

TIMSS 2011

Summary Statistics and Standard Errors for Proficiency in Science at the Fourth Grade

Exhibit 1: Summary Statistics and Standard Errors for Proficiency in Overall Science at the Fourth Grade

Country	Sample Size	Overall Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	416.083	88.161	3.295	3.794
Australia	6146	515.593	81.072	2.604	2.826
Austria	4668	531.502	70.477	2.691	2.847
Azerbaijan	4882	438.066	98.445	5.429	5.648
Bahrain	4083	449.416	106.264	3.420	3.452
Belgium (Flemish)	4849	508.550	57.665	1.731	2.007
Chile	5585	480.274	78.230	1.993	2.444
Chinese Taipei	4284	551.703	73.701	1.773	2.199
Croatia	4584	515.990	62.268	1.685	2.122
Czech Republic	4578	536.411	71.812	2.271	2.478
Denmark	3987	527.991	72.647	2.493	2.839
England	3397	528.781	81.914	2.912	2.942
Finland	4638	570.221	66.554	1.959	2.558
Georgia	4799	454.842	86.865	3.388	3.832
Germany	3995	527.764	70.154	2.416	2.858
Hong Kong SAR	3957	534.948	74.104	3.630	3.787
Hungary	5204	534.387	86.367	3.308	3.675
Iran, Islamic Rep. of	5760	452.879	99.451	3.529	3.738
Ireland	4560	516.055	79.411	2.898	3.351
Italy	4200	523.855	73.823	2.558	2.733
Japan	4411	558.611	63.818	1.472	1.946
Kazakhstan	4382	494.532	90.507	5.017	5.115
Korea, Rep. of	4334	586.729	65.887	1.494	2.021
Kuwait	4142	347.136	126.017	3.993	4.693
Lithuania	4688	514.628	67.796	2.283	2.423
Malta	3607	445.826	97.578	1.318	1.886
Morocco	7841	263.654	128.159	4.194	4.500

Exhibit 1: Summary Statistics and Standard Errors for Proficiency in Overall Science at the Fourth Grade (Continued)

Country	Sample Size	Overall Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Netherlands	3229	531.156	52.878	1.671	2.244
New Zealand	5572	496.687	85.622	2.195	2.317
Northern Ireland	3571	516.717	71.369	2.485	2.593
Norway	3121	493.967	63.413	1.919	2.350
Oman	10411	377.006	124.074	3.745	4.279
Poland	5027	504.892	78.115	2.165	2.619
Portugal	4042	521.704	72.525	3.736	3.878
Qatar	4117	394.156	126.687	4.197	4.309
Romania	4673	505.385	106.590	5.768	5.895
Russian Federation	4467	552.345	72.037	3.422	3.456
Saudi Arabia	4515	429.387	107.248	5.222	5.365
Serbia	4379	515.508	83.713	2.747	3.087
Singapore	6368	583.339	86.975	3.387	3.447
Slovak Republic	5616	531.805	79.431	3.611	3.780
Slovenia	4492	520.280	75.533	2.318	2.710
Spain	4183	505.152	73.050	2.520	2.960
Sweden	4663	533.481	74.788	2.238	2.694
Thailand	4448	471.571	94.170	5.362	5.632
Tunisia	4912	345.606	116.722	5.017	5.300
Turkey	7479	462.504	99.084	4.290	4.512
United Arab Emirates	14720	427.829	111.508	2.105	2.462
United States	12569	543.841	78.776	1.787	2.075
Yemen	8058	209.065	116.911	6.210	7.348
Sixth Grade Participants					
Botswana	4198	367.328	130.684	5.415	5.490
Honduras	3919	432.309	84.817	5.660	5.820
Yemen	4929	345.405	117.110	6.599	6.980
Benchmarking Participants					
Alberta, Canada	3645	541.253	70.730	2.279	2.440
Ontario, Canada	4570	527.590	76.718	2.783	3.005
Quebec, Canada	4235	516.400	58.756	2.172	2.720
Abu Dhabi, UAE	4164	411.384	109.368	4.778	4.924
Dubai, UAE	6151	461.242	112.848	1.758	2.307
Florida, US	2661	544.673	75.208	3.342	3.663
North Carolina, US	1792	538.295	77.440	4.545	4.565

Exhibit 2: Summary Statistics and Standard Errors for Proficiency in Life Science at the Fourth Grade

Country	Sample Size	Life Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	424.370	90.887	3.254	3.936
Australia	6146	515.653	83.330	2.786	3.143
Austria	4668	526.003	69.255	2.461	2.635
Azerbaijan	4882	440.477	96.976	4.900	5.215
Bahrain	4083	443.651	120.762	3.516	4.130
Belgium (Flemish)	4849	510.135	61.727	1.628	2.443
Chile	5585	489.555	81.257	1.990	2.198
Chinese Taipei	4284	538.073	83.350	1.965	2.443
Croatia	4584	525.027	61.171	1.897	2.014
Czech Republic	4578	549.604	70.055	2.228	2.952
Denmark	3987	530.028	73.194	2.527	2.800
England	3397	530.246	85.627	2.752	2.850
Finland	4638	574.074	67.825	2.059	2.778
Georgia	4799	460.820	83.985	3.340	3.644
Germany	3995	525.086	66.992	2.235	2.612
Hong Kong SAR	3957	524.138	77.834	3.340	3.668
Hungary	5204	551.566	86.082	3.339	3.457
Iran, Islamic Rep. of	5760	448.644	104.510	3.730	4.053
Ireland	4560	512.817	87.783	3.334	3.565
Italy	4200	535.096	79.114	2.529	2.677
Japan	4411	540.001	70.301	1.572	1.870
Kazakhstan	4382	499.762	94.483	4.881	5.061
Korea, Rep. of	4334	570.925	67.156	1.717	2.197
Kuwait	4142	322.561	139.337	4.600	4.959
Lithuania	4688	520.388	69.938	2.193	2.938
Malta	3607	438.697	101.438	1.521	2.415
Morocco	7841	244.514	145.820	3.932	4.475
Netherlands	3229	536.702	55.546	1.657	1.834
New Zealand	5572	497.376	86.177	2.240	2.499
Northern Ireland	3571	518.644	75.978	2.609	2.853
Norway	3121	495.923	63.342	2.121	3.047
Oman	10411	369.913	130.550	3.746	3.808
Poland	5027	513.888	78.039	2.176	2.462
Portugal	4042	520.448	77.754	4.085	4.219
Qatar	4117	382.856	135.415	4.518	5.036
Romania	4673	504.012	109.664	5.686	6.096
Russian Federation	4467	556.301	70.821	3.069	3.578
Saudi Arabia	4515	414.973	116.238	5.921	6.396
Serbia	4379	518.140	79.317	2.610	2.950
Singapore	6368	597.423	101.504	3.707	4.324

Exhibit 2: Summary Statistics and Standard Errors for Proficiency in Life Science at the Fourth Grade (Continued)

Country	Sample Size	Life Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Slovak Republic	5616	533.893	79.966	3.407	3.522
Slovenia	4492	524.024	76.243	2.065	2.577
Spain	4183	512.965	78.979	2.683	2.823
Sweden	4663	533.831	73.495	2.287	2.738
Thailand	4448	479.892	103.741	5.956	6.147
Tunisia	4912	342.178	122.919	4.899	5.069
Turkey	7479	460.131	98.727	4.334	4.522
United Arab Emirates	14720	419.967	119.681	2.217	2.730
United States	12569	547.156	83.725	1.822	2.068
Yemen	8058	171.688	132.383	6.456	6.885
Sixth Grade Participants					
Botswana	4198	344.595	143.512	5.664	6.298
Honduras	3919	441.155	88.158	5.258	5.529
Yemen	4929	312.646	132.657	7.154	7.664
Benchmarking Participants					
Alberta, Canada	3645	542.285	75.746	2.464	2.620
Ontario, Canada	4570	534.901	81.293	3.028	3.407
Quebec, Canada	4235	524.166	60.021	2.228	2.461
Abu Dhabi, UAE	4164	403.027	116.518	5.092	5.570
Dubai, UAE	6151	455.388	122.246	2.081	2.924
Florida, US	2661	549.378	82.515	3.982	4.222
North Carolina, US	1792	540.842	80.087	4.539	4.633

Exhibit 3: Summary Statistics and Standard Errors for Proficiency in Physical Science at the Fourth Grade

Country	Sample Size	Physical Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	398.801	100.284	3.470	3.822
Australia	6146	513.987	80.508	2.846	3.249
Austria	4668	534.972	69.741	2.719	2.883
Azerbaijan	4882	435.686	107.791	5.674	5.895
Bahrain	4083	452.633	104.345	3.619	4.584
Belgium (Flemish)	4849	507.221	57.269	1.640	2.067
Chile	5585	470.959	82.232	2.160	2.495
Chinese Taipei	4284	568.510	71.299	1.793	2.046
Croatia	4584	502.169	68.072	2.012	2.735
Czech Republic	4578	519.273	74.662	2.477	3.146
Denmark	3987	525.703	74.137	2.420	2.486
England	3397	535.446	79.461	3.072	3.533
Finland	4638	568.106	64.611	1.955	2.827
Georgia	4799	440.157	93.970	3.947	4.161
Germany	3995	534.925	71.723	2.380	3.065
Hong Kong SAR	3957	539.159	74.522	3.470	4.389
Hungary	5204	520.491	88.977	3.488	3.754
Iran, Islamic Rep. of	5760	452.871	104.860	3.855	3.969
Ireland	4560	517.218	73.958	2.925	3.084
Italy	4200	509.191	74.294	2.422	3.038
Japan	4411	589.080	61.380	1.324	1.903
Kazakhstan	4382	485.878	96.116	5.026	5.199
Korea, Rep. of	4334	596.845	65.200	1.509	2.586
Kuwait	4142	348.327	142.727	4.351	4.536
Lithuania	4688	514.067	69.013	2.385	3.069
Malta	3607	453.152	98.073	1.414	2.464
Morocco	7841	256.269	142.077	4.186	5.275
Netherlands	3229	525.708	53.116	1.655	1.960
New Zealand	5572	493.280	87.974	2.406	2.722
Northern Ireland	3571	520.142	73.059	2.418	3.184
Norway	3121	482.426	67.415	2.141	3.426
Oman	10411	370.116	138.439	4.521	4.807
Poland	5027	494.808	77.658	2.280	3.334
Portugal	4042	516.786	73.939	3.988	4.165
Qatar	4117	396.903	133.381	4.360	5.029
Romania	4673	508.302	107.689	5.475	5.688
Russian Federation	4467	548.458	78.576	3.687	4.011
Saudi Arabia	4515	439.044	110.903	5.825	6.020
Serbia	4379	522.654	89.323	3.089	3.783
Singapore	6368	598.451	83.039	3.166	3.518

Exhibit 3: Summary Statistics and Standard Errors for Proficiency in Physical Science at the Fourth Grade (Continued)

Country	Sample Size	Physical Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Slovak Republic	5616	527.375	81.555	3.492	4.042
Slovenia	4492	523.657	83.783	2.687	3.372
Spain	4183	496.884	72.422	2.572	2.722
Sweden	4663	527.771	77.501	2.297	2.493
Thailand	4448	462.269	93.477	5.746	5.883
Tunisia	4912	341.878	129.359	5.314	5.646
Turkey	7479	466.398	100.074	4.429	4.714
United Arab Emirates	14720	428.650	115.183	2.169	2.680
United States	12569	543.622	76.831	1.696	1.977
Yemen	8058	197.998	135.428	6.784	6.867
Sixth Grade Participants					
Botswana	4198	379.693	135.425	5.243	5.532
Honduras	3919	416.563	85.966	5.554	6.389
Yemen	4929	366.630	118.179	6.159	6.773
Benchmarking Participants					
Alberta, Canada	3645	541.686	70.796	2.284	3.017
Ontario, Canada	4570	527.569	75.072	2.862	3.165
Quebec, Canada	4235	507.005	61.482	1.942	3.065
Abu Dhabi, UAE	4164	415.129	111.945	5.012	5.243
Dubai, UAE	6151	460.013	118.136	2.232	3.247
Florida, US	2661	542.480	75.024	3.333	3.868
North Carolina, US	1792	540.695	77.460	4.599	5.107

Exhibit 4: Summary Statistics and Standard Errors for Proficiency in Earth Science at the Fourth Grade

Country	Sample Size	Earth Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	398.011	111.558	3.907	4.102
Australia	6146	519.529	87.511	2.830	3.508
Austria	4668	538.595	87.339	3.257	3.590
Azerbaijan	4882	407.995	134.380	6.726	7.203
Bahrain	4083	445.079	107.575	3.389	3.656
Belgium (Flemish)	4849	504.741	68.998	1.892	2.838
Chile	5585	474.945	78.782	1.993	2.727
Chinese Taipei	4284	552.509	68.553	1.475	2.533
Croatia	4584	520.716	71.162	1.991	2.653
Czech Republic	4578	537.486	86.467	3.083	3.411
Denmark	3987	526.576	86.160	2.593	3.042
England	3397	522.170	90.591	3.448	3.775
Finland	4638	565.583	80.653	2.520	2.876
Georgia	4799	457.794	103.721	4.068	4.286
Germany	3995	520.031	88.876	2.814	3.673
Hong Kong SAR	3957	547.999	79.118	3.214	3.287
Hungary	5204	523.743	97.895	3.722	4.392
Iran, Islamic Rep. of	5760	456.654	100.295	3.305	3.505
Ireland	4560	520.010	82.098	3.035	3.772
Italy	4200	523.239	80.147	2.699	3.618
Japan	4411	551.143	74.188	1.533	1.792
Kazakhstan	4382	490.652	99.395	5.103	5.759
Korea, Rep. of	4334	603.122	73.078	1.574	1.840
Kuwait	4142	352.018	133.852	3.813	4.673
Lithuania	4688	500.696	79.168	2.542	2.967
Malta	3607	446.915	100.466	1.394	2.241
Morocco	7841	208.169	156.632	4.392	4.719
Netherlands	3229	524.925	69.700	2.088	2.664
New Zealand	5572	498.895	92.037	2.386	3.177
Northern Ireland	3571	507.296	75.988	2.470	2.715
Norway	3121	506.247	78.095	2.234	3.048
Oman	10411	370.595	136.059	4.126	4.606
Poland	5027	495.818	90.951	2.639	3.327
Portugal	4042	530.835	76.253	3.919	4.411
Qatar	4117	400.701	133.205	4.441	4.760
Romania	4673	501.902	116.107	5.891	5.961
Russian Federation	4467	552.499	80.115	3.872	4.098
Saudi Arabia	4515	431.945	112.610	5.552	6.263
Serbia	4379	497.183	101.145	3.082	3.592
Singapore	6368	541.111	85.462	2.854	2.959

Exhibit 4: Summary Statistics and Standard Errors for Proficiency in Earth Science at the Fourth Grade (Continued)

Country	Sample Size	Earth Science			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Slovak Republic	5616	535.259	85.608	3.553	3.757
Slovenia	4492	505.978	80.436	2.338	2.694
Spain	4183	499.170	80.811	3.118	3.754
Sweden	4663	538.335	90.478	2.855	3.207
Thailand	4448	459.972	104.990	5.620	5.860
Tunisia	4912	318.671	140.855	5.633	6.609
Turkey	7479	455.611	113.124	4.837	5.139
United Arab Emirates	14720	434.740	109.556	2.058	2.420
United States	12569	538.919	84.963	1.870	2.146
Yemen	8058	186.104	141.339	5.664	6.306
Sixth Grade Participants					
Botswana	4198	375.945	131.450	4.970	5.737
Honduras	3919	429.229	94.721	5.781	5.845
Yemen	4929	350.163	125.241	6.427	7.405
Benchmarking Participants					
Alberta, Canada	3645	538.520	76.894	2.727	3.161
Ontario, Canada	4570	513.642	85.889	3.590	3.921
Quebec, Canada	4235	515.677	72.704	2.703	3.528
Abu Dhabi, UAE	4164	417.574	106.266	4.842	5.054
Dubai, UAE	6151	469.098	111.429	1.896	2.980
Florida, US	2661	536.564	83.353	3.336	4.435
North Carolina, US	1792	528.502	91.429	5.113	6.209

Exhibit 5: Summary Statistics and Standard Errors for Proficiency in Science Knowing at the Fourth Grade

Country	Sample Size	Science Knowing			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	412.462	95.319	3.488	4.282
Australia	6146	517.469	82.839	2.674	2.753
Austria	4668	532.431	72.025	2.698	3.052
Azerbaijan	4882	445.018	111.348	6.111	6.395
Bahrain	4083	453.515	116.992	3.326	3.618
Belgium (Flemish)	4849	506.818	60.854	1.820	2.200
Chile	5585	482.934	84.735	2.018	2.737
Chinese Taipei	4284	542.197	77.836	1.849	2.673
Croatia	4584	525.511	68.873	1.879	1.941
Czech Republic	4578	550.767	78.063	2.421	3.257
Denmark	3987	524.440	75.956	2.407	2.555
England	3397	528.568	86.507	2.884	3.230
Finland	4638	579.419	72.137	2.303	2.543
Georgia	4799	465.692	86.494	3.733	3.943
Germany	3995	524.196	70.933	2.395	3.970
Hong Kong SAR	3957	536.754	80.306	3.252	3.620
Hungary	5204	546.586	90.593	3.437	3.668
Iran, Islamic Rep. of	5760	448.205	109.404	3.956	4.278
Ireland	4560	518.044	82.628	3.004	3.855
Italy	4200	531.761	79.012	2.594	2.997
Japan	4411	537.608	70.593	1.513	1.808
Kazakhstan	4382	486.121	96.044	5.264	5.562
Korea, Rep. of	4334	569.601	74.142	1.604	2.003
Kuwait	4142	341.831	147.125	4.604	5.682
Lithuania	4688	507.744	70.212	2.520	2.922
Malta	3607	436.626	103.484	1.399	3.045
Morocco	7841	237.110	148.795	4.995	6.147
Netherlands	3229	527.947	56.499	1.872	2.259
New Zealand	5572	496.104	88.505	2.368	2.662
Northern Ireland	3571	517.277	69.965	2.274	2.891
Norway	3121	501.624	69.611	2.148	2.848
Oman	10411	375.594	141.543	4.178	4.512
Poland	5027	500.233	81.157	2.426	3.173
Portugal	4042	527.569	79.486	4.059	4.378
Qatar	4117	387.820	141.672	4.762	5.124
Romania	4673	510.888	111.749	6.004	6.087
Russian Federation	4467	553.122	76.811	3.578	3.827
Saudi Arabia	4515	432.368	121.097	5.843	6.004
Serbia	4379	523.790	84.952	2.752	2.850
Singapore	6368	569.847	93.255	3.338	3.379

Exhibit 5: Summary Statistics and Standard Errors for Proficiency in Science Knowing at the Fourth Grade (Continued)

Country	Sample Size	Science Knowing			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Slovak Republic	5616	546.762	81.784	3.651	3.804
Slovenia	4492	518.279	75.879	2.037	2.179
Spain	4183	516.085	81.123	2.951	3.194
Sweden	4663	535.886	78.527	2.365	2.776
Thailand	4448	473.290	105.946	5.782	5.912
Tunisia	4912	336.287	129.633	5.054	5.329
Turkey	7479	457.051	103.518	4.476	4.696
United Arab Emirates	14720	432.593	123.035	2.287	2.745
United States	12569	546.206	80.095	1.741	1.852
Yemen	8058	182.348	139.116	6.550	6.729
Sixth Grade Participants					
Botswana	4198	343.625	151.768	6.161	6.206
Honduras	3919	445.013	93.655	5.695	6.026
Yemen	4929	338.403	132.048	6.824	7.380
Benchmarking Participants					
Alberta, Canada	3645	543.063	76.421	2.828	3.057
Ontario, Canada	4570	528.532	80.196	2.837	3.096
Quebec, Canada	4235	518.575	64.732	2.493	2.699
Abu Dhabi, UAE	4164	414.611	120.388	5.157	5.683
Dubai, UAE	6151	467.377	124.667	2.027	2.460
Florida, US	2661	549.743	78.094	3.555	3.957
North Carolina, US	1792	539.402	76.807	4.506	4.647

Exhibit 6: Summary Statistics and Standard Errors for Proficiency in Science Applying at the Fourth Grade

Country	Sample Size	Science Applying			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	417.816	90.693	3.295	3.936
Australia	6146	513.302	82.871	2.831	3.019
Austria	4668	533.394	74.055	2.653	2.852
Azerbaijan	4882	439.463	100.779	5.178	5.204
Bahrain	4083	443.354	110.510	3.262	3.483
Belgium (Flemish)	4849	511.428	60.674	1.660	1.848
Chile	5585	479.274	80.298	2.113	2.313
Chinese Taipei	4284	552.405	72.982	1.856	3.130
Croatia	4584	509.895	60.935	1.595	2.310
Czech Republic	4578	533.955	68.618	2.098	2.625
Denmark	3987	531.608	72.500	2.337	2.540
England	3397	532.383	84.412	3.094	3.141
Finland	4638	568.204	66.281	2.029	2.291
Georgia	4799	452.259	92.357	4.017	4.432
Germany	3995	532.949	70.427	2.476	2.602
Hong Kong SAR	3957	528.876	72.013	3.374	3.474
Hungary	5204	529.685	84.656	3.331	3.554
Iran, Islamic Rep. of	5760	451.543	97.012	3.550	3.828
Ireland	4560	517.010	81.224	3.032	3.584
Italy	4200	522.915	76.465	2.488	2.745
Japan	4411	562.266	64.160	1.291	1.634
Kazakhstan	4382	498.748	90.697	4.856	5.102
Korea, Rep. of	4334	593.494	65.110	1.353	1.902
Kuwait	4142	333.557	133.262	4.450	4.929
Lithuania	4688	520.624	68.527	2.218	2.518
Malta	3607	448.930	97.690	1.292	1.593
Morocco	7841	255.994	138.144	4.512	5.091
Netherlands	3229	534.239	53.404	1.749	1.951
New Zealand	5572	497.347	86.161	2.226	2.597
Northern Ireland	3571	521.404	76.007	2.357	2.627
Norway	3121	486.996	66.399	2.212	2.791
Oman	10411	371.902	125.379	3.867	4.204
Poland	5027	513.618	75.815	2.246	2.643
Portugal	4042	514.862	73.652	4.014	4.270
Qatar	4117	389.064	131.215	4.375	5.435
Romania	4673	502.038	108.854	5.774	5.944
Russian Federation	4467	556.096	73.000	3.544	3.642
Saudi Arabia	4515	426.836	108.774	5.547	6.143
Serbia	4379	506.140	86.354	3.091	3.182
Singapore	6368	589.513	91.872	3.569	4.038

Exhibit 6: Summary Statistics and Standard Errors for Proficiency in Science Applying at the Fourth Grade (Continued)

Country	Sample Size	Science Applying			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Slovak Republic	5616	527.772	83.010	3.827	3.968
Slovenia	4492	518.053	78.926	2.145	2.769
Spain	4183	498.546	76.882	2.718	2.961
Sweden	4663	530.620	77.091	2.309	2.952
Thailand	4448	470.883	88.957	5.100	5.398
Tunisia	4912	342.729	123.802	4.555	4.694
Turkey	7479	462.970	99.171	4.467	4.784
United Arab Emirates	14720	420.841	113.059	2.097	2.570
United States	12569	544.308	82.422	1.763	2.083
Yemen	8058	182.831	129.248	6.100	6.587
Sixth Grade Participants					
Botswana	4198	379.010	127.309	5.238	5.504
Honduras	3919	429.097	80.353	4.873	4.959
Yemen	4929	338.151	120.859	6.452	6.815
Benchmarking Participants					
Alberta, Canada	3645	540.718	72.915	2.408	2.839
Ontario, Canada	4570	525.803	79.432	2.995	3.332
Quebec, Canada	4235	513.525	61.401	2.307	2.519
Abu Dhabi, UAE	4164	405.226	109.327	4.938	5.341
Dubai, UAE	6151	453.323	116.741	1.792	1.985
Florida, US	2661	542.937	80.054	3.372	3.604
North Carolina, US	1792	538.827	81.538	4.066	4.356

Exhibit 7: Summary Statistics and Standard Errors for Proficiency in Science Reasoning at the Fourth Grade

Country	Sample Size	Science Reasoning			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5146	402.328	103.081	3.386	4.941
Australia	6146	517.895	83.066	2.738	3.385
Austria	4668	525.398	74.682	2.742	3.101
Azerbaijan	4882	401.832	105.011	5.473	5.894
Bahrain	4083	442.494	109.771	3.539	4.652
Belgium (Flemish)	4849	508.268	61.172	1.828	2.534
Chile	5585	477.158	75.232	1.914	2.826
Chinese Taipei	4284	567.624	80.912	2.229	3.156
Croatia	4584	512.315	65.063	1.914	3.508
Czech Republic	4578	516.482	80.280	2.965	4.037
Denmark	3987	527.292	81.126	2.756	3.074
England	3397	526.356	80.662	2.706	4.404
Finland	4638	560.033	69.581	2.570	3.160
Georgia	4799	422.178	103.065	4.563	4.969
Germany	3995	526.060	80.090	2.586	3.638
Hong Kong SAR	3957	541.379	79.961	3.817	4.234
Hungary	5204	525.031	94.567	3.508	4.539
Iran, Islamic Rep. of	5760	458.964	105.610	3.609	3.861
Ireland	4560	509.009	80.659	2.886	3.365
Italy	4200	509.595	73.305	2.267	2.879
Japan	4411	591.458	67.939	1.603	1.954
Kazakhstan	4382	495.569	91.988	4.684	5.729
Korea, Rep. of	4334	604.778	64.608	1.497	3.009
Kuwait	4142	335.963	141.986	4.056	4.982
Lithuania	4688	515.426	72.941	2.478	2.759
Malta	3607	459.062	91.899	1.347	4.195
Morocco	7841	240.150	147.576	3.710	5.028
Netherlands	3229	532.139	65.686	1.827	2.925
New Zealand	5572	496.655	88.429	2.452	2.885
Northern Ireland	3571	502.687	80.494	2.503	3.078
Norway	3121	492.739	72.565	2.260	3.698
Oman	10411	353.613	136.874	4.293	4.394
Poland	5027	487.178	88.739	2.415	3.174
Portugal	4042	524.295	73.689	3.809	4.629
Qatar	4117	404.182	120.150	3.591	4.388
Romania	4673	496.893	110.966	5.966	6.000
Russian Federation	4467	541.793	74.846	3.336	4.225
Saudi Arabia	4515	415.627	111.491	5.536	5.808
Serbia	4379	519.496	89.534	2.925	3.006
Singapore	6368	596.675	83.210	3.249	3.759

Exhibit 7: Summary Statistics and Standard Errors for Proficiency in Science Reasoning at the Fourth Grade (Continued)

Country	Sample Size	Science Reasoning			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Slovak Republic	5616	513.928	83.206	3.803	4.171
Slovenia	4492	525.298	83.095	2.558	3.579
Spain	4183	496.004	71.965	2.732	3.079
Sweden	4663	536.977	76.301	2.223	3.015
Thailand	4448	463.020	102.936	5.980	6.022
Tunisia	4912	336.800	128.062	4.417	4.911
Turkey	7479	471.934	99.034	4.542	5.301
United Arab Emirates	14720	425.539	108.203	2.080	2.553
United States	12569	537.159	77.242	1.708	2.327
Yemen	8058	180.009	139.683	6.038	7.341
Sixth Grade Participants					
Botswana	4198	377.005	129.676	5.289	5.921
Honduras	3919	392.212	107.045	6.968	7.424
Yemen	4929	337.090	131.432	6.397	6.955
Benchmarking Participants					
Alberta, Canada	3645	540.183	73.336	2.540	2.886
Ontario, Canada	4570	528.866	76.645	3.176	3.726
Quebec, Canada	4235	519.616	57.719	2.086	3.737
Abu Dhabi, UAE	4164	416.378	105.564	4.625	5.079
Dubai, UAE	6151	455.195	111.181	1.905	3.658
Florida, US	2661	535.540	82.835	3.574	3.819
North Carolina, US	1792	532.628	83.924	4.820	5.131