

Appendix G.2: Percentages of Students with Science Achievement Too Low for Estimation*

Country	eTIMSS		paperTIMSS	
	Percentage of Students with Achievement Too Low for Estimation	Average Percent Correct	Percentage of Students with Achievement Too Low for Estimation	Average Percent Correct
Albania	--	--	3 (0.5)	47 (0.7)
Armenia	--	--	4 (0.4)	41 (0.6)
Australia	--	--	2 (0.3)	55 (0.5)
Austria	1 (0.2)	51 (0.5)	--	--
Azerbaijan	--	--	8 (0.6)	36 (0.5)
Bahrain	--	--	4 (0.4)	48 (0.6)
Belgium (Flemish)	--	--	2 (0.2)	48 (0.4)
Bosnia and Herzegovina	--	--	5 (0.4)	40 (0.5)
Bulgaria	--	--	4 (0.6)	54 (1.0)
Canada	2 (0.2)	52 (0.3)	--	--
Chile	5 (0.5)	40 (0.5)	--	--
Chinese Taipei	0 (0.1)	60 (0.3)	--	--
Croatia	1 (0.2)	51 (0.4)	--	--
Cyprus	--	--	2 (0.3)	50 (0.6)
Czech Republic	1 (0.2)	54 (0.4)	--	--
Denmark	1 (0.3)	51 (0.4)	--	--
England	1 (0.2)	55 (0.5)	--	--
Finland	1 (0.2)	59 (0.5)	--	--
France	4 (0.4)	45 (0.6)	--	--
Georgia	6 (0.7)	38 (0.6)	--	--
Germany	2 (0.3)	51 (0.5)	--	--
Hong Kong SAR	1 (0.2)	54 (0.6)	--	--
Hungary	1 (0.3)	53 (0.5)	--	--
Iran, Islamic Rep. of	--	--	9 (0.7)	38 (0.7)
Ireland	--	--	2 (0.4)	54 (0.7)
Italy	2 (0.2)	49 (0.6)	--	--
Japan	--	--	1 (0.1)	61 (0.4)
Kazakhstan	--	--	2 (0.3)	47 (0.6)
Korea, Rep. of	0 (0.1)	66 (0.4)	--	--
Kosovo	--	--	9 (0.7)	33 (0.5)
Kuwait	--	--	14 (0.9)	33 (0.9)
Latvia	--	--	0 (0.2)	57 (0.5)
Lithuania	1 (0.2)	55 (0.5)	--	--
Malta	3 (0.3)	47 (0.3)	--	--
Montenegro	--	--	8 (0.4)	39 (0.4)
ψ Morocco	--	--	17 (0.9)	30 (0.8)
Netherlands	2 (0.3)	50 (0.6)	--	--
New Zealand	--	--	3 (0.3)	49 (0.4)
North Macedonia	--	--	11 (0.9)	36 (1.0)
Northern Ireland	--	--	2 (0.3)	52 (0.4)
Norway (5)	1 (0.2)	55 (0.5)	--	--
Oman	--	--	10 (0.6)	39 (0.7)
✱ Pakistan	--	--	31 (3.5)	21 (1.1)
✱ Philippines	--	--	34 (1.4)	20 (0.5)
Poland	--	--	1 (0.2)	55 (0.5)
Portugal	2 (0.2)	47 (0.4)	--	--
Qatar	8 (0.8)	39 (0.7)	--	--
Russian Federation	0 (0.1)	62 (0.7)	--	--
Saudi Arabia	--	--	12 (0.7)	34 (0.5)
Serbia	--	--	3 (0.6)	52 (0.7)
Singapore	1 (0.1)	68 (0.7)	--	--
Slovak Republic	2 (0.4)	52 (0.7)	--	--
✱ South Africa (5)	--	--	28 (1.0)	25 (0.6)
Spain	1 (0.2)	49 (0.4)	--	--
Sweden	1 (0.2)	55 (0.7)	--	--
Turkey (5)	3 (0.4)	54 (0.8)	--	--
United Arab Emirates	7 (0.2)	44 (0.3)	--	--
United States	2 (0.2)	55 (0.5)	--	--
Benchmarking Participants				
Ontario, Canada	2 (0.3)	52 (0.6)	--	--
Quebec, Canada	1 (0.2)	51 (0.5)	--	--
Moscow City, Russian Fed.	0 (0.1)	68 (0.5)	--	--
Madrid, Spain	1 (0.2)	51 (0.4)	--	--
Abu Dhabi, UAE	14 (0.5)	35 (0.4)	--	--
Dubai, UAE	1 (0.1)	57 (0.3)	--	--

* Students were considered to have achievement too low for estimation if their performance on the assessment was no better than could be achieved by simply guessing on the multiple-choice assessment items. However, such students were assigned scale scores (plausible values) by the achievement scaling procedure, despite concerns about their reliability.

ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

✱ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 25%.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A dash (-) indicates comparable data not available.