

Exhibit 5.9: Participation Rates (Weighted) – TIMSS 2015 – Eighth Grade

Country	School Participation		Class Participation	Student Participation	Overall Participation	
	Before Replacement	After Replacement			Before Replacement	After Replacement
Australia	99%	99%	99%	91%	90%	90%
Bahrain	100%	100%	100%	97%	97%	97%
Botswana (9)	100%	100%	100%	98%	98%	98%
† Canada	80%	85%	99%	93%	73%	78%
Chile	85%	92%	100%	93%	79%	85%
Chinese Taipei	100%	100%	100%	98%	98%	98%
Egypt	95%	100%	100%	91%	87%	91%
England	91%	97%	100%	95%	87%	92%
Georgia	99%	100%	100%	98%	97%	98%
Hong Kong SAR	78%	84%	100%	96%	74%	81%
Hungary	96%	99%	100%	97%	93%	96%
Iran, Islamic Rep. of	100%	100%	100%	98%	98%	98%
Ireland	99%	99%	100%	92%	91%	91%
Israel	91%	100%	100%	93%	84%	93%
Italy	78%	98%	100%	95%	74%	93%
Japan	95%	99%	100%	95%	90%	93%
Jordan	100%	100%	100%	96%	96%	96%
Kazakhstan	97%	99%	100%	98%	95%	97%
Korea, Rep. of	100%	100%	100%	98%	98%	98%
Kuwait	94%	94%	100%	90%	85%	85%
Lebanon	77%	92%	100%	96%	74%	88%
Lithuania	99%	100%	100%	93%	92%	93%
Malaysia	100%	100%	100%	98%	98%	98%
Malta	100%	100%	100%	96%	96%	96%
Morocco	100%	100%	100%	95%	95%	95%
† New Zealand	76%	90%	100%	90%	68%	81%
Norway (9)	96%	96%	100%	91%	87%	87%
Oman	97%	97%	100%	99%	96%	96%
Qatar	98%	98%	100%	98%	96%	96%
Russian Federation	100%	100%	100%	97%	97%	97%
Saudi Arabia	98%	100%	100%	97%	95%	97%
Singapore	100%	100%	100%	97%	97%	97%

TIMSS guidelines for sampling participation: The minimum acceptable participation rates were 85 percent of both schools and students, or a combined rate (the product of school and student participation) of 75 percent. Participants not meeting these guidelines were annotated as follows:

† Met guidelines for sample participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation rates after replacement schools were included.

‡ Did not satisfy guidelines for sample participation rates.

Exhibit 5.9: Participation Rates (Weighted) – TIMSS 2015 – Eighth Grade (Continued)

Country	School Participation		Class Participation	Student Participation	Overall Participation	
	Before Replacement	After Replacement			Before Replacement	After Replacement
Slovenia	96%	99%	100%	94%	89%	92%
South Africa (9)	98%	100%	100%	96%	94%	96%
Sweden	97%	100%	100%	94%	91%	94%
Thailand	98%	100%	100%	99%	96%	99%
Turkey	100%	100%	100%	98%	98%	98%
United Arab Emirates	100%	100%	100%	97%	97%	97%
[†] United States	78%	84%	99%	94%	73%	78%
Benchmarking Participants						
[†] Buenos Aires, Argentina	81%	85%	98%	85%	68%	71%
Ontario, Canada	93%	94%	99%	93%	85%	87%
[‡] Quebec, Canada	50%	63%	99%	92%	46%	58%
Norway (8)	95%	95%	100%	93%	87%	87%
Abu Dhabi, UAE	100%	100%	100%	98%	98%	98%
Dubai, UAE	100%	100%	100%	97%	97%	97%
Florida, US	98%	98%	99%	93%	90%	90%