



## Briefing Note: Low School Participation in PISA 2022

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| <b>To:</b>                                    | Hon Jan Tinetti, Associate Minister of Education                  |                     |             |
| <b>Cc:</b>                                    | Sean Teddy, Hautū – Te Pai Aronui                                 |                     |             |
| <b>Date:</b>                                  | 4 April 2022  | <b>Priority:</b>    | High        |
| <b>Security Level:</b>                        | In Confidence   | <b>METIS No:</b>    | 1284908     |
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| <b>Messaging seen by Communications team:</b> | No  | <b>Round Robin:</b> | No          |

### Purpose of Report

The purpose of this paper is to update you on the critically low school response rate to participate in the PISA 2022 Main Survey. This presents a significant risk to the Government's ability to monitor changes in student achievement and learning experiences through a period where the Covid-19 pandemic has impacted on schooling for many of our learners/ākonga. This paper describes the benefits of the study, implications should we not meet the required school response rates, and outlines 'back to green' actions we are taking across Te Mahau with opportunities for you to be involved.

### Summary

- The PISA study provides critical and unique data to: monitor the wellbeing and achievement of our learners over time and in comparison to other countries, measure the impact of Covid-19 and all other interventions and changes to the education system, and directly inform educational policy and teacher practice.
- Currently the PISA 2022 study is at risk of not having comparable and publishable data because not enough schools have agreed to participate. We would not have reliable estimates of student achievement and their learning experiences, disrupting the flow of evidence and insights between schools and policy makers.
- To raise participation and realise the full benefits of PISA, our team has a return to green plan which utilises capability across Te Mahau to provide targeted support and incentives to schools. We are also considering whether official endorsements from Unions and Ministry Leadership could increase participation. This model, if successful, could be beneficial to studies such as NMSSA.

## Proactive Release

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- a **agree** that the Ministry of Education release this briefing in full once it has been considered by you. Proactive release of this Briefing Note will be helpful for schools and Boards to understand more how New Zealand sees and values participation in PISA.



Tom Dibley  
**National Director  
Evidence Data and Knowledge**

04/04/2022



Hon Jan Tinetti  
**Associate Minister of Education**

9/4/2022

## Background

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1. The Programme for International Student Assessment (PISA) is a three-yearly international research programme which tests and surveys 15-year-old students (primarily Year 11 students), who will be nearing the end of around ten years of compulsory schooling, with the aim of evaluating how well the education system has prepared them with the foundational skills and knowledge they need for success and informed citizenship in the modern world.
2. The PISA 2022 Main Survey in New Zealand is set to take place in Term 3 2022 (1 August to 30 September). Over 220 schools across the country have been randomly selected for participation with a goal of assessing 6300 students.
3. A study of this scale is a large investment for the Government, with a budget of approximately \$3,000,000 per cycle. Over two-thirds of has been spent or committed on development, the Field Trial (which took place in 2021) and preparations to date for the Main Survey.
4. This cycle was originally planned for 2021 but due to Covid-19 related restrictions in many participating countries around the world, was deferred a year. As a country we are unable to defer again.

## Benefits of PISA

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5. PISA operates within a portfolio of large studies (PIRLS, TIMSS, TALIS and NMSSA), with each providing unique information to give a holistic understanding of how the education system is supporting our learners to thrive and experience educational success. The studies efficiently measure student performance across the pathway (from year 5 to age 15) and subject and curriculum areas, as well as student background, experiences, perceptions, attitudes, and wellbeing.
  - a. Work is currently underway with the next cycle of NMSSA to establish how to gain the most value from it, how it should evolve with the New Zealand Curriculum (NZC) Refresh in mind, and if the study can be done more frequently.
  - b. PISA complements the NMSSA findings by providing more regular measures of reading, science and maths with international comparisons and involving older students at Year 11 so that we can compare their achievement to that of Year 8's in NMSSA.
6. In addition to measuring students' reading, science and mathematical literacy and their ability to practically to solve real-world problems, PISA tells us about well-being of our 15-year-olds and their school experiences such as their sense of belonging at school, self-reported attendance and tardiness, and parental and teacher support.
7. New Zealand has taken part in every cycle since its beginning in 2000 providing us rich trend data on these measures and comparisons to other countries. PISA is also the only large-scale study that tests and surveys a representative sample of students at the end of their compulsory schooling (see METIS 1272093).
8. PISA is classed by Statistics NZ as a 'Tier 1' data collection, meaning it is one of the most important and trustworthy data collections in New Zealand. Achievement and survey data from PISA are used to monitor key outcomes in the Treasury's Living Standards Framework (LSF), DPMC's Child & Youth Wellbeing Strategy and the Education System Monitoring Framework for the NELP and TES [METIS 1271484]

refers] as well as components of Ka Hikitia, the Action Plan for Pacific Education, and other strategies.

9. Evidence from PISA has played an important role in supporting educational policy and practice (see Annex 1). Most recently, PISA data on the decline of maths and reading achievement helped prompt the need for and provided evidence for the development of the Literacy & Communications and Maths strategy and will rely on PISA 2022 data for solid baseline measures. There are also resources and insight reports for teachers from PISA evidence as well as calls to action around streaming, bullying and enjoyment of reading.
10. For this cycle especially, PISA will contribute significant insight into how our learners are doing academically and personally after over two years of disruption from the COVID-19 pandemic.
  - a. There are a few other mechanisms that measure student performance but not many. PISA and other large-scale studies provide reliable estimates of changes in performance as they are based on achievement scales anchored before the pandemic began – that is, they have been designed to measure change in skills, and give us pre-Covid-19 baselines to compare future performance against.
  - b. A special COVID-19 module will ask learners how they think their learning has been affected when schools were shut down and their feelings on self-learning and preparedness for the future.

#### Present Risk to PISA: Unacceptably low school response rates

11. PISA's reliability is earned in large part by its rigorous technical standards which all countries must meet for their data to be published. One of these technical standards requires a high school response rate (85%). New Zealand is one of a few countries where school participation is voluntary.
12. In 2021, we were already proactively preparing for a dip in response rates because of COVID-19. We have used several strategies to try to maintain acceptable response rates:
  - a. As part of our communications planning, we organised webinars to promote the value of the study and dispel any myths, authored a Gazette article on the value all our large-scale studies provide.
  - b. Due to the regional lockdowns in late 2021, we postponed inviting Auckland schools until January 2022. The PISA team invited all other sampled schools outside of Auckland in December 2021
  - c. All schools were offered compensation for their time in the form of an individualised report with the achievement and survey results of their students in comparison to all New Zealand schools, and a \$350 honorarium.
  - d. Our general tactic for when schools decline is based on problem-solving their concerns. We ask what the barriers are to participating and offer solutions and reiterate the importance and use of the study. This year we have also offered to increase honoraria amounts and reduce as much as possible the tasks schools need to complete.
13. However, despite these proactive approaches, we have secured a commitment to participate from only **58% of schools**, far below the minimum 85% to achieve an 'Acceptable' rate and still well below the 65% required to achieve an 'Intermediate' rate, as defined by the OECD PISA Technical Standards. An 'Intermediate' response is still allowable if the country can prove there isn't bias present in the school sample via a 'non-response' bias analysis. This was done successfully in 2015. However,

response rates were higher in 2015 and the risk of bias is greater the lower the response rate is.

14. The reason nearly all declining schools have given relates to COVID-19 – either due to staff shortage/burdens, student learning loss and/or the two years of disruption and stress on students and staff. Our conversations have not been as successful as in past cycles where we could typically persuade one-third of schools who initially decline to take part (so far zero schools have changed their mind).
15. If we remain below the 'Intermediate' school response rate of 65%, we risk our sample being biased and unrepresentative of our New Zealand schools, resulting in our data being deemed incomparable internationally and over time. We and the OECD would be unable to publish and use the information. Our trend data would not include the estimates of student achievement in 2022, after two years of lockdowns and disruption, while other countries would. There would also be a 7-year gap between cycles (2018 being the last cycle, 2025 being the next) and the interpretation of 2025 findings would be more difficult without an intermediate point. There is also a reputational risk nationally and abroad associated with these consequences.

#### Our Approach to Getting 'Back to Green'

16. Other jurisdictions, including those where PISA is mandatory, are struggling to balance responding to COVID with the collection of the PISA data. We have been involved in workshops to understand what incentives and approaches are working globally and what would translate well into the New Zealand context.
17. We have planned several actions to increase school participation and ensure we realise the benefits of PISA from our committed expenditure. We have currently paused all communications with schools on PISA while Omicron is peaking and will resume in May. These are based around leveraging relationships to provide targeted support and solutions, and clearly articulating that the benefits PISA brings to the Ministry, regions and schools is worth the time spent by students and schools.
18. We will be utilising our regional staff and networks to try and influence schools to participate and are planning engagements with unions and other peak bodies to help endorse PISA collection as an important part of how the system is measured.
19. Even with these actions it is unlikely that we will reach the necessary 85% of schools participating. We plan to conduct a preliminary non-response bias analysis in June to

assess if further intervention is needed and to work with PISA contractors on whether New Zealand's results can be included for international comparison.

20. This exercise of working alongside regional and network staff and engaging with peak bodies may be useful to all large-scale studies in the future, including NMSSA, to promote more frequent participation in and use of research.
21. We will keep you updated as to progress and whether we seek your public endorsement of PISA as a way of influencing schools to participate.

### Next Steps

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22. The Ministry will progress on our action plan to increase PISA school response rates.
23. We will provide you an update on the progress made to our goals no later than the end of June.

### Other Relevant Information

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24. You recently endorsed a decision that New Zealand recommend that the PISA cycle moves to 4 years instead of 3. This was in part driven by the desire to decrease the burden on schools. That decision is still to be made by the OECD at the upcoming Governing Board Meeting in April [See METIS 280451].

### Annex

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- Annex 1: Impacts and Use of PISA Data in Policy & Practice

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- **The Literacy & Communications and Maths Strategy:** Evidence from PISA and other large-scale students were valuable inputs into the strategy.
  - Countries Improving in Maths Report on countries that have turned around declining mathematics performance  
<https://assets.education.govt.nz/public/Documents/Ministry/Changes-in-education/Countries-Improving-in-Maths-report.pdf>
  - Digital Literacy: A Review [Digital-Literacy-a-review.pdf](https://assets.education.govt.nz/public/Documents/Digital-Literacy-a-review.pdf) (education.govt.nz)
  - The literacy landscape in Aotearoa New Zealand <https://cpb-ap-se2.wpmucdn.com/blogs.auckland.ac.nz/dist/f/688/files/2020/01/The-Literacy-Landscape-in-Aotearoa-New-Zealand-Full-report-final.pdf>
  - How our education system is performing for literacy: Progress and achievement of New Zealand learners in English medium settings  
<https://assets.education.govt.nz/public/Literacy-and-Maths-strategy-development-in-2021/How-our-education-system-is-performing-for-Literacy.pdf>
  - Progress and achievement and the context of mathematics and statistics learning in New Zealand (English medium education)  
<https://assets.education.govt.nz/public/Literacy-and-Maths-strategy-development-in-2021/Progress-and-achievement-and-the-context-of-mathematics-and-statistics-learning-in-New-Zealand.pdf>
- **Refreshing the New Zealand Curriculum:** Evidence from PISA was used in the Royal Society's Independent Report on the Curriculum Refresh  
<https://www.royalsociety.org.nz/news/independent-report-on-improving-maths-and-stats-learning-finds-investment-and-changes-needed-at-virtually-all-levels-of-the-education-system/>
- **Talanoa Ako: PISA for Pacific Parents and Schools Guided Resource:** In April 2022 Talanoa Ako will release a resource framed around the key themes that are the PISA questions from the learners' questionnaire. In each theme PISA data of Pacific learners is shown which mostly relate to the learners' achievement alongside of ideas and activities parents, families, schools, and teachers can use to empower Pacific learners to keep doing their best at school.
- **Ending Streaming in Schools:** Evidence from PISA and other large-scale studies provided significant evidence for the call to action to end streaming in schools.
  - How often are students organised into same and mixed ability groups?  
<https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-ability-grouping>
  - He Whakaaro: Does Streaming Work?  
<https://www.educationcounts.govt.nz/publications/series/he-whakaaro/he-whakaaro-does-streaming-work-a-review-of-the-evidence>
- **Student Wellbeing Measures Development:** Evidence from PISA and other large-scale studies have provided significant insight into the wellbeing of students and the need to have more frequent feedback loops between students and schools.
- **Reading Results from 2018:** The decline in reading achievement and enjoyment prompted initiatives and teacher insight papers such as:
  - New Zealand Reading Ambassador: <https://mch.govt.nz/new-role-champion-reading-children>
  - He Whakaaro: How can teachers and whanau effectively teach and support reading? <https://www.educationcounts.govt.nz/publications/series/he-whakaaro/he-whakaaro-how-can-teachers-and-whanau-effectively-teach-and-support-reading>

[whakaaro/he-whakaaro-how-can-teachers-and-whanau-effectively-teach-and-support-reading](#)

- **Tomorrow's Schools Review:** Evidence from PISA and other large scale studies were included in briefing papers to the taskforce <https://conversation-live-storage-assets.s3.amazonaws.com/public/Uploads/TSR-Student-outcomes-paper.pdf>
- **Insights for Teachers**
  - Inquiry-based or teacher-directed science? Evidence from PISA <https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-inquiry-based-or-teacher-directed>
  - How much 'choice' and 'voice' are students given in their lessons? <https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-voice-and-choice>
  - Are teachers connecting lessons with students' lives and prior knowledge? <https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-connections>
  - How much feedback are students receiving from teachers? <https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-feedback>
  - Are New Zealand teachers adapting their lessons for student needs, and does it matter? <https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-adaptive-teaching>
- **Teacher Resources**
  - PISA released items are highlighted as a resource for teachers in assessment: [Diagnostic assessment / Assessment / Mathematics and statistics / Home - Senior Secondary \(tki.org.nz\)](#)
  - PISA reports are listed as PLD material: <https://nzmaths.co.nz/nz-mathematics-education-reports>
  - Assessment Tools & Resources: [Research – national and international / Assessment tools & resources / Home - Assessment \(tki.org.nz\)](#)
- **Other organisations use of our data in research:**
  - [Bullying in New Zealand Schools | Bullying Free NZ](#) references [PISA 2015: New Zealand Students Wellbeing | Education Counts](#) for evidence on bullying
  - The perilous state of literacy in Aotearoa New Zealand <https://theeducationhub.org.nz/now-i-dont-know-my-abc/>