

# SNAPSHOTS

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## How much effort are students putting into PISA?

The most recent OECD Programme for International Student Assessment (PISA) survey enables educators, policymakers and the wider community to compare Australian students with each other, as well as with their counterparts across the world.

PISA measures the extent to which 15-year-old students near the end of compulsory education have acquired the knowledge and skills that young adults need to meet the challenges of the future.

Australia's National Assessment Program, of which PISA is a key component, measures student achievement and allows for nationally comparable reports of progress towards the National Goals as outlined in *The Alice Springs (Mparntwe) Education Declaration* (Education Council, 2019). This Declaration sets out the vision for high-quality schooling in Australia to ensure that 'all young Australians become confident and creative individuals, successful lifelong learners, and active and informed members of the community (p. 4).<sup>1</sup>

PISA's results have become increasingly important in evidence-based education policy. The assessment allows students to analyse and reason; apply their knowledge and skills to interpret and solve real-life problems. PISA is regarded as

<sup>1</sup> Education Council (2019). *Alice Springs (Mparntwe) Education Declaration*. <https://www.dese.gov.au/alice-springs-mparntwe-education-declaration/resources/alice-springs-mparntwe-education-declaration>

low-stakes for both schools and students. This is because, unlike other formal assessments, students' results do not impact their grades and the data cannot be linked to the school (although schools do receive feedback on their students' performance).

This *Snapshot* examines the self-reported levels of effort students invested in the PISA 2018 test and compares it with the effort they reported that they would have invested if the results counted towards their school marks.

## Measuring effort in PISA 2018: The effort thermometer

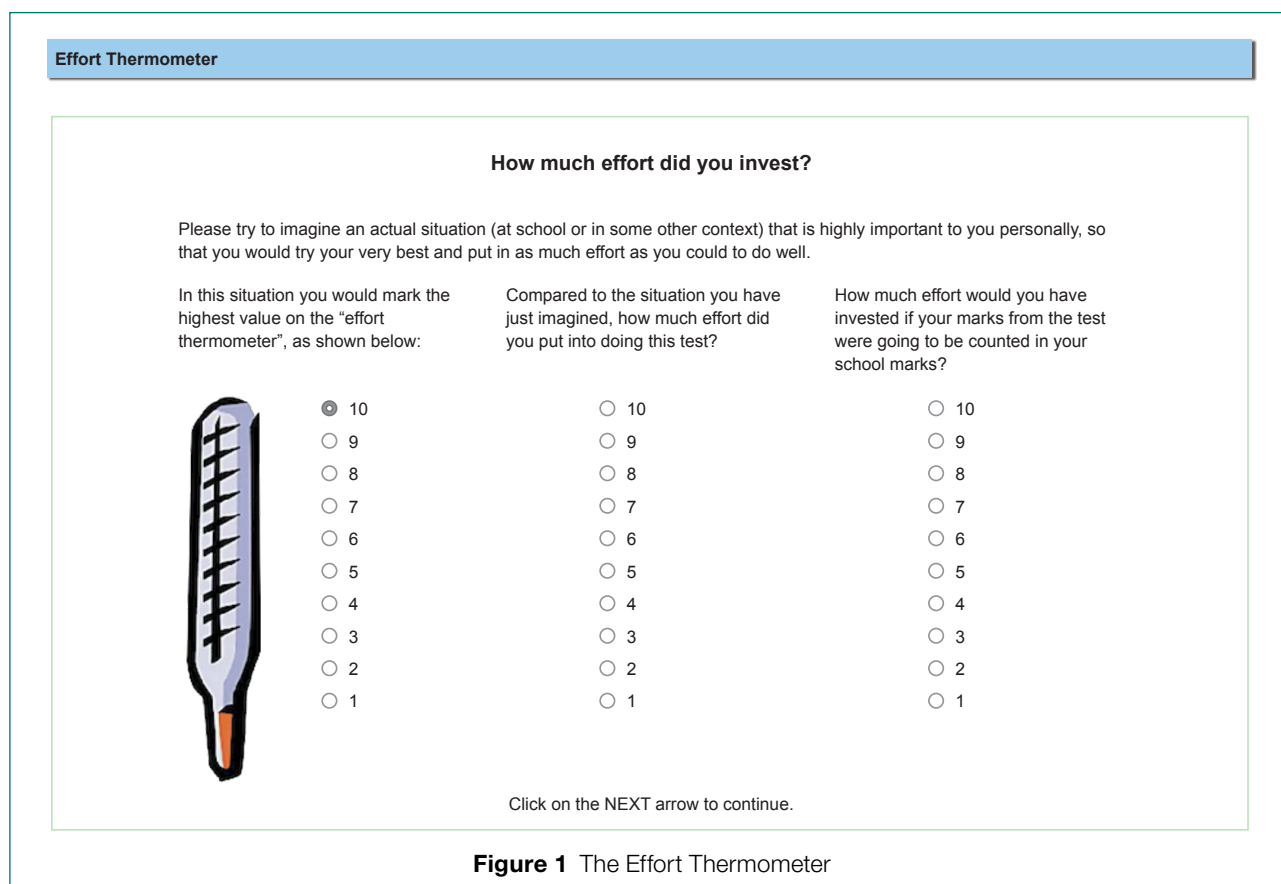
Students who participated in PISA 2018 undertook a two-hour test of reading, mathematical, and scientific literacy. After completion, they were asked to rate the amount of effort they had invested in the assessment using the effort thermometer (Figure 1).<sup>2</sup>

The effort thermometer is a visual that guides students to think of a past situation of high personal importance in which they made a maximum effort, ranging from '1', minimum effort to '10', maximum effort. The thermometer was used to help quantify students' test-taking motivation across two vertical scales.

In the first scale, students were asked to use this experience to grade their effort in the PISA test (PISA Effort). The second scale asked students to rate their effort if they knew their results would count towards their school marks (School Mark Effort). For each scale, they had to select the button number that corresponded to their level of effort.

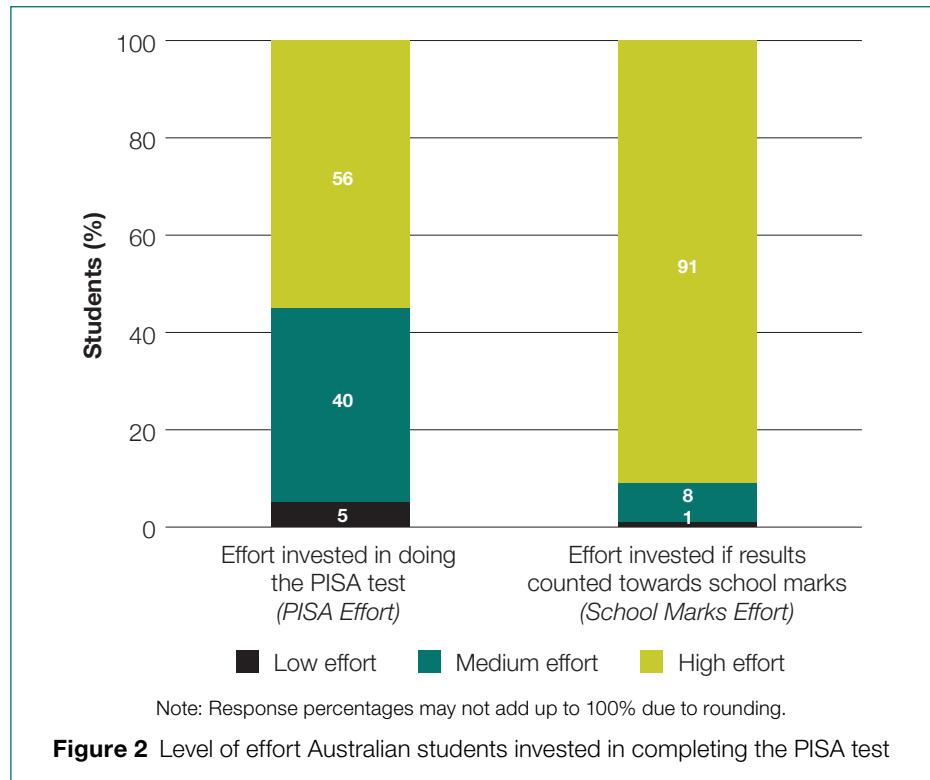
## Australian students' invested effort in the PISA test

The student ratings for the *PISA Effort* and the *School Marks Effort* scales were collapsed into three categories that described the level of effort



<sup>2</sup> Thirteen per cent of students did not respond to the Effort Thermometer.

that was invested in completing the test: *low effort* (1–3), *medium effort* (4–7), and *high effort* (8–10). Over 50% of Australian students reported investing high effort in completing the PISA test, while 40% reported investing medium effort, and 5% students reported investing low effort. However, almost all students (91%) reported that they would invest higher effort if the PISA test counted towards their school marks (Figure 2).

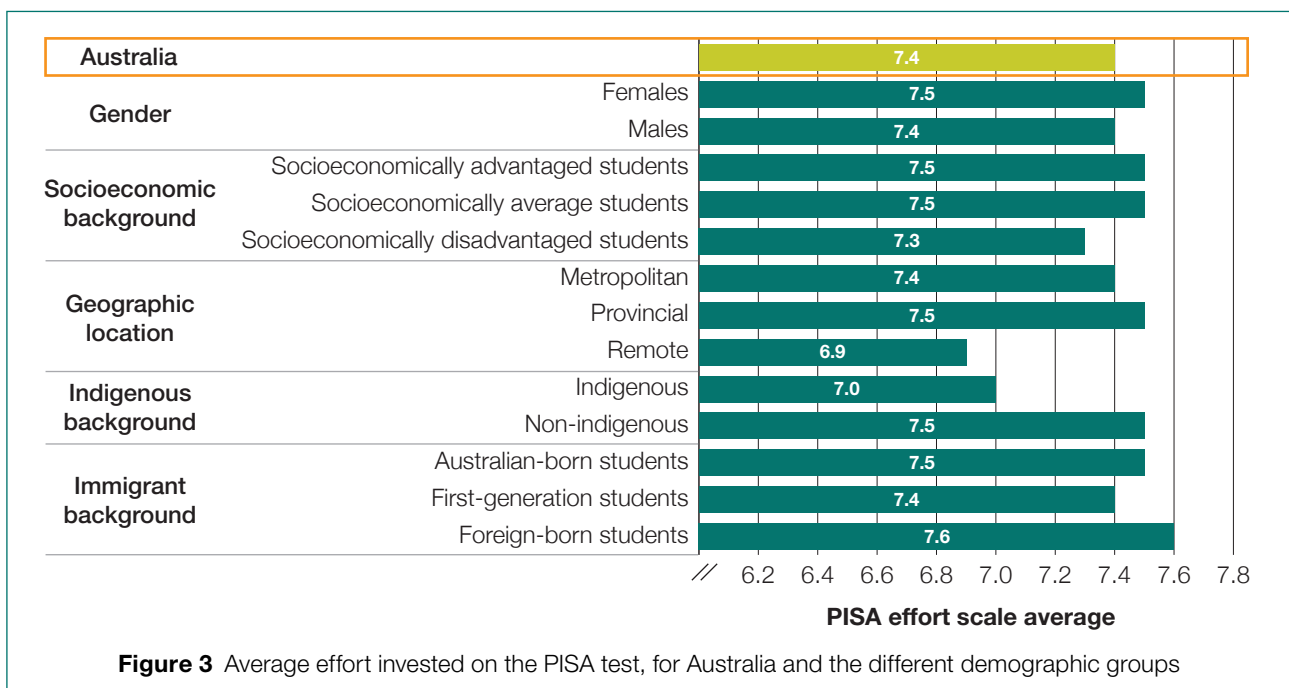


**Figure 2** Level of effort Australian students invested in completing the PISA test

## Average effort invested in the PISA test

Figure 3 shows the average effort students reported investing in the PISA test for Australia overall, and for different demographic groups. Some groups reported investing significantly less effort in the PISA test than their counterparts.

- Female students reported investing more effort in the PISA test than male students.
- Socioeconomically advantaged students reported investing more effort in the PISA test than socioeconomically disadvantaged students.
- Students in metropolitan or provincial schools reported investing more effort in the PISA test than students in remote schools.



**Figure 3** Average effort invested on the PISA test, for Australia and the different demographic groups

- Non-Indigenous students reported investing more effort in the PISA test than Indigenous students.
- Australian-born students and foreign-born immigrant students reported investing more effort in the PISA test than first-generation immigrant students.

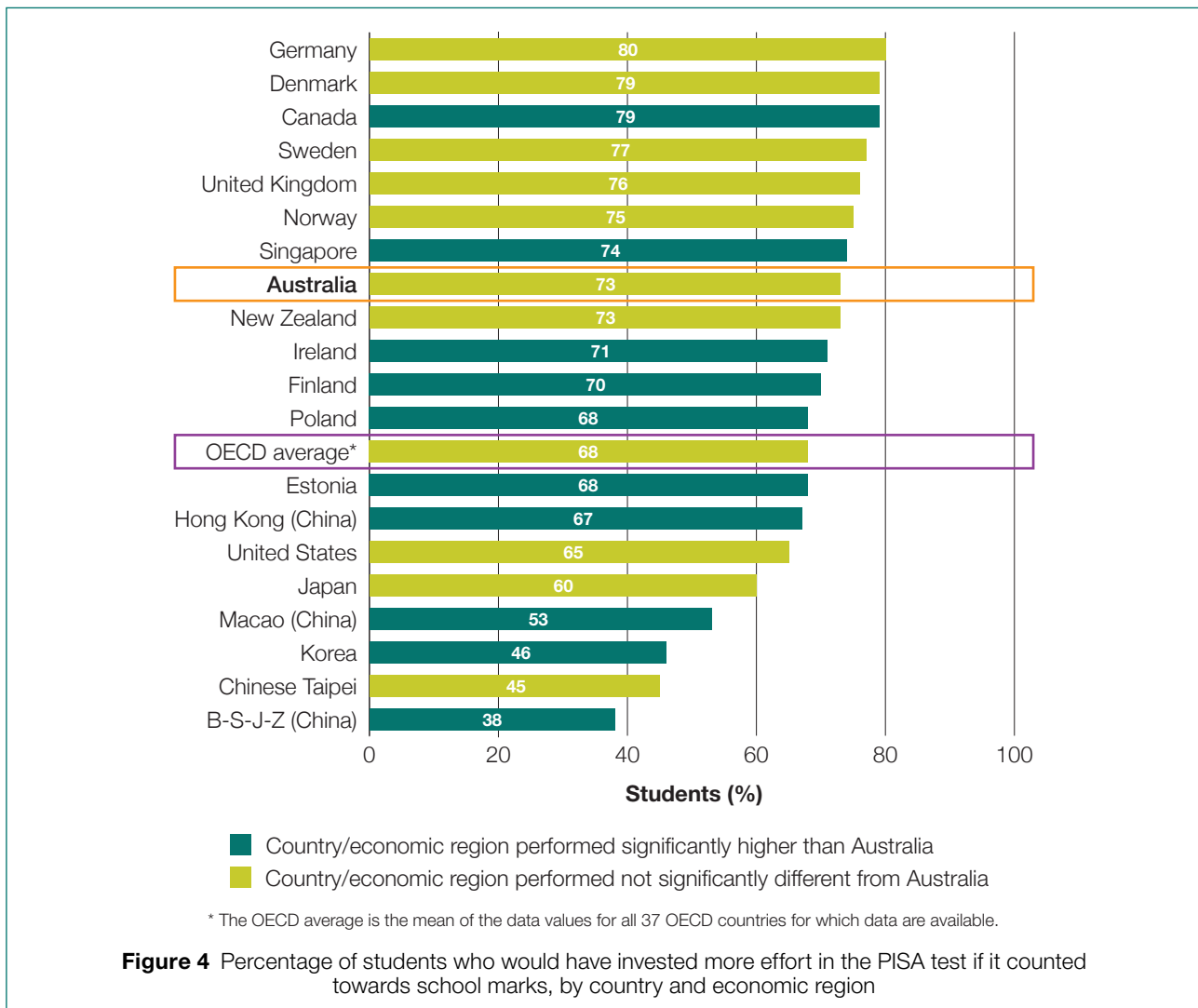
4% indicated that they would have invested less effort if the PISA test counted towards their marks. These results aren't surprising, given that PISA is a low-stakes assessment for students.

## Invested effort in the PISA test if results counted towards school marks

In PISA 2018, the majority of Australian students (73%) indicated that they would have invested more effort if the PISA test counted towards their marks. Twenty-two per cent of students indicated that their effort would have remained similar and

## Results across countries

Figure 4 shows the percentage of students who indicated they would have invested more effort in the PISA test if it counted towards their school marks<sup>3</sup> for those countries and economic regions that performed significantly higher or not significantly different from Australia in reading literacy performance in 2018. At least half of the students in these countries and economic regions would have invested more effort if this was the case.



<sup>3</sup> These results are based on those students who indicated a positive difference between their PISA Effort score and their *School Mark Effort*.

Students in Norway, Singapore and New Zealand invested a similar effort to Australian students while students in Germany, Denmark, Canada, Sweden and the United Kingdom showed they would have invested more effort in the PISA test if it counted towards their school marks than Australian students.

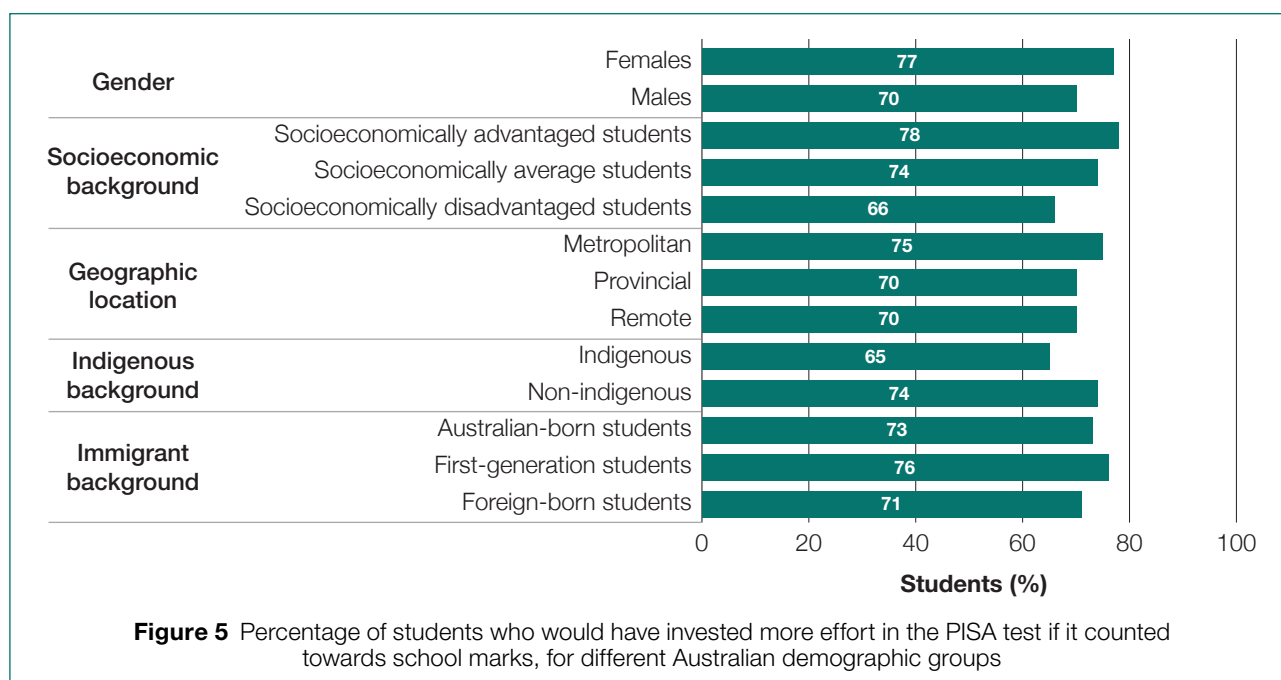
The remaining countries and economic regions including the Asian countries and economic regions (Korea, Japan, Beijing, Shanghai, Jiangsu and Zhejiang (China), Macao (China), Hong Kong (China), and Chinese Taipei), the United States, Finland and Ireland showed they would have put less effort into the PISA test if their results were going to be counted in their school marks compared to Australian students.

## Results for different Australian demographic groups

Figure 5 shows that within the different demographic groups there were differences in the effort they would have invested in the PISA test if

it counted towards their school marks. If the PISA test counted towards their school marks:

- ▶ More female students than male students would have invested greater effort (a difference of 7 percentage points).
- ▶ More non-Indigenous students than Indigenous students would have invested greater effort (a difference of 9 percentage points).
- ▶ More socioeconomically advantaged students than socioeconomically disadvantaged students would have invested greater effort (a difference of 12 percentage points).
- ▶ More students from metropolitan schools than students in provincial schools would have invested greater effort (a difference of 5 percentage points).
- ▶ More first-generation immigrant students than Australian-born students and foreign-born students would have invested greater effort (a difference of 3 and 5 percentage points respectively).



### ASK YOURSELF:

If your school is a PISA participant ...

- ▶ How can you encourage students to do the best they can in completing the PISA test?
- ▶ In what ways can students be acknowledged for their participation in PISA?