

**Appendix** **B**

**Gender Differences  
Across the  
Performance  
Distribution**

**Exhibit B.1**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Mathematics - Fourth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	49 (2.0)	51 (2.0)	50 (1.1)	50 (1.1)	52 (1.8)	48 (1.8)
Austria	47 (2.5)	53 (2.5)	49 (1.2)	51 (1.2)	54 (1.6)	46 (1.6)
Canada	48 (2.0)	52 (2.0)	50 (1.0)	50 (1.0)	52 (1.7)	48 (1.7)
Cyprus	51 (1.9)	49 (1.9)	46 (1.3)	54 (1.3)	▲ 56 (1.9)	44 (1.9)
Czech Republic	48 (1.6)	52 (1.6)	52 (1.3)	48 (1.3)	49 (2.2)	51 (2.2)
England	48 (2.8)	52 (2.8)	49 (1.6)	51 (1.6)	53 (2.3)	47 (2.3)
Hong Kong	50 (1.7)	50 (1.7)	50 (1.0)	50 (1.0)	50 (1.7)	50 (1.7)
Hungary	51 (2.5)	49 (2.5)	48 (1.8)	52 (1.8)	53 (2.5)	47 (2.5)
Iceland	50 (2.7)	50 (2.7)	50 (1.5)	50 (1.5)	49 (2.7)	51 (2.7)
Iran, Islamic Rep.	48 (4.0)	52 (4.0)	49 (1.8)	51 (1.8)	55 (4.3)	45 (4.3)
Ireland	51 (2.3)	49 (2.3)	49 (1.4)	51 (1.4)	51 (2.6)	49 (2.6)
Japan	47 (1.6)	53 (1.6)	48 (1.2)	52 (1.2)	▲ 56 (1.6)	44 (1.6)
Korea	43 (1.8)	▲ 57 (1.8)	50 (1.3)	50 (1.3)	56 (2.4)	44 (2.4)
Latvia (LSS)	54 (2.3)	46 (2.3)	50 (1.3)	50 (1.3)	47 (2.3)	53 (2.3)
Netherlands	43 (2.5)	57 (2.5)	50 (1.7)	50 (1.7)	56 (2.0)	44 (2.0)
New Zealand	▲ 58 (2.4)	42 (2.4)	46 (1.3)	54 (1.3)	49 (2.4)	51 (2.4)
Norway	50 (2.4)	50 (2.4)	48 (1.7)	52 (1.7)	54 (2.7)	46 (2.7)
Portugal	49 (1.9)	51 (1.9)	49 (1.7)	51 (1.7)	52 (2.5)	48 (2.5)
Scotland	53 (1.5)	47 (1.5)	48 (1.0)	52 (1.0)	51 (1.7)	49 (1.7)
Singapore	53 (1.6)	47 (1.6)	49 (0.8)	51 (0.8)	48 (2.0)	52 (2.0)
Slovenia	51 (2.6)	49 (2.6)	49 (1.5)	51 (1.5)	51 (2.5)	49 (2.5)
United States	50 (1.3)	50 (1.3)	49 (1.0)	51 (1.0)	51 (1.5)	49 (1.5)
International Avg.	50 (0.5)	50 (0.5)	49 (0.3)	▲ 51 (0.3)	▲ 52 (0.5)	48 (0.5)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Fourth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.2**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Mathematics - Fourth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	429 (5.0)	432 (5.1)	546 (3.0)	547 (3.6)	664 (3.0)	664 (4.1)
Austria	457 (5.1)	454 (3.9)	562 (3.4)	562 (3.4)	659 (3.5)	657 (4.3)
Canada	422 (4.9)	429 (5.3)	532 (3.4)	533 (3.7)	640 (4.2)	638 (5.2)
Cyprus	392 (3.4)	393 (4.0)	506 (4.0)	500 (3.0)	611 (5.1)	613 (3.3)
Czech Republic	457 (4.4)	458 (2.9)	567 (3.8)	566 (3.3)	678 (5.0)	676 (5.4)
England	396 (2.4)	402 (5.3)	510 (2.5)	509 (4.1)	631 (4.9)	632 (7.4)
Hong Kong	480 (6.3)	489 (4.8)	591 (4.4)	589 (5.1)	683 (4.5)	683 (4.6)
Hungary	439 (5.0)	437 (3.9)	549 (4.1)	548 (3.8)	664 (4.3)	658 (6.5)
Iceland	385 (3.3)	382 (3.1)	472 (3.0)	472 (3.3)	570 (4.0)	565 (5.3)
Iran, Islamic Rep.	343 (3.6)	344 (4.3)	427 (4.3)	425 (4.1)	522 (8.0)	513 (5.1)
Ireland	437 (4.9)	442 (5.4)	549 (4.3)	555 (3.7)	658 (4.3)	653 (2.8)
Japan	486 (3.0)	▲ 498 (2.9)	599 (2.3)	598 (2.5)	699 (2.6)	695 (2.5)
Korea	515 (3.9)	515 (3.4)	614 (2.3)	611 (2.5)	705 (3.2)	698 (3.1)
Latvia (LSS)	418 (3.9)	422 (4.8)	520 (4.3)	526 (5.5)	640 (10.2)	632 (7.9)
Netherlands	489 (4.9)	486 (4.4)	579 (3.1)	575 (4.1)	671 (4.0)	663 (4.2)
New Zealand	378 (7.5)	389 (4.9)	503 (5.7)	499 (3.5)	612 (6.6)	608 (4.8)
Norway	404 (5.4)	407 (3.1)	504 (3.7)	503 (2.6)	596 (3.8)	592 (4.4)
Portugal	372 (5.0)	372 (5.9)	478 (3.8)	477 (3.5)	577 (4.2)	573 (3.3)
Scotland	407 (4.6)	406 (4.7)	520 (4.3)	520 (3.8)	637 (6.2)	630 (4.6)
Singapore	483 (4.7)	493 (6.9)	630 (4.7)	631 (6.4)	751 (6.5)	752 (7.9)
Slovenia	445 (4.8)	451 (4.6)	552 (4.6)	552 (2.7)	655 (4.6)	661 (3.4)
United States	432 (3.2)	436 (3.8)	547 (3.2)	546 (3.4)	652 (3.8)	650 (4.3)
International Avg.	430 (1.0)	▲ 433 (1.0)	539 (0.8)	538 (0.8)	▲ 644 (1.1)	641 (1.1)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Fourth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.3**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Mathematics - Eighth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	53 (2.3)	47 (2.3)	48 (0.9)	52 (0.9)	50 (2.0)	50 (2.0)
Austria	48 (2.5)	52 (2.5)	49 (1.2)	51 (1.2)	54 (1.8)	46 (1.8)
Belgium (Fl)	50 (6.0)	50 (6.0)	51 (2.3)	49 (2.3)	49 (4.0)	51 (4.0)
Belgium (Fr)	48 (4.2)	52 (4.2)	49 (2.3)	51 (2.3)	54 (2.6)	46 (2.6)
Canada	52 (3.0)	48 (3.0)	49 (1.6)	51 (1.6)	50 (1.9)	50 (1.9)
Colombia	50 (4.4)	50 (4.4)	49 (1.8)	51 (1.8)	52 (4.6)	48 (4.6)
Cyprus	51 (1.8)	49 (1.8)	50 (1.0)	50 (1.0)	48 (1.6)	52 (1.6)
Czech Republic	46 (2.0)	54 (2.0)	50 (1.0)	50 (1.0)	54 (2.3)	46 (2.3)
England	52 (3.1)	48 (3.1)	47 (1.4)	53 (1.4)	55 (3.1)	45 (3.1)
France	46 (2.1)	54 (2.1)	51 (1.4)	49 (1.4)	51 (2.2)	49 (2.2)
Germany	52 (2.5)	48 (2.5)	49 (1.4)	51 (1.4)	51 (2.3)	49 (2.3)
Hong Kong	43 (3.3)	57 (3.3)	49 (1.5)	51 (1.5)	58 (3.1)	42 (3.1)
Hungary	52 (2.0)	48 (2.0)	49 (1.2)	51 (1.2)	50 (2.0)	50 (2.0)
Iceland	52 (4.0)	48 (4.0)	45 (1.6)	55 (1.6)	57 (2.7)	43 (2.7)
Iran, Islamic Rep.	42 (3.3)	58 (3.3)	51 (1.4)	49 (1.4)	56 (2.8)	44 (2.8)
Ireland	46 (3.2)	54 (3.2)	48 (1.4)	52 (1.4)	57 (3.3)	43 (3.3)
Japan	49 (1.4)	51 (1.4)	48 (0.9)	52 (0.9)	▲ 55 (1.5)	45 (1.5)
Korea	44 (2.0)	56 (2.0)	50 (1.2)	50 (1.2)	55 (2.2)	45 (2.2)
Latvia (LSS)	48 (2.5)	52 (2.5)	50 (1.6)	50 (1.6)	53 (2.1)	47 (2.1)
Lithuania	49 (3.0)	51 (3.0)	51 (1.6)	49 (1.6)	49 (2.1)	51 (2.1)
Netherlands	47 (2.3)	53 (2.3)	49 (1.5)	51 (1.5)	54 (2.9)	46 (2.9)
New Zealand	48 (2.7)	52 (2.7)	49 (1.7)	51 (1.7)	55 (3.1)	45 (3.1)
Norway	52 (2.2)	48 (2.2)	48 (1.2)	52 (1.2)	53 (1.9)	47 (1.9)
Portugal	45 (2.1)	55 (2.1)	50 (1.3)	50 (1.3)	55 (1.8)	45 (1.8)
Romania	50 (2.2)	50 (2.2)	49 (1.3)	51 (1.3)	52 (2.2)	48 (2.2)
Russian Federation	53 (1.9)	47 (1.9)	48 (1.0)	52 (1.0)	51 (1.5)	49 (1.5)
Scotland	44 (2.1)	56 (2.1)	50 (1.3)	50 (1.3)	56 (2.9)	44 (2.9)
Singapore	51 (2.6)	49 (2.6)	49 (0.9)	51 (0.9)	50 (2.6)	50 (2.6)
Slovak Republic	50 (2.6)	50 (2.6)	48 (1.3)	52 (1.3)	55 (2.0)	45 (2.0)
Slovenia	47 (1.7)	53 (1.7)	51 (1.0)	49 (1.0)	52 (2.0)	48 (2.0)
Spain	47 (1.8)	53 (1.8)	49 (1.1)	51 (1.1)	54 (2.2)	46 (2.2)
Sweden	49 (1.8)	51 (1.8)	51 (1.2)	49 (1.2)	48 (1.7)	52 (1.7)
Switzerland	49 (2.1)	51 (2.1)	49 (1.0)	51 (1.0)	53 (1.7)	47 (1.7)
United States	50 (1.7)	50 (1.7)	47 (0.8)	▲ 53 (0.8)	▲ 55 (1.6)	45 (1.6)
International Avg.	49 (0.5)	51 (0.5)	49 (0.2)	51 (0.2)	▲ 53 (0.4)	47 (0.4)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Eighth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.4**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup> in Mathematics - Eighth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	403 (5.0)	407 (2.8)	528 (5.8)	529 (3.6)	656 (5.1)	657 (4.6)
Austria	423 (5.4)	423 (4.5)	537 (3.6)	539 (4.0)	660 (4.0)	655 (4.0)
Belgium (Fl)	439 (14.1)	454 (4.9)	565 (7.1)	568 (5.7)	685 (4.0)	678 (4.2)
Belgium (Fr)	413 (10.0)	418 (5.4)	528 (6.6)	528 (3.9)	636 (4.1)	631 (4.8)
Canada	415 (2.6)	422 (5.1)	527 (2.6)	526 (3.5)	639 (3.8)	639 (4.2)
Colombia	309 (4.8)	311 (3.2)	380 (4.5)	380 (2.7)	470 (7.5)	469 (5.6)
Cyprus	365 (3.3)	367 (3.1)	469 (3.0)	471 (2.7)	592 (3.7)	585 (3.7)
Czech Republic	448 (3.0)	449 (4.5)	559 (5.6)	559 (6.6)	688 (6.8)	687 (7.8)
England	391 (2.6)	389 (5.7)	502 (3.4)	503 (3.5)	628 (4.6)	628 (4.0)
France	447 (4.1)	443 (3.9)	537 (2.9)	536 (4.2)	638 (3.5)	638 (5.4)
Germany	404 (4.9)	398 (3.9)	508 (6.1)	505 (4.9)	629 (5.6)	625 (5.7)
Hong Kong	453 (12.4)	460 (9.2)	594 (6.9)	590 (6.0)	713 (6.0)	709 (5.9)
Hungary	424 (4.0)	419 (4.4)	536 (4.6)	532 (3.4)	657 (4.5)	660 (3.9)
Iceland	390 (6.6)	395 (4.2)	482 (7.9)	486 (3.8)	586 (5.0)	587 (6.3)
Iran, Islamic Rep.	357 (2.5)	356 (3.2)	427 (2.1)	422 (2.6)	507 (3.2)	506 (3.0)
Ireland	406 (7.3)	414 (4.9)	527 (5.8)	524 (5.9)	649 (4.4)	645 (7.3)
Japan	469 (2.5)	▲ 478 (3.2)	609 (2.4)	604 (2.3)	736 (2.6)	730 (2.2)
Korea	467 (5.6)	467 (3.5)	611 (2.7)	608 (3.3)	745 (3.2)	741 (4.5)
Latvia (LSS)	396 (4.3)	393 (3.4)	487 (3.8)	489 (3.0)	603 (5.1)	603 (4.6)
Lithuania	378 (5.3)	378 (3.5)	473 (4.8)	476 (3.6)	583 (5.2)	581 (4.6)
Netherlands	428 (10.8)	426 (10.0)	540 (7.5)	539 (8.1)	656 (8.1)	654 (7.5)
New Zealand	394 (6.0)	397 (3.1)	506 (5.6)	504 (4.8)	627 (5.9)	624 (6.1)
Norway	401 (3.8)	399 (2.2)	500 (2.9)	500 (2.3)	617 (2.9)	609 (4.0)
Portugal	380 (2.9)	376 (2.1)	452 (2.9)	448 (2.2)	540 (4.4)	538 (3.5)
Romania	370 (3.1)	372 (4.7)	478 (4.3)	477 (5.9)	602 (4.7)	597 (6.2)
Russian Federation	415 (5.4)	423 (6.1)	535 (6.9)	535 (6.3)	659 (4.9)	648 (4.3)
Scotland	393 (4.0)	391 (4.0)	494 (5.9)	493 (6.1)	619 (8.4)	610 (7.3)
Singapore	531 (6.2)	533 (5.3)	642 (5.9)	643 (5.4)	754 (5.1)	758 (5.0)
Slovak Republic	431 (6.1)	433 (2.7)	543 (6.0)	545 (3.3)	667 (3.9)	667 (5.4)
Slovenia	429 (3.8)	432 (3.2)	540 (3.8)	536 (3.9)	658 (4.0)	654 (3.5)
Spain	400 (2.1)	398 (2.7)	484 (2.4)	482 (2.6)	588 (3.6)	583 (3.6)
Sweden	415 (3.4)	409 (4.1)	517 (3.2)	516 (3.7)	632 (3.9)	626 (2.6)
Switzerland	430 (4.2)	435 (5.4)	548 (2.3)	546 (3.7)	657 (2.7)	653 (3.2)
United States	386 (4.1)	389 (4.1)	496 (5.2)	496 (5.5)	618 (4.9)	621 (6.7)
International Avg.	412 (1.0)	413 (0.8)	520 (0.9)	519 (0.8)	▲ 637 (0.9)	634 (0.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Eighth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.5**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Mathematics Literacy - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	44 (4.3)	56 (4.3)	46 (2.7)	54 (2.7)	▲ 64 (4.1)	36 (4.1)
Austria	35 (4.5)	▲ 65 (4.5)	47 (2.1)	53 (2.1)	▲ 69 (4.4)	31 (4.4)
Canada	38 (3.2)	▲ 62 (3.2)	50 (2.2)	50 (2.2)	▲ 62 (3.2)	38 (3.2)
Cyprus	45 (6.1)	55 (6.1)	48 (3.0)	52 (3.0)	59 (3.2)	41 (3.2)
Czech Republic	36 (5.7)	64 (5.7)	50 (2.8)	50 (2.8)	63 (6.0)	37 (6.0)
France	36 (4.0)	▲ 64 (4.0)	49 (2.6)	51 (2.6)	▲ 66 (3.6)	34 (3.6)
Germany	41 (4.7)	59 (4.7)	50 (2.4)	50 (2.4)	60 (4.7)	40 (4.7)
Hungary	54 (3.6)	46 (3.6)	46 (1.7)	54 (1.7)	55 (3.6)	45 (3.6)
Iceland	36 (2.8)	▲ 64 (2.8)	48 (1.4)	52 (1.4)	▲ 67 (2.3)	33 (2.3)
Lithuania	37 (4.2)	▲ 63 (4.2)	53 (1.7)	47 (1.7)	56 (4.1)	44 (4.1)
Netherlands	27 (3.9)	▲ 73 (3.9)	54 (2.4)	46 (2.4)	▲ 66 (3.4)	34 (3.4)
New Zealand	44 (4.3)	56 (4.3)	48 (2.3)	52 (2.3)	61 (3.6)	39 (3.6)
Norway	33 (3.2)	▲ 67 (3.2)	48 (2.5)	52 (2.5)	▲ 70 (3.4)	30 (3.4)
Russian Federation	42 (3.1)	58 (3.1)	48 (2.2)	52 (2.2)	61 (3.8)	39 (3.8)
Slovenia	35 (6.5)	65 (6.5)	47 (3.3)	53 (3.3)	▲ 71 (6.0)	29 (6.0)
Sweden	40 (2.7)	▲ 60 (2.7)	46 (1.4)	54 (1.4)	▲ 68 (2.4)	32 (2.4)
Switzerland	39 (5.5)	61 (5.5)	50 (2.6)	50 (2.6)	▲ 62 (3.1)	38 (3.1)
United States	50 (2.1)	50 (2.1)	47 (1.4)	53 (1.4)	55 (2.7)	45 (2.7)
International Avg.	40 (1.0)	▲ 60 (1.0)	49 (0.5)	51 (0.5)	▲ 63 (0.9)	37 (0.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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

**Exhibit B.6**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Mathematics Literacy - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	397 (16.0)	399 (12.8)	525 (12.9)	521 (9.2)	649 (8.3)	639 (14.5)
Austria	420 (10.3)	421 (4.4)	521 (7.6)	514 (5.6)	628 (8.9)	617 (7.0)
Canada	413 (4.3)	405 (4.9)	517 (3.7)	516 (4.3)	643 (4.6)	628 (4.6)
Cyprus	354 (8.1)	359 (3.4)	444 (5.3)	442 (2.8)	545 (6.8)	536 (4.9)
Czech Republic	361 (6.3)	346 (13.7)	456 (10.8)	453 (17.9)	▲ 611 (13.4)	588 (12.8)
France	424 (6.1)	422 (6.4)	528 (5.7)	519 (5.5)	629 (8.7)	619 (5.3)
Germany	388 (8.6)	371 (10.3)	496 (7.5)	494 (7.9)	618 (8.9)	612 (7.5)
Hungary	369 (4.3)	372 (3.0)	477 (4.6)	479 (3.3)	613 (6.4)	596 (5.9)
Iceland	432 (4.1)	422 (2.8)	537 (3.1)	528 (3.2)	652 (4.5)	643 (4.8)
Lithuania	366 (9.4)	359 (8.8)	470 (5.0)	470 (7.9)	581 (6.0)	574 (6.9)
Netherlands	450 (8.3)	437 (6.9)	567 (4.8)	559 (6.5)	674 (7.0)	668 (8.8)
New Zealand	397 (11.2)	394 (7.4)	526 (7.2)	518 (4.1)	653 (4.6)	638 (4.8)
Norway	414 (5.9)	412 (5.7)	530 (5.7)	518 (3.9)	657 (7.3)	641 (4.7)
Russian Federation	374 (5.2)	365 (5.1)	468 (8.0)	463 (6.6)	586 (10.0)	584 (13.3)
Slovenia	400 (20.7)	400 (9.6)	520 (8.4)	512 (9.8)	625 (8.5)	612 (12.0)
Sweden	428 (6.4)	428 (4.8)	552 (5.3)	546 (4.1)	687 (6.2)	670 (7.2)
Switzerland	433 (7.0)	422 (9.6)	541 (6.6)	539 (7.3)	▲ 658 (4.7)	645 (4.3)
United States	353 (2.6)	350 (5.1)	457 (3.9)	454 (3.9)	586 (6.3)	577 (4.8)
International Avg.	397 (2.1)	392 (1.8)	▲ 506 (1.6)	501 (1.7)	▲ 62 (1.8)	614 (1.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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

**Exhibit B.7**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Advanced Mathematics - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	46 (4.7)	54 (4.7)	50 (3.9)	50 (3.9)	54 (8.3)	46 (8.3)
Austria	16 (5.8)	▲ 84 (5.8)	50 (3.6)	50 (3.6)	▲ 75 (4.6)	25 (4.6)
Canada	40 (4.6)	60 (4.6)	48 (3.0)	52 (3.0)	▲ 65 (4.6)	35 (4.6)
Cyprus	44 (4.0)	56 (4.0)	49 (3.6)	51 (3.6)	59 (6.2)	41 (6.2)
Czech Republic	20 (4.0)	▲ 80 (4.0)	47 (2.0)	53 (2.0)	▲ 79 (2.5)	21 (2.5)
France	40 (4.8)	60 (4.8)	50 (3.7)	50 (3.7)	63 (7.1)	37 (7.1)
Germany	38 (3.4)	▲ 62 (3.4)	49 (1.9)	51 (1.9)	▲ 63 (2.9)	37 (2.9)
Lithuania	28 (4.1)	▲ 72 (4.1)	52 (3.2)	48 (3.2)	▲ 69 (4.2)	31 (4.2)
Russian Federation	37 (4.4)	▲ 63 (4.4)	48 (2.3)	52 (2.3)	▲ 67 (3.2)	33 (3.2)
Slovenia	45 (6.4)	55 (6.4)	48 (2.9)	52 (2.9)	58 (5.8)	42 (5.8)
Sweden	44 (4.3)	56 (4.3)	48 (3.3)	52 (3.3)	62 (9.5)	38 (9.5)
Switzerland	35 (3.8)	▲ 65 (3.8)	46 (2.3)	54 (2.3)	▲ 74 (3.2)	26 (3.2)
United States	35 (3.7)	▲ 65 (3.7)	54 (2.7)	46 (2.7)	57 (4.5)	43 (4.5)
International Avg.	37 (1.3)	▲ 63 (1.3)	49 (0.9)	51 (0.9)	▲ 65 (1.5)	35 (1.5)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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



**Exhibit B.8**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Advanced Mathematics - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	387 (20.2)	379 (23.7)	529 (11.5)	528 (9.7)	658 (17.2)	657 (11.5)
Austria	331 (20.6)	315 (14.1)	449 (7.1)	435 (8.0)	555 (8.9)	533 (7.2)
Canada	388 (4.3)	385 (8.9)	509 (4.5)	507 (6.7)	▲ 645 (8.3)	617 (5.9)
Cyprus	401 (7.7)	414 (10.2)	521 (4.0)	522 (5.2)	626 (8.1)	611 (7.7)
Czech Republic	364 (8.7)	347 (9.9)	466 (10.4)	452 (9.2)	618 (21.9)	595 (24.0)
France	470 (6.2)	468 (5.5)	560 (4.8)	557 (4.6)	647 (4.4)	641 (8.0)
Germany	359 (8.6)	359 (7.4)	468 (6.1)	463 (7.6)	578 (6.5)	568 (7.8)
Lithuania	415 (8.7)	413 (5.5)	515 (3.3)	510 (4.7)	632 (6.2)	613 (16.9)
Russian Federation	411 (8.7)	398 (14.3)	544 (10.1)	535 (10.1)	690 (12.0)	679 (17.2)
Slovenia	361 (12.2)	353 (8.6)	471 (12.9)	473 (8.9)	601 (12.3)	584 (8.9)
Sweden	403 (7.5)	404 (7.4)	513 (4.4)	511 (8.4)	624 (5.5)	603 (12.3)
Switzerland	433 (6.6)	424 (7.7)	532 (6.4)	522 (5.6)	▲ 657 (8.5)	632 (8.2)
United States	326 (7.4)	321 (6.5)	439 (8.3)	436 (8.2)	574 (8.6)	563 (13.1)
International Avg.	386 (3.1)	381 (3.1)	499 (2.1)	495 (2.1)	▲ 621 (2.9)	606 (3.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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

**Exhibit B.9**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Science - Fourth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	47 (1.9)	53 (1.9)	48 (1.3)	52 (1.3)	▲ 58 (2.2)	42 (2.2)
Austria	43 (2.7)	57 (2.7)	50 (1.7)	50 (1.7)	▲ 57 (3.0)	43 (3.0)
Canada	49 (2.2)	51 (2.2)	48 (1.2)	52 (1.2)	▲ 56 (1.3)	44 (1.3)
Cyprus	48 (3.0)	52 (3.0)	48 (1.8)	52 (1.8)	▲ 56 (1.7)	44 (1.7)
Czech Republic	43 (2.0)	▲ 57 (2.0)	50 (1.0)	50 (1.0)	▲ 57 (1.8)	43 (1.8)
England	53 (1.7)	47 (1.7)	46 (1.1)	▲ 54 (1.1)	55 (1.8)	45 (1.8)
Hong Kong	46 (1.6)	54 (1.6)	48 (1.1)	52 (1.1)	▲ 58 (2.0)	42 (2.0)
Hungary	45 (2.4)	55 (2.4)	49 (1.4)	51 (1.4)	▲ 57 (1.8)	43 (1.8)
Iceland	45 (2.2)	55 (2.2)	48 (1.4)	52 (1.4)	▲ 59 (2.1)	41 (2.1)
Iran, Islamic Rep.	46 (3.5)	54 (3.5)	49 (2.0)	51 (2.0)	55 (4.1)	45 (4.1)
Ireland	48 (2.1)	52 (2.1)	49 (1.0)	51 (1.0)	54 (1.9)	46 (1.9)
Japan	45 (1.1)	▲ 55 (1.1)	48 (0.8)	52 (0.8)	▲ 59 (1.2)	41 (1.2)
Korea	44 (1.9)	56 (1.9)	48 (1.4)	52 (1.4)	▲ 59 (2.2)	41 (2.2)
Latvia (LSS)	52 (2.9)	48 (2.9)	50 (1.3)	50 (1.3)	48 (2.8)	52 (2.8)
Netherlands	38 (2.4)	▲ 62 (2.4)	49 (1.2)	51 (1.2)	▲ 64 (2.3)	36 (2.3)
New Zealand	58 (2.6)	42 (2.6)	45 (1.5)	▲ 55 (1.5)	52 (2.5)	48 (2.5)
Norway	48 (1.9)	52 (1.9)	49 (1.6)	51 (1.6)	55 (2.9)	45 (2.9)
Portugal	51 (2.0)	49 (2.0)	48 (1.7)	52 (1.7)	53 (2.8)	47 (2.8)
Scotland	51 (2.1)	49 (2.1)	48 (1.2)	52 (1.2)	53 (1.9)	47 (1.9)
Singapore	49 (2.0)	51 (2.0)	49 (1.5)	51 (1.5)	52 (3.3)	48 (3.3)
Slovenia	51 (2.2)	49 (2.2)	48 (1.2)	52 (1.2)	53 (1.8)	47 (1.8)
United States	47 (1.4)	53 (1.4)	48 (0.8)	52 (0.8)	▲ 56 (1.3)	44 (1.3)
International Avg.	48 (0.5)	▲ 52 (0.5)	48 (0.3)	▲ 52 (0.3)	▲ 56 (0.5)	44 (0.5)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Fourth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.10**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup> in Science - Fourth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	436 (5.9)	443 (5.6)	568 (2.7)	567 (3.8)	680 (2.4)	671 (4.3)
Austria	461 (5.4)	460 (4.7)	566 (3.8)	568 (2.9)	666 (6.2)	659 (3.4)
Canada	437 (4.6)	440 (4.2)	550 (4.4)	551 (2.8)	658 (3.5)	653 (4.5)
Cyprus	378 (3.8)	379 (5.5)	477 (3.3)	476 (3.4)	574 (4.8)	565 (2.9)
Czech Republic	455 (4.4)	452 (3.2)	557 (3.6)	555 (2.9)	661 (4.6)	659 (4.9)
England	428 (4.1)	429 (4.9)	553 (3.8)	552 (3.3)	▲ 679 (5.1)	665 (3.9)
Hong Kong	431 (5.3)	435 (4.7)	538 (3.7)	534 (3.8)	632 (4.4)	624 (4.3)
Hungary	428 (4.2)	428 (5.6)	536 (3.3)	534 (3.9)	633 (3.6)	629 (4.9)
Iceland	393 (4.5)	396 (4.8)	509 (3.7)	505 (4.3)	613 (3.8)	605 (4.0)
Iran, Islamic Rep.	322 (5.6)	322 (3.2)	415 (4.5)	417 (4.1)	515 (5.4)	508 (5.5)
Ireland	427 (4.9)	431 (5.3)	542 (3.0)	543 (4.0)	648 (3.1)	639 (4.7)
Japan	476 (3.1)	484 (2.5)	576 (1.8)	575 (2.0)	▲ 666 (2.1)	658 (2.2)
Korea	508 (3.1)	509 (3.1)	600 (1.9)	599 (2.3)	681 (2.3)	677 (2.8)
Latvia (LSS)	408 (5.3)	411 (3.9)	511 (5.5)	509 (3.8)	625 (12.6)	614 (6.6)
Netherlands	474 (5.4)	472 (5.0)	560 (3.0)	556 (3.2)	642 (2.6)	635 (3.7)
New Zealand	399 (7.6)	410 (10.2)	536 (4.2)	534 (5.6)	651 (4.8)	647 (4.7)
Norway	413 (6.7)	422 (4.7)	534 (4.5)	533 (3.1)	638 (4.9)	630 (2.9)
Portugal	369 (7.0)	371 (6.4)	484 (4.5)	483 (3.1)	585 (5.0)	578 (3.8)
Scotland	411 (5.2)	417 (6.0)	539 (4.3)	537 (4.8)	656 (4.3)	648 (4.7)
Singapore	416 (4.3)	425 (5.4)	551 (5.9)	549 (4.6)	669 (8.8)	662 (5.0)
Slovenia	450 (4.3)	445 (5.8)	547 (3.8)	549 (3.5)	643 (3.8)	638 (4.2)
United States	439 (5.2)	441 (3.8)	573 (4.5)	569 (2.5)	681 (3.0)	680 (3.0)
International Avg.	425 (1.1)	▲ 428 (1.1)	537 (0.8)	536 (0.8)	▲ 641 (1.1)	634 (0.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Fourth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.11**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Science - Eighth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	49 (1.8)	51 (1.8)	48 (0.9)	52 (0.9)	56 (1.9)	44 (1.9)
Austria	46 (3.4)	54 (3.4)	49 (1.9)	51 (1.9)	55 (2.4)	45 (2.4)
Belgium (Fl)	46 (3.8)	54 (3.8)	48 (1.6)	52 (1.6)	57 (3.3)	43 (3.3)
Belgium (Fr)	46 (3.7)	54 (3.7)	48 (1.7)	52 (1.7)	▲ 58 (2.5)	42 (2.5)
Canada	46 (1.6)	54 (1.6)	49 (0.8)	51 (0.8)	56 (2.2)	44 (2.2)
Colombia	46 (3.6)	54 (3.6)	48 (1.7)	52 (1.7)	57 (4.0)	43 (4.0)
Cyprus	54 (1.7)	46 (1.7)	47 (1.3)	53 (1.3)	52 (1.7)	48 (1.7)
Czech Republic	41 (2.2)	▲ 59 (2.2)	49 (1.5)	51 (1.5)	▲ 62 (2.7)	38 (2.7)
England	45 (2.7)	55 (2.7)	50 (1.5)	50 (1.5)	56 (2.7)	44 (2.7)
France	44 (2.0)	56 (2.0)	49 (1.4)	51 (1.4)	▲ 58 (2.3)	42 (2.3)
Germany	45 (2.2)	55 (2.2)	50 (1.2)	50 (1.2)	56 (2.3)	44 (2.3)
Hong Kong	41 (2.7)	▲ 59 (2.7)	50 (1.1)	50 (1.1)	▲ 61 (2.5)	39 (2.5)
Hungary	44 (1.6)	▲ 56 (1.6)	49 (1.5)	51 (1.5)	57 (2.5)	43 (2.5)
Iceland	46 (4.5)	54 (4.5)	47 (1.9)	53 (1.9)	59 (3.3)	41 (3.3)
Iran, Islamic Rep.	45 (2.8)	55 (2.8)	48 (1.3)	52 (1.3)	60 (3.4)	40 (3.4)
Ireland	47 (3.0)	53 (3.0)	49 (1.2)	51 (1.2)	55 (2.9)	45 (2.9)
Japan	45 (1.3)	▲ 55 (1.3)	49 (0.8)	51 (0.8)	▲ 57 (1.5)	43 (1.5)
Korea	42 (1.7)	▲ 58 (1.7)	49 (1.2)	51 (1.2)	▲ 60 (2.2)	40 (2.2)
Latvia (LSS)	43 (2.2)	57 (2.2)	51 (1.4)	49 (1.4)	56 (2.0)	44 (2.0)
Lithuania	45 (2.3)	55 (2.3)	49 (1.3)	51 (1.3)	57 (2.2)	43 (2.2)
Netherlands	43 (2.6)	57 (2.6)	49 (1.6)	51 (1.6)	▲ 58 (2.5)	42 (2.5)
New Zealand	43 (2.5)	57 (2.5)	48 (1.7)	52 (1.7)	60 (3.7)	40 (3.7)
Norway	47 (1.5)	53 (1.5)	48 (0.8)	52 (0.8)	▲ 57 (1.8)	43 (1.8)
Portugal	40 (1.9)	▲ 60 (1.9)	50 (1.1)	50 (1.1)	▲ 60 (1.5)	40 (1.5)
Romania	48 (2.4)	52 (2.4)	49 (1.5)	51 (1.5)	55 (2.2)	45 (2.2)
Russian Federation	47 (2.2)	53 (2.2)	48 (1.2)	52 (1.2)	56 (2.1)	44 (2.1)
Scotland	44 (2.4)	56 (2.4)	49 (1.3)	51 (1.3)	57 (2.6)	43 (2.6)
Singapore	46 (2.9)	54 (2.9)	51 (1.6)	49 (1.6)	52 (3.3)	48 (3.3)
Slovak Republic	43 (1.8)	▲ 57 (1.8)	52 (0.9)	48 (0.9)	54 (1.6)	46 (1.6)
Slovenia	42 (2.0)	▲ 58 (2.0)	48 (1.1)	52 (1.1)	▲ 62 (2.6)	38 (2.6)
Spain	42 (1.6)	▲ 58 (1.6)	50 (1.0)	50 (1.0)	▲ 58 (1.8)	42 (1.8)
Sweden	46 (1.9)	54 (1.9)	48 (1.1)	52 (1.1)	▲ 57 (1.2)	43 (1.2)
Switzerland	47 (2.3)	53 (2.3)	48 (1.3)	52 (1.3)	▲ 56 (1.8)	44 (1.8)
United States	49 (1.7)	51 (1.7)	48 (1.4)	52 (1.4)	54 (2.1)	46 (2.1)
International Avg.	45 (0.4)	▲ 55 (0.4)	49 (0.2)	▲ 51 (0.2)	▲ 57 (0.4)	43 (0.4)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Eighth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.12**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup> in Science - Eighth Grade\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	406 (6.5)	411 (4.1)	547 (5.2)	543 (3.1)	680 (4.2)	679 (3.9)
Austria	440 (10.6)	428 (6.3)	559 (5.5)	556 (2.5)	684 (4.9)	677 (3.8)
Belgium (Fl)	446 (7.0)	446 (7.2)	552 (4.3)	549 (4.6)	656 (4.0)	651 (3.5)
Belgium (Fr)	361 (7.8)	363 (3.8)	471 (4.6)	471 (2.9)	583 (4.1)	570 (3.6)
Canada	413 (4.4)	416 (3.3)	530 (2.6)	531 (2.8)	653 (2.8)	646 (4.0)
Colombia	314 (8.6)	317 (4.2)	411 (4.8)	410 (4.1)	512 (4.7)	503 (5.5)
Cyprus	345 (3.1)	356 (2.7)	462 (2.1)	464 (2.8)	579 (2.5)	572 (3.3)
Czech Republic	465 (5.2)	465 (4.3)	572 (4.8)	571 (4.4)	687 (5.0)	689 (6.8)
England	419 (5.2)	418 (5.2)	552 (4.5)	550 (3.4)	694 (5.6)	679 (4.6)
France	404 (3.6)	398 (3.9)	499 (2.7)	497 (4.0)	596 (2.3)	595 (4.8)
Germany	406 (7.2)	403 (5.8)	536 (5.4)	531 (5.4)	661 (4.4)	657 (5.6)
Hong Kong	410 (8.6)	409 (5.3)	524 (6.0)	520 (3.3)	638 (5.7)	628 (3.4)
Hungary	446 (3.9)	437 (5.6)	554 (2.8)	551 (4.0)	670 (3.1)	667 (4.3)
Iceland	391 (4.7)	394 (6.5)	494 (4.9)	493 (4.9)	597 (5.7)	589 (4.5)
Iran, Islamic Rep.	379 (2.8)	381 (3.5)	469 (2.1)	467 (3.4)	568 (3.2)	556 (3.6)
Ireland	413 (8.0)	419 (4.4)	538 (5.1)	535 (5.0)	665 (3.6)	655 (5.2)
Japan	453 (3.7)	457 (2.4)	573 (2.4)	571 (1.8)	688 (2.8)	677 (2.8)
Korea	446 (3.7)	446 (2.8)	566 (1.8)	564 (2.8)	686 (2.5)	678 (4.1)
Latvia (LSS)	381 (6.1)	383 (2.9)	485 (3.3)	483 (3.2)	592 (2.9)	585 (4.2)
Lithuania	375 (5.4)	373 (3.2)	476 (4.7)	475 (3.1)	580 (4.0)	582 (4.7)
Netherlands	452 (9.8)	452 (5.5)	563 (5.6)	558 (5.0)	669 (5.7)	665 (4.1)
New Zealand	398 (7.0)	401 (4.4)	526 (4.8)	522 (6.2)	659 (4.4)	646 (7.5)
Norway	416 (5.0)	419 (3.1)	527 (2.4)	525 (2.6)	643 (3.0)	633 (3.9)
Portugal	392 (3.4)	385 (2.8)	478 (2.8)	476 (2.9)	577 (3.0)	575 (3.8)
Romania	357 (5.2)	358 (6.2)	487 (5.5)	483 (5.5)	618 (5.7)	614 (5.5)
Russian Federation	418 (5.8)	419 (6.1)	536 (3.9)	537 (5.1)	661 (3.3)	660 (4.7)
Scotland	394 (5.4)	392 (5.0)	517 (5.2)	514 (6.1)	650 (6.9)	640 (8.7)
Singapore	489 (6.4)	488 (4.0)	605 (6.5)	605 (6.0)	733 (5.9)	729 (8.0)
Slovak Republic	430 (3.2)	429 (3.9)	544 (3.3)	542 (3.8)	666 (4.3)	659 (4.0)
Slovenia	453 (3.2)	451 (3.5)	559 (2.2)	555 (3.8)	676 (3.0)	672 (5.5)
Spain	423 (2.6)	418 (2.6)	515 (2.0)	514 (2.1)	620 (2.3)	616 (2.2)
Sweden	423 (3.3)	420 (4.5)	535 (3.5)	534 (3.3)	652 (3.2)	650 (4.0)
Switzerland	404 (5.1)	406 (3.2)	525 (3.6)	520 (2.2)	640 (3.5)	631 (2.6)
United States	396 (5.1)	401 (7.6)	537 (4.9)	534 (5.3)	672 (5.3)	663 (3.7)
International Avg.	411 (1.0)	411 (0.8)	525 (0.7)	523 (0.7)	643 (0.7)	637 (0.8)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* Eighth Grade in most countries; see Appendix A for information about the grades tested in each country.

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

**Exhibit B.13**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup> in Science Literacy - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	43 (3.9)	57 (3.9)	46 (3.3)	54 (3.3)	▲ 64 (4.4)	36 (4.4)
Austria	35 (5.2)	65 (5.2)	45 (2.1)	55 (2.1)	▲ 71 (3.5)	29 (3.5)
Canada	39 (4.8)	61 (4.8)	49 (2.5)	51 (2.5)	▲ 62 (3.4)	38 (3.4)
Cyprus	44 (5.5)	56 (5.5)	47 (3.4)	53 (3.4)	▲ 61 (3.5)	39 (3.5)
Czech Republic	32 (6.5)	68 (6.5)	51 (2.4)	49 (2.4)	▲ 67 (4.8)	33 (4.8)
France	36 (4.3)	▲ 64 (4.3)	48 (3.0)	52 (3.0)	▲ 68 (4.1)	32 (4.1)
Germany	38 (6.5)	62 (6.5)	51 (3.3)	49 (3.3)	60 (6.0)	40 (6.0)
Hungary	42 (2.9)	58 (2.9)	48 (1.1)	52 (1.1)	▲ 63 (2.7)	37 (2.7)
Iceland	36 (2.5)	▲ 64 (2.5)	46 (1.7)	54 (1.7)	▲ 72 (2.0)	28 (2.0)
Lithuania	35 (5.5)	65 (5.5)	52 (2.2)	48 (2.2)	59 (4.3)	41 (4.3)
Netherlands	28 (4.2)	▲ 72 (4.2)	53 (2.3)	47 (2.3)	▲ 67 (3.8)	33 (3.8)
New Zealand	45 (4.2)	55 (4.2)	46 (1.8)	54 (1.8)	▲ 64 (2.5)	36 (2.5)
Norway	30 (3.2)	▲ 70 (3.2)	48 (2.0)	52 (2.0)	▲ 74 (2.5)	26 (2.5)
Russian Federation	31 (3.4)	▲ 69 (3.4)	50 (1.9)	50 (1.9)	▲ 65 (2.9)	35 (2.9)
Slovenia	35 (6.3)	65 (6.3)	48 (3.2)	52 (3.2)	▲ 70 (5.8)	30 (5.8)
Sweden	36 (3.1)	▲ 64 (3.1)	46 (1.5)	54 (1.5)	▲ 71 (2.6)	29 (2.6)
Switzerland	36 (3.9)	▲ 64 (3.9)	51 (2.0)	49 (2.0)	▲ 62 (3.8)	38 (3.8)
United States	45 (2.3)	55 (2.3)	47 (1.6)	53 (1.6)	▲ 61 (3.1)	39 (3.1)
International Avg.	37 (1.0)	▲ 63 (1.0)	49 (0.6)	51 (0.6)	▲ 66 (0.9)	34 (0.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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

**Exhibit B.14**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Science Literacy - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	402 (15.4)	403 (12.2)	532 (14.6)	523 (9.2)	657 (8.0)	647 (15.7)
Austria	418 (6.8)	416 (7.4)	523 (7.2)	513 (5.4)	645 (9.4)	621 (8.2)
Canada	430 (7.0)	425 (3.3)	534 (4.7)	529 (3.2)	648 (4.8)	632 (5.6)
Cyprus	342 (12.7)	350 (5.9)	444 (4.7)	442 (3.9)	561 (7.2)	551 (7.7)
Czech Republic	391 (8.1)	374 (8.6)	481 (10.2)	476 (7.6)	616 (12.9)	594 (9.6)
France	387 (7.9)	389 (7.1)	490 (5.9)	482 (6.1)	594 (5.0)	577 (6.8)
Germany	397 (6.0)	375 (11.0)	498 (5.2)	495 (7.5)	618 (6.0)	604 (7.5)
Hungary	369 (3.4)	367 (3.5)	465 (3.0)	464 (3.4)	▲ 592 (6.4)	573 (5.2)
Iceland	460 (3.6)	456 (2.2)	551 (2.8)	544 (2.5)	650 (3.1)	644 (3.9)
Lithuania	364 (8.8)	352 (6.6)	462 (7.3)	458 (5.6)	572 (8.1)	566 (7.5)
Netherlands	450 (10.1)	450 (4.8)	▲ 562 (5.2)	550 (4.7)	670 (10.6)	664 (12.1)
New Zealand	405 (11.3)	410 (9.8)	533 (6.8)	527 (5.6)	652 (4.7)	636 (5.8)
Norway	435 (6.1)	433 (5.0)	▲ 544 (3.9)	533 (4.5)	▲ 669 (7.0)	648 (6.0)
Russian Federation	380 (3.1)	366 (6.1)	482 (5.3)	475 (6.9)	603 (8.0)	596 (11.6)
Slovenia	416 (15.5)	415 (8.3)	519 (8.8)	512 (9.1)	634 (12.5)	606 (9.8)
Sweden	450 (4.6)	449 (5.0)	▲ 557 (4.3)	549 (4.5)	▲ 687 (7.0)	667 (6.1)
Switzerland	413 (7.5)	400 (8.7)	522 (5.4)	517 (6.4)	649 (6.4)	632 (5.1)
United States	366 (4.2)	363 (5.8)	478 (3.0)	476 (4.6)	607 (5.5)	595 (6.6)
International Avg.	402 (2.0)	398 (1.7)	▲ 508 (1.5)	502 (1.4)	▲ 627 (1.8)	612 (1.9)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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

**Exhibit B.15**
**Percentages by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Physics - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	36 (5.0)	64 (5.0)	50 (4.2)	50 (4.2)	67 (8.0)	33 (8.0)
Austria	22 (6.0)	▲ 78 (6.0)	46 (3.9)	54 (3.9)	▲ 78 (5.6)	22 (5.6)
Canada	36 (7.9)	64 (7.9)	47 (3.2)	53 (3.2)	▲ 72 (4.5)	28 (4.5)
Cyprus	41 (4.0)	59 (4.0)	46 (3.4)	54 (3.4)	68 (8.4)	32 (8.4)
Czech Republic	17 (3.5)	▲ 83 (3.5)	44 (2.6)	56 (2.6)	▲ 84 (2.3)	16 (2.3)
France	37 (4.6)	63 (4.6)	50 (3.1)	50 (3.1)	▲ 65 (4.6)	35 (4.6)
Germany	33 (6.0)	67 (6.0)	49 (3.5)	51 (3.5)	▲ 77 (7.1)	23 (7.1)
Norway	34 (4.1)	▲ 66 (4.1)	51 (3.2)	49 (3.2)	▲ 69 (5.1)	31 (5.1)
Russian Federation	30 (2.7)	▲ 70 (2.7)	51 (2.9)	49 (2.9)	▲ 69 (6.4)	31 (6.4)
Slovenia	24 (5.8)	▲ 76 (5.8)	56 (6.8)	44 (6.8)	▲ 78 (9.3)	22 (9.3)
Sweden	38 (3.8)	▲ 62 (3.8)	44 (2.9)	56 (2.9)	▲ 80 (5.6)	20 (5.6)
Switzerland	21 (4.6)	▲ 79 (4.6)	48 (2.9)	52 (2.9)	▲ 84 (2.4)	16 (2.4)
United States	34 (2.5)	▲ 66 (2.5)	49 (2.1)	51 (2.1)	▲ 68 (3.7)	32 (3.7)
International Avg.	31 (1.4)	▲ 69 (1.4)	49 (1.0)	51 (1.0)	▲ 74 (1.7)	26 (1.7)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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



**Exhibit B.16**
**Achievement by Gender of Low-, Middle-, and High-Performing Students<sup>1</sup>  
in Physics - Final Year of Secondary School\***

Country	Low-Performing		Middle-Performing		High-Performing	
	Males	Females	Males	Females	Males	Females
Australia	420 (7.1)	410 (10.1)	518 (6.4)	512 (8.0)	627 (11.7)	605 (11.5)
Austria	338 (14.6)	334 (6.5)	439 (8.8)	426 (6.0)	550 (12.1)	533 (12.2)
Canada	384 (6.9)	377 (3.7)	484 (4.9)	480 (4.5)	602 (7.0)	579 (10.4)
Cyprus	373 (10.7)	366 (10.8)	490 (6.8)	487 (6.4)	630 (11.6)	624 (14.1)
Czech Republic	363 (9.7)	359 (4.0)	450 (7.0)	438 (4.3)	▲ 570 (13.9)	541 (16.3)
France	383 (9.3)	384 (6.4)	468 (3.7)	463 (3.8)	554 (5.6)	543 (8.7)
Germany	414 (20.4)	399 (10.1)	521 (12.1)	513 (11.6)	650 (13.8)	619 (18.8)
Norway	473 (6.3)	455 (13.5)	582 (6.0)	575 (13.0)	699 (6.7)	686 (10.3)
Russian Federation	417 (10.9)	399 (13.0)	550 (9.1)	538 (18.0)	687 (9.9)	679 (28.2)
Slovenia	389 (25.8)	368 (12.5)	529 (13.8)	516 (18.5)	655 (27.7)	641 (20.3)
Sweden	455 (7.3)	454 (7.6)	577 (6.1)	569 (4.5)	690 (6.9)	681 (15.7)
Switzerland	394 (10.4)	381 (5.6)	▲ 489 (5.6)	475 (3.4)	▲ 611 (6.5)	580 (7.0)
United States	356 (5.3)	349 (3.1)	423 (4.0)	417 (2.9)	504 (6.2)	487 (4.2)
International Avg.	397 (3.5)	387 (2.5)	▲ 502 (2.2)	493 (2.7)	▲ 618 (3.4)	600 (4.1)

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

▲ = Gender difference statistically significant at .05 level, adjusted for multiple comparisons

<sup>1</sup> Low-performing students are defined as those students scoring at or below the 25th percentile for their country. Middle-performing students are defined as those students scoring above the 25th percentile but below the 75th percentile for their country. High-performing students are defined as those students scoring at or above the 75th percentile for their country. Percentages have been adjusted to account for male-female imbalances in the total sample.

\* See Appendix A for characteristics of students sampled.

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