

Exhibit 1.2: Multiple Comparisons of Average Reading Achievement

Because there often were relatively small differences in achievement between countries, Exhibit 1.2 shows whether the differences in average achievement among the countries are statistically significant.

The Russian Federation and Singapore were the top-performing countries, with similar achievement. Fourth grade students in the Russian Federation had higher achievement than students in all of the other countries except Singapore. In turn, Singaporean students had higher achievement than those in all of the other countries except the Russian Federation and Hong Kong SAR. Hong Kong SAR was another top performer, with achievement similar to or higher achievement than all the countries except the Russian Federation. Ireland, Finland, Poland, and Northern Ireland also performed very well, having achievement similar to or higher than than all the other countries except the Russian Federation and Singapore.

Exhibit 1.2: Multiple Comparisons of Average Reading Achievement

Instructions: Read across the row for a country to compare performance with the countries listed along the top of the chart. The symbols indicate whether the average achievement of the country in the row is significantly lower than that of the comparison country, significantly higher than that of the comparison country, or if there is no statistically significant difference between the average achievement of the two countries.

Country	Average Scale Score	Russian Federation	Singapore	Hong Kong SAR	Ireland	Finland	Poland	Northern Ireland	Norway (5)	Chinese Taipei	England	Latvia	Sweden	Hungary	Bulgaria	United States	Lithuania	Italy	Denmark	Macao SAR	Netherlands	Australia	Czech Republic	Canada	Slovenia	Austria	Germany	Kazakhstan	Slovak Republic	Israel	Portugal
Russian Federation	581 (2.2)			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Singapore	576 (3.2)				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Hong Kong SAR	569 (2.7)				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Ireland	567 (2.5)					▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Finland	566 (1.8)						▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Poland	565 (2.1)							▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Northern Ireland	565 (2.2)								▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Norway (5)	559 (2.3)									▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Chinese Taipei	559 (2.0)										▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
England	559 (1.9)											▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Latvia	558 (1.7)												▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Sweden	555 (2.4)													▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Hungary	554 (2.9)														▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Bulgaria	552 (4.2)															▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
United States	549 (3.1)																▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Lithuania	548 (2.6)																	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Italy	548 (2.2)																		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Denmark	547 (2.1)																			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Macao SAR	546 (1.0)																				▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Netherlands	545 (1.7)																					▲	▲	▲	▲	▲	▲	▲	▲	▲	
Australia	544 (2.5)																						▲	▲	▲	▲	▲	▲	▲	▲	
Czech Republic	543 (2.1)																							▲	▲	▲	▲	▲	▲	▲	
Canada	543 (1.8)																								▲	▲	▲	▲	▲	▲	
Slovenia	542 (2.0)																									▲	▲	▲	▲	▲	
Austria	541 (2.4)																										▲	▲	▲	▲	
Germany	537 (3.2)																											▲	▲	▲	
Kazakhstan	536 (2.5)																												▲	▲	
Slovak Republic	535 (3.1)																													▲	▲
Israel	530 (2.5)																													▲	▲
Portugal	528 (2.3)																													▲	▲
Spain	528 (1.7)																													▲	▲
Belgium (Flemish)	525 (1.9)																													▲	▲
New Zealand	523 (2.2)																													▲	▲
France	511 (2.2)																													▲	▲
Belgium (French)	497 (2.6)																													▲	▲
Chile	494 (2.5)																													▲	▲
Georgia	488 (2.8)																													▲	▲
Trinidad and Tobago	479 (3.3)																													▲	▲
Azerbaijan	472 (4.2)																													▲	▲
Malta	452 (1.8)																													▲	▲
United Arab Emirates	450 (3.2)																													▲	▲
Bahrain	446 (2.3)																													▲	▲
Qatar	442 (1.8)																													▲	▲
Saudi Arabia	430 (4.2)																													▲	▲
Iran, Islamic Rep. of	428 (4.0)																													▲	▲
Oman	418 (3.3)																													▲	▲
Kuwait	393 (4.1)																													▲	▲
Morocco	358 (3.9)																													▲	▲
Egypt	330 (5.6)																													▲	▲
South Africa	320 (4.4)																													▲	▲

Benchmarking Participants

Moscow City, Russian Fed.	612 (2.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Madrid, Spain	549 (2.0)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Quebec, Canada	547 (2.8)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Ontario, Canada	544 (3.2)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Andalusia, Spain	525 (2.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Norway (4)	517 (2.0)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Dubai, UAE	515 (1.9)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Denmark (3)	501 (2.7)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Buenos Aires, Argentina	480 (3.1)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Abu Dhabi, UAE	414 (4.7)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Eng/Afr/Zulu - RSA (5)	406 (6.0)	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

▲ 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.

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2016

