

# Comparison of International & NAEP Assessments

| Characteristic                          | TIMSS  | ICILS  | PISA   | TALIS  | NAEP   |
|---|--|--|--|--|--|
| Grade or Age                            | Grades 4 & 8   | Grade 8  | 15-year-olds   | Teachers of grades 7, 8 & 9, as well as their principals | Grades 4, 8 & 12   |
| Subjects or Content                     | Math & Science   | Computer & Information Literacy; Computational Thinking                | Math, Reading & Science Literacy                                 | Teachers, teaching & learning environments               | Reading, Math, Science & Others                              |
| Typical U.S. Assessment Window          | March – June   | March - May  | October - November   | March - May  | January - March  |
| Components                              | Students: CA & SQ<br>Teachers: SQ<br>School: SQ                                  | Students: CA & SQ<br>Teachers: SQ<br>School: SQ<br>ICT Coordinator: SQ | Students: CA & SQ<br>Teachers: SQ<br>School: SQ                  | Teachers: SQ<br>School: SQ                               | Students: CA & SQ<br>Teachers: SQ<br>School: SQ              |
| TOTAL Administration Time               | ~ 2-2.5 hours for both CA & SQ   | ~ 3 hours for both CA & SQ   | ~ 3 hours for both CA & SQ                                       | ~ 1 hour (teachers)<br>~45 min (principals)              | ~ 1.5-2 hours for both CA & SQ                               |
| U.S. Sample Sizes: Students<br>Schools  | ~ 8,800 per grade<br>~ 280 per grade   | ~ 6,800<br>~ 270   | ~ 4,800<br>~ 160   | ~2,500 teachers<br>~165 schools & principals             | ~ 148,000 per subject & grade<br>~ 7,500 per subject & grade |
| Frequency                               | Every 4 years  | Every 5 years  | Every 3 years  | Every 6 years  | Every 2 years  |
| Initial Year (I) / Most Recent Year (R) | I: 1995<br>R: 2019   | I: 2013<br>R: 2018   | I: 2000<br>R: 2018   | I: 2008<br>R: 2018                                       | I: early 1990s<br>R: 2019                                    |
| Content Assessed                        | Internationally curriculum-based   | Computer & information literacy  | Real-world applications of knowledge                             | NA   | U.S. curriculum-based  |
| Scale(s)                                | 0-1,000  | 0-700  | 0-1,000  | NA   | 0-300 or 0-500, varying by subject & grade                   |
| Sponsoring Organization                 | IEA<br>(International Association for the Evaluation of Educational Achievement) |  | OECD<br>(Organization for Economic Co-operation and Development) |  | NCES + NAGB<br>(National Assessment Governing Board)         |

TIMSS, ICIL, PISA, and TALIS are all international assessments, whereas NAEP is a national assessment.

PISA is designed to measure "literacy" broadly, while the Trends in International Mathematics and Science Study (TIMSS) and the National Assessment of Educational Progress (NAEP) have stronger links to curriculum frameworks and seeks to measure students' mastery of specific knowledge, skills, and concepts.

The content of PISA is drawn from broad content areas, such as living systems and physical systems for science, in contrast to more specific curriculum-based content such as biology or physics. Students participating in PISA use their reading, mathematics and science knowledge and skills to meet real-life challenges.