Appendix C.5: Student Sample Sizes

Bahrbain (Combined) Numerary 99% 4,825 18 Numerary 99% 4,825 38 277 4,510 81 44 18 18 Belgium (Flemish) 98% 5,580 24 32 25,534 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 5,544 120 6,646 6,646 130 130 147 6,77 142 6,76 6,761		Within-School Student Participation (Weighted Percentage)	Number of Sampled Students in Participating Schools	Number of Students Withdrawn from Class/School	Number of Students Excluded	Number of Eligible Students	Number of Students Absent	Number of Students Assessed
Numeracy 99% 4,825 38 277 4,510 81 4,4 TIMSS 99% 5,500 24 32 5,524 120 5,500 Belgium (Flemish) 98% 5,500 24 32 5,524 120 5,500 Belgium (Flemish) 98% 5,500 24 32 5,524 120 5,500 Canada 94% 13,583 178 294 131,171 888 127 Canada 94% 15,883 178 294 131,171 888 127 Chiles 94% 5,196 68 64 5,500 308 4,20 Chiles 13pei 99% 4,461 37 44 4,300 49 4,20 Croatia 95% 4,354 25 109 4,220 235 3,80 Chires Taipei 99% 4,461 37 44 4,300 49 4,20 Croatia 95% 4,354 12 112 4,199 74 4,11 Czech Republic 95% 5,562 41 31 5,600 288 5,20 Cenmark 95% 4,213 57 241 3,315 205 3,7 England 98% 4,222 1177 0 4,115 109 4,00 Finance 98% 5,110 66 35 5,009 136 4,86 Gerorgia 98% 4,001 30 59 4,002 33 3,9 Germany 99% 4,002 44 45 4,113 165 33,9 Germany 99% 4,202 44 45 4,113 165 33,9 Hungary 97% 5,329 24 102 5,203 167 5,00 Numeracy 99% 4,202 118 0 4,404 110 4,204 111 Numeracy 99% 4,202 118 0 4,404 110 4,204 111 Numeracy 99% 4,208 89 0 4,119 44 0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,803 107 197 Numeracy 99% 4,208 89 0 4,119 44 0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,803 107 197 Numeracy 99% 4,208 89 0 4,119 44 0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,803 107 197 Numeracy 99% 4,208 89 0 4,119 44 0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,803 107 197 Numeracy 99% 4,208 89 0 4,119 44 0 Iran, Islamic Rep. of (Combined) 99% 8,301 17 19 3,809 46 13 14 14 14 14 14 14 14 14 14 14 14 14 14		95%	6,705	149	129	6,427	370	6,057
Numeracy 99% 4,255 38 277 4,510 81 4,44 TIMSS 99% 4,510 25 263 4,222 76 4,5 1 Belgium (Flemish) 89% 5,580 24 32 5,524 120 5,54 Longiaria 99% 4,563 78 80 4,455 177 24,2 Canada 94% 13,583 118 294 13,171 888 12,2 Canada 94% 5,196 68 64 5,664 308 4,7 Croatia 95% 4,461 37 84 4,340 49 4,2 Croatia 95% 4,461 37 84 4,340 49 4,2 Croatia 95% 4,563 78 25 109 4,220 235 33,9 Croatia 95% 5,562 41 31 5,499 74 4, Czech Republic 95% 5,562 41 31 5,490 288 5,5 England 98% 4,232 117 0 4,115 109 40 Enemark 95% 4,213 57 241 3,915 205 37 England 98% 4,222 117 0 4,115 109 40 England 98% 4,222 117 0 4,115 109 40 England 98% 5,110 66 35 5,009 116 48 Engrang 98% 4,911 30 59 4,002 33 39 Gerrany 90% 4,002 44 45 4,113 165 33,8 Gerrany 90% 4,002 44 45 4,113 165 33,8 Hong Kong SAR 93% 3,336 17 45 3,874 274 3,0 Hong Kong SAR 93% 3,346 3,346 3,347 3,348	mbined)	99%	9,335	63	540	8,732	157	8,575
Englym (Flemish) 98% 4,510 25 263 4,222 76 4.1 4.1 5 6 6 6 6 6 6 6 7 5 5.7 4 12 0 5.0 6 6 7 8 8 9 0 4,005 177 4.2 2 6 7 6 6 7 8 8 9 0 4,005 177 4.2 2 6 7 6 7 8 8 9 0 4,005 177 4.2 2 6 7 6 7 8 8 9 0 4,005 177 4.2 2 6 7 8 8 9 0 4,005 177 4.2 2 6 7 8 8 9 0 4,005 177 4.2 2 6 7 8 8 9 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		99%	4,825	38	277	4,510	81	4,429
Bulgaria		99%	4,510	25	263	4,222	76	4,146
Canada 94% 13,833 118 294 13,171 888 12,2 Chines Chile 94% 5,196 68 64 5,064 308 4,7 Chinese Taipei 99% 4,461 37 84 4,340 49 4,2 Croatla 95% 4,354 25 199 4,220 235 33,0 Cyprus 96% 4,343 12 132 4,199 74 4,1 Cacech Republic 95% 5,562 41 31 5,499 288 5,2,2 Chemnark 95% 4,232 117 0 4,115 109 4,0 Cyprus 10,0 Cyprus 10,0 Cyprus 117 0 4,115 109 4,0 Cyprus 117 0 4,115 109 4,0 Cyprus 117 0 4,115 109 4,0 Cyprus 118 5,0 Cyprus 118 5,0 Cyprus 119 5,521 17 34 5,200 185 5,0 Cyprus 119 66 35 5,00 136 8,3 Cyprus 119 67 5,0 Cyp	emish)	98%	5,580	24	32	5,524	120	5,404
Chile Chile 94% 5,196 68 64 5,064 308 4.7 Chines Taipei 99% 4,461 37 84 4,240 49 42.2 Croatia 95% 4,334 12 132 4,199 7.4 4,1 Croatia 95% 4,334 12 132 4,199 7.4 4,1 Croatia 95% 5,562 41 31 5,490 28 5,2,0 Denmark 95% 4,213 5.7 241 3,915 205 3.7 England 95% 4,223 177 0 4,115 205 3.7 England 95% 4,223 177 0 4,115 205 3.7 England 97% 5,251 17 34 5,200 185 5,0 England 97% 5,251 17 34 5,200 185 5,0 England 97% 5,251 17 34 5,200 185 5,0 England 98% 4,091 30 59 4,002 83 3,9 Ecrmany 98% 4,091 30 59 4,002 83 3,9 Endonesia (Combined) 99% 8,330 207 0 6,532 30 167 5,0 Indonesia (Combined) 99% 8,330 207 0 6,523 30 167 5,0 Indonesia (Combined) 99% 4,222 118 0 4,404 110 4,2 TIMSS 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) Numeracy 99% 4,203 35 2 4,166 61 4,11 TIMSS 99% 3,312 42 1 3,899 46 13,8 Ireland 98% 4,264 31 52 4,541 197 4,3 Iraly 95% 4,263 35 2 4,166 61 4,11 TIMSS 99% 3,912 42 1 3,899 46 13,8 Ireland 98% 4,311 77 35 4,469 86 4,33 Ireland 98% 4,331 77 35 4,469 86 4,33 Ireland 98% 4,331 77 35 4,469 86 4,33 Ireland 98% 4,311 77 35 4,469 86 4,37 Ireland 98% 4,311 77 77 4,70 4,70 4,70 4,70 4,70 4,70 4,7		96%	4,563	78	80	4,405	177	4,228
Chinese Taipei 99% 4,461 37 84 4,340 49 4,22 Croatia 95% 4,354 25 109 4,220 235 3,8 (Cyprus 98% 4,343 12 132 4,199 74 4,1 1 31 5,400 288 5,2 Cyprus 98% 4,343 12 132 4,199 74 4,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		94%	13,583	118	294	13,171	888	12,283
Croatia 95% 4,334 25 109 4,202 235 3.8 Cyprus 98% 4,343 12 132 4,199 7.4 4,11 Czech Republic 95% 5,562 41 31 5,400 288 5,50 141 31 5,50 141 31 5,50 141 31 5,50 141 31 31 31 31 31 31 31 31 31 31 31 31 31		94%	5,196	68	64	5,064	308	4,756
Cyprus 98% 4,343 12 132 4,19 74 4.1 Zeech Republic 95% 5,562 41 31 5,490 288 5,2 Denmark 95% 4,213 57 241 3,915 205 3,7 England 98% 4,212 117 0 4,115 109 4,00 France 98% 5,110 66 35 5,009 136 4,8 Georgia 98% 4,001 30 99 4,002 33 3,9 Germany 96% 4,022 44 45 4,113 165 3,8 Hungary 97% 5,229 24 102 5,203 167 5,0 Indonesia (Combined) 99% 4,372 118 0 4,414 10 4,2 TIMSS 99% 4,202 14 42 5,23 204 63 Numeracy 99% 8,739 207	oei	99%	4,461	37	84	4,340	49	4,291
Céch Républic 95% 5,562 41 31 5,490 288 5,22 Denmark 95% 4,213 57 241 3,915 205 3,7 England 98% 4,222 117 0 4,115 109 4,0 Finland 97% 5,251 17 34 5,200 185 5,0 France 98% 5,110 66 35 5,009 136 4,8 Georgia 98% 5,110 66 35 5,009 136 3,8 Georgia 98% 4,091 30 59 4,002 83 3,9 Hongary 99% 4,202 44 45 4,113 165 3,9 Hongary 99% 3,293 207 0 8,523 106 5,0 Indonesia (Combined) 99% 3,292 24 102 5,203 107 5,0 Indonesia (Combined) 99% 4,522		95%	4,354	25	109	4,220	235	3,985
Céch Républic 95% 5,562 41 31 5,490 288 5,22 Denmark 95% 4,213 57 241 3,915 205 3,7 England 98% 4,222 117 0 4,115 109 4,0 Finland 97% 5,251 17 34 5,200 185 5,0 France 98% 5,110 66 35 5,000 185 5,0 Georgia 98% 5,110 66 35 5,000 136 3,9 Georgia 98% 4,091 30 59 4,002 83 3,9 Hongary 99% 4,202 44 45 4,113 165 3,9 Hungary 99% 8,202 24 102 5,203 167 5,0 Indonesia (Combined) 99% 8,730 207 0 8,233 204 8,3 Indonesia (Combined) 99% 4,522		98%	4,343	12	132	4,199	74	4,125
Denmark 95% 4,213 57 241 3,915 205 3,7 England 98% 4,232 117 0 4,115 109 4,00 Finland 97% 5,251 17 34 5,200 185 5,00 France 98% 5,110 66 35 5,009 38 4,8 Georgia 98% 4,091 30 59 4,002 38 3,9 Germany 96% 4,091 30 59 4,002 38 3,9 Germany 96% 4,091 30 59 4,002 31 3,9 Germany 96% 4,091 30 59 4,002 31 6,7 3,9 Germany 97% 5,329 24 102 5,203 167 5,0 Indonesia (Combined) 97% 5,329 24 102 5,203 167 5,0 Indonesia (Combined) 99% 8,730 207 0 8,523 204 8,3 Indonesia (Combined) 99% 4,522 118 0 4,004 110 4,2 TiMSS 99% 4,208 89 0 4,119 94 4,0 Indonesia (Combined) 99% 8,115 77 3 3 8,035 107 7,9 Numeracy 99% 4,203 35 2 4,166 61 4,11 TIMSS 99% 4,208 31 5 2 4,166 61 4,11 TIMSS 99% 4,203 35 2 4,166 61 4,11 TIMSS 99% 4,203 35 2 4,166 61 4,11 TIMSS 199% 4,203 35 2 4,166 61 4,11 TIMSS 199% 4,503 35 2 4,511 77 35 4,699 86 3,8 Italy 10 10 10 10 10 10 10 10 10 10 10 10 10	blic							5,202
England 98% 4,232 117 0 4,115 109 4,0 Finland 97% 5,251 17 34 5,200 185 5,0 186 5,0 186 5,0 186 5,0 186 5,0 186 5,0 186 5,0 186 4,8 5,0 186 5,0 186 5,0 186 4,8 5,0 186 5,0 186 5,0 186 5,0 186 4,8 186 5,0 18								3,710
Finland 97% 5,251 17 34 5,200 185 5,00 France 98% 5,110 66 35 5,009 136 4,8 6 66 66 35 5,009 136 4,8 66 66 35 5,009 136 4,8 8 66 67 30 59 4,002 38 3,8 9 4,002 38 3,8 9 4,002 38 3,8 9 4,002 38 3,8 9 4,002 38 3,9 4,002 38 3,9 4,002 38 3,00 4 1,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00								4,006
France 99% 5,110 66 35 5,009 136 4,8 Georgia 98% 4,091 30 59 4,002 83 3,9 Georgia 98% 4,091 30 59 4,002 83 3,9 Hong Kong SAR 93% 3,936 17 45 3,874 274 3,6 Hong Kong SAR 93% 3,936 17 45 3,874 274 3,6 Hong Kong SAR 99% 8,730 207 0 8,523 204 8,3 Numeracy 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) 99% 4,522 118 0 4,404 110 4,2 Iran, Islamic Rep. of (Combined) 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) 99% 4,203 35 2 4,166 61 4,1 TIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Japan 98% 4,511 7 35 4,669 66 3,8 Japan 98% 4,511 7 35 4,669 66 4,33 Japan 98% 4,511 7 35 4,669 66 4,33 Japan 98% 4,511 7 35 4,669 66 4,33 Japan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of Kuwait Combined) 99% 1,903 54 54 4,779 126 4,66 Kuwait (Combined) 96% 1,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 ITMSS 99% 3,943 41 2 175 4,847 318 4,55 ITMSS 99% 3,934 41 2 175 4,847 318 4,55 ITMSS 99% 3,938 4,128 38 2 4,088 385 3,7 ITMSS 99% 3,938 4,128 38 2 4,088 385 3,7 ITMSS 99% 5,581 43 0 5,538 178 5,30 Norwacy 98% 5,581 43 0 5,538 178 5,30 Norwacy 5,99% 5,244 41 0 5,173 105 5,00 Norman 99% 9,490 118 77 6,75 403 6,33 Northand 9,99% 5,581 43 0 5,538 178 5,33 Norwacy 5) 99% 3,388 17 2 3,369 253 3,31 Norwacy 5,544 41 10 5,173 105 5,00 Northand 9,99% 5,581 43 0 5,538 178 5,33 Northand 9,99% 5,581 43 0 5,538 178 5,33 Northand 9,99% 5,581 43 0 5,538 178 5,34 Northand 9,99% 5,581 43 0 5,538 178 5,33 Northand 9,99% 5,444 41 0 5,173 105 5,00 Northand 9,99% 5,444 41 0 5,173 105 5,00 Northand 9,99% 5,444 41 10 5,173 105 5,00 Northand 9,99% 5,444 41 41 0 5,173 105 5,00 North								5,015
Georgia 99% 4,091 30 59 4,002 83 3,39 Germany 96% 4,202 44 45 4,113 165 3,9 Hungary 96% 4,202 44 45 4,113 165 3,9 Hungary 97% 3,396 17 45 3,874 274 3,6 Hungary 97% 5,329 24 102 5,203 167 5,0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								4,873
Germany 96% 4,022 44 45 4,113 165 3.9 Hong Kong SAR 93% 3,936 17 45 3,874 274 3,66 Hong Kong SAR 93% 3,936 17 45 3,874 274 3,66 Hong Kong SAR 93% 3,936 17 45 3,874 274 3,66 Hong Kong SAR 93% 3,936 17 45 3,874 274 3,66 Hong Kong SAR 1879 99% 5,329 24 102 5,203 167 5,0 Indonesia (Combined) 99% 8,730 207 0 8,523 204 8.3 Numeracy 99% 4,208 89 0 4,119 94 4,0 110 4,2 TIMSS 99% 4,208 89 0 4,119 94 4,0 110 11 11 11 11 11 11 11 11 11 11 11 1								3,919
Hong Kong SAR 93% 3,936 17 45 3,874 274 3,68 Hungary 97% 5,329 24 102 5,203 167 5,0 Indonesia (Combined) 99% 8,730 207 0 8,523 204 8,3 Numeracy 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,035 107 7,9 Numeracy 99% 4,203 35 2 4,166 61 4,11 21 11MSS 99% 3,912 42 1 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Japan 98% 4,511 7 35 4,449 86 4,33 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of Kuwait (Combined) 99% 1,918 3,863 41 2 3,802 2 4,088 3,77 7,8 Kuwait (Combined) 99% 7,991 79 4 7,088 612 7,22 Numeracy 95% 4,128 38 2 4,088 385 3,7 7 11MSS 99% 1,185 97% 3,863 41 2 3,820 227 3,55 11MSS 99% 5,581 43 0 5,538 178 5,34 171MSS 99% 5,581 43 0 5,538 178 5,34 171MSS 99% 5,214 41 0 5,173 105 5,00 Norway (5) 99% 5,244 41 0 5,173 105 5,00 Norway (5) 99% 5,346 49 118 5,179 432 4,79 Poland 99% 9,490 131 84 9,275 110 9,19 10 111 111 111 111 111 111 111 111 11								3,948
Hungary 97% 5,329 24 102 5,203 167 5,0 Indonesia (Combined) 99% 8,730 207 0 8,523 204 8,3 Numeracy 99% 4,522 118 0 4,404 1110 4,2 TIMSS 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,035 107 7,9 Numeracy 99% 4,203 35 2 4,166 61 4,11 TIMSS 99% 3,912 42 1 3,869 46 3,8 Iral Iran Miller Mi	SAR							3,600
Indonesia (Combined) 99% 8,730 207 0 8,523 204 8,3 Numeracy 99% 4,522 118 0 4,404 110 4,2 TIMSS 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,035 107 7,9 Numeracy 99% 4,203 35 2 4,166 61 4,1 TIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Italy 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Jardan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 3,863 41 2 3,820 227 3,5 TIMSS 97% 1,88 4 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Nortway (5) 95% 4,764 27 166 4,571 242 4,3 Nortway (5) 95% 4,764 27 166 4,571 242 4,3 Orman 99% 9,490 131 84 9,275 170 9,1 Northern Ireland 93% 5,341 16 113 5,255 61 5,10 Nortway (5) 95% 4,764 27 166 4,571 242 4,3 Orman 99% 9,490 131 84 9,275 170 9,1 Northern Ireland 93% 5,341 16 113 5,255 61 5,1 Northern Ireland 93% 5,341 21 80 4,099 173 4,0 Northern Ireland 93% 5,341 31 72 2 3,699 253 3,1 Northern Ireland 95% 6,800 26 0 6,774 257 6,55 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,769 13 77 4,700 255 44,800 302 8,011 247 7,7 Slovenia 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,895 129 6,45	57111							5,036
Numeracy ITIMSS 99% 4,208 89 0 4,119 94 4,0 ITIMSS 99% 4,208 89 0 4,119 94 4,0 Numeracy 99% 4,203 35 2 4,166 61 4,1 ITIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 99% 4,624 31 52 4,416 91 97 4,3 Italy 95% 4,859 18 264 4,577 204 4,3 Italy 95% 4,859 18 264 4,777 204 4,3 Italy 95% 4,859 18 264 4,777 204 4,3 Italy 95% 4,859 18 264 4,777 204 4,3 Italy 95% 4,850 51 0 4,779 77 4,7 Italy 95% 4,850 51 0 4,779 77 4,7 Italy 95% 4,850 51 0 4,795 126 4,6 Italy 95% 4,850 51 0 4,795 126 4,6 Italy 95% 4,128 38 2 4,088 385 3,7 ITIMSS 97% 3,863 41 2 3,820 227 3,5 Itithuania 94% 5,034 12 175 4,847 318 4,5 Italy Numeracy 98% 5,831 43 0 5,538 178 5,3 ITIMSS 99% 5,214 41 0 5,173 105 5,0 Italy Numeracy 98% 5,581 43 0 5,538 178 5,3 ITIMSS 99% 5,214 41 0 5,173 105 5,0 Italy Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 ITIMSS 99% 5,346 49 118 7,6725 403 6,3 Italy 90% 1,308 178 49,275 170 9,1 Italy 90% 5,484 116 113 5,255 61 5,1 Italy 90% 5,484 116 1	Combined)							8,319
TIMSS 99% 4,208 89 0 4,119 94 4,0 Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,035 107 7,9 Numeracy 99% 4,203 35 2 4,166 61 4,1 TIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Italy 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Numeracy 98% 5,581 43 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 20 4,694 179 4,5 Norvay (5) 95% 4,764 27 166 4,571 242 4,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norvay (5) 95% 4,764 27 166 4,571 242 4,3 Northern Ireland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Oman 99% 5,494 116 113 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Oracle 4,470 24 4,683 346 4,3 Singapore 96% 6,800 26 0 6,774 257 65,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 95% 4,505 29 126 4,350 208 4,11 Turkey 96% 6,892 217 90 6,585 219 6,4								4,294
Iran, Islamic Rep. of (Combined) 99% 8,115 77 3 8,035 107 7,9 Numeracy 99% 4,203 35 2 4,166 61 4,11 TIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Italy 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 96% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 20 4,694 179 4,5 Norvacy 59% 4,764 27 166 4,571 242 4,3 Ornan 99% 5,346 49 118 5,179 432 4,7 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,445 24 87 5,034 13 4,9 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,445 24 87 5,034 13 4,9 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,455 24 87 5,034 13 4,9 Poland 95% 4,759 74 2 4,683 346 4,3 Saudi Arabia 95% 4,799 74 2 4,683 346 4,3 Saudi Arabia 95% 4,799 74 2 4,683 346 4,3 Saudi Arabia 95% 4,790 13 77 7,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,333 40 302 8,011 247 7,7 Turkey 98% 6,892 217 90 6,855 129 6,4	racy							
Numeracy 99% 4,203 35 2 4,166 61 4,11 TIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Italy 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,66 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,00 Netherlands 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Northern Ireland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,341 13 15,255 61 5,10 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Norway (5) 95% 5,444 116 113 5,255 61 5,10 Russian Federation 99% 5,484 116 113 5,255 61 5,10 Russian Federation 99% 6,490 26 0 0 6,774 257 6,5 5,10 R	Pan of (Combined)							
TIMSS 99% 3,912 42 1 3,869 46 3,8 Ireland 96% 4,624 31 52 4,541 197 4,3 Italy 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,609 86 4,3 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,66 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,581 43 0 5,538 178 5,3 TIMSS 99% 6,690 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,400 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,779 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Serbia 96% 4,790 13 77 4,700 255 4,4 South Arabia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,700 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,333 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								
Ireland 96% 4,624 31 52 4,541 197 4,33 tataly 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 ITMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,1373 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3,3 Oman 99% 9,490 131 84 9,275 170 9,11 Poland 92% 5,346 49 118 5,179 432 4,7 Po	racy							
Italy 95% 4,859 18 264 4,577 204 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Japan 98% 4,511 7 35 4,469 86 4,3 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,33 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,11 Poland 92% 5,346 49 1118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,11 Russian Federation 98% 5,484 116 113 5,255 61 5,11 Russian Federation 99% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,799 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Spain 96%								
Japan 98% 4,511 7 35 4,469 86 4,33 Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMS 96% 4,791 77								
Jordan 96% 8,514 276 0 8,238 377 7,8 Kazakhstan 98% 4,830 51 0 4,779 77 4,7 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,2 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 New Zealand 94% 6,920								
Kazakhstan 98% 4,830 51 0 4,779 77 4,77 Korea, Rep. of 97% 4,903 54 54 4,795 126 4,6 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,22 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920								
Korea, Rep. of 97% 4,903 54 54 4,795 126 4,66 Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,22 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,53 Lithuania 94% 5,034 12 175 4,847 318 4,53 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>								
Kuwait (Combined) 96% 7,991 79 4 7,908 612 7,22 Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 </td <td>- (</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	- (
Numeracy 95% 4,128 38 2 4,088 385 3,7 TIMSS 97% 3,863 41 2 3,820 227 3,5 Lithuania 94% 5,034 12 175 4,847 318 4,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovan 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Sweden 95% 4,505 29 126 4,3350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								
TIMSS 97% 3,863 41 2 3,820 227 3,55 Lithuania 94% 5,034 12 175 4,847 318 4,55 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,31 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,33 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 93% 4,759 74 2 4,683 346 3,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovania 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 5,291 206 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								
Lithuania 94% 5,034 12 175 4,847 318 4,5,5 Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovah Africa (5) 98% 11,305 151 0 11,54 222 10,9 Spain Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4	racy							3,703
Morocco (Combined) 99% 10,795 84 0 10,711 283 10,4 Numeracy 98% 5,581 43 0 5,538 178 5,31 TIMSS 99% 5,214 41 0 5,173 105 5,00 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484								3,593
Numeracy 98% 5,581 43 0 5,538 178 5,3 TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145								4,529
TIMSS 99% 5,214 41 0 5,173 105 5,0 Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,11 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,11 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Sarbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								10,428
Netherlands 96% 4,791 77 20 4,694 179 4,5 New Zealand 94% 6,920 118 77 6,725 403 6,3 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1* Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310								5,360
New Zealand 94% 6,920 118 77 6,725 403 6,33 Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1* Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800					-			5,068
Northern Ireland 93% 3,388 17 2 3,369 253 3,1 Norway (5) 95% 4,764 27 166 4,571 242 4,3 Oman 99% 9,490 131 84 9,275 170 9,1 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235								4,515
Norway (5) 95% 4,764 27 166 4,571 242 4,33 Oman 99% 9,490 131 84 9,275 170 9,11 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,11 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,00 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,11 Turkey 98% 6,892 217 90 6,585 129 6,4								6,322
Oman 99% 9,490 131 84 9,275 170 9,11 Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1* Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305	eland							3,116
Poland 92% 5,346 49 118 5,179 432 4,7 Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1 Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353								4,329
Portugal 93% 5,391 33 295 5,063 370 4,6 Qatar 99% 5,484 116 113 5,255 61 5,1* Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505								9,105
Qatar 99% 5,484 116 113 5,255 61 5,1* Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								4,747
Russian Federation 98% 5,145 24 87 5,034 113 4,9 Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								4,693
Saudi Arabia 93% 4,759 74 2 4,683 346 4,3 Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								5,194
Serbia 96% 4,310 21 80 4,209 173 4,0 Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								4,921
Singapore 96% 6,800 26 0 6,774 257 6,5 Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4	a							4,337
Slovak Republic 97% 6,235 208 50 5,977 204 5,7 Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								4,036
Slovenia 95% 4,790 13 77 4,700 255 4,4 South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4								6,517
South Africa (5) 98% 11,305 151 0 11,154 222 10,9 Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4	ıblic			208	50	5,977	204	5,773
Spain 96% 8,353 40 302 8,011 247 7,7 Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4			4,790		77	4,700	255	4,445
Sweden 95% 4,505 29 126 4,350 208 4,1 Turkey 98% 6,892 217 90 6,585 129 6,4	a (5)	98%	11,305	151	0	11,154	222	10,932
Turkey 98% 6,892 217 90 6,585 129 6,4			8,353		302	8,011	247	7,764
		95%	4,505	29	126	4,350	208	4,142
11 1 1 1 1 5 1 1		98%	6,892	217	90	6,585	129	6,456
United Arab Emirates 97% 22,249 110 275 21,864 687 21,1	Emirates	97%	22,249	110	275	21,864	687	21,177

Students attending a sampled class at the time the sample was chosen but leaving the class before the assessment was administered were classified as "withdrawn." Students with a disability or language barrier that prevented them from participating in the assessment were classified as "excluded." Students not present when the assessment was administered, and not subsequently assessed in a make-up session, were classified as "absent."





Appendix C.5: Student Sample Sizes (Continued)

Country	Within-School Student Participation (Weighted Percentage)	Number of Sampled Students in Participating Schools	Number of Students Withdrawn from Class/School	Number of Students Excluded	Number of Eligible Students	Number of Students Absent	Number of Students Assessed
enchmarking Participants							
Buenos Aires, Argentina (Combined)	93%	7,464	54	16	7,180	745	6,435
Numeracy	93%	3,852	27	8	3,697	366	3,331
TIMSS	93%	3,612	27	8	3,483	379	3,104
Ontario, Canada	95%	4,938	52	59	4,827	253	4,574
Quebec, Canada	95%	3,012	13	54	2,945	147	2,798
Norway (4)	95%	4,583	27	149	4,407	243	4,164
Abu Dhabi, UAE	97%	5,281	32	64	5,185	184	5,001
Dubai, UAE	97%	7,906	35	153	7,718	265	7,453
Florida, US	95%	2.269	55	76	2.138	113	2.025

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015