

Exhibit 3.9: Achievement in Science Content Domains by Gender

Country	Life Science		Physical Science		Earth Science	
	Girls	Boys	Girls	Boys	Girls	Boys
Australia	535 (3.1) ⬆	527 (3.8)	513 (2.9)	519 (3.6)	516 (4.1)	524 (4.0)
² Bahrain	476 (3.2) ⬆	433 (4.0)	483 (4.8) ⬆	447 (3.6)	463 (3.7) ⬆	433 (4.3)
[†] Belgium (Flemish)	517 (2.8) ⬆	508 (2.7)	505 (3.5)	507 (3.4)	506 (3.0)	519 (3.9) ⬆
Bulgaria	549 (6.8) ⬆	535 (6.4)	533 (6.9) ⬆	526 (6.5)	535 (7.4)	529 (7.0)
^{1 2 †} Canada	541 (3.1) ⬆	531 (2.9)	517 (3.1)	519 (2.9)	510 (3.6)	516 (3.5)
Chile	490 (2.9)	485 (3.1)	462 (3.1)	469 (3.4) ⬆	461 (3.8)	468 (4.1)
Chinese Taipei	544 (2.8)	546 (2.6)	565 (2.7)	572 (3.2)	543 (2.6)	567 (3.1) ⬆
Croatia	534 (3.3) ⬆	528 (2.7)	532 (3.7)	539 (3.4)	531 (3.0)	540 (5.1)
Cyprus	483 (3.1)	479 (3.5)	483 (3.2)	489 (3.5)	463 (3.5)	463 (4.8)
Czech Republic	540 (2.5)	537 (2.8)	522 (3.2)	539 (2.6) ⬆	525 (3.9)	538 (3.2) ⬆
^{2 †} Denmark	539 (3.2) ⬆	530 (2.6)	511 (4.2)	520 (3.2)	518 (4.6)	542 (3.4) ⬆
England	539 (2.8)	533 (3.6)	537 (2.9)	543 (3.2) ⬆	523 (4.2)	532 (4.0)
Finland	566 (2.2) ⬆	546 (3.9)	550 (2.2)	545 (3.1)	565 (2.8) ⬆	556 (3.1)
France	494 (3.5) ⬆	486 (3.3)	477 (2.9)	487 (3.2) ⬆	480 (5.9)	489 (4.3) ⬆
¹ Georgia	464 (4.5) ⬆	454 (4.7)	439 (5.9)	436 (5.4)	440 (4.5)	442 (5.5)
Germany	529 (2.8)	527 (2.6)	530 (2.8)	534 (3.1)	513 (4.8)	525 (4.1) ⬆
[†] Hong Kong SAR	550 (5.2)	550 (3.7)	548 (4.2)	561 (4.2) ⬆	565 (4.3)	582 (4.0) ⬆
Hungary	550 (3.7)	551 (3.8)	528 (3.7)	539 (4.0) ⬆	525 (4.6)	545 (5.0) ⬆
Indonesia	396 (5.7) ⬆	378 (5.5)	408 (6.1)	402 (6.2)	384 (6.5)	383 (5.8)
Iran, Islamic Rep. of	426 (6.0) ⬆	408 (5.9)	425 (6.0)	421 (6.6)	409 (6.9)	407 (6.5)
Ireland	532 (3.1)	529 (3.7)	521 (3.8)	527 (3.9)	527 (3.8)	542 (4.1) ⬆
² Italy	519 (3.0)	519 (3.2)	506 (2.5)	520 (3.9) ⬆	504 (4.7)	517 (4.5) ⬆
Japan	556 (2.3)	556 (2.8)	585 (3.2)	589 (3.4)	556 (3.4)	570 (3.1) ⬆
Kazakhstan	550 (4.6) ⬆	540 (4.5)	561 (5.2)	557 (5.4)	542 (6.1)	542 (5.4)
Korea, Rep. of	581 (2.8)	582 (2.3)	589 (2.1)	605 (2.4) ⬆	578 (4.1)	603 (5.3) ⬆
ψ Kuwait	345 (8.1) ⬆	318 (8.3)	342 (8.1) ⬆	308 (8.7)	345 (7.8) ⬆	321 (8.5)
² Lithuania	534 (3.5) ⬆	520 (3.3)	533 (3.2)	537 (3.2)	512 (3.8)	519 (4.7)
ψ Morocco	356 (5.2)	345 (6.0)	361 (5.8)	353 (7.4)	295 (7.7)	284 (7.4)
[†] Netherlands	530 (2.5) ⬆	520 (3.5)	503 (2.9)	505 (3.2)	514 (2.9)	527 (4.1) ⬆
New Zealand	518 (3.1) ⬆	505 (3.4)	496 (3.0)	499 (3.0)	502 (4.4)	510 (3.3) ⬆
[‡] Northern Ireland	524 (3.5)	518 (3.3)	510 (3.6)	518 (3.1)	522 (4.0)	522 (3.7)
Norway (5)	552 (2.8) ⬆	540 (3.1)	519 (3.2)	525 (3.2)	545 (4.1)	553 (4.5)
Oman	444 (3.3) ⬆	408 (4.1)	449 (4.0) ⬆	421 (4.0)	439 (3.7) ⬆	408 (4.1)
Poland	563 (2.7) ⬆	550 (3.2)	536 (2.2)	544 (2.8) ⬆	542 (3.9)	539 (3.2)
² Portugal	506 (2.4)	509 (2.7)	496 (3.8)	507 (2.6) ⬆	507 (4.4)	519 (3.2) ⬆
Qatar	449 (5.0) ⬆	422 (6.2)	448 (5.1) ⬆	423 (6.8)	435 (5.6)	419 (7.4)
Russian Federation	573 (3.6) ⬆	565 (3.5)	565 (3.9)	569 (4.0)	560 (4.7)	565 (5.7)
Saudi Arabia	423 (6.3) ⬆	342 (7.3)	433 (6.2) ⬆	349 (8.4)	430 (6.6) ⬆	360 (8.0)
³ Serbia	535 (4.1)	527 (4.8)	527 (4.0)	531 (4.7)	495 (6.5)	496 (5.8)
² Singapore	610 (4.5)	604 (5.0)	603 (4.0)	604 (4.4)	541 (4.0)	552 (4.2) ⬆
Slovak Republic	519 (3.8)	516 (2.8)	517 (3.8)	534 (3.6) ⬆	510 (3.7)	518 (3.4) ⬆
Slovenia	547 (2.3)	543 (3.5)	539 (2.9)	553 (3.3) ⬆	520 (6.1)	541 (3.3) ⬆
² Spain	522 (3.2)	524 (2.8)	502 (3.6)	512 (3.1) ⬆	515 (3.1)	524 (4.4)
² Sweden	548 (3.6) ⬆	532 (3.7)	534 (4.2)	535 (4.0)	553 (5.0)	551 (4.6)
Turkey	475 (3.7)	470 (3.7)	496 (4.0)	495 (4.2)	477 (3.7)	483 (3.7)
United Arab Emirates	458 (4.9) ⬆	440 (4.6)	458 (4.7)	449 (4.1)	452 (5.1)	444 (4.5)
^{2 †} United States	555 (2.7)	555 (2.4)	534 (2.9)	541 (2.8) ⬆	535 (2.6)	544 (2.8) ⬆
International Avg.	513 (0.6) ⬆	502 (0.6)	505 (0.6)	505 (0.6)	498 (0.7)	501 (0.7) ⬆

⬆ Average significantly higher than other gender

ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

See Appendix C.1 for target population coverage notes 1, 2, and 3. See Appendix C.7 for sampling guidelines and sampling participation notes †, ‡, and §.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

**Exhibit 3.9: Achievement in Science Content Domains by Gender
(Continued)**

Country	Life Science		Physical Science		Earth Science	
	Girls	Boys	Girls	Boys	Girls	Boys
Benchmarking Participants						
Buenos Aires, Argentina	432 (5.8)	420 (4.9)	412 (5.5)	414 (5.4)	382 (6.3)	400 (7.5) ▲
Ontario, Canada	551 (3.1) ▲	537 (3.0)	523 (3.4)	521 (2.9)	514 (4.5)	516 (4.1)
‡ Quebec, Canada	536 (4.2)	530 (5.1)	515 (5.0)	524 (5.5) ▲	510 (4.2)	520 (5.3) ▲
Norway (4)	507 (2.8) ▲	497 (2.8)	474 (3.4)	476 (3.3)	495 (5.9)	500 (3.4)
² Abu Dhabi, UAE	423 (9.8)	405 (8.8)	417 (9.5)	410 (8.3)	412 (10.0)	405 (9.3)
Dubai, UAE	527 (3.9) ▲	510 (4.2)	524 (4.0)	517 (3.6)	513 (4.2)	508 (4.5)
¹ Florida, US	564 (5.1) ▲	553 (6.0)	547 (5.6) ▲	537 (6.0)	537 (7.8)	541 (7.6)

▲ Average significantly higher than other gender

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015