## Appendix C

## Coverage of TIMSS 2003 Target Populations and Participation Rates

Exhibit C.1: Coverage of TIMSS 2003 Target Populations


| Countries | International Desired Population |  | National Desired Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coverage | Notes on Coverage | School-Level Exclusions | Within-Sample Exclusions | Overall Exclusions |
| Armenia | 100\% |  | 2.9\% | 0.0\% | 2.9\% |
| Australia | 100\% |  | 0.4\% | 0.9\% | 1.3\% |
| Bahrain | 100\% |  | 0.0\% | 0.0\% | 0.0\% |
| Belgium (Flemish) | 100\% |  | 3.1\% | 0.1\% | 3.2\% |
| Botswana | 100\% |  | 0.8\% | 2.2\% | 3.0\% |
| Bulgaria | 100\% |  | 0.5\% | 0.0\% | 0.5\% |
| Chile | 100\% |  | 1.6\% | 0.7\% | 2.2\% |
| Chinese Taipei | 100\% |  | 0.2\% | 4.6\% | 4.8\% |
| Cyprus | 100\% |  | 1.1\% | 1.5\% | 2.5\% |
| Egypt | 100\% |  | 3.4\% | 0.0\% | 3.4\% |
| England | 100\% |  | 2.1\% | 0.0\% | 2.1\% |
| Estonia | 100\% |  | 2.6\% | 0.8\% | 3.4\% |
| Ghana | 100\% |  | 0.9\% | 0.0\% | 0.9\% |
| Hong Kong, SAR | 100\% |  | 3.3\% | 0.1\% | 3.4\% |
| Hungary | 100\% |  | 5.5\% | 3.2\% | 8.5\% |
| Indonesia | 80\% | Non-Islamic schools | 0.1\% | 0.3\% | 0.4\% |
| Iran, Islamic Rep. of | 100\% |  | 5.5\% | 1.1\% | 6.5\% |
| Israel | 100\% |  | 15.2\% | 8.6\% | 22.5\% |
| Italy | 100\% |  | 0.0\% | 3.6\% | 3.6\% |
| Japan | 100\% |  | 0.5\% | 0.1\% | 0.6\% |
| Jordan | 100\% |  | 0.5\% | 0.8\% | 1.3\% |
| Korea, Rep. of | 100\% |  | 1.5\% | 3.4\% | 4.9\% |
| Latvia | 100\% |  | 3.6\% | 0.1\% | 3.7\% |
| Lebanon | 100\% |  | 1.4\% | 0.0\% | 1.4\% |
| Lithuania | 89\% | Students taught in Lithuanian | 1.4\% | 1.2\% | 2.6\% |
| Macedonia, Rep. of | 100\% |  | 12.5\% | 0.0\% | 12.5\% |
| Malaysia | 100\% |  | 4.0\% | 0.0\% | 4.0\% |
| Moldova, Rep. of | 100\% |  | 0.7\% | 0.5\% | 1.2\% |
| Morocco | 69\% | All students but Souss Massa Draa, Casablanca, Gharb-Chrarda | 1.5\% | 0.0\% | 1.5\% |
| Netherlands | 100\% |  | 3.0\% | 0.0\% | 3.0\% |
| New Zealand | 100\% |  | 1.7\% | 2.7\% | 4.4\% |
| Norway | 100\% |  | 0.9\% | 1.5\% | 2.3\% |
| Palestinian Nat'l Auth. | 100\% |  | 0.2\% | 0.3\% | 0.5\% |
| Philippines | 100\% |  | 1.5\% | 0.0\% | 1.5\% |
| Romania | 100\% |  | 0.4\% | 0.1\% | 0.5\% |
| Russian Federation | 100\% |  | 1.7\% | 3.9\% | 5.5\% |
| Saudi Arabia | 100\% |  | 0.3\% | 0.2\% | 0.5\% |
| Scotland | 100\% |  | 0.0\% | 0.0\% | 0.0\% |
| Serbia | 81\% | Serbia without Kosovo | 2.4\% | 0.6\% | 2.9\% |
| Singapore | 100\% |  | 0.0\% | 0.0\% | 0.0\% |
| Slovak Republic | 100\% |  | 5.0\% | 0.0\% | 5.0\% |
| Slovenia | 100\% |  | 1.3\% | 0.1\% | 1.4\% |
| South Africa | 100\% |  | 0.6\% | 0.0\% | 0.6\% |
| Sweden | 100\% |  | 0.3\% | 2.5\% | 2.8\% |
| Syrian Arab Republic | 100\% |  | 18.7\% | 0.0\% | 18.8\% |
| Tunisia | 100\% |  | 1.8\% | 0.0\% | 1.8\% |
| United States | 100\% |  | 0.0\% | 4.9\% | 4.9\% |
| Benchmarking Participants |  |  |  |  |  |
| Basque Region, Spain | 100\% |  | 2.1\% | 3.8\% | 5.8\% |
| Indiana State, US | 100\% |  | 0.0\% | 7.8\% | 7.8\% |
| Ontario Province, Can. | 100\% |  | 1.0\% | 5.0\% | 6.0\% |
| Quebec Province, Can. | 100\% |  | 1.4\% | 3.5\% | 4.8\% |

## Exhibit C.1: Coverage of TIMSS 2003 Target Populations

| Countries | International Desired Population |  | National Desired Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coverage | Notes on Coverage | School-Level Exclusions | Within-Sample Exclusions | Overall Exclusions |
| Armenia | 100\% |  | 2.9\% | 0.0\% | 2.9\% |
| Australia | 100\% |  | 1.2\% | 1.6\% | 2.7\% |
| Belgium (Flemish) | 100\% |  | 5.9\% | 0.4\% | 6.3\% |
| Chinese Taipei | 100\% |  | 0.3\% | 2.8\% | 3.1\% |
| Cyprus | 100\% |  | 1.5\% | 1.4\% | 2.9\% |
| England | 100\% |  | 1.9\% | 0.0\% | 1.9\% |
| Hong Kong, SAR | 100\% |  | 3.7\% | 0.1\% | 3.8\% |
| Hungary | 100\% |  | 4.4\% | 3.9\% | 8.1\% |
| Iran, Islamic Rep. of | 100\% |  | 3.6\% | 2.1\% | 5.7\% |
| Italy | 100\% |  | 0.1\% | 4.1\% | 4.2\% |
| Japan | 100\% |  | 0.4\% | 0.3\% | 0.8\% |
| Latvia | 100\% |  | 4.3\% | 0.1\% | 4.4\% |
| Lithuania | 92\% | Students taught in Lithuanian | 2.1\% | 2.6\% | 4.6\% |
| Moldova, Rep. of | 100\% |  | 2.0\% | 1.6\% | 3.6\% |
| Morocco | 100\% |  | 2.2\% | 0.0\% | 2.2\% |
| Netherlands | 100\% |  | 4.1\% | 1.1\% | 5.2\% |
| New Zealand | 100\% |  | 1.5\% | 2.5\% | 4.0\% |
| Norway | 100\% |  | 1.7\% | 2.7\% | 4.4\% |
| Philippines | 100\% |  | 3.8\% | 0.7\% | 4.5\% |
| Russian Federation | 100\% |  | 2.2\% | 4.7\% | 6.8\% |
| Scotland | 100\% |  | 1.5\% | 0.0\% | 1.5\% |
| Singapore | 100\% |  | 0.0\% | 0.0\% | 0.0\% |
| Slovenia | 100\% |  | 0.8\% | 0.5\% | 1.3\% |
| Tunisia | 100\% |  | 0.9\% | 0.0\% | 0.9\% |
| United States | 100\% |  | 0.0\% | 5.1\% | 5.1\% |
| Yemen | 100\% |  | 0.6\% | 8.9\% | 9.5\% |
| Benchmarking Participants |  |  |  |  |  |
| Indiana State, US | 100\% |  | 0.0\% | 7.2\% | 7.2\% |
| Ontario Province, Can. | 100\% |  | 1.3\% | 3.5\% | 4.8\% |
| Quebec Province, Can. | 100\% |  | 2.7\% | 0.9\% | 3.6\% |


| Countries | School Participation |  | Class <br> Participation | Student Participation | Overall Participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before Replacement | After Replacement |  |  | Before Replacement | After Replacement |
| Armenia | 99\% | 99\% | 99\% | 90\% | 89\% | 89\% |
| Australia | 81\% | 90\% | 100\% | 93\% | 75\% | 83\% |
| Bahrain | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Belgium (Flemish) | 82\% | 99\% | 98\% | 97\% | 77\% | 94\% |
| Botswana | 98\% | 98\% | 100\% | 98\% | 96\% | 96\% |
| Bulgaria | 97\% | 97\% | 99\% | 96\% | 92\% | 92\% |
| Chile | 98\% | 100\% | 100\% | 99\% | 97\% | 99\% |
| Chinese Taipei | 100\% | 100\% | 100\% | 99\% | 99\% | 99\% |
| Cyprus | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |
| Egypt | 99\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| England | 40\% | 54\% | 99\% | 86\% | 34\% | 46\% |
| Estonia | 99\% | 99\% | 100\% | 96\% | 95\% | 95\% |
| Ghana | 100\% | 100\% | 100\% | 93\% | 93\% | 93\% |
| Hong Kong, SAR | 74\% | 83\% | 99\% | 97\% | 72\% | 80\% |
| Hungary | 98\% | 99\% | 100\% | 95\% | 94\% | 94\% |
| Indonesia | 98\% | 100\% | 100\% | 99\% | 97\% | 99\% |
| Iran, Islamic Rep. of | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Israel | 98\% | 99\% | 100\% | 95\% | 93\% | 94\% |
| Italy | 96\% | 100\% | 100\% | 97\% | 93\% | 97\% |
| Japan | 97\% | 97\% | 100\% | 96\% | 93\% | 93\% |
| Jordan | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |
| Korea, Rep. of | 99\% | 99\% | 100\% | 99\% | 98\% | 98\% |
| Latvia | 92\% | 94\% | 100\% | 89\% | 81\% | 83\% |
| Lebanon | 93\% | 95\% | 100\% | 96\% | 89\% | 91\% |
| Lithuania | 92\% | 95\% | 100\% | 89\% | 81\% | 84\% |
| Macedonia, Rep. of | 94\% | 99\% | 100\% | 97\% | 91\% | 96\% |
| Malaysia | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Moldova, Rep. of | 99\% | 100\% | 100\% | 96\% | 95\% | 96\% |
| Morocco | 79\% | 79\% | 100\% | 91\% | 71\% | 71\% |
| Netherlands | 79\% | 87\% | 100\% | 94\% | 74\% | 81\% |
| New Zealand | 86\% | 97\% | 100\% | 93\% | 80\% | 90\% |
| Norway | 92\% | 92\% | 100\% | 92\% | 85\% | 85\% |
| Palestinian Nat'l Auth. | 100\% | 100\% | 100\% | 99\% | 99\% | 99\% |
| Philippines | 81\% | 86\% | 100\% | 96\% | 78\% | 82\% |
| Romania | 99\% | 99\% | 100\% | 98\% | 98\% | 98\% |
| Russian Federation | 99\% | 99\% | 100\% | 97\% | 96\% | 96\% |
| Saudi Arabia | 95\% | 97\% | 100\% | 97\% | 93\% | 94\% |
| Scotland | 76\% | 85\% | 100\% | 89\% | 68\% | 76\% |
| Serbia | 99\% | 99\% | 100\% | 96\% | 96\% | 96\% |
| Singapore | 100\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| Slovak Republic | 96\% | 100\% | 100\% | 95\% | 91\% | 95\% |
| Slovenia | 94\% | 99\% | 100\% | 93\% | 87\% | 91\% |
| South Africa | 89\% | 96\% | 100\% | 92\% | 82\% | 88\% |
| Sweden | 97\% | 99\% | 99\% | 89\% | 85\% | 87\% |
| Syrian Arab Republic | 81\% | 89\% | 100\% | 98\% | 79\% | 87\% |
| Tunisia | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| United States | 71\% | 78\% | 99\% | 94\% | 66\% | 73\% |
| Benchmarking Participants |  |  |  |  |  |  |
| Basque Region, Spain | 100\% | 100\% | 100\% | 98\% | 97\% | 98\% |
| Indiana State, US | 97\% | 97\% | 100\% | 97\% | 94\% | 94\% |
| Ontario Province, Can. | 84\% | 93\% | 100\% | 95\% | 80\% | 89\% |
| Quebec Province, Can. | 91\% | 93\% | 100\% | 92\% | 84\% | 85\% |

## Exhibit C.2: Participation Rates (Weighted)

| Countries | School Participation |  | Class <br> Participation | Student Participation | Overall Participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before Replacement | After <br> Replacement |  |  | Before Replacement | After <br> Replacement |
| Armenia | 99\% | 99\% | 100\% | 91\% | 90\% | 90\% |
| Australia | 78\% | 90\% | 100\% | 94\% | 73\% | 85\% |
| Belgium (Flemish) | 89\% | 99\% | 100\% | 98\% | 87\% | 97\% |
| Chinese Taipei | 100\% | 100\% | 100\% | 99\% | 99\% | 99\% |
| Cyprus | 100\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| England | 54\% | 82\% | 100\% | 93\% | 50\% | 76\% |
| Hong Kong, SAR | 77\% | 88\% | 99\% | 95\% | 73\% | 83\% |
| Hungary | 98\% | 99\% | 100\% | 94\% | 92\% | 93\% |
| Iran, Islamic Rep. of | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Italy | 97\% | 100\% | 100\% | 97\% | 93\% | 97\% |
| Japan | 100\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| Latvia | 91\% | 94\% | 100\% | 94\% | 85\% | 88\% |
| Lithuania | 92\% | 96\% | 99\% | 92\% | 84\% | 87\% |
| Moldova, Rep. of | 97\% | 100\% | 100\% | 97\% | 94\% | 97\% |
| Morocco | 87\% | 87\% | 100\% | 93\% | 81\% | 81\% |
| Netherlands | 52\% | 87\% | 100\% | 96\% | 50\% | 84\% |
| New Zealand | 87\% | 98\% | 100\% | 95\% | 82\% | 93\% |
| Norway | 89\% | 93\% | 100\% | 95\% | 85\% | 88\% |
| Philippines | 78\% | 85\% | 100\% | 95\% | 75\% | 81\% |
| Russian Federation | 99\% | 100\% | 100\% | 97\% | 96\% | 97\% |
| Scotland | 64\% | 83\% | 100\% | 92\% | 59\% | 77\% |
| Singapore | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Slovenia | 95\% | 99\% | 100\% | 92\% | 87\% | 91\% |
| Tunisia | 100\% | 100\% | 100\% | 99\% | 99\% | 99\% |
| United States | 70\% | 82\% | 99\% | 95\% | 66\% | 78\% |
| Yemen | 100\% | 100\% | 100\% | 93\% | 93\% | 93\% |
| Benchmarking Participants |  |  |  |  |  |  |
| Indiana State, US | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Ontario Province, Can. | 89\% | 94\% | 100\% | 96\% | 85\% | 90\% |
| Quebec Province, Can. | 99\% | 100\% | 100\% | 91\% | 90\% | 91\% |

