Achievement at TIMSS International Benchmarks

TIMSS describes achievement at four International Benchmarks along the science achievement scale: Advanced, High, Intermediate, and Low.

Percentage of Students Reaching Benchmarks (averaged across countries)

- **Advanced Benchmark (625)**: 7%
- **High Benchmark (550)**: 39%
- **Intermediate Benchmark (475)**: 77%
- **Low Benchmark (400)**: 95%

Students communicate understanding of life, physical, and Earth sciences and demonstrate some knowledge of the process of scientific inquiry.

Students communicate and apply knowledge of the life, physical, and Earth sciences in everyday and abstract contexts.

Students show basic knowledge of life and Earth sciences.

Many countries were able to educate nearly all of their fourth grade students to a basic level of science achievement.

Trends at the TIMSS International Benchmarks

In general, there were more improvements across the International Benchmarks in 2015 than there were declines.

**Trends 2011-2015: 41 Countries**

- **Advanced Benchmark (625)**: 9 increased, 4 decreased
- **High Benchmark (550)**: 16 increased, 8 decreased
- **Intermediate Benchmark (475)**: 20 increased, 6 decreased
- **Low Benchmark (400)**: 15 increased, 5 decreased

**Trends 1995-2015: 17 Countries**

- **Advanced Benchmark (625)**: 8 increased, 6 decreased
- **High Benchmark (550)**: 9 increased, 2 decreased
- **Intermediate Benchmark (475)**: 13 increased, 1 decreased
- **Low Benchmark (400)**: 14 increased, 0 decreased

Of the 17 countries with 20-year trends, 8 managed to improve achievement at all four benchmarks: Singapore, Korea, Japan, Hong Kong SAR, Hungary, Slovenia, Cyprus, and Iran.
