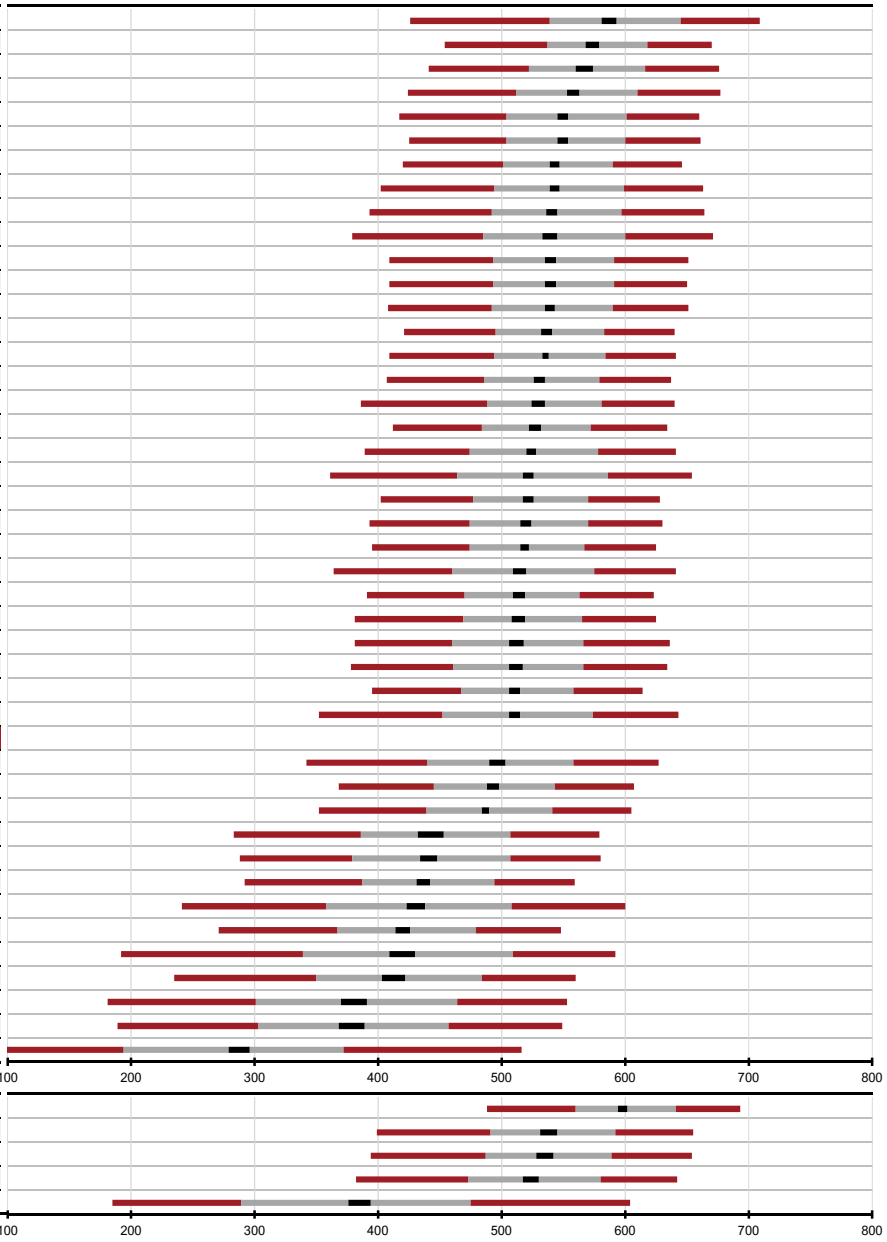
Exhibit 1.1: Average Reading Achievement and Scale Score Distributions

Assessed Fourth Grade Students at the End of the School Year

⋈ Assessed one year later than originally scheduled

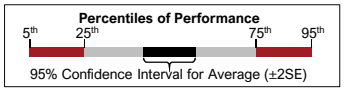
Country	Average Scale Score	
[3] Singapore	587 (3.1)	▲
[2 †] Hong Kong SAR	573 (2.7)	▲
Russian Federation	567 (3.6)	▲
England ⋈	558 (2.5)	▲
Finland	549 (2.4)	▲
Poland	549 (2.2)	▲
Chinese Taipei	544 (2.2)	▲
[2] Sweden	544 (2.1)	▲
Australia ⋈	540 (2.2)	▲
Bulgaria	540 (3.0)	▲
Czech Republic	540 (2.3)	▲
[2 †] Denmark	539 (2.2)	▲
Norway (5)	539 (2.0)	▲
[2] Italy	537 (2.2)	▲
Macao SAR	536 (1.3)	▲
Austria	530 (2.2)	▲
[†] Slovak Republic	529 (2.7)	▲
[≡] Netherlands	527 (2.5)	▲
Germany	524 (2.1)	▲
[†] New Zealand	521 (2.3)	▲
Spain	521 (2.2)	▲
[2] Portugal	520 (2.3)	▲
Slovenia	520 (1.9)	▲
Malta	515 (2.7)	▲
France	514 (2.5)	▲
[3] Serbia	514 (2.8)	▲
[2] Albania	513 (3.1)	▲
Cyprus	511 (2.9)	▲
Belgium (Flemish)	511 (2.3)	▲
[3] Israel ⋈	510 (2.2)	▲
PIRLS Scale Centerpoint	**500**	
[2] Turkiye	496 (3.4)	
[2] Belgium (French)	494 (2.7)	▼
[3] Montenegro	487 (1.6)	▼
North Macedonia	442 (5.3)	▼
Azerbaijan	440 (3.6)	▼
Uzbekistan	437 (2.9)	▼
Oman	429 (3.7)	▼
[2] Kosovo	421 (3.1)	▼
[2 †] Brazil ⋈	419 (5.3)	▼
Iran, Islamic Rep. of ⋈	413 (4.9)	▼
Jordan	381 (5.4)	▼
[2 Ψ] Egypt	378 (5.4)	▼
[Ж] South Africa ⋈	288 (4.4)	▼
Benchmarking Participants		
Moscow City, Russian Federation	598 (2.1)	▲
[3 ≡] Alberta, Canada	539 (3.6)	▲
[2] British Columbia, Canada	535 (3.5)	▲
[2] Newfoundland & Labrador, Canada	523 (3.2)	▲
South Africa (6) ⋈	384 (4.5)	▼

Reading Achievement Distribution



▲ Average significantly higher than the centerpoint of the PIRLS scale

▼ Average significantly lower than the centerpoint of the PIRLS scale



The PIRLS achievement scale was established in 2001 based on the combined achievement distribution of all countries that participated in PIRLS 2001. 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.

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

See Appendix A.2 for population coverage notes 1, 2, and 3. See Appendix A.5 for sampling guidelines and sampling participation notes †, ‡, and ≡.

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

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

Issues identified in Albania's data quality led to reduced comparability and framework coverage.

South Africa continued investigating its PIRLS 2021 results at the time of publication and will deal with the findings through its national report.

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2021

IEA TIMSS & PIRLS International Study Center Lynch School of Education BOSTON COLLEGE

Exhibit 1.2: Significance of Differences Between Countries' Average Reading Achievement

Assessed Fourth Grade Students at the End of the School Year

⋈ Assessed one year later than originally scheduled

Read across the row for a country to compare performance with the countries listed along the top of the chart. If no statistically significant difference was found, no symbol is present. If the difference is significant ($p < 0.05$), a symbol indicates whether the estimated achievement of the country in the row is higher (▲) than that of the comparison country, or lower (▼).

Country	Average Scale Score	Singapore	Hong Kong SAR	Russian Federation	England ⋈	Finland	Poland	Chinese Taipei	Sweden	Australia ⋈	Bulgaria	Czech Republic	Denmark	Norway (5)	Italy	Macao SAR	Austria	Slovak Republic	Netherlands	Germany	New Zealand	Spain	Portugal	Slovenia	Malta	France	Serbia	Albania	Cyprus	Belgium (Flemish)	Israel ⋈	Turkiye	Belgium (French)	Montenegro	North Macedonia
Singapore	587 (3.1)		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Hong Kong SAR	573 (2.7)	▼			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Russian Federation	567 (3.6)	▼			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
England ⋈	558 (2.5)	▼	▼	▼		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Finland	549 (2.4)	▼	▼	▼	▼					▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Poland	549 (2.2)	▼	▼	▼	▼					▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Chinese Taipei	544 (2.2)	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Sweden	544 (2.1)	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Australia ⋈	540 (2.2)	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Bulgaria	540 (3.0)	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Czech Republic	540 (2.3)	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Denmark	539 (2.2)	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Norway (5)	539 (2.0)	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Italy	537 (2.2)	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Macao SAR	536 (1.3)	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Austria	530 (2.2)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼					▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Slovak Republic	529 (2.7)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼					▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Netherlands	527 (2.5)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼						▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Germany	524 (2.1)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼									▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
New Zealand	521 (2.3)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Spain	521 (2.2)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Portugal	520 (2.3)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲
Slovenia	520 (1.9)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲
Malta	515 (2.7)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼												▲	▲	▲	▲
France	514 (2.5)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲
Serbia	514 (2.8)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲
Albania	513 (3.1)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲
Cyprus	511 (2.9)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲
Belgium (Flemish)	511 (2.3)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲
Israel ⋈	510 (2.2)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲
Turkiye	496 (3.4)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼			▲	▲
Belgium (French)	494 (2.7)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼			▲	▲
Montenegro	487 (1.6)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼		▲
North Macedonia	442 (5.3)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
Azerbaijan	440 (3.6)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
Uzbekistan	437 (2.9)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
Oman	429 (3.7)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
Kosovo	421 (3.1)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Brazil ⋈	419 (5.3)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Iran, Islamic Rep. of ⋈	413 (4.9)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Jordan	381 (5.4)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Egypt	378 (5.4)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
South Africa ⋈	288 (4.4)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Benchmarking Participants																																			
Moscow City, Russian Federation	598 (2.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Alberta, Canada	539 (3.6)	▼	▼	▼	▼	▼	▼										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
British Columbia, Canada	535 (3.5)	▼	▼	▼	▼	▼	▼	▼	▼											▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Newfoundland & Labrador, Canada	523 (3.2)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼								▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
South Africa (6) ⋈	384 (4.5)	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼

▲ Average achievement significantly higher than comparison country

▼ Average achievement significantly lower than comparison country

Significance tests were not adjusted for multiple comparisons. Five percent of the comparisons would be statistically significant by chance alone.
( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.
Issues identified in Albania's data quality led to reduced comparability and framework coverage.

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2021
Downloaded from https://pirls2021.org/results

IEA TIMSS & PIRLS International Study Center
Lynch School of Education
BOSTON COLLEGE

Exhibit 1.2: Significance of Differences Between Countries' Average Reading Achievement

Assessed Fourth Grade Students at the End of the School Year

⋈ Assessed one year later than originally scheduled

(Continued)

Country	Average Scale Score	Azerbaijan	Uzbekistan	Oman	Kosovo	Brazil ⋈	Iran, Islamic Rep. of ⋈	Jordan	Egypt	South Africa ⋈	**Benchmarking Participants**	Moscow City, Russian Federation	Alberta, Canada	British Columbia, Canada	Newfoundland & Labrador, Canada	South Africa (6) ⋈
Singapore	587 (3.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▲	▲	▲	▲
Hong Kong SAR	573 (2.7)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▲	▲	▲	▲
Russian Federation	567 (3.6)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▲	▲	▲	▲
England ⋈	558 (2.5)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▲	▲	▲	▲
Finland	549 (2.4)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▲	▲	▲	▲
Poland	549 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▲	▲	▲	▲
Chinese Taipei	544 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼		▲	▲	▲
Sweden	544 (2.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼		▲	▲	▲
Australia ⋈	540 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Bulgaria	540 (3.0)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Czech Republic	540 (2.3)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Denmark	539 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Norway (5)	539 (2.0)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Italy	537 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Macao SAR	536 (1.3)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Austria	530 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼			▲
Slovak Republic	529 (2.7)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼			▲
Netherlands	527 (2.5)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼			▲
Germany	524 (2.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼		▲
New Zealand	521 (2.3)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼		▲
Spain	521 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼		▲
Portugal	520 (2.3)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼		▲
Slovenia	520 (1.9)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼		▲
Malta	515 (2.7)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
France	514 (2.5)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Serbia	514 (2.8)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Albania	513 (3.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Cyprus	511 (2.9)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Belgium (Flemish)	511 (2.3)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Israel ⋈	510 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Turkiye	496 (3.4)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Belgium (French)	494 (2.7)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Montenegro	487 (1.6)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
North Macedonia	442 (5.3)				▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Azerbaijan	440 (3.6)			▲	▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Uzbekistan	437 (2.9)				▲	▲	▲	▲	▲	▲		▼	▼	▼	▼	▲
Oman	429 (3.7)	▼					▲	▲	▲	▲		▼	▼	▼	▼	▲
Kosovo	421 (3.1)	▼	▼					▲	▲	▲		▼	▼	▼	▼	▲
Brazil ⋈	419 (5.3)	▼	▼					▲	▲	▲		▼	▼	▼	▼	▲
Iran, Islamic Rep. of ⋈	413 (4.9)	▼	▼	▼				▲	▲	▲		▼	▼	▼	▼	▲
Jordan	381 (5.4)	▼	▼	▼	▼	▼	▼			▲		▼	▼	▼	▼	
Egypt	378 (5.4)	▼	▼	▼	▼	▼	▼			▲		▼	▼	▼	▼	
South Africa ⋈	288 (4.4)	▼	▼	▼	▼	▼	▼	▼	▼			▼	▼	▼	▼	▼
Benchmarking Participants																
Moscow City, Russian Federation	598 (2.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲			▲	▲	▲	▲
Alberta, Canada	539 (3.6)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
British Columbia, Canada	535 (3.5)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼			▲	▲
Newfoundland & Labrador, Canada	523 (3.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲		▼	▼	▼		▲
South Africa (6) ⋈	384 (4.5)	▼	▼	▼	▼	▼	▼			▲		▼	▼	▼	▼	

▲ Average achievement significantly higher than comparison country

▼ Average achievement significantly lower than comparison country

Significance tests were not adjusted for multiple comparisons. Five percent of the comparisons would be statistically significant by chance alone.
( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.
Issues identified in Albania's data quality led to reduced comparability and framework coverage.