

Achievement by Content Domains

Within science, TIMSS at the fourth grade provided results for three content domains—Life Science, Physical Science, and Earth Science. Most countries demonstrated strengths in one or two content domains compared to science achievement overall, and weaknesses in one or two content domains.

TIMSS 2015: 47 Countries

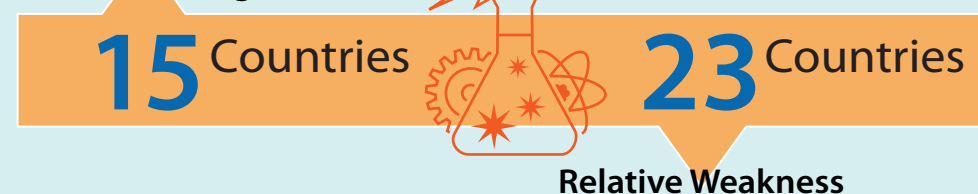
Life Science

Relative Strength



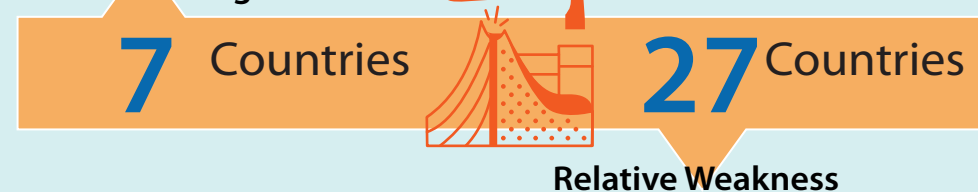
Physical Science

Relative Strength



Earth Science

Relative Strength



Trends 2011–2015: 41 Countries

Countries Improved | Countries Declined

Life Science

20

8

Physical Science

15

7

Earth Science

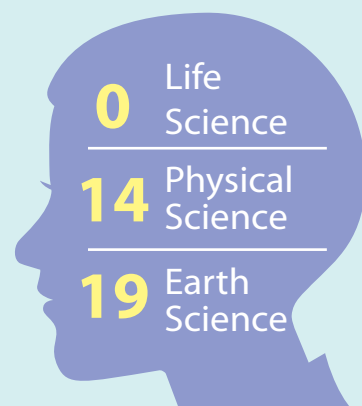
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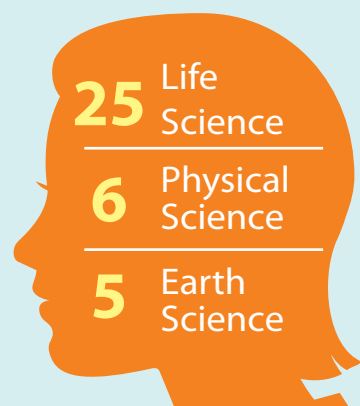
Differences in Achievement by Gender in the Content Domains

Achievement differences in content domain by gender showed a large advantage for girls in Life Science. Boys had a larger advantage in Physical Science and Earth Science.

Number of Countries Where **Boys** Outperformed Girls in the Content Domains



Number of Countries Where **Girls** Outperformed Boys in the Content Domains



Achievement by Cognitive Domains

TIMSS at the fourth grade provided results for three cognitive domains—Knowing, Applying, and Reasoning. Although there was some balance in achievement across cognitive domains, most countries had at least one strength and one weakness compared to science achievement overall.

TIMSS 2015: 47 Countries

Knowing

Relative Strength



Applying

Relative Strength



Reasoning

Relative Strength



Trends 2011–2015: 41 Countries

Countries Improved | Countries Declined

Knowing

16

9

Applying

18

7

Reasoning

18

8

Differences in Achievement by Gender in the Cognitive Domains

Number of Countries Where **Boys** Outperformed Girls in the Cognitive Domains



Number of Countries Where **Girls** Outperformed Boys in the Cognitive Domains

