## Appendix E.1: Average Percent Correct in the Science Content and

## Cognitive Domains

| Country | Overall <br> Science | Science Content Domains |  |  | Science Cognitive Domains |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Life Science | Physical Science | Earth Science | Knowing | Applying | Reasoning |
| Australia | 52 (0.6) | 55 (0.6) | 49 (0.7) | 52 (0.7) | 56 (0.6) | 51 (0.7) | 48 (0.6) |
| Bahrain | 41 (0.4) | 42 (0.4) | 41 (0.4) | 39 (0.4) | 45 (0.4) | 40 (0.4) | 34 (0.5) |
| Belgium (Flemish) | 49 (0.4) | 50 (0.5) | 46 (0.5) | 49 (0.5) | 50 (0.5) | 48 (0.5) | 47 (0.6) |
| Bulgaria | 57 (1.2) | 59 (1.2) | 54 (1.2) | 55 (1.2) | 63 (1.2) | 56 (1.2) | 46 (1.2) |
| Canada | 52 (0.5) | 56 (0.5) | 49 (0.5) | 50 (0.6) | 56 (0.5) | 52 (0.5) | 46 (0.5) |
| Chile | 42 (0.5) | 46 (0.5) | 39 (0.5) | 40 (0.6) | 46 (0.5) | 41 (0.6) | 36 (0.6) |
| Chinese Taipei | 59 (0.4) | 58 (0.4) | 61 (0.4) | 58 (0.5) | 62 (0.4) | 58 (0.4) | 56 (0.5) |
| Croatia | 54 (0.4) | 55 (0.5) | 53 (0.5) | 54 (0.7) | 58 (0.5) | 53 (0.5) | 49 (0.6) |
| Cyprus | 43 (0.5) | 44 (0.5) | 43 (0.6) | 40 (0.6) | 44 (0.5) | 43 (0.6) | 39 (0.5) |
| Czech Republic | 55 (0.4) | 57 (0.4) | 52 (0.5) | 54 (0.6) | 60 (0.5) | 52 (0.5) | 48 (0.6) |
| Denmark | 53 (0.4) | 55 (0.4) | 49 (0.6) | 53 (0.6) | 56 (0.5) | 53 (0.5) | 48 (0.6) |
| England | 55 (0.5) | 56 (0.5) | 54 (0.5) | 53 (0.7) | 58 (0.5) | 54 (0.5) | 50 (0.6) |
| Finland | 58 (0.4) | 59 (0.4) | 56 (0.5) | 60 (0.5) | 62 (0.5) | 57 (0.4) | 53 (0.5) |
| France | 44 (0.5) | 46 (0.5) | 42 (0.5) | 44 (0.7) | 47 (0.6) | 44 (0.6) | 38 (0.5) |
| Georgia | 39 (0.7) | 42 (0.6) | 35 (0.8) | 37 (0.8) | 44 (0.7) | 38 (0.7) | 29 (0.7) |
| Germany | 53 (0.4) | 54 (0.4) | 53 (0.5) | 51 (0.6) | 56 (0.5) | 52 (0.5) | 48 (0.5) |
| Hong Kong SAR | 60 (0.6) | 59 (0.7) | 58 (0.7) | 63 (0.8) | 64 (0.6) | 58 (0.7) | 53 (0.8) |
| Hungary | 56 (0.7) | 59 (0.7) | 53 (0.7) | 55 (0.8) | 61 (0.7) | 55 (0.7) | 49 (0.7) |
| Indonesia | 32 (0.6) | 33 (0.7) | 32 (0.7) | 29 (0.6) | 37 (0.7) | 29 (0.5) | 26 (0.7) |
| Iran, Islamic Rep. of | 34 (0.6) | 36 (0.6) | 34 (0.6) | 33 (0.7) | 38 (0.6) | 33 (0.6) | 29 (0.7) |
| Ireland | 53 (0.5) | 55 (0.5) | 51 (0.5) | 55 (0.7) | 57 (0.5) | 53 (0.5) | 47 (0.6) |
| Italy | 51 (0.5) | 53 (0.5) | 49 (0.5) | 49 (0.7) | 56 (0.5) | 49 (0.6) | 45 (0.6) |
| Japan | 62 (0.4) | 60 (0.4) | 65 (0.4) | 60 (0.6) | 59 (0.4) | 63 (0.4) | 63 (0.4) |
| Kazakhstan | 58 (0.9) | 58 (0.8) | 58 (1.1) | 56 (1.0) | 62 (0.9) | 56 (1.0) | 53 (1.1) |
| Korea, Rep. of | 66 (0.4) | 66 (0.4) | 67 (0.4) | 66 (0.6) | 67 (0.4) | 66 (0.4) | 64 (0.5) |
| \% Kuwait | 25 (0.7) | 26 (0.8) | 23 (0.7) | 26 (0.6) | 30 (0.8) | 24 (0.7) | 18 (0.6) |
| Lithuania | 53 (0.5) | 54 (0.6) | 53 (0.6) | 50 (0.6) | 56 (0.6) | 52 (0.5) | 50 (0.7) |
| $\psi$ Morocco | 27 (0.6) | 28 (0.6) | 27 (0.7) | 24 (0.6) | 30 (0.6) | 26 (0.6) | 22 (0.6) |
| Netherlands | 50 (0.5) | 53 (0.5) | 46 (0.5) | 51 (0.7) | 52 (0.6) | 50 (0.5) | 47 (0.6) |
| New Zealand | 49 (0.5) | 51 (0.5) | 45 (0.5) | 49 (0.6) | 52 (0.5) | 47 (0.5) | 45 (0.5) |
| Northern Ireland | 51 (0.5) | 53 (0.5) | 49 (0.5) | 53 (0.7) | 55 (0.6) | 50 (0.5) | 46 (0.6) |
| Norway (5) | 55 (0.5) | 58 (0.5) | 50 (0.6) | 58 (0.8) | 58 (0.6) | 55 (0.6) | 49 (0.6) |
| Oman | 38 (0.5) | 39 (0.5) | 38 (0.5) | 36 (0.5) | 41 (0.5) | 37 (0.5) | 32 (0.5) |
| Poland | 57 (0.5) | 61 (0.5) | 54 (0.5) | 56 (0.6) | 60 (0.5) | 58 (0.6) | 52 (0.5) |
| Portugal | 48 (0.3) | 50 (0.3) | 45 (0.4) | 50 (0.5) | 52 (0.4) | 47 (0.4) | 42 (0.5) |
| Qatar | 38 (0.6) | 40 (0.6) | 36 (0.7) | 36 (0.6) | 42 (0.6) | 36 (0.7) | 32 (0.7) |
| Russian Federation | 62 (0.7) | 63 (0.7) | 60 (0.7) | 60 (0.7) | 65 (0.8) | 62 (0.6) | 55 (0.7) |
| Saudi Arabia | 31 (0.6) | 32 (0.6) | 30 (0.7) | 32 (0.7) | 37 (0.7) | 30 (0.6) | 23 (0.6) |
| Serbia | 52 (0.7) | 56 (0.6) | 52 (0.8) | 46 (0.9) | 56 (0.7) | 52 (0.8) | 47 (0.8) |
| Singapore | 67 (0.8) | 71 (0.8) | 68 (0.8) | 57 (0.8) | 67 (0.7) | 68 (0.8) | 65 (0.8) |
| Slovak Republic | 52 (0.6) | 53 (0.6) | 52 (0.6) | 50 (0.7) | 57 (0.6) | 50 (0.6) | 44 (0.6) |
| Slovenia | 56 (0.4) | 58 (0.5) | 56 (0.5) | 53 (0.6) | 59 (0.5) | 57 (0.5) | 51 (0.5) |
| Spain | 51 (0.5) | 54 (0.5) | 47 (0.6) | 51 (0.7) | 56 (0.6) | 49 (0.5) | 45 (0.6) |
| Sweden | 56 (0.7) | 56 (0.6) | 53 (0.8) | 59 (0.8) | 59 (0.7) | 55 (0.8) | 51 (0.7) |
| Turkey | 45 (0.5) | 45 (0.5) | 46 (0.6) | 44 (0.6) | 48 (0.5) | 44 (0.6) | 41 (0.7) |
| United Arab Emirates | 41 (0.4) | 42 (0.5) | 40 (0.5) | 40 (0.5) | 46 (0.5) | 40 (0.5) | 34 (0.5) |
| United States | 57 (0.4) | 61 (0.4) | 54 (0.5) | 56 (0.5) | 61 (0.5) | 57 (0.4) | 51 (0.4) |
| International Avg. | 50 (0.1) | 51 (0.1) | 48 (0.1) | 49 (0.1) | 53 (0.1) | 49 (0.1) | 44 (0.1) |

[^0]Appendix E.1: Average Percent Correct in the Science Content and

## Cognitive Domains (Continued)

| Country | Overall <br> Science | Science Content Domains |  |  | Science Cognitive Domains |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Life Science | Physical Science | Earth Science | Knowing | Applying | Reasoning |
| Benchmarking Participants |  |  |  |  |  |  |  |
| Buenos Aires, Argentina | 32 (0.6) | 35 (0.7) | 30 (0.7) | 29 (0.7) | 36 (0.7) | 31 (0.7) | 27 (0.7) |
| Ontario, Canada | 54 (0.5) | 58 (0.5) | 50 (0.5) | 50 (0.6) | 57 (0.5) | 54 (0.5) | 47 (0.6) |
| Quebec, Canada | 52 (0.8) | 55 (0.8) | 49 (1.0) | 50 (1.0) | 56 (0.9) | 51 (1.0) | 47 (0.9) |
| Norway (4) | 45 (0.5) | 49 (0.5) | 40 (0.5) | 47 (0.6) | 50 (0.5) | 44 (0.6) | 38 (0.5) |
| Abu Dhabi, UAE | 35 (0.9) | 37 (1.0) | 34 (0.9) | 35 (0.9) | 39 (1.0) | 34 (0.9) | 29 (0.8) |
| Dubai, UAE | 53 (0.3) | 54 (0.4) | 51 (0.4) | 51 (0.4) | 57 (0.4) | 52 (0.4) | 45 (0.4) |
| Florida, US | 58 (1.1) | 61 (1.0) | 54 (1.2) | 56 (1.2) | 62 (1.0) | 57 (1.1) | 50 (1.2) |


[^0]:    $\psi$ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds $15 \%$ but does not exceed $25 \%$.
    () Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

