Exhibit 1.1: Distribution of Science Achievement

Country	Average Scale Score	Science Achievement Distribution
² Singapore	590 (3.7)	
Korea, Rep. of	589 (2.0)	
Japan	569 (1.8)	
Russian Federation	567 (3.2)	
[†] Hong Kong SAR	557 (2.9)	
Chinese Taipei	555 (1.8)	
Finland	554 (2.3)	
Kazakhstan	550 (4.4)	
Poland	547 (2.4)	
² [†] United States	546 (2.2)	
Slovenia	543 (2.4)	
Hungary	542 (3.3)	
² Sweden	540 (3.6)	
Norway (5)	538 (2.6)	
England	536 (2.4)	
Bulgaria	536 (5.9)	
Czech Republic	534 (2.4)	
Croatia	533 (2.1)	
Ireland	529 (2.4)	
Germany	528 (2.4)	
² Lithuania	528 (2.5)	
² † Denmark	527 (2.1)	
² [†] Canada	525 (2.6)	
³ Serbia	525 (3.7)	
Australia	524 (2.9)	
Slovak Republic	520 (2.6)	
[‡] Northern Ireland	520 (2.2)	
² Spain		
⁺ Netherlands	518 (2.6) O 517 (2.7) O	
² Italy	516 (2.6)	
 * Raiy * Belgium (Flemish) 	512 (2.3)	
² Portugal	508 (2.2)	
New Zealand		
TIMSS Scale Centerpoint	506 (2.7) O 500	
France	487 (2.7) 💿	
Turkey		
Cyprus Chile	,	
² Bahrain	478 (2.7) (Constraints) 459 (2.6) (Constraints)	
² Banrain ¹ Georgia	459 (2.6) (1)	
United Arab Emirates	451 (2.8) 💿	
Qatar	436 (4.1)	
Qatar Oman	436 (4.1) (431 (3.1) (431 (3.1)	
Iran, Islamic Rep. of Indonesia	421 (4.0) 🐨	
Saudi Arabia	397 (4.8) 390 (4.9)	
ψ Morocco	352 (4.7) 💿	
ψ Kuwait	337 (6.2) 💿 🗖	
	100	200 300 400 500 600 700
		y average significantly higher than Percentiles of Performance nterpoint of the TIMSS 4th grade scale 5th 25th 75th 95th
		y average significantly lower than

The TIMSS achievement scale was established in 1995 based on the combined achievement distribution of all countries that participated in TIMSS 1995. To provide a point of reference for country comparisons, the scale centerpoint of 500 was located at the mean of the combined achievement distribution. The units of the scale were chosen so that 100 scale score points corresponded to the standard deviation of the distribution.

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

See Appendix C.1 for target population coverage notes 1, 2, and 3. See Appendix C.7 for sampling guidelines and sampling participation notes †, ‡, and ‡.

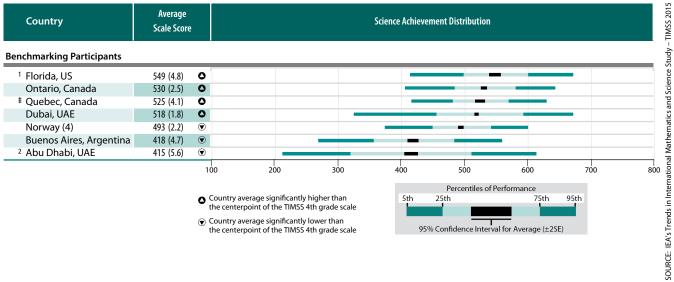
() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.



TIMSS Science

1th Grade

Exhibit 1.1: Distribution of Science Achievement (Continued)



♥ Country average significantly lower than the centerpoint of the TIMSS 4th grade scale



TIMSS Science

95% Confidence Interval for Average (±2SE)

1 th Grade