

MATHEMATICS AND SCIENCE ACHIEVEMENT IN PRIMARY EDUCATION

Key Findings: Canada, England, Japan, Scotland, United States

U.S. fourth-grade students had a mean score of 545 in mathematics on the 1994–95 Third International Mathematics and Science Study (TIMSS).⁸ The mean score of U.S. fourth-grade students was lower than the mean score of Japanese students (597), and higher than the mean scores of students in Canada (532), Scotland (520) and England (513)⁹ (table 10a).

In science, no difference was detected between the average performance of U.S. fourth-grade students (565) and the average performance of students in Japan (574), but the average performance of U.S. students was higher than the performance of students in England (551), Canada (549), and Scotland (536) (table 10b).

Definition and Methodology

This indicator shows mean scores in mathematics and science of fourth-grade students who participated in the Third International Mathematics and Science Study, 1994–95.

⁸Fourth-grade data are not available in the Third International Mathematics and Science Study 1999 report and will be available in the TIMSS 2003 report.

⁹The United Kingdom is one of the countries included in this study. Most indicators are reported for the country as a whole, but this indicator reports TIMSS scores separately for England and Scotland, two of the four units in the United Kingdom. The other two units are Wales and Northern Ireland.

Table 10a. Mean mathematics achievement scores of fourth-grade students, by country: 1994–95

Country	Mean score
Canada	532
England	513
Japan	597
Scotland	520
United States	545

NOTE: Fourth-grade in most countries; year 5 in England and Scotland. Dark shading signifies a higher score than the U.S. score; light shading signifies a lower score.

SOURCE: International Association for the Evaluation of Educational Achievement, *Mathematics Achievement in the Primary School Years: Third International Mathematics and Science Study*, 1997, Table I.1.

Table 10b. Mean science achievement scores of fourth-grade students, by country: 1994–95

Country	Mean score
Canada	549
England	551
Japan	574
Scotland	536
United States	565

NOTE: Fourth-grade in most countries; year 5 in England and Scotland. Light shading signifies a lower score than the U.S. score. No shading shows no statistical difference from the U.S. score.

SOURCE: International Association for the Evaluation of Educational Achievement, *Science Achievement in the Primary School Years: Third International Mathematics and Science Study*, 1997, Table I.1.

Mathematics and Science Achievement in Primary Education – Data Table

Table A-10. Mean mathematics and science achievement scores of fourth-grade students, by country: 1994–95

Country	Mathematics mean	Science mean
Canada	532 (3.3)	549 (3.0)
England	513 (3.2)	551 (3.3)
Japan	597 (2.1)	574 (1.8)
Scotland	520 (3.9)	536 (4.2)
United States	545 (3.0)	565 (3.1)

NOTE: Fourth-grade in most countries; year 5 in England and Scotland. Standard errors are in parentheses.

SOURCE: International Association for the Evaluation of Educational Achievement, *Mathematics Achievement in the Primary School Years: Third International Mathematics and Science Study*, 1997, Table 1.1; International Association for the Evaluation of Educational Achievement, *Science Achievement in the Primary School Years: Third International Mathematics and Science Study*, 1997, Table 1.1.