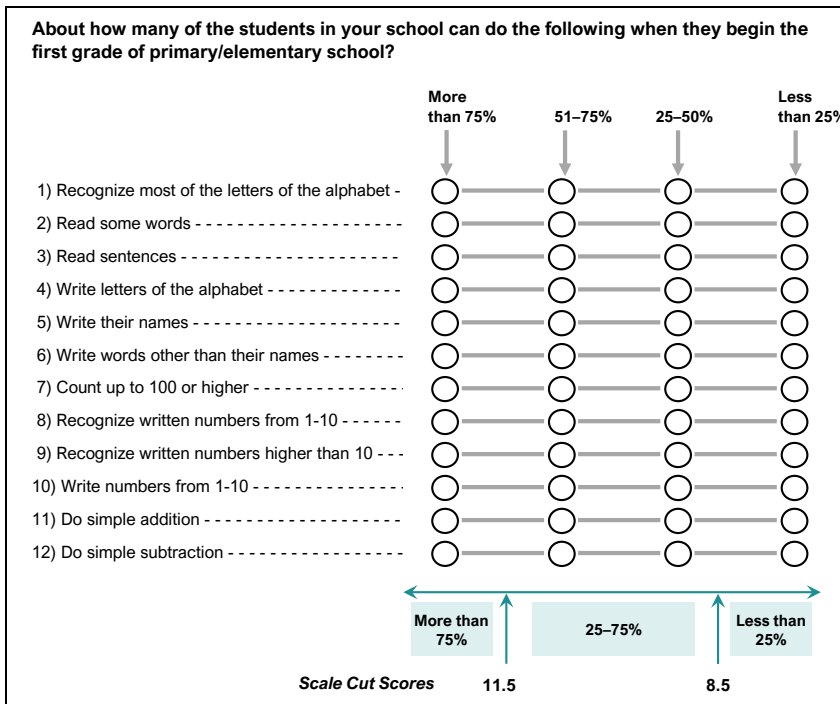


Exhibit 6.10: Schools Where Students Enter the Primary Grades With Literacy and Numeracy Skills

Students' Results based on Principals' Reports

About the Scale

Students were scored according to their principals' reports regarding the percentage of students in the school who begin primary school with the twelve skills on the *Schools Where Students Enter the Primary Grades with Literacy and Numeracy Skills* scale. Cut scores divide the scale into three categories. Students in **Schools Where More than 75% Enter with Skills** had a score at or above the cut score corresponding to their principals reporting that "more than 75%" of the students have six of the twelve skills and "51–75%" of the students have the other six, on average. Students in **Schools Where Less than 25% Enter with Skills** had a score at or below the cut score corresponding to their principals reporting that "less than 25%" of the students have six of the twelve skills and "25–50%" of the students have the other six, on average. All other students attended **Schools Where 25–75% Enter with Skills**.



SOURCE: IEA's Trends in International Mathematics and Science Study - TIMSS 2019
 Downloaded from <http://timss2019.org/download>

Exhibit 6.11: Schools Where Students Enter the Primary Grades With Literacy and Numeracy Skills

Students' Results based on Principals' Reports

Country	Schools Where More than 75% Enter with Skills		Schools Where 25–75% Enter with Skills		Schools Where Less than 25% Enter with Skills		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Ireland	89 (2.6)	552 (2.6)	11 (2.6)	522 (9.8)	0 (0.4)	--	12.7 (0.08)
Singapore	84 (0.0)	627 (4.5)	15 (0.0)	618 (9.0)	1 (0.0)	--	12.7 (0.00)
Latvia	65 (4.1)	545 (3.5)	35 (4.1)	549 (3.5)	0 (0.0)	--	11.8 (0.08)
Hong Kong SAR	65 (4.4)	607 (4.0)	35 (4.3)	593 (6.2)	1 (0.8)	--	12.2 (0.13)
Korea, Rep. of	62 (4.0)	604 (2.8)	34 (4.1)	592 (4.1)	4 (1.9)	592 (18.9)	11.9 (0.15)
Spain	60 (2.9)	511 (2.5)	39 (2.8)	491 (3.5)	1 (0.8)	--	11.8 (0.07)
United States	60 (3.1)	546 (3.4)	32 (3.1)	518 (6.0)	8 (1.6)	533 (7.2)	11.6 (0.12)
Chinese Taipei	59 (3.7)	599 (2.6)	39 (3.8)	601 (2.6)	2 (1.2)	--	11.9 (0.13)
United Arab Emirates	r 57 (1.1)	504 (2.3)	34 (1.2)	449 (2.9)	9 (0.4)	435 (5.4)	11.6 (0.04)
Qatar	52 (3.5)	465 (5.8)	38 (3.8)	432 (5.6)	10 (2.7)	435 (13.3)	11.4 (0.15)
England	s 47 (5.1)	567 (8.0)	49 (5.1)	548 (4.4)	4 (1.9)	536 (21.5)	11.4 (0.16)
Bahrain	40 (2.6)	483 (3.9)	50 (2.9)	478 (3.8)	10 (1.8)	478 (5.3)	11.0 (0.10)
Philippines	39 (3.8)	310 (10.6)	55 (3.9)	288 (7.2)	6 (1.9)	287 (17.5)	11.1 (0.14)
Montenegro	37 (0.4)	451 (2.9)	61 (0.5)	454 (2.3)	2 (0.2)	--	11.1 (0.01)
Kazakhstan	32 (3.6)	520 (4.8)	65 (3.6)	509 (3.6)	3 (1.2)	493 (17.8)	10.8 (0.11)
Sweden	31 (4.2)	531 (4.1)	62 (4.3)	516 (4.1)	6 (2.2)	504 (8.0)	11.0 (0.13)
Canada	30 (2.3)	522 (3.7)	64 (2.4)	510 (2.5)	6 (1.4)	491 (6.8)	10.8 (0.09)
Japan	28 (3.9)	598 (4.0)	69 (4.0)	591 (1.9)	3 (1.4)	588 (7.1)	10.9 (0.10)
Kuwait	27 (3.9)	403 (11.6)	50 (3.9)	385 (7.4)	24 (3.1)	353 (9.5)	10.2 (0.17)
Kosovo	25 (4.3)	449 (6.5)	64 (4.7)	443 (3.6)	11 (2.7)	438 (8.5)	10.4 (0.14)
Finland	24 (3.4)	540 (4.8)	74 (3.6)	531 (2.5)	3 (1.0)	496 (16.7)	10.8 (0.08)
Albania	21 (3.8)	506 (8.7)	75 (4.1)	490 (4.4)	4 (1.6)	509 (16.7)	10.6 (0.11)
Oman	21 (2.7)	447 (7.4)	68 (3.1)	430 (4.6)	12 (2.2)	406 (9.9)	10.3 (0.10)
Pakistan	20 (6.3)	365 (29.0)	45 (5.6)	306 (11.4)	35 (6.7)	336 (24.1)	9.4 (0.39)
Bulgaria	20 (3.2)	556 (4.7)	54 (4.5)	521 (6.5)	26 (3.5)	471 (9.3)	9.8 (0.14)
Saudi Arabia	20 (2.8)	415 (7.2)	54 (3.4)	402 (4.7)	27 (3.3)	381 (8.4)	9.8 (0.14)
Poland	18 (3.4)	523 (6.5)	77 (3.7)	520 (3.2)	5 (1.9)	505 (9.7)	10.5 (0.11)
Georgia	18 (3.6)	494 (7.6)	48 (4.2)	483 (5.2)	34 (4.0)	474 (7.5)	9.6 (0.21)
Lithuania	18 (2.6)	554 (7.6)	77 (2.8)	541 (3.3)	6 (1.4)	524 (8.8)	10.4 (0.10)
Azerbaijan	17 (2.7)	510 (7.2)	55 (3.5)	517 (3.8)	28 (3.4)	517 (5.3)	9.8 (0.13)
Russian Federation	15 (2.8)	576 (6.2)	68 (3.0)	570 (3.3)	17 (2.5)	549 (9.5)	10.0 (0.11)
Turkey (5)	14 (3.0)	540 (9.5)	36 (3.7)	536 (7.8)	49 (4.2)	507 (7.3)	9.1 (0.21)
Chile	13 (2.8)	481 (9.7)	60 (4.0)	438 (4.6)	27 (4.0)	430 (5.1)	9.7 (0.15)
Malta	13 (0.3)	519 (3.4)	68 (0.4)	512 (1.6)	19 (0.3)	490 (2.8)	9.8 (0.01)
France	13 (3.1)	503 (9.0)	83 (3.6)	483 (3.5)	4 (1.7)	455 (10.5)	10.3 (0.10)
Netherlands	s 12 (3.8)	543 (7.2)	80 (5.1)	537 (2.7)	8 (3.7)	531 (11.5)	10.1 (0.13)
South Africa (5)	11 (1.9)	413 (18.4)	75 (3.3)	363 (4.1)	14 (2.8)	404 (12.9)	9.9 (0.11)
Portugal	10 (2.1)	536 (8.1)	68 (3.3)	526 (3.0)	22 (2.9)	521 (6.7)	9.4 (0.11)
Morocco	9 (2.1)	412 (15.6)	42 (3.5)	396 (8.0)	49 (3.1)	368 (6.8)	8.6 (0.13)
Australia	9 (2.1)	526 (9.3)	43 (3.4)	530 (4.8)	47 (3.3)	498 (4.6)	8.9 (0.13)
Armenia	8 (2.2)	492 (9.5)	56 (4.1)	504 (3.6)	36 (4.0)	491 (4.3)	9.1 (0.13)
Croatia	7 (2.3)	515 (15.0)	83 (3.2)	510 (2.3)	9 (2.4)	506 (5.7)	9.9 (0.10)
Iran, Islamic Rep. of	6 (2.0)	425 (9.9)	29 (3.9)	452 (8.1)	65 (3.9)	442 (5.9)	8.1 (0.15)
Cyprus	6 (2.0)	558 (9.6)	61 (4.2)	535 (3.7)	33 (3.9)	522 (5.7)	9.1 (0.12)
Denmark	r 5 (2.1)	531 (12.5)	81 (3.7)	526 (2.5)	15 (3.2)	518 (5.0)	9.6 (0.09)
Bosnia and Herzegovina	5 (1.9)	469 (12.9)	67 (4.1)	451 (3.1)	28 (3.8)	450 (4.4)	9.3 (0.10)
Italy	4 (1.8)	506 (8.3)	67 (4.1)	517 (3.2)	28 (4.1)	513 (4.1)	9.2 (0.12)
Norway (5)	r 4 (1.6)	556 (8.5)	75 (4.2)	548 (2.7)	21 (4.2)	527 (6.1)	9.3 (0.12)
North Macedonia	4 (1.3)	447 (31.3)	64 (4.5)	484 (5.5)	32 (4.4)	453 (9.5)	9.1 (0.13)
Serbia	4 (1.7)	531 (26.3)	77 (3.9)	512 (3.3)	19 (4.1)	486 (9.5)	9.5 (0.12)
New Zealand	3 (1.1)	528 (21.8)	48 (3.7)	505 (4.6)	49 (3.6)	468 (4.8)	8.4 (0.11)
Austria	3 (1.3)	527 (12.8)	53 (3.4)	545 (3.3)	44 (3.6)	534 (3.2)	8.8 (0.08)
Belgium (Flemish)	2 (1.3)	--	79 (4.0)	535 (2.4)	18 (3.8)	521 (5.7)	9.3 (0.09)
Slovak Republic	1 (1.0)	--	70 (3.2)	518 (2.9)	29 (3.1)	485 (8.2)	9.0 (0.09)
Germany	1 (0.6)	--	68 (3.5)	527 (2.7)	31 (3.5)	508 (5.0)	8.9 (0.07)
Czech Republic	0 (0.0)	--	60 (4.0)	539 (3.1)	40 (4.0)	525 (4.6)	8.7 (0.08)
Hungary	0 (0.0)	--	32 (4.0)	534 (5.6)	68 (4.0)	517 (3.8)	7.8 (0.10)
Northern Ireland	--	--	--	--	--	--	--
International Average	24 (0.4)	508 (1.5)	56 (0.5)	499 (0.6)	20 (0.4)	480 (1.4)	
Benchmarking Participants							
Dubai, UAE	r 75 (0.3)	555 (2.0)	18 (0.2)	515 (3.2)	7 (0.3)	504 (4.8)	12.2 (0.01)
Madrid, Spain	72 (3.4)	521 (2.6)	28 (3.4)	513 (3.9)	0 (0.5)	--	12.2 (0.09)
Abu Dhabi, UAE	r 44 (1.7)	470 (3.4)	42 (1.8)	413 (3.6)	14 (0.9)	394 (11.0)	11.1 (0.06)
Moscow City, Russian Fed.	40 (4.3)	594 (3.4)	57 (4.4)	591 (2.8)	2 (1.3)	--	11.2 (0.11)
Ontario, Canada	35 (4.1)	527 (6.2)	61 (4.3)	505 (4.4)	5 (2.0)	486 (7.4)	11.0 (0.16)
Quebec, Canada	21 (3.5)	538 (5.3)	72 (4.0)	531 (2.9)	7 (2.4)	527 (5.1)	10.6 (0.14)

This TIMSS context questionnaire scale was established in 2015 based on the combined response distribution of all countries that participated in TIMSS 2015. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent. A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.

Exhibit 6.12: Schools Where Students Enter the Primary Grades With Literacy and Numeracy Skills

Students' Results based on Principals' Reports

Country	Schools Where More than 75% Enter with Skills		Schools Where 25–75% Enter with Skills		Schools Where Less than 25% Enter with Skills		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Ireland	89 (2.6)	531 (3.4)	11 (2.6)	505 (9.6)	0 (0.4)	--	12.7 (0.08)
Singapore	84 (0.0)	596 (4.0)	15 (0.0)	586 (8.1)	1 (0.0)	--	12.7 (0.00)
Latvia	65 (4.1)	541 (3.2)	35 (4.1)	544 (3.1)	0 (0.0)	--	11.8 (0.08)
Hong Kong SAR	65 (4.4)	536 (4.0)	35 (4.3)	523 (5.8)	1 (0.8)	--	12.2 (0.13)
Korea, Rep. of	62 (4.0)	592 (2.7)	34 (4.1)	581 (3.9)	4 (1.9)	583 (14.0)	11.9 (0.15)
Spain	60 (2.9)	520 (2.5)	39 (2.8)	499 (3.6)	1 (0.8)	--	11.8 (0.07)
United States	60 (3.1)	549 (3.7)	32 (3.1)	521 (6.0)	8 (1.6)	539 (8.6)	11.6 (0.12)
Chinese Taipei	59 (3.7)	558 (2.5)	39 (3.8)	560 (2.4)	2 (1.2)	--	11.9 (0.13)
United Arab Emirates	57 (1.1)	500 (2.7)	34 (1.2)	435 (4.0)	9 (0.4)	420 (6.9)	11.6 (0.04)
Qatar	52 (3.5)	466 (6.4)	38 (3.8)	430 (6.6)	10 (2.7)	441 (18.2)	11.4 (0.15)
England	47 (5.1)	547 (6.8)	49 (5.1)	529 (4.7)	4 (1.9)	521 (21.1)	11.4 (0.16)
Bahrain	40 (2.6)	502 (5.6)	50 (2.9)	490 (5.6)	10 (1.8)	477 (7.3)	11.0 (0.10)
Philippines	39 (3.8)	267 (12.6)	55 (3.9)	238 (8.4)	6 (1.9)	236 (17.3)	11.1 (0.14)
Montenegro	37 (0.4)	451 (3.6)	61 (0.5)	454 (2.8)	2 (0.2)	--	11.1 (0.01)
Kazakhstan	32 (3.6)	500 (6.1)	65 (3.6)	492 (4.3)	3 (1.2)	476 (23.7)	10.8 (0.11)
Sweden	31 (4.2)	550 (4.5)	62 (4.3)	531 (4.8)	6 (2.2)	515 (9.7)	11.0 (0.13)
Canada	30 (2.3)	532 (3.4)	64 (2.4)	521 (2.2)	6 (1.4)	500 (5.0)	10.8 (0.09)
Japan	28 (3.9)	566 (4.2)	69 (4.0)	560 (1.8)	3 (1.4)	559 (7.4)	10.9 (0.10)
Kuwait	27 (3.9)	405 (14.6)	50 (3.9)	396 (8.4)	24 (3.1)	368 (11.0)	10.2 (0.17)
Kosovo	25 (4.3)	421 (7.5)	64 (4.7)	411 (4.6)	11 (2.7)	402 (10.6)	10.4 (0.14)
Finland	24 (3.4)	563 (4.6)	74 (3.6)	553 (2.8)	3 (1.0)	518 (19.2)	10.8 (0.08)
Albania	21 (3.8)	501 (7.6)	75 (4.1)	486 (4.9)	4 (1.6)	497 (16.0)	10.6 (0.11)
Oman	21 (2.7)	455 (7.6)	68 (3.1)	434 (5.2)	12 (2.2)	405 (12.1)	10.3 (0.10)
Pakistan	20 (6.3)	341 (25.5)	45 (5.6)	271 (13.9)	35 (6.7)	287 (27.7)	9.4 (0.39)
Bulgaria	20 (3.2)	574 (5.8)	54 (4.5)	532 (7.3)	26 (3.5)	459 (11.2)	9.8 (0.14)
Saudi Arabia	20 (2.8)	420 (7.9)	54 (3.4)	409 (5.4)	27 (3.3)	377 (9.7)	9.8 (0.14)
Poland	18 (3.4)	534 (5.5)	77 (3.7)	531 (3.1)	5 (1.9)	512 (8.5)	10.5 (0.11)
Georgia	18 (3.6)	470 (7.7)	48 (4.2)	456 (5.4)	34 (4.0)	444 (7.6)	9.6 (0.21)
Lithuania	18 (2.6)	549 (7.4)	77 (2.8)	537 (3.1)	6 (1.4)	518 (8.6)	10.4 (0.10)
Azerbaijan	17 (2.7)	420 (8.2)	55 (3.5)	429 (4.7)	28 (3.4)	426 (6.5)	9.8 (0.13)
Russian Federation	15 (2.8)	577 (5.9)	68 (3.0)	570 (3.0)	17 (2.5)	548 (9.2)	10.0 (0.11)
Turkey (5)	14 (3.0)	542 (8.3)	36 (3.7)	538 (6.9)	49 (4.2)	511 (7.1)	9.1 (0.21)
Chile	13 (2.8)	506 (8.8)	60 (4.0)	466 (4.3)	27 (4.0)	460 (4.7)	9.7 (0.15)
Malta	13 (0.3)	509 (3.5)	68 (0.4)	499 (1.3)	19 (0.3)	475 (2.8)	9.8 (0.01)
France	13 (3.1)	505 (9.7)	83 (3.6)	486 (3.3)	4 (1.7)	467 (16.7)	10.3 (0.10)
Netherlands	12 (3.8)	528 (10.3)	80 (5.1)	517 (3.4)	8 (3.7)	515 (13.2)	10.1 (0.13)
South Africa (5)	11 (1.9)	382 (24.9)	75 (3.3)	309 (5.7)	14 (2.8)	369 (17.5)	9.9 (0.11)
Portugal	10 (2.1)	513 (6.7)	68 (3.3)	505 (2.9)	22 (2.9)	500 (5.0)	9.4 (0.11)
Morocco	9 (2.1)	398 (21.3)	42 (3.5)	390 (9.3)	49 (3.1)	356 (7.9)	8.6 (0.13)
Australia	9 (2.1)	548 (7.0)	43 (3.4)	545 (4.3)	47 (3.3)	517 (4.0)	8.9 (0.13)
Armenia	8 (2.2)	460 (11.4)	56 (4.1)	472 (4.3)	36 (4.0)	459 (5.6)	9.1 (0.13)
Croatia	7 (2.3)	531 (9.8)	83 (3.2)	525 (2.3)	9 (2.4)	518 (6.4)	9.9 (0.10)
Iran, Islamic Rep. of	6 (2.0)	432 (7.8)	29 (3.9)	451 (8.1)	65 (3.9)	438 (6.0)	8.1 (0.15)
Cyprus	6 (2.0)	539 (12.0)	61 (4.2)	513 (3.8)	33 (3.9)	503 (5.5)	9.1 (0.12)
Denmark	5 (2.1)	523 (11.1)	81 (3.7)	523 (2.8)	15 (3.2)	515 (4.9)	9.6 (0.09)
Bosnia and Herzegovina	5 (1.9)	479 (14.0)	67 (4.1)	457 (3.7)	28 (3.8)	459 (4.7)	9.3 (0.10)
Italy	4 (1.8)	502 (6.6)	67 (4.1)	512 (3.7)	28 (4.1)	507 (4.6)	9.2 (0.12)
Norway (5)	4 (1.6)	548 (10.2)	75 (4.2)	545 (2.5)	21 (4.2)	522 (6.3)	9.3 (0.12)
North Macedonia	4 (1.3)	388 (35.7)	64 (4.5)	438 (6.9)	32 (4.4)	409 (10.5)	9.1 (0.13)
Serbia	4 (1.7)	541 (26.3)	77 (3.9)	522 (3.5)	19 (4.1)	494 (9.7)	9.5 (0.12)
New Zealand	3 (1.1)	538 (17.6)	48 (3.7)	519 (3.6)	49 (3.6)	485 (4.5)	8.4 (0.11)
Austria	3 (1.3)	513 (18.9)	53 (3.4)	531 (3.6)	44 (3.6)	512 (4.2)	8.8 (0.08)
Belgium (Flemish)	2 (1.3)	--	79 (4.0)	504 (2.6)	18 (3.8)	487 (5.7)	9.3 (0.09)
Slovak Republic	1 (1.0)	--	70 (3.2)	532 (2.9)	29 (3.1)	489 (9.8)	9.0 (0.09)
Germany	1 (0.6)	--	68 (3.5)	525 (2.7)	31 (3.5)	503 (5.2)	8.9 (0.07)
Czech Republic	0 (0.0)	--	60 (4.0)	538 (3.2)	40 (4.0)	527 (4.1)	8.7 (0.08)
Hungary	0 (0.0)	--	32 (4.0)	537 (5.3)	68 (4.0)	525 (3.7)	7.8 (0.10)
Northern Ireland	--	--	--	--	--	--	--
International Average	24 (0.4)	499 (1.6)	56 (0.5)	490 (0.7)	20 (0.4)	471 (1.6)	
Benchmarking Participants							
Dubai, UAE	75 (0.3)	556 (2.2)	18 (0.2)	513 (3.5)	7 (0.3)	515 (6.1)	12.2 (0.01)
Madrid, Spain	72 (3.4)	526 (2.4)	28 (3.4)	517 (3.5)	0 (0.5)	--	12.2 (0.09)
Abu Dhabi, UAE	44 (1.7)	459 (3.6)	42 (1.8)	381 (5.1)	14 (0.9)	360 (14.2)	11.1 (0.06)
Moscow City, Russian Fed.	40 (4.3)	597 (3.3)	57 (4.4)	593 (2.8)	2 (1.3)	--	11.2 (0.11)
Ontario, Canada	35 (4.1)	534 (5.9)	61 (4.3)	521 (3.8)	5 (2.0)	491 (7.6)	11.0 (0.16)
Quebec, Canada	21 (3.5)	525 (4.0)	72 (4.0)	523 (3.2)	7 (2.4)	509 (4.5)	10.6 (0.14)

This TIMSS context questionnaire scale was established in 2015 based on the combined response distribution of all countries that participated in TIMSS 2015. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

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

A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students.