

	Coverage	Notes on Coverage	School-Level Exclusions	Within-Sample Exclusions	Overall Exclusions
Chile	100%		0.3%	1.9%	2.2%
Chinese Taipei	100%		0.1%	1.3%	1.5%
England	100%		2.9%	2.0%	4.8%
Finland	100%		1.5%	1.5%	3.1%
France	100%		2.8%	1.0%	3.8%
¹ Georgia	91%	Students taught in Georgian	2.2%	2.1%	4.3%
Hong Kong SAR	100%		1.2%	2.1%	3.3%
Hungary	100%		2.5%	1.9%	4.4%
³ Israel	100%		19.5%	3.8%	23.2%
Italy	100%		0.8%	3.6%	4.3%
Korea, Rep. of	100%		0.7%	0.9%	1.6%
Lithuania	100%		3.2%	2.0%	5.3%
Malaysia	100%		1.9%	1.3%	3.2%
Norway (9)	100%		1.4%	2.5%	4.0%
Portugal	100%		1.0%	4.5%	5.5%
Qatar	100%		1.3%	0.9%	2.2%
² Russian Federation	100%		2.8%	2.9%	5.7%
² Singapore	100%		10.1%	0.2%	10.3%
² Sweden	100%		1.7%	4.6%	6.3%
Turkey	100%		1.1%	2.4%	3.4%
United Arab Emirates	100%		1.1%	1.3%	2.4%
United States	100%		0.0%	3.9%	3.9%

Benchmarking P10092109 w/2105% Td(100% d03v)1 (c)34m)3.19 1650 Td(100% d03v)1 (c)30d) w/1 (c)30960) 147% 0003 cv83.19

	Schools	Students	Schools	Students	Student Population Size Estimated from Sample
Austria	3,095	81,406	193	5,097	82,158
Canada	9,796	304,798	704	15,582	306,230
Chile	6,081	252,190	169	4,775	250,230
Chinese Taipei	2,476	190,975	162	4,295	188,886
Croatia	1,571	39,244	153	4,335	39,860
Czech Republic	3,578	114,774	152	5,358	113,904
Denmark	1,644	66,225	166	3,693	66,950
England	15,349	644,127	139	3,872	667,451
Finland	1,840	59,755	158	5,397	59,198
France	31,716	822,438	155	4,792	827,474
Georgia	1,678	42,980	154	4,316	40,185
Germany	17,584	716,091	203	3,933	725,273
Hong Kong SAR	564	60,786	139	3,386	60,761
Hungary	2,888	94,673	149	5,227	89,198
Italy	6,809	556,298	162	4,269	549,275

	Before Replacement	After Replacement			Before Replacement	After Replacement
Austria	99%	99%	100%	100%	97%	96%
Canada	86%	90%	100%	100%	94%	81%
Chile	89%	99%	100%	100%	95%	85%
Chinese Taipei	95%	99%	100%	100%	98%	94%
Croatia	95%	97%	99%	99%	90%	84%
Czech Republic	99%	100%	100%	100%	95%	94%
† Denmark	70%	95%	99%	99%	86%	60%
England	86%	93%	100%	100%	95%	82%
Finland	99%	100%	100%	100%	96%	96%
France	100%	100%	100%	100%	97%	97%
Georgia	97%	99%	100%	100%	97%	93%
Germany	97%	100%	100%	100%	96%	94%
† Hong Kong SAR	67%	88%	100%	100%	89%	60%
Hungary	93%	99%	100%	100%	96%	89%
Italy	96%	100%	100%	100%	96%	92%
Korea, Rep. of	99%	99%	100%	100%	98%	97%
Lithuania	100%	100%	100%	100%	93%	93%
Malta	100%	100%	100%	100%	96%	96%
^A Netherlands	46%	75%	100%	100%	97%	45%
† Norway (5)	70%	90%	100%	100%	93%	65%
Portugal	87%	100%	99%	99%	94%	81%
Qatar	100%	100%	100%	100%	97%	97%
Russian Federation	99%	99%	100%	100%	98%	97%
Singapore	100%	100%	100%	100%	97%	97%
Slovak Republic	97%	99%	100%	100%	96%	93%
Spain	97%	99%	100%	100%	95%	92%
Sweden	100%	100%	100%	100%	94%	94%
Turkey (5)	99%	100%	100%	100%	99%	98%
United Arab Emirates	100%	100%	100%	100%	96%	95%
† United States	76%	88%	100%	100%	95%	73%
Benchmarking Participants						
Ontario, Canada	93%	95%	100%	100%	94%	87%
Quebec, Canada	82%	86%	100%	100%	96%	79%

	Before Replacement	After Replacement			Before Replacement	After Replacement
Chile	90%	99%	100%	100%	95%	86%
Chinese Taipei	98%	99%	100%	100%	98%	95%
England	83%	90%	100%	100%	94%	78%
Finland	100%	100%	100%	100%	95%	95%
France	100%	100%	100%	100%	96%	96%
Georgia	90%	92%	100%	100%	97%	87%
† Hong Kong SAR	70%	86%	100%	100%	93%	65%
Hungary	95%	99%	100%	100%	96%	91%
Israel	95%	98%	100%	100%	92%	87%
Italy	97%	100%	100%	100%	97%	93%
Korea, Rep. of	100%	100%	100%	100%	97%	97%
Lithuania	99%	99%	100%	100%	92%	92%
Malaysia	99%	100%	100%	100%	98%	97%
† Norway (9)	79%	95%	99%	99%	88%	68%
Portugal	95%	99%	99%	99%	95%	89%
Qatar	100%	100%	100%	100%	97%	97%
Russian Federation	99%	100%	100%	100%	97%	97%
Singapore	100%	100%	100%	100%	96%	96%
Sweden	98%	99%	100%	100%		

Participation Rates (Unweighted) – eTIMSS 2019 with Problem Solving and Inquiry—Grade 8

Country	School Participation		Class Participation	Student Participation	Overall Participation	
	Before Replacement	After Replacement			Before Replacement	After Replacement
Chile	88%	98%	100%	100%	95%	84%
Chinese Taipei	98%	99%	100%	100%	98%	95%
England	83%	90%	100%	100%	94%	78%
Finland	100%	100%	100%	100%	95%	95%
France	100%	100%	100%	100%	96%	96%
Georgia	90%	92%	100%	100%	97%	87%
Hong Kong SAR	71%	86%	100%	100%	93%	66%
Hungary	94%	99%	100%	100%	96%	91%
Israel	94%	98%	100%	100%	92%	87%
Italy	97%	100%	100%	100%	97%	94%
Korea, Rep. of	100%	100%	100%	100%	97%	97%
Lithuania	99%	99%	100%	100%	92%	92%
Malaysia	99%	100%	100%	100%	98%	97%
Norway (9)	80%	95%	98%	98%	89%	70%
Portugal	94%	99%	99%	99%	95%	88%
Qatar	100%	100%	100%	100%	97%	97%
Russian Federation	100%	100%	100%	100%	97%	97%
Singapore	100%	100%	100%	100%	96%	96%
Sweden	99%	99%	100%	100%	91%	89%
Turkey	99%	100%	100%	100%	98%	98%
United Arab Emirates	100%	100%	100%	100%	95%	95%
United States	72%	85%	100%	100%	93%	67%
Benchmarking Participants						
Ontario, Canada	92%	93%	100%	100%	93%	86%
Quebec, Canada	74%	77%	99%	99%	94%	69%
Moscow City, Russian Fed.	97%	99%	100%	100%	97%	94%
Abu Dhabi, UAE	100%	100%	100%	100%	95%	95%
Dubai, UAE	100%	100%	100%	100%	96%	96%

School Sample Sizes – eTIMSS 2019 with Problem Solving and Inquiry—Grade 4

Country	Number of Schools in Original Sample	Number of Eligible Schools	Number of Schools in Original Sample that Participated	Number of Replacement Schools that Participated	Total Number of Schools that Participated
Austria	197	194	193	0	193
Canada	788	777	669	35	704
Chile	174	172	151	18	169
Chinese Taipei	163	163	155	7	162
Croatia	159	158	150	3	153
Czech Republic	156	152	151	1	152
Denmark	175	174	123	43	166
England	150	150	129	10	139
Finland	159	158	157	1	158
France	156	155	155	0	155
Georgia	158	157	151	3	154
Germany	206	203	198	5	203
Hong Kong SAR	159	159	109	30	139
Hungary	151	150	139	10	149
Italy	162	162	153	9	162
Korea, Rep. of	152	152	151	0	151
Lithuania	208	207	207	0	207
Malta	99	98	98	0	98
Netherlands	151	149	71	41	112
Norway (5)	167	167	119	31	150
Portugal	182	181	158	23	181
Qatar	242	242	242	0	242
Russian Federation	202	202	200	0	200
Singapore	187	187	187	0	187
Slovak Republic	159	158	153	4	157
Spain	502	502	494	7	501
Sweden	150	145	144	1	145
Turkey (5)	181	180	179	1	180
United Arab Emirates	697	688	688	0	688
United States	329	325	249	38	287
Benchmarking Participants					
Ontario, Canada	171	170	160	3	163
Quebec, Canada	172	172	140	8	148
Moscow City, Russian Fed.	152	151	148	2	150
Madrid, Spain	167	167	167	0	167
Abu Dhabi, UAE	249	247	247	0	247
Dubai, UAE	205	199	199	0	199

Student Sample Sizes – eTIMSS 2019 with Problem Solving and Inquiry—Grade 8

Country	Within-School Student Participation (Weighted)	Number of Students	Number of Students Withdrawn from Class/ Excluded	Number of Students	Number of Students	Number of Students	Number of Students
Chile	95%	5,085	68	76	4,941	244	4,697
Chinese Taipei	98%	5,901	106	42	5,753	143	5,610
England	94%	4,310	140	70	4,100	242	3,858
Finland	95%	5,979	62	62	5,855	285	5,570
France	96%	4,700	53	49	4,598	172	4,426
Georgia	97%	4,031	37	73	3,921	132	3,789
Hong Kong SAR	93%	4,115	12	73	4,030	300	3,730
Hungary	96%	5,540	23	86	5,431	212	5,219
Israel	92%	4,737	36	51	4,650	381	4,269
Italy	97%	4,456	22	153	4,281	143	4,138
Korea, Rep. of	97%	4,593	18	37	4,538	129	4,409
Lithuania	92%	4,843	19	98	4,726	360	4,366
Malaysia	98%	8,354	120	0	8,234	157	8,077
Norway (9)	88%	6,069	41	141	5,887	671	5,216
Portugal	95%	4,268	32	152	4,084	217	3,867
Qatar	97%	4,767	138	32	4,597	160	4,437
Russian Federation	97%	4,692	28	76	4,588	132	4,456
Singapore	96%	5,797	19	0	5,778	232	5,546
Sweden	91%	5,313	64	213	5,036	471	4,565
Turkey	98%	4,971	111	123	4,737	75	4,662
United Arab Emirates	95%	27,322	251	315	26,756	1217	25,539
United States	93%	11,270	307	242	10,721	777	9,944
Benchmarking Participants							
Ontario, Canada	94%	4,779	63	75	4,641	311	4,330
Quebec, Canada	94%	3,895	28	7	3,860	222	3,638
Moscow City, Russian Fed.	97%	4,517	21	19	4,477	153	4,324
Abu Dhabi, UAE	95%	9,997	41	86	9,870	490	9,380
Dubai, UAE	96%	7,164	199	141	6,824	280	6,544