

# U.S. PARTICIPATION IN INTERNATIONAL ASSESSMENTS



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# U.S. PARTICIPATION IN INTERNATIONAL ASSESSMENTS

**Progress in International Reading Literacy Study (PIRLS)  
Trends in International Mathematics and Science Study (TIMSS)  
Program for International Student Assessment (PISA)  
Program for the International Assessment of Adult Competencies (PIAAC)**

|   | PIRLS   |
|---|---|
| What year did the study begin?  | 2001  |
| How often is the study conducted?   | Every 5 years   |
| When will the study be conducted next?  | 2011  |
| How many jurisdictions participated in the last assessment?<br>How many were OECD countries? <sup>1</sup> | 45 jurisdictions<br>(19 OECD countries)   |
| What is the target population?  | Fourth-graders  |
| How many U.S. participants were in the most recent study?   | 5,190   |
| What is assessed?   | Reading literacy  |
| What is the purpose of the study?   | PIRLS measures students' reading comprehension of literary and informational text, broadly aligned with curricula of the participating countries. |

To learn more about how the international assessments compare with each other and with the National Assessment of Educational Progress (NAEP), please visit: <http://nces.ed.gov/surveys/international/assessments.asp>.

| TIMSS  | PISA  | PIAAC   |
|--|---|---|
| 1995   | 2000  | Initial data collection in 2011   |
| Every 4 years  | Every 3 years   | Every 10 years  |
| 2011   | 2009<br>(Data available 12/2010)  | Initial data collection in 2011   |
| 58 jurisdictions<br>(Grade 4: 15 OECD countries; Grade 8: 11 OECD countries)   | 57 jurisdictions<br>(30 OECD countries)   | 28 projected<br>(23 OECD countries)   |
| Fourth- and eighth-graders   | 15-year-olds  | Adults ages 16–65   |
| Grade 4: 10,350<br>Grade 8: 9,723  | 5,611   | 5,000 planned   |
| Mathematics, science   | Reading, mathematical, and scientific literacy, with one subject assessed in depth at each administration (on a rotating basis) and the other two subjects as minor domains   | Literacy, numeracy, problem solving in a technology rich environment, reading components (components of reading comprehension)  |
| TIMSS measures the mathematics and science knowledge and skills broadly aligned with curricula of the participating countries. | PISA measures how well students can apply their knowledge and skills to problems within real-life contexts. PISA is designed to represent a “yield” of learning at age 15, rather than a direct measure of attained curriculum knowledge. | PIAAC measures competencies believed to underlie personal and societal success. PIAAC is designed to measure the association of these competencies with social and economic outcomes. |



| PIRLS  |   |
|--|---|
| Are descriptions provided of what the participants know and can do at various levels of performance? | Yes, international benchmarks at Advanced, High, Intermediate, and Low levels include descriptions of typical knowledge and skills.   |
| What scale scores are provided?  | <b>Reading literacy:</b><br>Overall scale score and subscale scores   |
| Are there sources that provide contextual information for the scale scores?                          | Yes, there are student, teacher, and school questionnaires, and in most countries (not including the United States) a parent questionnaire; national research coordinators also report on characteristics of national curriculum and selected education policies and practices. |
| Are international data available for between-country analyses?                                       | Yes   |
| Are national-level data available for within-country analyses, including with country subgroups?     | Yes   |
| Are state-level data available?  | No  |
| Are district-level data available?   | No  |
| Is it possible to do trend analyses?   | Yes   |

<sup>1</sup> There are a total of 30 countries in the Organization for Economic Cooperation and Development (OECD). The count for the OECD countries includes single countries and jurisdictions of the country (e.g., England and Scotland as representing the United Kingdom).

| TIMSS   | PISA  | PIAAC   |
|---|---|---|
| Yes, international benchmarks at Advanced, High, Intermediate, and Low levels include descriptions of typical knowledge and skills.   | Yes, Levels 1 (lowest) through 6 (highest) include descriptions of typical tasks that can be completed.   | Yes, levels and descriptions planned.   |
| Grade 4 and Grade 8<br><b>Mathematics:</b><br>Overall scale score and subscale scores<br><b>Science:</b><br>Overall scale score and subscale scores   | <b>Reading literacy:</b><br>Overall scale score and subscale scores<br><b>Mathematics literacy:</b><br>Overall scale score and subscale scores<br><b>Science literacy:</b><br>Overall scale score and subscale scores | <b>Literacy:</b><br>Scale score planned<br><b>Numeracy:</b><br>Scale score planned<br><b>Problem Solving in Technology Rich Environments:</b><br>Scale score planned<br><b>Reading Components:</b><br>Scale score planned |
| Yes, there are student, teacher, and school questionnaires; national research coordinators also report on characteristics of national curriculum and selected education policies and practices. | Yes, there are student and school questionnaires, and in some countries (not including the United States) a parent questionnaire.   | Yes, questionnaires of participating adults, including a section on the skill requirements of participants' jobs are planned.   |
| Yes   | Yes   | Planned   |
| Yes   | Yes   | Planned   |
| For a few participating states in 1995, 2003, and 2007 <sup>2</sup>   | No  | No  |
| For a few participating districts in 1995 and 1999 <sup>2</sup>   | No  | Not applicable  |
| Yes   | Yes   | Planned   |

<sup>2</sup> The TIMSS Benchmarking studies provide an opportunity for states and school districts to assess the comparative international standing of their students' achievement. The participating states and districts administered the assessments following the same guidelines for the main TIMSS assessments, but separately from the U.S. national samples. For information about participants in the TIMSS Benchmarking studies, see the TIMSS 2007 international reports published by the International Association for the Evaluation of Educational Achievement (IEA).

## Participation in the most recent international assessments, by jurisdiction and target population

| Jurisdiction           | PIRLS 2006 | TIMSS 2007 |           | PISA 2006    |
|------------------------|------------|------------|-----------|--------------|
|                        | 4th Grade  | 4th Grade  | 8th Grade | 15-year-olds |
| <b>OECD</b>            |            |            |           |              |
| Australia              |            | ●          | ●         | ●            |
| Austria                | ●          | ●          |           | ●            |
| Belgium                |            |            |           | ●            |
| Flemish                | ●          |            |           |              |
| French                 | ●          |            |           |              |
| Canada                 |            |            |           | ●            |
| Alberta                | ●          | ○          |           |              |
| British Columbia       | ●          | ○          | ○         |              |
| Nova Scotia            | ●          |            |           |              |
| Ontario                | ●          | ○          | ○         |              |
| Quebec                 | ●          | ○          | ○         |              |
| Czech Republic         |            | ●          | ●         | ●            |
| Denmark                | ●          | ●          |           | ●            |
| Finland                |            |            |           | ●            |
| France                 | ●          |            |           | ●            |
| Germany                | ●          | ●          |           | ●            |
| Greece                 |            |            |           | ●            |
| Hungary                | ●          | ●          | ●         | ●            |
| Iceland                | ●          |            |           | ●            |
| Ireland                |            |            |           | ●            |
| Italy                  | ●          | ●          | ●         | ●            |
| Japan                  |            | ●          | ●         | ●            |
| Korea, Republic of     |            |            | ●         | ●            |
| Luxembourg             | ●          |            |           | ●            |
| Mexico                 |            |            |           | ●            |
| Netherlands            | ●          | ●          |           | ●            |
| New Zealand            | ●          | ●          |           | ●            |
| Norway                 | ●          | ●          | ●         | ●            |
| Poland                 | ●          |            |           | ●            |
| Portugal               |            |            |           | ●            |
| Slovak Republic        | ●          | ●          |           | ●            |
| Spain                  | ●          |            |           | ●            |
| Basque country         |            |            | ○         |              |
| Sweden                 | ●          | ●          | ●         | ●            |
| Switzerland            |            |            |           | ●            |
| Turkey                 |            |            | ●         | ●            |
| United Kingdom         |            |            |           | ●            |
| England                | ●          | ●          | ●         |              |
| Scotland               | ●          | ●          | ●         |              |
| United States          | ●          | ●          | ●         | ●            |
| Massachusetts          |            | ○          | ○         |              |
| Minnesota              |            | ○          | ○         |              |
| <b>Non-OECD</b>        |            |            |           |              |
| Algeria                |            | ●          | ●         |              |
| Argentina              |            |            |           | ●            |
| Armenia                |            | ●          | ●         |              |
| Azerbaijan             |            |            |           | ●            |
| Bahrain                |            |            | ●         |              |
| Bosnia and Herzegovina |            |            | ●         |              |
| Botswana               |            |            | ●         |              |
| Brazil                 |            |            |           | ●            |
| Bulgaria               | ●          |            | ●         | ●            |
| Chile                  |            |            |           | ●            |

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| Jurisdiction              | PIRLS 2006 | TIMSS 2007 |           | PISA 2006    |
|---------------------------|------------|------------|-----------|--------------|
|                           | 4th Grade  | 4th Grade  | 8th Grade | 15-year-olds |
| <b>Non-OECD—Continued</b> |            |            |           |              |
| Chinese Taipei            | ●          | ●          | ●         | ●            |
| Colombia                  |            | ●          | ●         | ●            |
| Croatia                   |            |            |           | ●            |
| Cyprus                    |            |            | ●         |              |
| United Arab Emirates      |            |            |           |              |
| Dubai                     |            | ○          | ○         |              |
| Egypt                     |            |            | ●         |              |
| El Salvador               |            | ●          | ●         |              |
| Estonia                   |            |            |           | ●            |
| Georgia                   | ●          | ●          | ●         |              |
| Ghana                     |            |            | ●         |              |
| Hong Kong-China           | ●          | ●          | ●         | ●            |
| Indonesia                 | ●          |            | ●         | ●            |
| Iran, Islamic Republic of | ●          | ●          | ●         |              |
| Israel                    | ●          |            | ●         | ●            |
| Jordan                    |            |            | ●         | ●            |
| Kazakhstan                |            | ●          |           |              |
| Kyrgyz Republic           |            |            |           | ●            |
| Kuwait                    | ●          | ●          | ●         |              |
| Latvia                    | ●          | ●          |           | ●            |
| Lebanon                   |            |            | ●         |              |
| Liechtenstein             |            |            |           | ●            |
| Lithuania                 | ●          | ●          | ●         | ●            |
| Macedonia, Republic of    | ●          |            |           |              |
| Macao-China               |            |            |           | ●            |
| Malaysia                  |            |            | ●         |              |
| Malta                     |            |            | ●         |              |
| Moldova, Republic of      | ●          |            |           |              |
| Montenegro, Republic of   |            |            |           | ●            |
| Morocco                   | ●          | ●          |           |              |
| Oman                      |            |            | ●         |              |
| Palestinian Nat'l Auth.   |            |            | ●         |              |
| Qatar                     | ●          | ●          | ●         | ●            |
| Romania                   | ●          |            | ●         | ●            |
| Russian Federation        | ●          | ●          | ●         | ●            |
| Saudi Arabia              |            |            | ●         |              |
| Serbia, Republic of       |            |            | ●         | ●            |
| Singapore                 | ●          | ●          | ●         |              |
| Slovenia                  | ●          | ●          | ●         | ●            |
| South Africa              | ●          |            |           |              |
| Syrian Arab Republic      |            |            | ●         |              |
| Thailand                  |            |            | ●         | ●            |
| Trinidad and Tobago       | ●          |            |           |              |
| Tunisia                   |            | ●          | ●         | ●            |
| Ukraine                   |            | ●          | ●         |              |
| Uruguay                   |            |            |           | ●            |
| Yemen                     |            | ●          |           |              |

“●” indicates participation in the particular assessment.

“○” indicates jurisdictions that participated as “benchmarking participants.”

NOTE: Upcoming participation in Program for the International Assessment of Adult Competencies (PIAAC) yet to be determined.

SOURCE: International Association for the Evaluation of Educational Achievement (IEA), Progress in International Reading Literacy Study (PIRLS), 2006; IEA, Trends in International Mathematics and Science Study (TIMSS), 2007; Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2006.

## Did You Know?

Assessment items are available online. Visit the following NCES websites to view publicly released items:

PIRLS: <http://nces.ed.gov/surveys/PIRLS>

TIMSS: <http://nces.ed.gov/TIMSS>

PISA: <http://nces.ed.gov/surveys/PISA>



<http://nces.ed.gov>  
<http://nces.ed.gov/surveys/international>