Exhibit 1.1: Distribution of Mathematics Achievement

Country	Average Scale Score		Mathematics Achievement Distribution						
² Singapore	618 (3.8)	0							
[†] Hong Kong SAR	615 (2.9)	0							
Korea, Rep. of	608 (2.2)	0							
Chinese Taipei	597 (1.9)	0					_		
Japan	593 (2.0)	0					_		
[‡] Northern Ireland	570 (2.9)	0					_		
Russian Federation	564 (3.4)	0					_		
Norway (5)	549 (2.5)	0						_	
Ireland	547 (2.1)	0						-	
England	546 (2.8)	0							
[†] Belgium (Flemish)	546 (2.1)	0							
Kazakhstan	544 (4.5)	0							
² Portugal	541 (2.2)	0							
[†] United States	539 (2.3)	0							
[†] Denmark	539 (2.7)	0							
² Lithuania	535 (2.7)	0							
Finland	535 (2.3)	0							
Poland	535 (2.0)	0							
	535 (2.1)	0							
[†] Netherlands		0							
Hungary	529 (3.2) 528 (2.2)	0						-	
Czech Republic									
Bulgaria	524 (5.3)	0							
Cyprus	523 (2.7)	0							
Germany	522 (2.0)	0							
Slovenia	520 (1.9)	0				-			
² Sweden	519 (2.8)	0							
³ Serbia	518 (3.5)	0							
Australia	517 (3.1)	0				-			
† Canada	511 (2.3)	0				-			
² Italy	507 (2.6)	0				-			
² Spain	505 (2.5)	0							
Croatia	502 (1.8)								
TIMSS Scale Centerpoint	500								
Slovak Republic	498 (2.5)								
New Zealand	491 (2.3)	•				-			
France	488 (2.9)	•				-			
Turkey	483 (3.1)	•							
Armenia	481 (3.4)	$\overline{\mathbf{v}}$							
¹ Georgia	463 (3.6)	•				-			
Chile	459 (2.4)	$\overline{\mathbf{v}}$		•		-	-		
United Arab Emirates	452 (2.4)	•							
² Bahrain	451 (1.6)	\odot							
Qatar	439 (3.4)	۲							
Iran, Islamic Rep. of	431 (3.2)	\odot							
Oman	425 (2.5)	•			-				
Indonesia	397 (3.7)	$\overline{\mathbf{v}}$			-				
Jordan	388 (3.1)	۲	-		-				
ψ Saudi Arabia	383 (4.1)	$\overline{\mathbf{v}}$							
Morocco	377 (3.4)	\bigcirc	_		-				
South Africa (5)	376 (3.5)	\odot			-				
ψ Kuwait	353 (4.6)	۲							
		100	200	300	400	500	600	700	1
			average significant						·
			erpoint of the TIMS		5th	Percentiles of I 25th	Performance 75th	95th	
				-	5		,		

I 95% Confidence Interval for Average (±2SE)

Note: Seven countries and 1 benchmarking entity participated in the TIMSS Numeracy assessment: Bahrain, Indonesia, Iran, Jordan, Kuwait, Morocco, and South Africa as well as Buenos Aires. Except for Jordan and South Africa, they also participated in the TIMSS fourth grade assessment and their mathematics achievement results are based on an average of both assessments.

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 \ddagger .

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



TIMSS Mathematics

4th Grade

Exhibit 1.1: Distribution of Mathematics Achievement (Continued)

Country	Average Scale Score	2	Mather			natics Achievement Distribution				
Benchmarking Participants										
¹ Florida, US	353 (4.6)	۲					-			
[‡] Quebec, Canada	546 (4.7)	0					-			
Ontario, Canada	536 (4.0)	0			-	-				
Dubai, UAE	512 (2.3)	0		-		-	-	-		
Norway (4)	511 (1.4)	0				-				
Buenos Aires, Argentina	493 (2.3)	$\overline{\mathbf{v}}$		-	_	-	-			
² ψ Abu Dhabi, UAE	432 (2.9)	۲		-						
		100	200	300	400	500	600	700	8	
		 Country average significantly higher than 				Percentiles of Performance				

• Country average significantly higher than the centerpoint of the TIMSS 4th grade scale

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



TIMSS Mathematics

4th Grade

