

# Appendix D

SELECTED SCIENCE ACHIEVEMENT RESULTS FOR DENMARK, SWEDEN,  
AND SWITZERLAND (GERMAN-SPEAKING) – EIGHTH GRADE

**Table D.1**

**Denmark - Selected Achievement Results in the Sciences**

**Distributions of Science Achievement - Eighth Grade**

Mean	Years of Formal Schooling	Average Age	5th Percentile (Scale Score)	25th Percentile (Scale Score)	50th Percentile (Scale Score)	75th Percentile (Scale Score)	95th Percentile (Scale Score)
523 (3.3)	8	14.9	371 (6.5)	464 (5.1)	520 (4.5)	588 (4.0)	673 (4.9)

**Gender Differences in Science Achievement - Eighth Grade**

Boys Mean	Girls Mean	Difference
538 (3.9)	509 (4.0)	28 (5.5)

**Percentages of Students Achieving International Marker Levels in Science Eighth Grade**

Top 10% Level	Top Quarter Level	Top Half Level
4 (0.5)	14 (1.0)	35 (1.3)

**Average Percent Correct by Science Content Areas - Eighth Grade**

Science Overall	Earth Science	Life Science	Physics	Chemistry	Environmental Issues & the Nature of Science
57 (0.7)	55 (0.8)	62 (0.8)	58 (0.7)	49 (0.9)	55 (1.2)

**Average Percent Correct for Boys and Girls by Science Content Areas Eighth Grade**

Science Overall		Earth Science		Life Science		Physics	
Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
60 (0.8)	54 (0.8)	60 (0.9)	51 (1.1)	63 (0.9)	61 (1.0)	62 (0.9)	55 (0.9)

Chemistry		Environmental Issues & the Nature of Science	
Boys	Girls	Boys	Girls
54 (1.3)	45 (1.1)	56 (1.6)	55 (1.5)

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1994-95.

**Table D.2**

**Sweden - Selected Achievement Results in the Sciences**

**Distributions of Science Achievement - Eighth Grade**

Mean	Years of Formal Schooling	Average Age	5th Percentile (Scale Score)	25th Percentile (Scale Score)	50th Percentile (Scale Score)	75th Percentile (Scale Score)	95th Percentile (Scale Score)
570 (4.1)	8	14.9	419 (2.5)	507 (8.1)	566 (4.3)	637 (5.6)	724 (1.6)

**Gender Differences in Science Achievement - Eighth Grade**

Boys Mean	Girls Mean	Difference
574 (4.7)	567 (4.4)	7 (6.4)

**Percentages of Students Achieving International Marker Levels in Science Eighth Grade**

Top 10% Level	Top Quarter Level	Top Half Level
13 (1.0)	29 (1.4)	56 (2.1)

**Average Percent Correct by Science Content Areas - Eighth Grade**

Science Overall	Earth Science	Life Science	Physics	Chemistry	Environmental Issues & the Nature of Science
64 (0.8)	64 (0.9)	69 (0.9)	63 (0.8)	63 (1.1)	57 (1.2)

**Average Percent Correct for Boys and Girls by Science Content Areas Eighth Grade**

Science Overall		Earth Science		Life Science		Physics	
Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
65 (1.0)	63 (0.9)	66 (1.1)	62 (1.1)	68 (1.1)	70 (0.9)	65 (1.0)	61 (0.9)

Chemistry		Environmental Issues & the Nature of Science	
Boys	Girls	Boys	Girls
65 (1.4)	60 (1.2)	57 (1.5)	58 (1.6)

( ) Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1994-95.

**Table D.3**

**Switzerland (German Speaking) - Selected Achievement Results in the Sciences**

**Distributions of Science Achievement - Eighth Grade**

Mean	Years of Formal Schooling	Average Age	5th Percentile (Scale Score)	25th Percentile (Scale Score)	50th Percentile (Scale Score)	75th Percentile (Scale Score)	95th Percentile (Scale Score)
565 (3.1)	8	15.1	416 (4.8)	501 (2.1)	563 (4.3)	631 (3.8)	718 (5.2)

**Gender Differences in Science Achievement - Eighth Grade**

Boys Mean	Girls Mean	Difference
578 (4.0)	553 (3.7)	26 (5.4)

**Percentages of Students Achieving International Marker Levels in Science Eighth Grade**

Top 10% Level	Top Quarter Level	Top Half Level
11 (0.8)	28 (1.3)	54 (1.7)

**Average Percent Correct by Science Content Areas - Eighth Grade**

Science Overall	Earth Science	Life Science	Physics	Chemistry	Environmental Issues & the Nature of Science
63 (0.5)	64 (0.7)	66 (0.6)	63 (0.6)	57 (0.8)	57 (1.1)

**Average Percent Correct for Boys and Girls by Science Content Areas Eighth Grade**

Science Overall		Earth Science		Life Science		Physics	
Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
65 (0.7)	60 (0.7)	67 (1.0)	61 (0.9)	67 (0.7)	65 (0.7)	68 (0.7)	60 (0.9)

Chemistry		Environmental Issues & the Nature of Science	
Boys	Girls	Boys	Girls
62 (1.3)	53 (1.1)	58 (1.5)	55 (1.3)

( ) Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1994-95.