



Media Release
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Prime Minister's Science Advisor comments on PISA – reinforces the need to progress on several fronts

With the release yesterday of the Programme for International Student Assessment (PISA) scores by the OECD in Paris, Sir Peter Gluckman, the Prime Minister's Chief Science Advisor, has expressed his concern, but also his belief that New Zealand is heading in a new positive direction in maths and science education.

"There's no doubt that we are disappointed and concerned to see how our students have fared in the recent global rankings, but I think we need to put the issue in context," said Sir Peter. Noting the limitations inherent in such performance review and ranking exercises, Sir Peter points to the difficulties in making objective comparisons across a diverse range of variable local situations.

"The limitations notwithstanding, there is no denying PISA's utility and the importance of understanding our performance trends over time. But it is just as important to understand that learning contexts are notoriously difficult to capture and that context matters, especially when it comes to devising mitigating strategies and appropriate interventions," said Sir Peter.

He emphasises the need to address the deep-seeded contextual issues in science teaching and learning, including curriculum relevance, teacher confidence especially in the primary years, and the role of parents, families and whānau in developing the 'science capital' that can inspire students toward STEM subjects and maintain their enthusiasm.

"There is no quick fix for raising student performance; success is the product of multiple internal and external factors, and the results of the National Monitoring survey (NMSSA), announced last week, have given us an important edge in these efforts. We now have clear national data to show where intervention is needed most for students, for teachers and, I would add, for families and communities," he said.

The PISA scores measure the knowledge and skills of 15-year-olds in more than 60 countries. Since 2000, the PISA tests have been administered every 3 years with an alternating focus on Reading, Maths and Science. By contrast, New Zealand's NMSSA offers a snapshot of science achievement levels in years 4 and 8 together with data from student and teacher interviews that provide a more complete picture of the situation here. Sir Peter notes that this newly acquired understanding of student science achievement in the earlier years, via the NMSSA results, is aimed at precisely the right target years for intervention.

"If young New Zealanders are to be better equipped in key subjects by age 15, we can't leave it until they hit secondary school. This is exactly what last week's Government response to the Challenge put forward by the National Science Challenges Panel, which I chaired, is designed to address," said Sir Peter.

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