Exhibit 5.17: Trends in Student Populations – TIMSS 2015 – Eighth Grade

Country	Years of Formal Schooling*						Average Age at Time of Testing					
	2015	2011	2007	2003	1999	1995	2015	2011	2007	2003	1999	1995
Australia	8	8	8	8		8	14.0	14.0	13.9	13.9		13.9
Bahrain	8	8	8	8			14.0	14.4	14.1	14.1		
Botswana (9)	9	9					15.6	15.8				
Chile	8	8		8	8		14.3	14.2		14.2	14.4	
Chinese Taipei	8	8	8	8	8		14.3	14.2	14.2	14.2	14.2	
Egypt	8		8	8			14.1		14.1	14.4		
England	9	9	9	9	9	9	14.1	14.2	14.2	14.3	14.2	14.0
Georgia	8	8	8				13.7	14.2	14.2			
Hong Kong SAR	8	8	8	8	8	8	14.2	14.2	14.4	14.4	14.2	14.2
Hungary	8	8	8	8	8	8	14.7	14.7	14.6	14.5	14.4	14.3
Iran, Islamic Rep. of	8	8	8	8	8	8	14.2	14.3	14.2	14.4	14.6	14.6
Ireland	8					8	14.4					14.4
Israel	8	8					14.0	14.0				
Italy	8	8	8	8	8		13.8	13.8	13.9	13.9	14.0	
Japan	8	8	8	8	8	8	14.5	14.5	14.5	14.4	14.4	14.4
Jordan	8	8	8	8	8		13.8	13.9	14.0	13.9	14.0	
Kazakhstan	8	8					14.3	14.6				
Korea, Rep. of	8	8	8	8	8	8	14.4	14.3	14.3	14.6	14.4	14.2
Kuwait	8		8				13.7		14.4			
Lebanon	8	8	8	8			14.2	14.3	14.4	14.6		
Lithuania	8	8	8	8	8.5	8	14.7	14.7	14.9	14.9	15.2	14.3
Malaysia	8	8	8	8	8		14.3	14.4	14.3	14.3	14.4	
Malta	8		9				13.8		14.0			
Morocco	8	8					14.5	14.7				
New Zealand	8	8.5–9.5		8.5–9.5	8.5–9.5	8.5–9.5	14.1	14.1		14.1	14.0	14.0
Oman	8	8	8				14.0	14.1	14.3			
Qatar	8	8					14.1	14.0				
Russian Federation	8	8	7 or 8	7 or 8	7 or 8	7 or 8	14.7	14.7	14.6	14.2	14.1	14.0
Saudi Arabia	8	8					14.1	14.1				
Singapore	8	8	8	8	8	8	14.4	14.4	14.4	14.3	14.4	14.5
Slovenia	8	8	7 or 8	7 or 8		7	13.8	13.9	13.8	13.8		13.8
South Africa (9)	9	9					15.7	16.0				

* Represents years of schooling counting from the first year of ISCED Level 1.

Georgian schools in South Ossetia and Abkhazia were excluded in 2011 due to lack of access and absence of official statistics. Abkhazia refugee schools in other territories of Georgia were included in the sample frame.

Bahrain in 2011, Korea in 2003, Lithuania in 1999, and Dubai (UAE) in 2007 tested the same cohort of students as other countries, but later in the assessment year. South Africa (9) tested one year later.

Trend results for Kuwait do not include private schools. Trend results for Lithuania do not include students taught in Polish or in Russian.

An empty cell indicates a country did not participate in that year's assessment. A dash (–) indicates comparable data not available.

Exhibit 5.17: Trends in Student Populations – TIMSS 2015 – Eighth Grade (Continued)

Country	Years of Formal Schooling*						Average Age at Time of Testing					
	2015	2011	2007	2003	1999	1995	2015	2011	2007	2003	1999	1995
Sweden	8	8	8	8		7	14.7	14.8	14.8	14.9		14.9
Thailand	8	8	8		8		14.4	14.3	14.3		14.5	
Turkey	8	8					13.9	14.0				
United Arab Emirates	8	8					13.9	13.9				
United States	8	8	8	8	8	8	14.2	14.2	14.3	14.2	14.2	14.2
Benchmarking Participants												
Ontario, Canada	8	8	8	8	8	8	13.8	13.8	13.8	13.8	13.9	14.0
Quebec, Canada	8	8	8	8	8	8	14.3	14.2	14.2	14.2	14.3	14.5
Norway (8)	8	8	8	7		7	13.7	13.7	13.8	13.8		13.9
Abu Dhabi, UAE	8	8					13.9	13.8				
Dubai, UAE	8	8	8				13.9	13.9	14.2			
Florida, US	8	8					14.4	14.4				

Exhibit 5.17: Trends in Student Populations – TIMSS 2015 – Eighth Grade (Continued)

Country	Overall Exclusions						Overall Participation (After Replacement)					
	2015	2011	2007	2003	1999	1995	2015	2011	2007	2003	1999	1995
Australia	3.5%	3.2%	1.9%	1.3%		1.0%	90%	88%	93%	83%		70%
Bahrain	3.8%	1.6%	1.5%	0.0%			97%	97%	97%	98%		
Botswana (9)	0.3%	0.0%					98%	98%				
Chile	1.9%	2.8%		2.2%	2.8%		85%	95%		99%	96%	
Chinese Taipei	1.7%	1.3%	3.3%	4.8%	1.6%		98%	99%	99%	99%	99%	
Egypt	0.1%		0.5%	3.4%			91%		98%	97%		
England	2.3%	2.2%	2.3%	2.1%	5.0%	11.0%	92%	70%	75%	46%	77%	77%
Georgia	6.0%	4.5%	3.9%				98%	97%	97%			
Hong Kong SAR	1.6%	5.3%	3.8%	3.4%	0.8%	2.0%	81%	75%	75%	80%	74%	81%
Hungary	5.4%	4.4%	3.9%	8.5%	4.3%	4.0%	96%	95%	96%	94%	93%	87%
Iran, Islamic Rep. of	2.2%	2.2%	0.5%	6.5%	4.4%	0.0%	98%	99%	98%	98%	98%	98%
Ireland	1.2%					0.0%	91%					81%
Israel	22.8%	22.6%					93%	92%				
Italy	6.1%	4.7%	5.0%	3.6%	6.7%		93%	93%	96%	97%	97%	
Japan	2.3%	2.8%	3.5%	0.6%	1.3%	1.0%	93%	87%	91%	93%	89%	90%
Jordan	1.0%	0.4%	2.0%	1.3%	3.0%		96%	96%	96%	96%	99%	
Kazakhstan	3.8%	5.1%					97%	98%				
Korea, Rep. of	2.1%	1.9%	1.6%	4.9%	4.0%	4.0%	98%	99%	99%	98%	100%	95%
Kuwait	3.3%		0.3%				85%		84%			
Lebanon	1.3%	1.4%	1.4%	1.4%			88%	94%	85%	91%		
Lithuania	7.0%	4.8%	4.2%	2.6%	4.5%	7.0%	93%	92%	90%	84%	89%	83%
Malaysia	4.3%	0.1%	3.3%	4.0%	4.6%		98%	98%	98%	98%	99%	
Malta	3.5%		2.9%				96%		94%			
Morocco	0.0%	0.1%					95%	94%				
New Zealand	3.1%	3.2%		4.4%	2.4%	2.0%	81%	88%		90%	91%	94%
Oman	0.4%	1.2%	1.2%				96%	97%	99%			
Qatar	3.2%	4.5%					96%	99%				
Russian Federation	3.7%	6.0%	2.3%	5.5%	1.7%	6.0%	97%	98%	97%	96%	97%	95%
Saudi Arabia	2.1%	1.2%					97%	98%				
Singapore	7.0%	6.0%	1.8%	0.0%	0.0%	5.0%	97%	95%	95%	97%	98%	95%
Slovenia	3.8%	2.3%	1.9%	1.4%		3.0%	92%	92%	92%	91%		77%
South Africa (9)	1.5%	1.4%					96%	95%				
Sweden	5.5%	5.1%	3.6%	2.8%		1.0%	94%	92%	94%	87%		90%
Thailand	0.2%	1.5%	3.4%		3.3%		99%	99%	99%		99%	

Exhibit 5.17: Trends in Student Populations – TIMSS 2015 – Eighth Grade (Continued)

Country	Overall Exclusions						Overall Participation (After Replacement)					
	2015	2011	2007	2003	1999	1995	2015	2011	2007	2003	1999	1995
Turkey	1.3%	1.5%					98%	97%				
United Arab Emirates	3.6%	2.8%					97%	97%				
United States	5.1%	7.2%	7.9%	4.9%	3.9%	2.0%	78%	81%	77%	73%	85%	78%
Benchmarking Participants												
Ontario, Canada	2.5%	5.6%	6.2%	6.0%	5.1%	–	87%	93%	89%	89%	93%	90%
Quebec, Canada	5.3%	4.9%	13.6%	4.8%	1.3%	–	58%	88%	77%	85%	92%	89%
Norway (8)	4.1%	1.9%	2.6%	2.3%		2.0%	87%	84%	86%	85%		93%
Abu Dhabi, UAE	4.1%	1.7%					98%	96%				
Dubai, UAE	5.2%	4.0%	5.0%				97%	95%	69%			
Florida, US	2.8%	6.9%					90%	84%				