at school.
- 3.85 Schools told us that teachers and principals can spend a lot of their time dealing with the effects of poverty. This includes schools helping students to cope with:
 - homelessness, overcrowded housing, a lack of clothing, or a lack of food;
 - mental illness, drug and alcohol issues, family violence, and transience; and
 - accessing digital learning resources that their families cannot afford.

¹³ New Zealand Council for Educational Research (2023), Assessing how schools are responding to the Equity Index, at nzcer.org.nz.

- 3.86 Schools told us that students are starting school with a range of abilities. Some students have under-developed language skills, and others are not toilet trained or have few social skills. Some students have limited English language skills when they start school.
- 3.87 We also heard that schools are often reluctant to share information about their students' achievement and progress with the Ministry.
- 3.88 Some schools are concerned about how the information will be used and whether there would be appropriate recognition of the different contexts that each school operates in and the range of challenges that their students face. We understand that schools perceive risks in directly comparing student achievement and progress or school performance.
- 3.89 The Ministry and schools also face practical challenges when sharing information with each other. People mentioned this during our interviews with Ministry staff, schools, and other education organisations. Schools do not always have the ability and capacity to provide reporting to support efficient analysis by Ministry staff.
- 3.90 The Ministry will need to consider these issues as it improves how it works with schools to identify, collect, and share relevant and timely information about student achievement and progress. This could include discussions on what a broader view of educational achievement could mean in practice.
- 3.91 Although this work will be challenging and will take time, we consider that it is essential for developing initiatives that are supported by reliable evidence.

Recommendation 1

We recommend that the Ministry of Education work with schools and other education organisations to identify what information it needs to develop a better picture of student achievement and progress and what factors can lead to inequity in educational outcomes.

Recommendation 2

We recommend that the Ministry of Education work with schools and other education organisations to develop a plan to collect and share the information it identifies in response to Recommendation 1, including who will collect it, how often they will collect it, how it will be used, and who it will be shared with.

The Ministry of Education needs to improve how it uses information

- 4.1 For the Ministry of Education to effectively respond to inequity in student achievement and progress, it is not enough that it has more information. It also needs to use information well to understand how different factors affect different students
- 4.2 The Ministry's knowledge needs to be detailed enough for it to be able to target its initiatives to meet the specific needs of student groups in different subjects.
- 4.3 We expected the Ministry to:
 - understand what factors act as enablers or barriers to achievement and progress, and which enabling factors are the most effective;
 - understand which causes of inequity the education system can directly influence and which it cannot;
 - have developed, targeted, prioritised, and implemented initiatives based on sound information and analysis;
 - share its information with others:
 - evaluate its initiatives to ensure that they are effective; and
 - bring together all its information to determine what work it should do to address inequity.
- 4.4 In this Part, we discuss how the Ministry:
 - needs a more detailed understanding of inequity;
 - · needs a more systematic approach to evaluating its initiatives; and
 - needs to better use existing information to target and improve its initiatives.

Summary of findings

- 4.5 In our view, the Ministry does not have a sufficiently detailed understanding of how different factors influence the educational outcomes of specific student groups.
- 4.6 Because of this, it has limited ability to design, implement, and prioritise initiatives and interventions to support more equitable outcomes. Initiatives are not always targeted to address the particular needs of specific student groups.
- 4.7 The Ministry could also do more with the information that it has to better identify:
 - what factors are having the most significant effects on student achievement and progress at different year levels:
 - · how these factors interact; and
 - how these factors affect different student groups.

- 4.8 The Ministry also needs to support schools to understand its initiatives and how to use them to help address inequity in student achievement and progress.
- 4.9 The Ministry's approach to addressing inequity could be stronger if it adopted a planned and systematic approach to evaluating its initiatives. Currently, it is difficult to understand how well initiatives are helping to address inequity in educational outcomes and whether they provide value for money.
- 4.10 The Ministry could also get more value from existing information, research, and evaluations about inequity. Having a process for bringing all this information together would help the Ministry to better identify what works for students, what is not working, and what needs to change to support more equitable educational outcomes.

A more detailed understanding of inequity would help with developing initiatives

- 4.11 As discussed in Part 3, the Ministry knows at a broad level that socioeconomic factors can significantly affect student achievement and progress. It also knows that the degree of inequity can vary widely when students are categorised according to broad variables such as ethnicity and gender, and that these variances differ between subjects and school year levels. (See, for example, paragraphs 3.21-3.24, 3.47-3.48, and 3.54.)
- 4.12 We expected the Ministry to build on this information to develop a more nuanced understanding of inequity. This includes being clear about:
 - the specific groups of students who are not meeting achievement or progress expectations;
 - · how multiple factors can interact and affect those student groups; and
 - which factors (or combination of factors) the Ministry and schools can and cannot address.
- 4.13 This would support the Ministry's efforts to develop initiatives to help schools support students to reach their potential.

The Education System Monitoring Framework is based on the Ministry's current understanding of factors influencing student achievement and progress

4.14 The Ministry's current knowledge about some important factors that influence student achievement and progress informed the development of the Education System Monitoring Framework (the monitoring framework).

- 4.15 The Ministry introduced the monitoring framework in 2021 to report on the experiences of, and outcomes for, students and whānau throughout the education system. The monitoring framework can also be used to monitor progress against the *Statement of National Education and Learning Priorities* (see paragraph 2.15).
- 4.16 The monitoring framework sets out priorities from the *Statement of National Education and Learning Priorities*, the "topics" that are monitored against those priorities, and the indicators within each topic that are used to measure progress for each priority. The Ministry reports performance against the monitoring framework's indicators annually in the Ngā Ara o te Mātauranga the pathways of education report series.
- 4.17 The Ministry used the monitoring study, international comparative studies, and local and international research to identify factors that influence student achievement and progress.
- 4.18 The monitoring framework reports on topics such as student attendance, students' feeling of safety in school, their sense of belonging, and their educational aspirations. The framework also tracks student achievement and progress against the National Curriculum.
- 4.19 However, the Ministry acknowledges that limitations in the underlying data limit the amount of detail it can report:
 - The indicators for "Achievement against the curriculum" use NCEA
 achievement for Year 12 and 13 students. For younger students, the Ministry
 uses results from the monitoring study (replaced by the Curriculum Insights
 and Progress Study in 2023) because a larger set of achievement data is not
 available.
 - PISA results for 15 year olds are used as indicators for "Literacy, language and numeracy skills progress" and also for students' feeling of safety, their sense of belonging, and their educational aspirations.
- 4.20 NCEA and PISA results can provide insights for only Year 11-13 students. In our view, to develop initiatives that effectively address inequity the Ministry also needs insights about what factors affect the achievement and progress of younger students.

The Ministry has used available information to prioritise its work programme

4.21 The Ministry has clear priorities for its work programme, including a focus on equity. It clearly set out its priorities in *The Statement on National Education and Learning Priorities* and, at the time of our audit, the *Education Work Programme 2021*.

- 4.22 The priorities in the *The Statement on National Education and Learning Priorities* and the *Education Work Programme 2021* were informed by:
 - more than 43,000 public submissions from the Ministry's K\u00f6rero M\u00e4tauranga |
 Education Conversation series;
 - targeted engagements and dedicated consultation on various draft strategies; and
 - lessons from the response to the Covid-19 pandemic, including feedback from schools and students about their experiences.
- 4.23 The Statement on National Education and Learning Priorities and the Education Work Programme 2021 recognise that inequity must be addressed. A theme from engagement when developing both documents was that although well-being, equity, and inclusion were important for students and their families, the education system was not currently providing this for all students.
- 4.24 This led the Ministry to say in 2020 that "now, more than ever, it is important that the education system sharpens its focus on equity".¹⁴
- 4.25 This focus was summarised in a paper that sought Cabinet's agreement to the *Education Work Programme 2021*:

New Zealand's education system performs well for many children and [students], but there are also many who are not served well by our current system, particularly Māori and Pacific [students], those with disabilities and/or learning support needs, and those from disadvantaged backgrounds. We must do more to address systemic issues, such as falling levels of academic achievement in maths and science, poor and declining rates of attendance, and relatively high levels of exposure to bullying.¹⁵

- 4.26 The *Education Work Programme 2021* prioritised initiatives aimed at tackling barriers to educational success. These initiatives were:
 - expanding Ka Ora, Ka Ako Healthy School Lunches Programme (Ka Ora, Ka Ako);
 - implementing the Equity Index for schools and early learning services;
 - improving digital access to help address the digital divide in schools;
 - · providing free period products in schools; and
 - continuing to implement the Learning Support Action Plan 2019-25.

¹⁴ Cabinet paper (2020), Shaping a Stronger Education System with New Zealanders: Finalising the NELP and TES, page 2, at education.govt.nz.

The Ministry of Education has designed initiatives that respond to some factors that can prevent students reaching their potential

4.27 As part of our audit, we looked at some of the Ministry's initiatives to address educational inequity. We found that the Ministry used its understanding of inequity to respond to some broad factors that it knows affect educational outcomes, such as socioeconomic status.

The Equity Index

- 4.28 Equity-based funding has been a feature of the education system for several decades. It is a response to the recognition that socioeconomic factors can be barriers to student achievement and progress. Until recently, the Ministry used the decile system to deliver funding to schools according to the socioeconomic status of their students.
- 4.29 The Equity Index was implemented in 2023 and replaces the decile system. It is a statistical model that estimates whether students face socioeconomic barriers to achievement at school and the extent of those barriers. Every primary and secondary school is assigned a score that determines how much additional funding they receive each year on top of their core funding.
- 4.30 Equity funding is provided on a per-student basis. For 2023, the equity funding range was \$0 (for schools whose students have the lowest socioeconomic barriers) to \$1029.03 per student (for schools with the highest socioeconomic barriers). This extra funding is on average about 3% of all schools' annual funding.
- 4.31 To produce the scores, the model measures relationships between educational achievement and socioeconomic variables.
- 4.32 The Ministry reviewed international research to identify variables that affect educational achievement that it could test in New Zealand. It then analysed data from the Integrated Data Infrastructure to narrow these down to 37 different significant variables that correlated with educational achievement.¹⁶
- 4.33 The Ministry divided the 37 variables into four types of measure. These are:
 - parental socioeconomic indicators, including details of parental income, parents' age at a child's birth, and parental contact with the justice system (such as community or custodial sentences);
 - child socioeconomic indicators, including contact with care and protection services or the youth justice system;
 - national background, including ethnicity, country of birth, migrant category, and age at first arrival in New Zealand; and
 - transience, including how often a student has changed homes and schools.

¹⁶ The Integrated Data Infrastructure is a large research database that Statistics New Zealand developed and manages.

- 4.34 The model looks at the relationships between these variables and educational achievement from a sample population and applies that understanding to the current student population in primary and secondary education.
- 4.35 The model generates a value for each school that reflects the average of information about the school's population. That value determines each school's share of Equity Index funding. Because Statistics New Zealand regularly updates the Integrated Data Infrastructure database, the Ministry can update schools' scores every year.
- 4.36 The Ministry used available information and research to develop the Equity Index. In doing this, the Ministry has gained a deeper understanding of which socioeconomic factors are closely correlated with student achievement and progress, and the relative importance of those factors.

The Attendance and Engagement Strategy

- 4.37 The Ministry released the Attendance and Engagement Strategy in 2022 in response to a decline in regular attendance and engagement in schools. It developed the strategy using attendance data from schools and research about the relationship between student attendance and engagement and achievement.
- 4.38 The strategy was also informed by the Ministry's Kōrero Mātauranga | Education Conversation series and by community knowledge provided to the Education and Workforce Committee Inquiry into school attendance.¹⁷
- 4.39 The strategy states that:
 - Some factors lie within the education system such as school culture and inclusiveness, having locally responsive curriculum, supporting well-being and mental health, and having strong relationships with [students], whānau, iwi, hapū, and community.¹⁸
- 4.40 External influences include broader societal issues such as housing affordability and security, family violence, and poverty. These issues go beyond the education system and need a collective effort at a local level to connect whānau and students with the supports they need to address out-of-school factors.
- In April 2024, the Associate Minister for Education announced an attendance action plan and further proposals to improve attendance. A media release indicated that the Minister would put further proposals to Cabinet, including "using improved data and analysis to distinguish the drivers of non-attendance and targeting interventions".¹⁹

¹⁷ Education and Workforce Committee (March 2022), *Inquiry into school attendance*, at selectcommittees.parliament.nz.

¹⁸ Ministry of Education (2022), Attendance and Engagement Strategy, page 6, at education.govt.nz.

¹⁹ Media release (2024), "Attendance action plan to lift student attendance rates", at beehive.govt.nz.

Ka Ora, Ka Ako, the Loss of Learning initiative, and the *Literacy & Communication* and *Maths Strategy*

- 4.42 We looked at some initiatives that the Ministry described as having a focus on addressing inequity. We were interested in how the Ministry used information to develop these initiatives, which included:
 - Ka Ora, Ka Ako, which is intended to reduce food insecurity by providing students with a nutritious lunch to support their development and learning;
 - the Loss of Learning initiative, which was intended to address the effects of school closures and staff and student illness caused by the Covid-19 pandemic; and
 - the Literacy & Communication and Maths Strategy, which is intended to create a cohesive teaching and learning pathway from early learning to the end of secondary schooling.
- 4.43 Ka Ora, Ka Ako is a response to food insecurity affecting the "25 per cent of children and young people nationwide in the schools with the highest concentrations of disadvantage". The programme provides free school lunches to about 25% of all Year 1-13 students.
- 4.44 In May 2024, the programme was active in 1013 schools and provided lunch to more than 236,000 students. The Ministry is responsible for implementing and running the programme.
- 4.45 Development of this programme began in 2018 with work that the Department of the Prime Minister and Cabinet did to understand the impact of food insecurity on education. In June 2019, Cabinet agreed to a proposal from the Minister for Education, the Minister for Child Poverty Reduction, and the Minister for Children to fund a prototype programme to supply free and healthy school lunches.
- 4.46 In May 2020, Cabinet agreed to extend the programme to include 25% of school children in lower socioeconomic areas. The Ministry used the Equity Index to identify the relevant schools.
- 4.47 The Ministry spent two years investigating the issues that students face in learning literacy and communication and maths, and identified opportunities for improvement.²¹
- 4.48 The Ministry made good use of this information to develop the *Literacy* & *Communication and Maths Strategy*, which aims to reverse declining student achievement levels.

²⁰ See "Cabinet paper: Continuing the Ka Ora, Ka Ako | Healthy school lunches programme" (dated 22 March 2021) at education.govt.nz.

²¹ Ministry of Education (2022), Insights that informed the Literacy & Communication and Maths Strategy, at education.govt.nz.

- 4.49 It also prepared a corresponding strategy, *Hei Raukura Mō te Mokopuna*, for te reo matatini and pāngarau.
- 4.50 We heard positive comments about how the Ministry worked with schools to develop the Loss of Learning initiative. This initiative was a response to learning being disrupted by the Covid-19 pandemic. These disruptions included school closures, staff and student illness, and lockdown periods. The initiative focused on students in Years 7-13.
- 4.51 The Ministry was asked to advise on how to best manage the effects of disrupted education on students. To understand how disruptions affected student achievement and progress, the Ministry used data from the Assessment for Teaching and Learning tool and NCEA results. It also sought information from the Education Review Office about its observations.
- 4.52 The Ministry recognised that existing information about disrupted learning from New Zealand was limited. In response, it looked at what other countries were doing and worked with schools to produce advice to Ministers about:
 - the effect of the pandemic on students' education; and
 - how the initiative could help reduce the effects of a disrupted education.

The Ministry needs a more nuanced understanding of inequity

- 4.53 The initiatives we looked at were high-level responses to some broad factors that can influence educational outcomes. They mostly aim to compensate for the effects of socioeconomic factors that exist outside of schools.
- 4.54 Although these are important factors that need to be addressed, we saw less evidence that the Ministry can respond to the particular needs of specific student groups.
- 4.55 In our view, this is because the Ministry does not have enough information to develop a nuanced understanding of what factors contribute to inequity and which students are most affected. This limits the Ministry's ability to help schools support these students to reach their full potential.
- 4.56 The Ministry knows that there are wide variations in student achievement between some broadly defined student groups. For example, there are long-standing disparities between girls and boys in different subjects, for students in lower socioeconomic areas, and for Māori and Pacific students.

- 4.57 However, it is also clear that some students that belong to these broadly defined student groups are reaching their potential:
 - There are girls who are high achievers in maths and boys who are high achievers in reading.
 - The 2022 PISA results for New Zealand found that 9% of students with the lowest socioeconomic backgrounds achieved excellent results in maths.
 - In 2020, 64% of Māori students in Māori-medium education left school with NCEA Level 3 or above, compared to 59% for all school leavers (see Figure 4).
- 4.58 We saw less evidence that the Ministry is able to explain what factors (or combination of factors) enable some students to reach their potential while others in similar situations struggle. This includes both in-school and out-of-school factors.
- 4.59 This problem is partly to do with the limitations in the information available (see Part 3). However, it might also reflect disagreement within the Ministry and between the Ministry and schools about what factors affecting student achievement and progress are the most important.
- 4.60 In our interviews, there were no consistent views about what the important causes of inequity are, how they interact, and how they affect different student groups. There was uncertainty about whether the Ministry's initiatives address the most important causes of inequity. The Ministry described this lack of consensus as a "competition of ideas" about how best to respond to educational inequity.
- 4.61 In our view, the Ministry has an important role in helping the education system to reach consensus about what the most important factors that affect students are.

 This includes in-school and out-of-school factors.
- 4.62 Without a common understanding, there cannot be clarity about what the Ministry, schools, and other public organisations could be doing to support more equitable educational outcomes for students. Developing a better picture of how different factors interact and affect educational outcomes would help to support system-wide action to address inequity.
- 4.63 The Ministry could also do more to systematically analyse the information that it currently has about educational outcomes.
- 4.64 The Ministry needs to bring together results from studies on student achievement and progress and analyse them alongside research about what factors can influence student achievement and progress.

- 4.65 The Ministry could use the results of this analysis to better design and target its responses. It could also use those results to better influence other public organisations to address factors that are outside the control of the Ministry or schools.
- 4.66 At a regional level, the Ministry could better support schools to identify variations in their students' educational outcomes and what factors have a particular influence on those outcomes. Schools can then identify:
 - factors that the Ministry and schools can influence and factors that require collaboration with other public organisations to address;
 - what schools in a region could do collectively to reduce any variation in educational achievement; and
 - whether a national-level response is needed.
- 4.67 This would also help the Ministry and other public organisations, where relevant, to ensure that a full range of strategies, programmes, and initiatives consistently addresses the most important factors affecting educational equity.
- 4.68 It also means that other parties (such as other education organisations, schools, parents, whānau, and parties representing student groups with inequitable achievement levels) can comment on the Ministry's view of the key factors, including whether the Ministry's view includes matters that are important to them.
- 4.69 In turn, this can point the Ministry to potential solutions and areas that it needs to investigate further.

Recommendation 3

We recommend that the Ministry of Education regularly analyse the information available about student achievement and progress alongside research about the factors influencing educational outcomes to develop more detailed knowledge of:

- the specific student groups who are not meeting achievement or progress expectations;
- how factors that influence achievement and progress interact and affect those specific student groups; and
- the factors that the Ministry and schools can directly influence and those that need a broader response.

The Ministry needs to better explain how its initiatives promote equity

- 4.70 In Part 2, we discussed the need for the Ministry and schools to collaborate to improve the information the Ministry has about student achievement and progress. The relationships between the Ministry and schools are also fundamental to the success of initiatives to promote equitable educational outcomes.
- 4.71 Principals are responsible for leading the teaching and learning process in schools. This includes bringing together information about good teaching practices and other resources to improve the quality of education in their school. This responsibility includes improving equity.
- 4.72 A principal's ability to do this relies, in part, on clearly understanding the intent of the Ministry's initiatives and how they relate to their students. Principals need to know what tools are available, how they are intended to support student achievement or progress, and how they should be used.
- 4.73 In our interviews, principals told us that it was not always clear why the Ministry had developed or prioritised an initiative, what its aims were, or how their students might benefit from it.
- 4.74 Part of the issue was the amount of information that the Ministry gave principals.

 The Ministry sends regular bulletins to school principals, which include:
 - access to research and other evaluative information;
 - guidance or summaries that distil key findings from studies and evaluations;
 - information about the Ministry's reviews of different aspects of the education system;
 - information about new and existing initiatives; and
 - requests for submissions on draft documents or for staff time to help develop initiatives by participating in working groups.
- 4.75 Principals told us that the amount of information that the Ministry sends them, combined with a busy workload, limited their ability to consider and apply the information.

- 4.76 During our audit, the Ministry was considering how to provide principals with more support to consider and apply the information it sends out. It was aware that it could do more to help schools. This includes support to help principals:
 - understand why it has introduced an initiative;
 - identify whether new initiatives are relevant to them (for example, schools with high attendance and engagement may get greater benefits from focusing on other initiatives than the Attendance and Engagement Strategy); and
 - implement initiatives effectively.
- 4.77 We consider that implementing Recommendations 1 and 2 would help the Ministry improve principals' ability to apply initiatives to their schools.
- 4.78 The relationships needed to effectively share information about student achievement and progress would also help the Ministry to better communicate the purpose and importance of its initiatives.
- 4.79 This would help schools to address the factors of inequity that are within the education system's ability to influence.
- 4.80 In addition, the Ministry could use these relationships to collect real-time feedback on how well schools are implementing its initiatives, how different initiatives are working as a package, and whether they are supporting students as intended.
- 4.81 This would provide the Ministry with valuable insights and information that it could use to refine how initiatives work, how they are implemented, and how they are prioritised.

The Ministry of Education needs a systematic approach to evaluating its initiatives

- 4.82 Evaluating the Ministry's initiatives is important to understanding whether they are helping to lift achievement and address inequity. Evaluations could highlight opportunities to improve or expand an initiative, or conclude that an initiative should be stopped because it is not effective.
- 4.83 We expected the Ministry to have a systematic approach to evaluating initiatives. We looked at the Ministry's:
 - evaluation plans for Ka Ora, Ka Ako, the Loss of Learning initiative, and the *Literacy & Communication and Maths Strategy*; and
 - overall approach to evaluating initiatives.

The Ministry will evaluate the three initiatives we looked at

- 4.84 The Ministry intends to evaluate all three initiatives we looked at. During our audit, it had already completed evaluations for Ka Ora, Ka Ako.
- 4.85 The Ministry used early evaluations of Ka Ora, Ka Ako to improve the initiative and to assess its effectiveness for Māori students. There were evaluations of:
 - the early impact of the pilot programme;
 - the nutritional value of the lunches; and
 - how Ka Ora, Ka Ako contributes to the hauora and well-being of Māori students.
- 4.86 The evaluations found many positive results from the programme. For secondary school students, these included increased mental well-being, improved energy and ability to carry out physical activity, and improved ability to pay attention and keep up in school.
- 4.87 The kaupapa Māori evaluation found that the programme had improved students' behaviour and attitudes, their ability to concentrate and engage with class material, their enjoyment of learning, and their confidence.
- 4.88 The Ministry used the results of the evaluations to support expanding the initiative to include more schools. The evaluations also led to the Ministry:
 - · updating the programme's nutrition standards; and
 - introducing two new models for delivering the initiative (by schools instead of third parties and through a model that supports partnership between schools and iwi and hapū).
- 4.89 The Ministry also told us that it intends to evaluate the effectiveness of the Literacy & Communication and Maths Strategy and the Loss of Learning initiative.

The Ministry needs a more structured approach to evaluations

- 4.90 Overall, we found that the Ministry does not have a systematic or planned approach to evaluating its initiatives. It does not have an evaluation strategy or documented guidance setting out the criteria for deciding which initiatives should be evaluated and when.
- 4.91 The Ministry does not have a central budget for evaluating its initiatives that responsible managers can access. Instead, each part of the Ministry decides which initiatives it will evaluate using its available funding.
- 4.92 We were told that, in most instances, funding for evaluating initiatives is sought when funding bids for new initiatives are put up.

- 4.93 Currently, the Ministry does not have a planned approach to evaluation, and there is no central oversight of what initiatives are being evaluated, what initiatives are overdue for evaluation, and what initiatives have never been evaluated.
- 4.94 As a result, it is difficult to know how some of the Ministry's initiatives are helping to lift student achievement and address inequity. Because of this, the main way of assessing their combined effectiveness is from studies (such as the Curriculum Insights and Progress Study) and PISA and NCEA results.
- 4.95 The Ministry told us that it is developing an evaluation action plan to identify whether initiatives are well targeted and delivering the expected outcomes.
- 4.96 We expect the action plan to include a framework for deciding which initiatives are evaluated, how these evaluations are organised and resourced, and how value for money should be assessed. Where practical, the Ministry should find ways to actively involve schools, students, and communities in evaluating its initiatives, and share its findings with the wider public.
- 4.97 The action plan should also include arrangements for providing central oversight of all the Ministry's evaluations. Central oversight of evaluations would enable the Ministry to assess how well its action plan is being implemented.

Recommendation 4

We recommend that the Ministry of Education implement a more structured approach to evaluating its strategies, programmes, and initiatives that sets out what is evaluated and why, how evaluations are organised and resourced, and how results will be shared within the Ministry and with education organisations and the public.

The Ministry of Education needs comprehensive information to better target initiatives

- 4.98 In this report, we have described why we consider it important for the Ministry to bring together the information that it currently has about student achievement and progress and to analyse this alongside research about factors that affect educational outcomes. We also expected the Ministry to have a process for bringing that information together with the results of all its evaluation activity.
- 4.99 Bringing together this information would help the Ministry to see how it could improve its efforts to address educational inequity. This could be a powerful tool for further targeting and prioritising these efforts.

- 4.100 The Ministry used to bring information together in this way. In the past, the Ministry used the Iterative Best Evidence Synthesis Programme to systematically identify, evaluate, and make accessible evidence about improving student achievement and progress.
- 4.101 However, the Ministry does not do this currently. We consider that, without such an approach, the Ministry will struggle to get all the value it could from its efforts to improve student achievement and progress and address inequity.
- 4.102 The Ministry, schools, and other public organisations would all benefit from the Ministry regularly bringing its information together to update and refine its understanding of how best to improve student achievement and progress and address inequity.
- 4.103 This includes evaluations of its initiatives and, in time, improved information about student achievement and progress and the results of its improved information-sharing with schools. This would give decision-makers greater clarity about:
 - which groups of students a proposed initiative is targeting;
 - the inequity that an initiative is intended to address; and
 - the intended effect of the proposed initiatives.
- 4.104 Regularly bringing together information would help the Ministry to base its initiatives on the strongest evidence available and ensure that initiatives address the most important causes of inequity.
- 4.105 In our view, the Ministry should also provide school principals with its assessment of that evidence for example, which individual studies are reliable and what the weight of evidence shows is effective.
- 4.106 The Ministry could also provide principals with easy-to-apply advice or guidance on how to use the insights to promote equity.

Recommendation 5

We recommend that the Ministry of Education regularly bring together information from evaluations of the Ministry's initiatives with assessments of research on improving achievement and addressing inequity, and use the results to inform refinements to the design, targeting, and prioritisation of initiatives aimed at addressing inequity.

Improvements are urgently needed to address growing inequity in achievement and progress

- 4.107 The Ministry told us that it broadly agrees with our findings, conclusions, and recommendations. It acknowledged that its current approaches to receiving, managing, and using information about inequity in student achievement and progress are not working as well as they need to be.
- 4.108 The Ministry said that addressing the shortcomings in how it collects and uses information is a strategic priority. It also said that policy context and settings affect the information that is available, and would affect how quickly and comprehensively it can act on our conclusions and recommendations. This includes the challenge of seeking more consistent and detailed information from schools.
- 4.109 We acknowledge the Ministry's concerns and that it might take some time to implement our recommendations. However, we think it is important work to prioritise to support the Ministry's ability to act as steward of the education system and provide better support to schools.

Appendix 1 How we carried out our work

We interviewed:

- Ministry of Education officials from national and regional offices;
- the then-Chief Education Science Advisor:
- senior staff from the Education Review Office, the New Zealand Qualifications Authority, and the Teaching Council of Aotearoa New Zealand;
- the National President and Executive Officer of the New Zealand Principals'
 Federation and senior staff from the New Zealand Educational Institute;
- staff from the New Zealand Council for Educational Research and the University of Otago involved in the National Monitoring Study of Student Achievement and its replacement, the Curriculum Insights and Progress Study; and
- principals and staff from 13 public schools throughout the country, including:
 - kura kaupapa Māori and English-medium primary, intermediate, and secondary schools;
 - schools in the North and South Islands;
 - schools in urban, provincial, and rural areas; and
 - schools in communities with different socioeconomic statuses.

We reviewed documents provided by the Ministry and publicly available documents. These included Cabinet papers and briefing notes to the Minister of Education, corporate publications, strategies, programmes, initiatives, plans, and monitoring and evaluation publications.

Appendix 2 Information about student achievement, progress, and proficiency

This appendix summarises the sources of the information that the Ministry of Education has about student achievement, progress, and proficiency in Years 1-13.

Achievement information

The Ministry gathers student achievement information from two sources. They are:

- the Curriculum Insights and Progress Study (CIPS), which replaced the National Monitoring Study of Student Achievement and will assess each subject in *The* New Zealand Curriculum once every four years; and
- NCEA results, which assesses participating students every year for all subjects in *The New Zealand Curriculum* and *Te Marautanga o Aotearoa*.

Year level	CIPS	NCEA Level 1	NCEA Level 2	NCEA Level 3
Year 1				
Year 2				
Year 3	All subjects once every four years			
Year 4				
Year 5				
Year 6	All subjects once every four years			
Year 7				
Year 8	All subjects once every four years			
Year 9				
Year 10				
Year 11		All subjects every year		
Year 12			All subjects every year	
Year 13				All subjects every year

Progress information

The Ministry gathers student progress information from two sources. They are:

- assessments that relate to curriculum levels 2-6 for reading and maths (which correlate to students in Years 5-10) and levels 1-6 for writing (which correlate to students in Years 1-10); and
- CIPS, which from 2023 assesses the literacy and numeracy level of a cohort of students every year.

Year level	The Assessment for Teaching and Learning tool	CIPS
Year 1		
Year 2		
Year 3		Literacy and numeracy
Year 4		
Year 5	Reading, maths, writing, pānui, pāngaru, and tuhituhi	
Year 6	Reading, maths, writing, pānui, pāngaru, and tuhituhi	Literacy and numeracy
Year 7	Reading, maths, writing, pānui, pāngaru, and tuhituhi	
Year 8	Reading, maths, writing, pānui, pāngaru, and tuhituhi	Literacy and numeracy
Year 9	Reading, maths, writing, pānui, pāngaru, and tuhituhi	
Year 10	Reading, maths, writing, pānui, pāngaru, and tuhituhi	
Year 11		
Year 12		
Year 13		

Note: As discussed in paragraphs 3.36-3.37, from 2025 schools will be required to use the Assessment for Teaching and Learning tool or another form of assessment to test children in Years 3-8 in reading, writing, and maths twice a year.

Proficiency information

The Ministry uses periodic international comparative studies to measure student proficiency in reading, maths, and science. These studies do not measure students against *The New Zealand Curriculum*. They include:

- the Trends in International Mathematics and Science Study (TIMSS), which takes place every four years and looks at student proficiency in maths and science at Years 5 and 9;
- the Progress in International Reading Literacy Study (PIRLS), which takes place every five years and looks at reading literacy proficiency at Year 5; and
- the Programme for International Student Assessment (PISA), which takes place every three years and assesses 15 year olds' proficiency in maths, reading, and science in English-medium education (generally Year 11).

Year level	TIMSS	PIRLS	PISA
Year 1			
Year 2			
Year 3			
Year 4			
Year 5	Maths and science every four years	Reading literacy every five years	
Year 6			
Year 7			
Year 8			
Year 9	Maths and science every four years		
Year 10			
Year 11			Maths, reading, and science every three years
Year 12			
Year 13			

About our publications

All available on our website

The Auditor-General's reports are available in HTML and PDF format, and often as an epub, on our website — oag.parliament.nz. We also group reports (for example, by sector, by topic, and by year) to make it easier for you to find content of interest to you.

Our staff are also blogging about our work – see oag.parliament.nz/blog.

Notification of new reports

We offer facilities on our website for people to be notified when new reports and public statements are added to the website. The home page has links to our RSS feed, Twitter account, Facebook page, and email subscribers service.

Sustainable publishing

The Office of the Auditor-General has a policy of sustainable publishing practices. This report is printed on environmentally responsible paper stocks manufactured under the environmental management system standard AS/NZS ISO 14001:2004 using Elemental Chlorine Free (ECF) pulp sourced from sustainable well-managed forests.

Processes for manufacture include use of vegetable-based inks and water-based sealants, with disposal and/or recycling of waste materials according to best business practices.

Office of the Auditor-General PO Box 3928, Wellington 6140

Telephone: (04) 917 1500

Email: reports@oag.parliament.nz Website: www.oag.parliament.nz