

Exhibit 3.10: Achievement in Science Content Domains by Gender

Country	Biology		Chemistry		Physics		Earth Science	
	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
Australia	524 (3.4)	520 (3.3)	494 (4.2)	492 (3.5)	496 (3.3)	513 (3.0) ▲	514 (3.5)	530 (3.4) ▲
Bahrain	499 (3.4) ▲	441 (3.6)	497 (3.7) ▲	430 (4.1)	480 (3.4) ▲	444 (4.0)	479 (4.1) ▲	443 (4.8)
Botswana (9)	412 (3.9) ▲	380 (3.4)	404 (4.3) ▲	375 (4.9)	385 (4.5)	383 (3.5)	375 (4.4) ▲	362 (3.3)
¹ † Canada	536 (2.5)	532 (2.8)	513 (2.3)	512 (2.8)	513 (2.4)	528 (2.6) ▲	522 (2.6)	543 (3.0) ▲
Chile	456 (4.4)	462 (4.2)	436 (4.2)	440 (5.4)	429 (4.8)	449 (4.1) ▲	452 (3.9)	475 (4.3) ▲
Chinese Taipei	566 (2.2)	564 (2.9)	584 (2.7) ▲	574 (3.5)	552 (3.6)	567 (3.5) ▲	574 (3.5)	588 (3.4) ▲
Egypt	357 (6.7) ▲	338 (6.1)	402 (6.9) ▲	386 (5.7)	379 (6.6)	376 (6.0)	351 (6.6)	351 (5.4)
England	546 (5.0)	538 (4.7)	534 (5.4)	523 (5.3)	532 (4.6)	539 (4.8)	532 (4.8)	540 (4.8)
¹ 2 Georgia	450 (3.3)	444 (3.8)	462 (4.9) ▲	451 (4.0)	423 (3.9)	435 (6.6) ▲	414 (3.8)	425 (4.8) ▲
Hong Kong SAR	547 (4.8)	550 (5.5)	537 (4.7)	535 (5.1)	530 (4.4)	549 (5.2) ▲	543 (4.7)	571 (5.0) ▲
Hungary	519 (3.8)	523 (3.3)	530 (4.0)	538 (4.4)	511 (4.9)	550 (4.1) ▲	506 (4.5)	536 (4.2) ▲
Iran, Islamic Rep. of	453 (4.4)	444 (6.3)	468 (5.4) ▲	448 (7.6)	473 (5.2)	477 (7.2)	435 (5.4)	442 (7.1)
Ireland	540 (2.9) ▲	528 (4.0)	524 (3.5) ▲	510 (5.3)	518 (3.9)	532 (3.9) ▲	536 (3.5)	548 (4.1) ▲
³ Israel	510 (4.5) ▲	498 (5.0)	523 (5.0) ▲	509 (5.5)	508 (4.3)	509 (5.1)	488 (4.5)	497 (4.8)
² Italy	494 (3.0)	497 (3.0)	485 (3.1)	490 (2.9)	484 (3.0)	508 (3.4) ▲	504 (3.5)	524 (3.7) ▲
Japan	574 (3.2) ▲	567 (3.4)	575 (3.3) ▲	565 (3.5)	567 (2.7)	572 (3.7)	572 (2.7)	575 (2.8)
Jordan	444 (4.6) ▲	395 (5.6)	463 (4.9) ▲	412 (6.2)	441 (4.6) ▲	408 (5.7)	429 (4.1) ▲	403 (5.2)
Kazakhstan	527 (5.5) ▲	514 (4.7)	559 (6.1) ▲	548 (5.1)	544 (6.0)	542 (5.0)	504 (6.1)	512 (5.7)
Korea, Rep. of	552 (2.5)	556 (2.7)	554 (2.6) ▲	547 (3.4)	563 (3.1)	565 (3.4)	547 (3.6)	561 (3.8) ▲
Kuwait	429 (5.8) ▲	374 (9.3)	437 (5.7) ▲	388 (9.0)	431 (5.2) ▲	392 (8.1)	432 (5.4) ▲	385 (7.7)
Lebanon	373 (5.7)	358 (8.9)	447 (6.1) ▲	427 (7.5)	413 (7.8)	412 (7.4)	366 (5.9)	364 (8.6)
² Lithuania	529 (3.6) ▲	513 (3.8)	520 (3.6)	515 (3.8)	508 (4.5)	517 (4.6)	511 (4.2)	525 (4.1) ▲
Malaysia	475 (4.4) ▲	457 (5.1)	482 (4.1) ▲	464 (4.6)	480 (4.2)	480 (4.9)	459 (4.4)	462 (5.5)
Malta	483 (3.2) ▲	463 (3.4)	492 (3.7) ▲	471 (2.7)	489 (3.5)	492 (3.4)	478 (3.0)	484 (3.6)
Morocco	387 (2.8) ▲	373 (3.1)	409 (3.1) ▲	392 (3.7)	391 (3.1)	399 (3.1) ▲	396 (2.9)	394 (2.8)
[†] New Zealand	526 (3.4) ▲	513 (4.7)	500 (3.8)	495 (4.8)	502 (3.9)	515 (4.4) ▲	510 (3.8)	524 (5.1) ▲
Norway (9)	504 (3.1)	499 (3.0)	507 (3.5)	498 (4.0)	504 (3.6)	520 (4.0) ▲	513 (4.3)	532 (3.8) ▲
Oman	482 (2.8) ▲	428 (3.8)	482 (2.9) ▲	425 (3.9)	466 (3.7) ▲	433 (3.9)	473 (2.7) ▲	441 (3.6)
Qatar	473 (4.0) ▲	435 (5.6)	474 (4.2) ▲	436 (5.7)	469 (3.6) ▲	450 (6.0)	457 (5.6) ▲	434 (6.4)
Russian Federation	544 (4.8) ▲	534 (4.8)	558 (5.4)	558 (5.6)	538 (4.8)	557 (4.6) ▲	528 (5.2)	536 (4.9) ▲
Saudi Arabia	430 (5.9) ▲	363 (8.3)	409 (6.5) ▲	344 (8.7)	410 (5.6) ▲	360 (8.8)	421 (6.6) ▲	384 (6.9)
² Singapore	612 (3.6) ▲	607 (4.4)	598 (3.9) ▲	588 (4.4)	605 (3.6)	611 (3.9)	557 (4.9)	572 (4.4) ▲
Slovenia	558 (3.0) ▲	539 (3.1)	559 (3.2) ▲	546 (3.4)	539 (3.8)	551 (3.2) ▲	560 (3.3)	569 (3.4) ▲
South Africa (9)	365 (6.9) ▲	347 (5.8)	380 (7.0) ▲	357 (5.8)	353 (6.6)	365 (5.6) ▲	329 (7.4)	331 (6.7)
Sweden	527 (4.7) ▲	514 (3.7)	517 (4.9)	509 (3.9)	519 (4.0)	530 (4.2) ▲	527 (6.0)	537 (4.0) ▲
Thailand	477 (4.2) ▲	453 (5.2)	460 (4.9) ▲	428 (6.3)	441 (5.0)	432 (6.0)	464 (5.0)	453 (5.6)
Turkey	504 (3.9) ▲	479 (4.6)	511 (5.0) ▲	477 (5.3)	515 (4.2) ▲	497 (5.0)	480 (3.8)	475 (4.6)
United Arab Emirates	495 (3.5) ▲	455 (4.5)	502 (4.0) ▲	460 (5.2)	483 (3.7) ▲	466 (4.8)	488 (3.6) ▲	462 (4.5)
[†] United States	542 (2.9)	538 (3.2)	520 (3.7)	518 (3.5)	508 (3.0)	524 (3.4) ▲	526 (3.5)	544 (3.3) ▲
International Avg.	493 (0.7) ▲	475 (0.8)	495 (0.7) ▲	476 (0.8)	484 (0.7)	486 (0.8)	481 (0.7)	483 (0.8) ▲

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

Benchmarking Participants

[†] Buenos Aires, Argentina	395 (5.8)	388 (6.2)	354 (6.3)	353 (6.6)	374 (5.2)	387 (7.3)	387 (6.6)	389 (7.0)
Ontario, Canada	542 (3.2) ▲	534 (3.2)	505 (3.0)	501 (3.4)	516 (3.3)	527 (3.2) ▲	517 (3.6)	535 (4.0) ▲
[‡] Quebec, Canada	524 (4.5)	530 (5.1)	527 (4.6)	534 (5.7)	508 (4.8)	532 (5.5) ▲	528 (4.5)	558 (5.0) ▲
Norway (8)	491 (3.7) ▲	481 (3.1)	484 (3.9) ▲	475 (4.4)	478 (3.0)	489 (3.3) ▲	496 (3.7)	516 (4.2) ▲
Abu Dhabi, UAE	483 (6.6) ▲	422 (8.6)	493 (7.2) ▲	426 (9.3)	473 (6.5) ▲	435 (8.5)	478 (6.8) ▲	429 (8.4)
Dubai, UAE	533 (4.2) ▲	516 (5.1)	536 (4.1)	520 (5.7)	522 (4.0)	528 (5.0)	519 (3.9)	517 (5.1)
¹ Florida, US	520 (7.0)	517 (6.0)	502 (8.5)	494 (7.9)	494 (6.7)	501 (6.7)	496 (7.5)	513 (7.7) ▲

▲ Average significantly higher than other gender

See Appendix C.2 for target population coverage notes 1, 2, and 3. See Appendix C.8 for sampling guidelines and sampling participation notes †, ‡, and §.

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