

Exhibit 16: Methods Used to Evaluate the Implementation of Mathematics and Science Curricula at the Eighth Grade

Reported by National Research Coordinators

| Country | Visits by Inspectors | | Research Programs | | School Self-Evaluation | | National or Regional Examinations | |
|-----------------------|------------------------------|------------------------------|-------------------|---------|------------------------|---------|-----------------------------------|---------|
| | Mathematics | Science | Mathematics | Science | Mathematics | Science | Mathematics | Science |
| Armenia | ● | ● | ● | ● | ● | ● | ● | ● |
| Australia | ○ | ○ | ○ | ○ | ● | ● | ● | ● |
| Bahrain | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Botswana | ● | ● | ○ | ● | ● | ● | ● | ● |
| Canada | ○ | ○ | ○ | ○ | ○ | ● | ● | ○ |
| Chile | ○ | ○ | ○ | ○ | ● | ● | ● | ● |
| Chinese Taipei | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Egypt | – | ● | – | ● | – | ● | – | ● |
| England | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Georgia | ○ | ○ | ○ | ● | ● | ○ | ● | ○ |
| Hong Kong SAR | ● | ● | ● | ● | ● | ● | ● | ○ |
| Hungary | ● | ● | ● | ● | ● | ● | ● | ● |
| Iran, Islamic Rep. of | ○ | ○ | ● | ● | ○ | ○ | ○ | ○ |
| Ireland | ● | ● | ● | ● | ● | ● | ● | ● |
| Israel | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Italy | ○ | ○ | ○ | ○ | ● | ○ | ● | ○ |
| Japan | ● | ● | ● | ● | ● | ● | ● | ● |
| Jordan | ● | ● | ● | ● | ● | ● | ● | ● |
| Kazakhstan | ● | ● | ● | ● | ● | ● | ○ | ○ |
| Korea, Rep. of | ● | ● | ● | ● | ● | ● | ● | ● |
| Kuwait | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Lebanon | ● | ● | ○ | ○ | ● | ● | ● | ○ |
| Lithuania | ● | ● | ○ | ○ | ● | ● | ○ | ○ |
| Malaysia | ● | ● | ● | ● | ● | ● | ● | ● |
| Malta | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Morocco | ● | ● | ● | ● | ● | ● | ● | ● |
| New Zealand | ● | ● | ● | ● | ● | ● | ○ | ○ |
| Norway | ○ | ○ | ○ | ○ | ○ | ○ | ● | ○ |
| Oman | ● | ● | ● | ● | ○ | ● | ● | ● |
| Qatar | ● | ● | ○ | ○ | ● | ○ | ● | ● |
| Russian Federation | ○ | ○ | ○ | ● | ● | ● | ● | ● |
| Saudi Arabia | ● | ● | ● | ● | ● | ● | ● | ● |
| Singapore | ○ | ○ | ○ | ○ | ● | ● | ● | ● |
| Slovenia | ○ | ○ | ● | ● | ● | ● | ● | ● |
| South Africa | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Sweden | ● | ● | ● | ● | ● | ● | ○ | ○ |
| Thailand | ● | ● | ● | ● | ● | ● | ● | ● |
| Turkey | ● | ● | ○ | ○ | ● | ● | ● | ● |
| United Arab Emirates | ● | ● | ● | ○ | ● | ● | ● | ● |
| United States | Varies by state and district | Varies by state and district | ● | ● | ● | ● | ● | ● |

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

Benchmarking Participants—Responses Pertain to Benchmarking Provinces/Emirates/States

| | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|
| Buenos Aires, Argentina | ● | ● | ○ | ○ | ● | ● | ● | ○ |
| Ontario, Canada | ○ | ○ | ○ | ○ | ● | ● | ● | ○ |
| Quebec, Canada | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Abu Dhabi, UAE | ● | ● | ● | ● | ● | ● | ● | ● |
| Dubai, UAE | ● | ● | ● | ○ | ● | ● | ● | ● |
| Florida, US | ● | ● | ● | ● | ● | ● | ● | ● |

● Yes
○ No

A dash (–) indicates data not provided.