

APPENDIX TABLE 1-18 

Average TIMSS science scores of students in grade 4, by education system: 2015

(Average score)

Education system	Grade 4	Comparison with U.S. score
TIMSS scale centerpoint	500	^
Singapore ^a	590	^
South Korea	589	^
Japan	569	^
Russia	567	^
Hong Kong (China) ^b	557	^
Taiwan (China)	555	^
Finland	554	^
Kazakhstan	550	≈
Poland	547	≈
United States ^{a,b}	546	≈
Slovenia	543	≈
Hungary	542	≈
Sweden ^a	540	≈
Norway (5 years of school)	538	v
Bulgaria	536	≈
England (UK)	536	v
Czech Republic	534	v
Croatia	533	v
Ireland	529	v
Germany	528	v
Lithuania ^a	528	v
Denmark ^{a,b}	527	v
Canada ^{a,b,c}	525	v
Serbia ^d	525	v



Education system	Grade 4	Comparison with U.S. score
Australia	524	v
Northern Ireland (UK) ^e	520	v
Slovakia	520	v
Spain ^a	518	v
Netherlands ^b	517	v
Italy ^a	516	v
Belgium (Flemish) ^b	512	v
Portugal ^a	508	v
New Zealand	506	v
France	487	v
Turkey	483	v
Cyprus	481	v
Chile	478	v
Bahrain ^a	459	v
Georgia ^c	451	v
United Arab Emirates	451	v
Qatar	436	v
Oman	431	v
Iran	421	v
Indonesia	397	v
Saudi Arabia	390	v
Morocco ^f	352	v
Kuwait ^f	337	v

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level.

TIMSS = Trends in International Mathematics and Science Study; UK = United Kingdom.

^a National defined population covers 90% to 95% of the national target population.

^b These education systems met guidelines for sample participation rates only after replacement schools were included.



- ^c National target population does not include all of the international target population.
- ^d National defined population covers less than 90% of the national target population (but at least 77%).
- ^e Nearly satisfied guidelines for sample participation rates after replacement schools were included.
- ^f Reservations about reliability exist because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

Note(s)

Education systems are ordered by average score. Education systems that are not countries are designated by the appended three-letter international abbreviation for their country. The TIMSS scale centerpoint is set at 500 points and represents the mean of the overall achievement distribution in 1995. The TIMSS scale is the same in each administration; thus, a value of 500 in 2015 equals 500 in 1995. For TIMSS 2015, Norway revised its assessed population to students in their fifth and ninth years of schooling to obtain better comparisons with Sweden and Finland. However, in previous TIMSS cycles, Norway assessed students in their fourth and eighth years of schooling, which were defined as fourth and eighth grades but have been redefined as third and seventh grades because year 1 in Norway is now considered the equivalent of a year of kindergarten. To maintain trends with previous TIMSS cycles, in 2015, Norway also collected data from students in their fourth and eighth years of schooling, which is used in trend tables.

Source(s)

Provasnik S, Malley L, Stephens M, Landeros K, Perkins R, Tang JH, *Highlights from TIMSS and TIMSS Advanced 2015: Mathematics and Science Achievement of U.S. Students in Grades 4 and 8 and in Advanced Courses at the End of High School in an International Context*, NCES 2017-002 (2016).

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