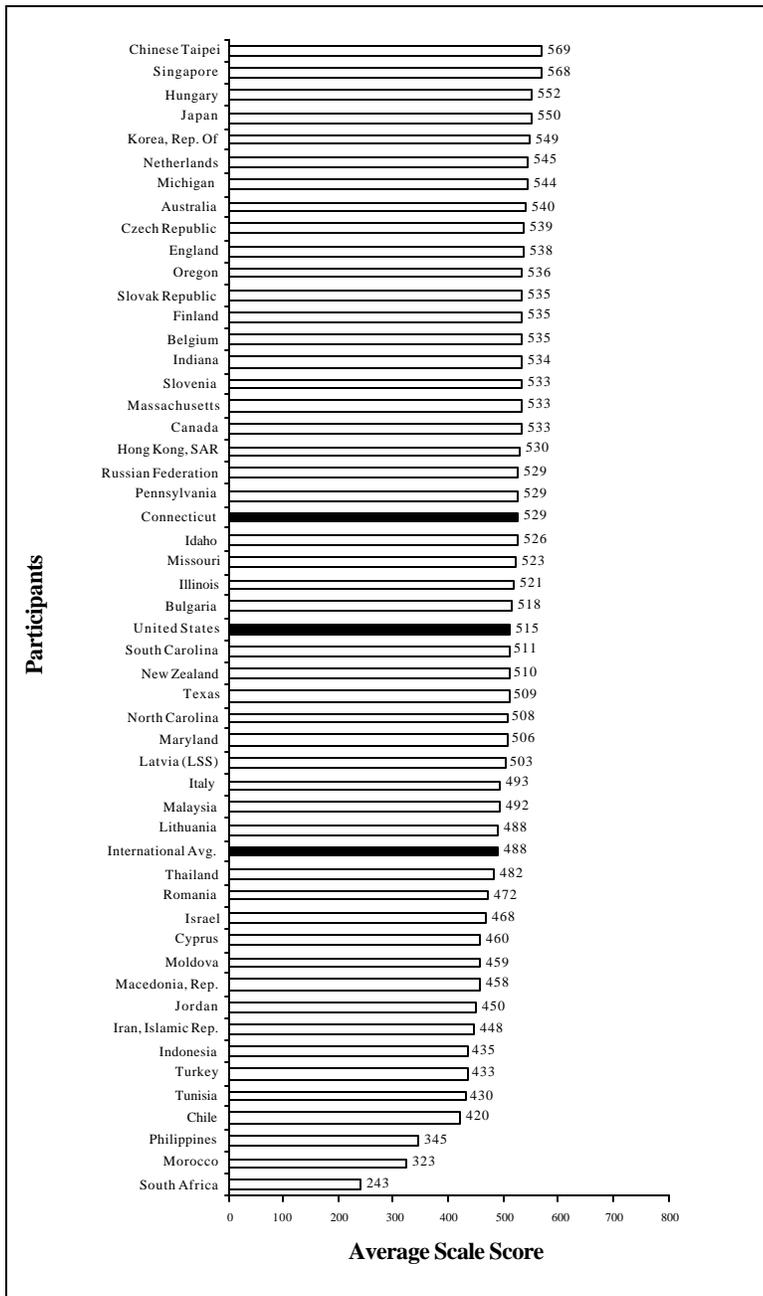


1999 Administration
Third International Math and Science Study - Repeat (TIMSS-R)
Distribution of Science Achievement



Pennsylvania and Texas did not fully satisfy guidelines for sample participation rates.

Belgium, England, Hong Kong and Indiana met guidelines for sample participation rates only after replacement schools were included.

OVERVIEW

TIMSS-R is an educational research project investigating student achievement in mathematics and science in about 40 countries around the world. It is designed to measure and interpret differences in national education systems in order to help improve the teaching and learning of mathematics and science worldwide.

TIMSS first collected mathematics and science data in 1994-95 on third/fourth, seventh/eighth and twelfth graders. This repeat of TIMSS tested eighth graders only.

In addition to the national sample, approximately 2000 eighth-grade students in about 50 Connecticut public schools participated. This participation in TIMSS-R will enable the state to compare instructional practices of teachers, student attitudes and curriculum with that of other nations and states. It will also enable the state to assess the rigor and effectiveness of math and science programs in an international context.

Science

Connecticut's average scale score of 529 is significantly higher than the United States as a whole (515) and the international average (488).

There was no significant difference between Connecticut's score and those of Michigan, Oregon, Indiana and Massachusetts. Each satisfied the guideline for participation and achieved the following average scale scores: Michigan, 544; Oregon, 536; Indiana, 534; Massachusetts, 533; and Connecticut, 529.

Within the six science content areas, listed below, Connecticut's eighth graders performed significantly above the international average in all except physics.

Science Content

Earth Science

Life Science

Physics

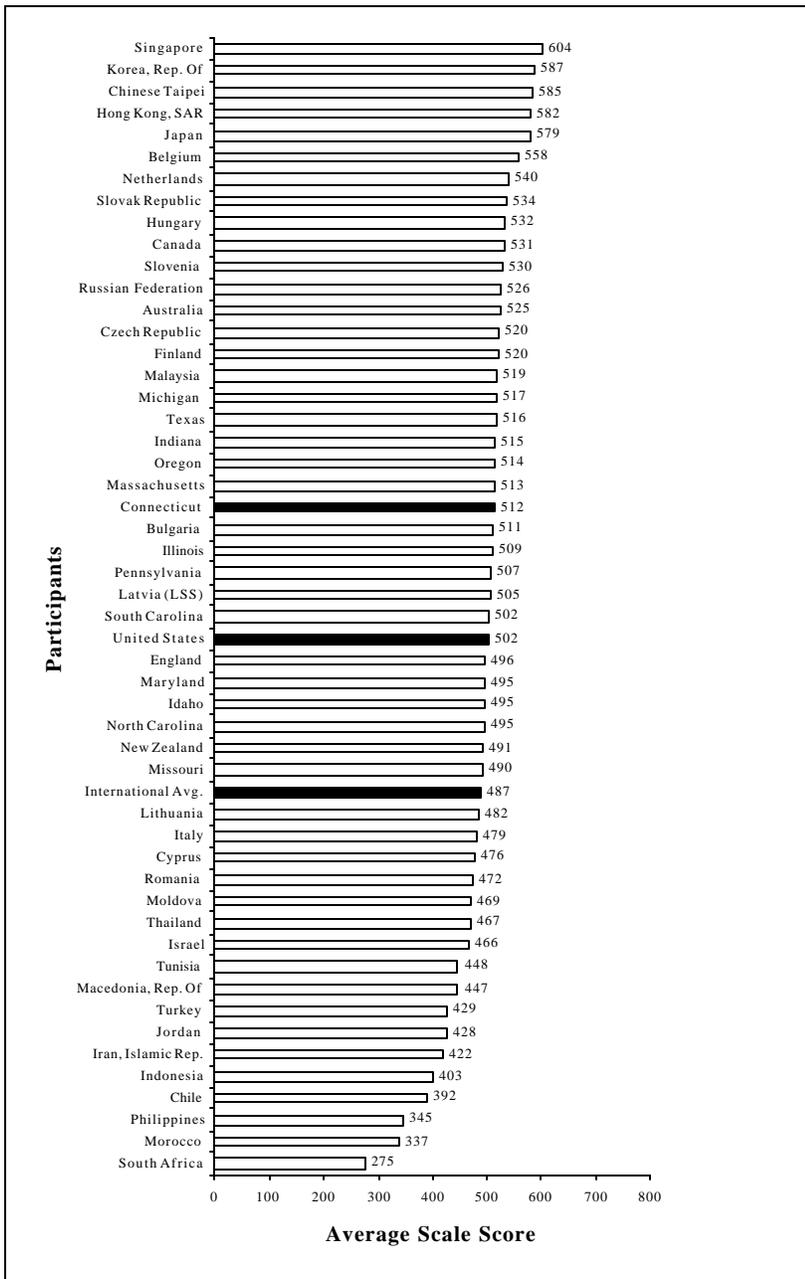
Chemistry

Environmental and Resource Issues

Scientific Inquiry and the Nature of Science

The average scale score for Connecticut boys, 542, was significantly higher than the score for Connecticut girls, 518.

1999 Administration
Third International Math and Science Study - Repeat (TIMSS-R)
Distribution of Mathematics Achievement



Mathematics

Connecticut's average scale score of 512 was not significantly different from the United States as a whole (502) and the international average (487).

There was no significant difference between Connecticut's score and those of Michigan, Indiana, Oregon and Massachusetts. Each satisfied the guideline for participation and achieved the following average scale scores: Michigan, 517; Indiana, 515; Oregon, 514; Massachusetts, 513; and Connecticut, 512.

Within the five content areas listed below, Connecticut's eighth graders performed best in Fractions and Number Sense (522). Their lowest score was in Geometry (470).

Mathematics Content

Fractions and Number Sense

Measurement

Data Representation, Analysis and Probability

Algebra

Geometry

Additional information:

A video study will be released to show U.S. teaching practices and those found in high-achieving nations.

TIMSS International Study Center at Boston College: <http://timss.bc.edu/timss1999.html>

National Center for Education Statistics
 TIMSS: <http://nces.ed.gov/timss>

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