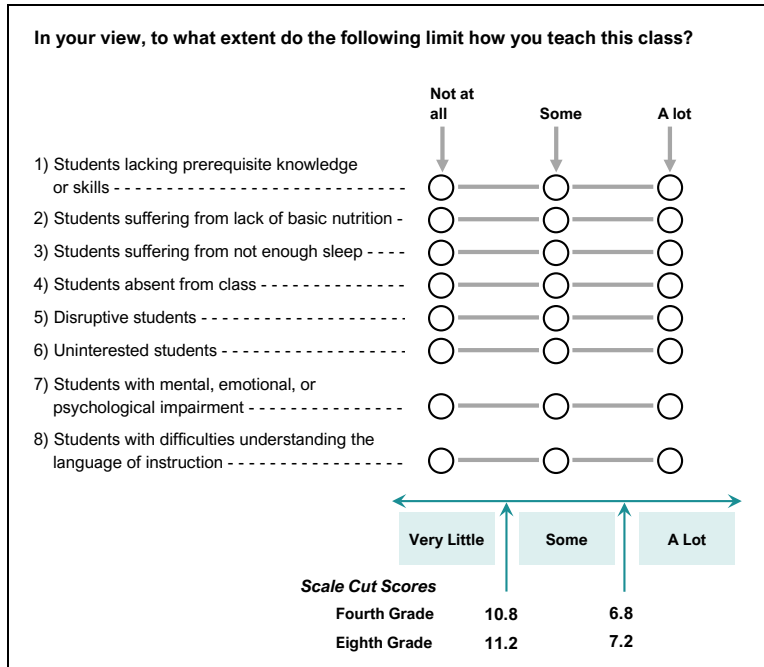


**Exhibit 10.9: Classroom Teaching Limited by Students Not Ready for Instruction – Teachers’ Reports**

Students’ Results based on Teachers’ Reports

**About the Scale**

Students were scored according to their teachers’ reports regarding eight student attributes on the *Classroom Teaching Limited by Students Not Ready for Instruction* scale. Cut scores divide the scale into three categories. Students with teachers who felt their teaching was limited **Very Little** had a score at or above the cut score corresponding to their teachers reporting they were “not at all” limited by four of the eight student attributes and were limited “some” by the other four, on average. Students with teachers who felt their teaching was limited **A Lot** had a score at or below the cut score corresponding to their teachers reporting they were limited “a lot” by four of the eight student attributes and were limited “some” by the other four, on average. All other students had teachers who felt their teaching was limited **Some**.



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

**Exhibit 10.10: Classroom Teaching Limited by Students Not Ready for Instruction – Teachers’ Reports**

Students’ Results based on Teachers’ Reports

Country	Very Little		Some		A Lot		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Japan	79 (3.0)	593 (2.1)	20 (2.9)	591 (3.4)	1 (0.6)	--	12.1 (0.14)
Albania	71 (3.8)	499 (4.0)	24 (3.3)	490 (8.7)	4 (2.2)	441 (14.9)	11.3 (0.17)
Kosovo	63 (3.8)	448 (3.7)	37 (3.8)	438 (5.0)	0 (0.0)	--	11.1 (0.12)
Czech Republic	61 (3.6)	543 (2.8)	39 (3.6)	517 (4.5)	0 (0.0)	--	11.0 (0.12)
North Macedonia	60 (3.9)	482 (5.5)	40 (3.9)	456 (9.7)	0 (0.0)	--	11.1 (0.12)
Azerbaijan	53 (3.8)	516 (4.0)	45 (3.8)	515 (4.1)	3 (1.1)	500 (17.2)	10.6 (0.11)
Singapore	52 (2.8)	656 (3.9)	45 (2.9)	591 (5.0)	3 (0.9)	613 (23.1)	10.8 (0.11)
Serbia	49 (4.1)	508 (3.9)	47 (4.1)	507 (5.6)	4 (1.6)	517 (8.1)	10.6 (0.15)
Croatia	49 (3.4)	507 (3.1)	50 (3.5)	511 (3.4)	2 (0.8)	--	10.8 (0.14)
Latvia	49 (3.9)	553 (3.3)	49 (3.9)	541 (4.0)	2 (1.1)	--	10.6 (0.14)
Slovak Republic	48 (3.5)	521 (3.5)	45 (3.4)	503 (5.8)	7 (1.9)	472 (12.7)	10.4 (0.16)
Hong Kong SAR	47 (3.8)	614 (5.6)	53 (3.8)	590 (4.1)	0 (0.0)	--	10.7 (0.13)
Netherlands	47 (4.2)	546 (3.6)	51 (4.3)	529 (2.8)	2 (1.2)	--	10.6 (0.14)
Austria	46 (3.2)	552 (2.7)	51 (3.3)	530 (3.1)	2 (0.9)	--	10.5 (0.09)
Montenegro	46 (2.7)	458 (2.5)	51 (2.6)	450 (3.1)	3 (1.0)	410 (9.0)	10.4 (0.10)
Spain	46 (3.7)	514 (3.6)	50 (3.9)	492 (3.7)	4 (1.3)	479 (9.7)	10.4 (0.12)
Bosnia and Herzegovina	45 (3.2)	454 (4.2)	49 (3.2)	451 (3.1)	6 (1.7)	443 (10.6)	10.4 (0.14)
Bulgaria	44 (3.8)	540 (4.2)	52 (3.7)	495 (6.4)	3 (1.2)	497 (37.0)	10.4 (0.14)
Georgia	42 (3.8)	482 (5.8)	57 (3.9)	482 (4.4)	1 (0.7)	--	10.4 (0.12)
Russian Federation	41 (3.1)	569 (4.9)	47 (3.7)	562 (4.6)	12 (2.2)	574 (8.4)	10.1 (0.16)
Germany	40 (3.8)	538 (3.1)	55 (3.8)	514 (3.0)	4 (1.3)	450 (17.2)	10.0 (0.13)
Finland	40 (2.9)	542 (3.2)	58 (3.1)	527 (3.0)	1 (0.5)	--	10.4 (0.09)
Ireland	40 (3.7)	557 (4.6)	59 (3.7)	542 (2.9)	1 (0.4)	--	10.3 (0.14)
Poland	39 (3.6)	533 (4.5)	59 (3.7)	513 (3.1)	2 (0.9)	--	10.4 (0.12)
United Arab Emirates	39 (1.9)	515 (3.1)	57 (2.0)	464 (2.7)	4 (0.5)	415 (7.9)	10.1 (0.05)
Sweden	37 (3.8)	530 (5.1)	61 (3.8)	517 (3.6)	2 (1.0)	--	10.3 (0.13)
Belgium (Flemish)	37 (3.4)	546 (2.3)	59 (3.5)	527 (2.4)	4 (1.1)	521 (11.7)	10.2 (0.11)
Italy	36 (4.1)	518 (3.9)	57 (4.0)	513 (3.2)	7 (2.0)	514 (7.3)	9.9 (0.16)
France	35 (3.2)	506 (4.1)	58 (3.2)	476 (3.8)	7 (1.4)	456 (10.3)	9.8 (0.11)
Portugal	33 (3.3)	540 (3.8)	56 (3.4)	519 (3.7)	11 (2.1)	516 (8.1)	9.6 (0.16)
Denmark	33 (4.4)	531 (4.7)	63 (4.5)	522 (2.3)	4 (1.6)	506 (10.2)	9.9 (0.14)
Hungary	33 (3.4)	543 (3.8)	63 (3.6)	516 (4.3)	4 (1.4)	507 (18.7)	10.1 (0.14)
Armenia	32 (3.8)	505 (4.7)	63 (3.9)	494 (3.1)	5 (1.5)	507 (11.5)	9.7 (0.13)
Korea, Rep. of	32 (3.8)	608 (4.6)	52 (3.7)	597 (3.1)	16 (2.9)	590 (6.3)	9.5 (0.20)
Qatar	30 (3.5)	464 (7.5)	66 (3.4)	443 (5.2)	4 (1.5)	465 (23.1)	9.8 (0.15)
Kazakhstan	30 (3.3)	517 (4.2)	49 (3.8)	512 (4.7)	21 (2.9)	507 (6.9)	9.3 (0.15)
Bahrain	28 (3.3)	489 (4.3)	64 (3.1)	477 (3.1)	8 (2.1)	478 (9.2)	9.7 (0.13)
Malta	28 (0.4)	532 (2.1)	63 (0.4)	499 (1.8)	10 (0.2)	507 (3.1)	9.4 (0.02)
Chinese Taipei	26 (3.7)	602 (3.0)	64 (4.0)	599 (2.6)	10 (2.4)	595 (6.4)	9.5 (0.16)
Northern Ireland	26 (3.9)	583 (6.6)	72 (4.1)	560 (3.7)	2 (1.3)	--	9.9 (0.12)
Norway (5)	25 (4.4)	560 (4.8)	70 (4.1)	541 (2.8)	5 (1.7)	518 (12.3)	9.7 (0.22)
Australia	24 (3.8)	545 (6.9)	69 (4.0)	514 (3.4)	6 (1.7)	458 (11.0)	9.6 (0.13)
New Zealand	24 (2.4)	515 (5.0)	71 (2.6)	481 (3.3)	5 (1.3)	446 (17.3)	9.6 (0.09)
Oman	24 (2.9)	450 (7.5)	54 (3.5)	418 (4.6)	22 (2.9)	441 (11.5)	9.0 (0.14)
Cyprus	23 (3.3)	547 (5.0)	68 (3.4)	533 (3.0)	9 (1.7)	507 (6.7)	9.4 (0.13)
Iran, Islamic Rep. of	22 (2.9)	465 (9.2)	63 (3.4)	436 (4.9)	14 (2.7)	439 (8.5)	9.1 (0.15)
Canada	22 (1.9)	537 (4.7)	71 (2.2)	507 (2.4)	6 (1.3)	484 (7.9)	9.4 (0.09)
England	22 (3.9)	576 (12.2)	71 (4.5)	551 (5.2)	7 (2.9)	552 (5.4)	9.5 (0.17)
Pakistan	19 (4.1)	353 (23.2)	79 (4.2)	324 (14.5)	2 (1.3)	--	9.7 (0.13)
Turkey (5)	19 (3.2)	568 (9.0)	67 (3.7)	520 (5.0)	14 (2.6)	478 (17.1)	9.0 (0.14)
Philippines	18 (3.1)	326 (15.1)	79 (3.1)	290 (6.1)	3 (1.4)	259 (19.2)	9.3 (0.12)
Kuwait	18 (3.2)	420 (12.2)	79 (3.5)	376 (5.3)	3 (1.3)	345 (28.8)	9.4 (0.12)
Lithuania	18 (2.8)	565 (6.9)	63 (3.9)	536 (3.9)	19 (3.0)	534 (6.0)	8.9 (0.15)
Saudi Arabia	18 (2.8)	419 (7.4)	76 (3.5)	393 (4.9)	6 (1.9)	385 (15.8)	9.3 (0.13)
United States	15 (1.6)	568 (4.5)	77 (1.9)	533 (2.9)	7 (1.3)	491 (7.8)	9.1 (0.09)
Morocco	13 (2.5)	418 (15.6)	79 (3.2)	378 (5.9)	8 (2.1)	375 (9.6)	8.8 (0.11)
Chile	12 (2.5)	477 (9.9)	74 (4.0)	437 (3.2)	13 (3.2)	425 (8.8)	8.7 (0.15)
South Africa (5)	12 (2.0)	409 (15.4)	81 (2.6)	369 (4.1)	7 (1.6)	370 (14.0)	9.0 (0.10)
<b>International Average</b>	<b>36 (0.4)</b>	<b>517 (0.9)</b>	<b>59 (0.5)</b>	<b>495 (0.6)</b>	<b>6 (0.2)</b>	<b>476 (2.2)</b>	
<b>Benchmarking Participants</b>							
Dubai, UAE	57 (2.4)	563 (3.3)	41 (2.4)	525 (4.0)	1 (0.3)	--	10.8 (0.07)
Madrid, Spain	51 (4.2)	524 (2.7)	46 (4.4)	512 (3.3)	4 (1.7)	495 (31.3)	10.6 (0.13)
Moscow City, Russian Fed.	46 (4.2)	599 (3.1)	46 (3.8)	587 (3.2)	8 (2.3)	590 (6.5)	10.3 (0.20)
Ontario, Canada	26 (3.7)	541 (8.7)	65 (4.1)	504 (4.3)	9 (2.5)	487 (9.9)	9.4 (0.16)
Abu Dhabi, UAE	26 (2.3)	487 (7.7)	66 (2.4)	431 (3.9)	8 (1.2)	394 (10.7)	9.5 (0.09)
Quebec, Canada	20 (2.9)	545 (4.2)	77 (3.2)	530 (2.6)	3 (1.2)	519 (12.8)	9.5 (0.11)

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 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 10.11: Classroom Teaching Limited by Students Not Ready for Instruction – Teachers' Reports

Students' Results based on Teachers' Reports

Country	Very Little		Some		A Lot		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Japan	78 (3.3)	561 (2.2)	22 (3.3)	562 (3.5)	0 (0.0)	--	12.2 (0.16)
Albania	71 (3.9)	494 (4.3)	25 (3.3)	484 (8.5)	4 (2.2)	444 (20.2)	11.3 (0.17)
Kosovo	63 (3.8)	417 (4.6)	37 (3.8)	406 (5.8)	0 (0.0)	--	11.1 (0.12)
Czech Republic	61 (3.5)	542 (2.8)	39 (3.5)	520 (4.2)	0 (0.0)	--	11.0 (0.10)
North Macedonia	60 (3.9)	438 (6.1)	40 (3.9)	408 (11.4)	0 (0.0)	--	11.1 (0.12)
Slovak Republic	54 (3.5)	537 (3.2)	38 (3.4)	509 (7.0)	8 (2.0)	468 (15.3)	10.6 (0.17)
Azerbaijan	52 (4.3)	427 (5.1)	46 (4.3)	425 (5.4)	2 (0.9)	--	10.5 (0.12)
Singapore	52 (3.2)	620 (3.7)	46 (3.1)	568 (4.6)	2 (0.7)	--	10.8 (0.11)
Latvia	51 (3.9)	544 (3.2)	47 (4.0)	538 (3.8)	2 (1.0)	--	10.8 (0.14)
Serbia	49 (4.1)	518 (4.1)	47 (4.1)	515 (6.0)	4 (1.6)	523 (10.1)	10.6 (0.15)
Croatia	49 (3.4)	522 (2.9)	50 (3.5)	525 (3.0)	2 (0.8)	--	10.8 (0.14)
Netherlands	47 (4.2)	530 (4.6)	51 (4.3)	509 (3.5)	2 (1.2)	--	10.6 (0.14)
Austria	47 (3.4)	537 (3.5)	51 (3.4)	511 (4.0)	2 (0.9)	--	10.5 (0.11)
Montenegro	46 (2.7)	458 (2.8)	51 (2.6)	451 (3.8)	3 (1.0)	406 (10.4)	10.4 (0.10)
Poland	46 (3.4)	539 (4.3)	52 (3.3)	526 (2.9)	2 (0.9)	--	10.6 (0.12)
Spain	46 (4.1)	520 (3.7)	51 (4.2)	503 (4.0)	3 (1.1)	486 (9.6)	10.4 (0.12)
Hong Kong SAR	45 (3.7)	550 (4.7)	54 (3.8)	518 (4.7)	1 (0.7)	--	10.7 (0.16)
Georgia	45 (4.1)	457 (6.4)	55 (4.2)	452 (4.7)	0 (0.5)	--	10.5 (0.12)
Bosnia and Herzegovina	45 (3.2)	460 (4.6)	49 (3.2)	458 (3.7)	6 (1.7)	452 (9.8)	10.4 (0.14)
Bulgaria	45 (3.7)	553 (5.5)	53 (3.6)	495 (7.6)	2 (1.0)	--	10.4 (0.14)
Germany	43 (3.9)	534 (3.3)	54 (4.0)	510 (3.4)	3 (1.0)	445 (20.1)	10.2 (0.14)
Ireland	40 (3.7)	534 (6.7)	59 (3.7)	523 (3.2)	1 (0.4)	--	10.3 (0.14)
Russian Federation	40 (3.1)	570 (4.2)	49 (3.5)	564 (4.2)	11 (2.2)	571 (7.2)	10.1 (0.16)
United Arab Emirates	40 (1.8)	510 (3.4)	55 (2.0)	452 (3.9)	5 (0.8)	427 (16.8)	10.2 (0.07)
Finland	40 (2.9)	565 (3.3)	59 (3.1)	549 (3.1)	1 (0.5)	--	10.3 (0.09)
Chinese Taipei	39 (3.7)	561 (2.8)	54 (3.8)	557 (2.4)	7 (2.1)	548 (8.2)	10.0 (0.14)
Denmark	38 (4.2)	528 (3.9)	60 (4.3)	519 (3.2)	2 (0.9)	--	10.2 (0.12)
Sweden	37 (4.0)	549 (4.1)	61 (4.1)	533 (4.3)	1 (1.0)	--	10.2 (0.13)
France	36 (3.4)	507 (4.3)	57 (3.3)	480 (3.9)	7 (1.5)	456 (8.7)	9.8 (0.12)
Belgium (Flemish)	36 (3.3)	516 (2.5)	61 (3.4)	495 (2.5)	3 (1.1)	480 (11.2)	10.2 (0.11)
Italy	36 (4.1)	513 (4.7)	57 (4.0)	508 (3.4)	7 (2.0)	508 (7.6)	9.9 (0.16)
Armenia	35 (4.2)	470 (5.9)	60 (4.1)	464 (4.0)	5 (1.7)	479 (11.1)	10.0 (0.15)
Hungary	35 (3.4)	544 (4.3)	61 (3.4)	523 (4.1)	4 (1.5)	507 (11.1)	10.1 (0.14)
Portugal	33 (3.3)	515 (3.0)	56 (3.4)	499 (3.4)	11 (2.1)	498 (6.1)	9.6 (0.16)
Qatar	31 (3.2)	467 (7.9)	65 (3.2)	441 (5.8)	4 (1.6)	462 (21.5)	9.9 (0.14)
Kazakhstan	30 (3.2)	498 (5.6)	49 (4.0)	495 (6.0)	21 (2.9)	488 (9.1)	9.3 (0.15)
Korea, Rep. of	30 (3.7)	599 (3.7)	57 (3.5)	584 (2.8)	13 (2.7)	577 (6.3)	9.4 (0.18)
Bahrain	30 (2.6)	512 (5.9)	67 (2.8)	486 (4.5)	3 (1.0)	451 (15.3)	9.8 (0.10)
Norway (5)	28 (4.6)	552 (4.8)	66 (4.5)	535 (3.4)	5 (1.8)	524 (14.6)	9.8 (0.21)
Malta	27 (0.4)	523 (2.4)	63 (0.4)	484 (1.8)	10 (0.3)	497 (4.2)	9.4 (0.02)
Kuwait	26 (4.2)	419 (13.9)	70 (4.5)	382 (7.4)	4 (1.5)	396 (19.4)	9.7 (0.15)
New Zealand	26 (2.6)	528 (4.2)	69 (2.7)	496 (3.1)	5 (1.4)	468 (15.0)	9.7 (0.09)
Northern Ireland	26 (3.9)	530 (4.7)	72 (4.1)	515 (3.0)	2 (1.3)	--	9.9 (0.12)
Australia	26 (3.8)	559 (5.0)	69 (4.0)	528 (3.1)	6 (1.6)	481 (10.4)	9.7 (0.13)
Canada	24 (2.1)	543 (3.4)	70 (2.5)	521 (2.2)	6 (1.2)	499 (7.0)	9.5 (0.09)
Pakistan	23 (6.4)	301 (35.9)	73 (6.5)	286 (15.7)	3 (1.9)	327 (48.1)	9.8 (0.16)
Oman	23 (3.0)	456 (9.0)	55 (3.2)	425 (5.9)	23 (2.9)	441 (10.0)	9.0 (0.16)
Iran, Islamic Rep. of	22 (2.9)	461 (9.2)	63 (3.4)	434 (5.1)	14 (2.7)	440 (7.7)	9.1 (0.15)
England	22 (3.9)	557 (9.9)	71 (4.5)	531 (4.7)	7 (2.9)	534 (5.7)	9.5 (0.17)
Turkey (5)	22 (2.9)	559 (7.9)	71 (3.3)	519 (5.4)	8 (1.9)	503 (12.6)	9.4 (0.14)
Saudi Arabia	20 (3.0)	409 (9.7)	78 (3.2)	397 (5.0)	2 (1.2)	--	9.5 (0.09)
Cyprus	19 (3.7)	530 (5.5)	74 (4.0)	508 (3.2)	7 (2.5)	508 (14.5)	9.3 (0.17)
Chile	18 (3.3)	498 (6.9)	69 (3.9)	463 (3.1)	13 (3.1)	450 (8.0)	8.9 (0.16)
Lithuania	18 (2.8)	561 (6.6)	63 (4.0)	533 (3.5)	19 (3.0)	527 (5.7)	8.9 (0.15)
Philippines	17 (2.7)	303 (16.9)	76 (3.0)	239 (8.0)	7 (2.2)	213 (27.4)	9.3 (0.13)
Morocco	15 (2.6)	399 (15.0)	77 (3.3)	370 (6.9)	8 (2.2)	378 (26.3)	9.1 (0.11)
United States	15 (1.9)	572 (4.9)	78 (2.0)	537 (3.1)	7 (1.2)	490 (8.4)	9.1 (0.10)
South Africa (5)	12 (2.3)	360 (24.2)	78 (2.9)	319 (6.2)	9 (1.9)	322 (17.5)	8.9 (0.11)
<b>International Average</b>	<b>37 (0.5)</b>	<b>506 (1.1)</b>	<b>58 (0.5)</b>	<b>484 (0.7)</b>	<b>6 (0.2)</b>	<b>465 (2.5)</b>	
<b>Benchmarking Participants</b>							
Dubai, UAE	60 (2.7)	565 (3.3)	38 (2.7)	526 (4.1)	2 (0.3)	--	11.1 (0.09)
Madrid, Spain	48 (4.4)	531 (2.3)	49 (4.3)	517 (2.8)	3 (1.6)	473 (18.9)	10.7 (0.16)
Moscow City, Russian Fed.	46 (4.2)	602 (3.2)	46 (3.8)	589 (3.2)	8 (2.3)	592 (6.5)	10.3 (0.20)
Abu Dhabi, UAE	29 (2.5)	464 (6.9)	63 (2.6)	405 (5.5)	8 (1.7)	377 (22.2)	9.6 (0.12)
Ontario, Canada	27 (4.3)	545 (6.1)	65 (4.7)	523 (4.3)	8 (2.4)	498 (9.8)	9.6 (0.19)
Quebec, Canada	23 (3.5)	534 (4.1)	74 (3.9)	520 (2.8)	4 (1.6)	511 (10.9)	9.5 (0.12)

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 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 10.12: Classroom Teaching Limited by Students Not Ready for Instruction – Teachers' Reports**
*Students' Results based on Teachers' Reports*

Country	Very Little		Some		A Lot		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Japan	71 (3.5)	596 (3.6)	29 (3.5)	590 (5.0)	1 (0.4)	--	12.3 (0.17)
Hungary	41 (3.2)	546 (5.8)	58 (3.3)	495 (4.9)	2 (0.9)	--	10.6 (0.12)
Singapore	40 (2.8)	655 (4.9)	55 (2.8)	592 (5.7)	5 (1.2)	554 (20.3)	10.6 (0.10)
Kazakhstan	39 (3.8)	493 (6.3)	53 (4.1)	481 (5.4)	8 (2.2)	498 (17.4)	10.3 (0.15)
Italy	38 (3.7)	503 (4.6)	58 (3.8)	494 (3.6)	5 (1.3)	500 (10.3)	10.4 (0.15)
United Arab Emirates	r 38 (1.8)	520 (3.8)	56 (2.1)	453 (3.3)	6 (0.9)	401 (9.8)	10.4 (0.07)
Ireland	35 (2.6)	548 (4.7)	59 (2.7)	517 (3.5)	6 (1.1)	457 (11.1)	10.4 (0.09)
England	s 35 (5.0)	564 (11.8)	61 (5.0)	503 (9.8)	4 (2.3)	453 (37.6)	10.4 (0.19)
Hong Kong SAR	32 (3.7)	625 (7.3)	66 (3.9)	558 (6.2)	2 (1.1)	--	10.5 (0.13)
Romania	31 (3.5)	520 (8.9)	66 (3.7)	461 (5.1)	3 (1.2)	481 (20.8)	10.3 (0.13)
Finland	30 (2.4)	529 (3.6)	66 (2.5)	503 (3.2)	4 (1.1)	465 (14.8)	10.3 (0.10)
New Zealand	29 (2.8)	532 (5.4)	63 (3.3)	470 (4.0)	8 (1.9)	438 (8.5)	10.0 (0.10)
Russian Federation	28 (2.9)	563 (6.9)	59 (3.0)	539 (5.4)	13 (2.8)	525 (16.1)	9.8 (0.17)
Australia	27 (2.8)	580 (8.5)	64 (2.9)	502 (3.2)	9 (2.1)	449 (9.0)	9.8 (0.12)
Chinese Taipei	26 (3.0)	636 (5.8)	63 (3.5)	604 (3.4)	10 (2.2)	605 (12.9)	9.6 (0.14)
Sweden	25 (3.0)	521 (6.0)	72 (3.3)	500 (3.0)	3 (1.3)	442 (9.6)	10.3 (0.12)
France	r 23 (3.7)	504 (6.5)	71 (3.6)	477 (3.1)	5 (1.5)	453 (9.9)	9.8 (0.14)
Turkey	21 (3.1)	554 (8.9)	63 (3.7)	483 (4.4)	15 (2.7)	470 (15.8)	9.3 (0.16)
United States	21 (2.0)	582 (7.9)	72 (2.2)	503 (4.9)	8 (1.4)	458 (9.9)	9.7 (0.09)
Norway (9)	s 21 (3.1)	522 (5.7)	73 (3.2)	503 (3.0)	6 (2.2)	476 (16.1)	9.9 (0.15)
Lithuania	20 (2.7)	548 (8.5)	59 (3.6)	519 (3.5)	20 (3.0)	501 (6.2)	9.3 (0.14)
Saudi Arabia	20 (3.2)	407 (6.9)	72 (3.6)	390 (3.1)	8 (2.0)	393 (7.9)	9.5 (0.13)
Cyprus	s 20 (3.8)	530 (8.7)	66 (4.3)	499 (3.8)	15 (2.5)	498 (5.6)	9.5 (0.15)
Qatar	20 (2.3)	480 (10.7)	75 (2.4)	434 (5.5)	6 (1.5)	445 (14.5)	9.8 (0.12)
Israel	18 (2.5)	582 (9.9)	57 (3.4)	517 (6.6)	25 (2.7)	481 (9.2)	9.0 (0.14)
Malaysia	18 (1.9)	524 (7.6)	68 (2.8)	453 (3.9)	14 (2.5)	420 (10.7)	9.3 (0.12)
Bahrain	17 (2.7)	485 (5.1)	79 (3.1)	480 (2.2)	4 (1.5)	488 (21.7)	9.9 (0.10)
Lebanon	17 (3.1)	442 (8.9)	78 (3.5)	426 (3.7)	6 (1.9)	421 (17.6)	9.5 (0.12)
Georgia	16 (2.8)	460 (8.8)	78 (3.5)	461 (5.2)	6 (2.2)	464 (15.1)	9.8 (0.12)
Kuwait	15 (2.5)	440 (10.0)	80 (3.0)	395 (5.0)	5 (1.8)	375 (20.6)	9.7 (0.11)
Portugal	14 (2.7)	526 (7.9)	78 (3.4)	497 (4.0)	8 (2.1)	485 (8.1)	9.5 (0.12)
Jordan	14 (3.0)	454 (9.7)	78 (3.8)	418 (4.3)	8 (2.2)	391 (13.9)	9.3 (0.11)
Oman	12 (2.1)	443 (9.8)	72 (3.2)	409 (3.7)	16 (2.8)	394 (7.9)	9.1 (0.12)
Korea, Rep. of	11 (2.0)	615 (6.9)	71 (3.2)	604 (3.3)	17 (2.9)	613 (9.1)	9.1 (0.14)
Iran, Islamic Rep. of	11 (2.3)	486 (22.3)	73 (3.1)	442 (3.7)	16 (2.7)	436 (9.9)	8.9 (0.13)
Chile	11 (2.2)	467 (14.1)	73 (3.7)	445 (3.5)	16 (3.1)	405 (8.9)	9.2 (0.13)
Egypt	9 (2.3)	418 (13.9)	82 (3.4)	416 (5.8)	9 (2.3)	383 (19.3)	9.4 (0.11)
Morocco	8 (1.9)	433 (14.3)	80 (2.6)	385 (2.3)	11 (2.1)	375 (7.6)	9.2 (0.11)
South Africa (9)	8 (1.6)	433 (16.4)	78 (2.3)	387 (2.5)	14 (2.0)	379 (6.6)	8.9 (0.09)
<b>International Average</b>	<b>24 (0.5)</b>	<b>520 (1.5)</b>	<b>67 (0.5)</b>	<b>482 (0.7)</b>	<b>9 (0.3)</b>	<b>458 (2.4)</b>	
<b>Benchmarking Participants</b>							
Dubai, UAE	48 (3.3)	570 (4.4)	50 (3.3)	507 (5.0)	3 (0.7)	520 (6.7)	11.0 (0.12)
Quebec, Canada	34 (3.8)	571 (6.2)	60 (3.9)	530 (4.9)	6 (1.8)	512 (17.2)	10.5 (0.15)
Moscow City, Russian Fed.	33 (3.8)	597 (7.2)	50 (3.9)	562 (5.6)	17 (3.2)	573 (9.0)	9.9 (0.21)
Abu Dhabi, UAE	r 26 (3.1)	493 (7.5)	64 (3.7)	422 (5.4)	10 (1.9)	371 (14.3)	9.8 (0.11)
Ontario, Canada	19 (4.3)	575 (12.0)	74 (4.8)	524 (3.5)	6 (2.2)	496 (12.2)	9.7 (0.16)
Western Cape, RSA (9)	9 (2.4)	538 (20.0)	77 (3.2)	440 (4.3)	14 (2.8)	385 (5.6)	8.9 (0.16)
Gauteng, RSA (9)	8 (1.9)	497 (10.5)	74 (3.5)	415 (3.7)	18 (3.4)	407 (10.0)	8.9 (0.13)

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 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 10.13: Classroom Teaching Limited by Students Not Ready for Instruction – Teachers' Reports**
*Students' Results based on Teachers' Reports*

Country	Very Little		Some		A Lot		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Japan	74 (3.3)	573 (2.6)	26 (3.3)	560 (3.6)	0 (0.0)	--	12.4 (0.14)
Singapore	48 (2.7)	631 (4.9)	50 (2.8)	587 (6.4)	2 (0.8)	--	11.0 (0.10)
Kazakhstan	39 (2.4)	479 (4.2)	54 (2.6)	474 (4.2)	7 (1.3)	501 (10.4)	10.4 (0.11)
England s	38 (4.6)	550 (10.9)	58 (4.8)	512 (7.6)	4 (2.5)	434 (51.6)	10.3 (0.19)
Hungary	37 (2.2)	552 (3.7)	59 (2.3)	519 (3.4)	4 (0.9)	458 (13.4)	10.5 (0.08)
Romania	37 (2.9)	491 (6.1)	59 (3.2)	459 (4.4)	4 (1.1)	460 (17.9)	10.4 (0.11)
Russian Federation	37 (2.0)	554 (4.6)	52 (1.8)	538 (4.0)	11 (1.3)	529 (10.8)	10.2 (0.12)
United Arab Emirates r	37 (1.8)	532 (4.4)	58 (1.9)	446 (4.1)	5 (0.5)	384 (13.3)	10.4 (0.06)
Sweden	35 (3.3)	539 (5.1)	65 (3.3)	512 (4.3)	1 (0.4)	--	10.5 (0.12)
Finland	34 (2.0)	565 (3.6)	64 (1.9)	533 (3.6)	3 (0.6)	495 (10.9)	10.5 (0.08)
Hong Kong SAR	32 (4.3)	535 (11.9)	67 (4.2)	487 (6.7)	1 (0.8)	--	10.4 (0.13)
Italy	32 (3.6)	508 (4.2)	61 (3.8)	495 (3.4)	7 (1.7)	510 (10.6)	10.4 (0.16)
France r	30 (2.8)	510 (3.7)	66 (3.0)	479 (2.7)	5 (1.3)	472 (13.8)	10.0 (0.11)
Portugal	29 (3.1)	543 (4.4)	62 (3.1)	510 (3.2)	9 (1.8)	512 (6.3)	9.9 (0.13)
Ireland	27 (3.2)	546 (5.0)	64 (3.5)	527 (2.9)	9 (2.4)	479 (13.0)	10.1 (0.12)
Chinese Taipei	27 (3.3)	586 (4.2)	61 (3.7)	569 (2.8)	13 (2.4)	574 (7.4)	9.8 (0.16)
Cyprus s	26 (2.5)	504 (5.6)	63 (2.5)	481 (3.4)	11 (0.9)	477 (5.1)	9.8 (0.08)
Qatar	25 (3.8)	500 (8.8)	70 (4.1)	468 (5.7)	4 (1.9)	450 (15.0)	10.1 (0.15)
New Zealand	25 (2.8)	542 (5.8)	70 (2.9)	493 (4.6)	5 (1.3)	422 (10.4)	9.9 (0.11)
Malaysia	24 (2.8)	512 (8.3)	67 (3.5)	449 (4.6)	9 (2.1)	404 (16.8)	9.9 (0.13)
Australia r	23 (2.8)	579 (7.2)	72 (3.0)	521 (3.6)	5 (1.3)	481 (17.3)	10.0 (0.10)
Norway (9) s	23 (3.5)	520 (6.7)	75 (3.8)	492 (3.9)	2 (1.5)	--	10.2 (0.13)
Lithuania	23 (2.0)	552 (5.0)	62 (2.6)	528 (3.0)	15 (1.7)	525 (5.8)	9.5 (0.10)
Georgia	22 (2.2)	462 (6.2)	76 (2.1)	444 (3.8)	2 (0.6)	--	10.1 (0.07)
Bahrain	22 (3.5)	526 (5.6)	71 (4.0)	478 (3.5)	8 (2.0)	471 (13.2)	10.0 (0.11)
Israel	20 (3.0)	572 (8.8)	59 (3.9)	508 (6.4)	21 (3.2)	476 (11.2)	9.2 (0.16)
Turkey	20 (2.7)	554 (9.1)	68 (3.3)	510 (5.2)	13 (2.5)	485 (15.0)	9.5 (0.15)
Saudi Arabia	19 (2.8)	459 (6.0)	71 (3.6)	426 (3.5)	9 (2.5)	415 (9.1)	9.6 (0.14)
Korea, Rep. of	19 (2.9)	569 (4.2)	70 (3.3)	561 (2.6)	11 (2.1)	546 (5.3)	9.5 (0.13)
Chile	18 (2.7)	488 (8.2)	65 (3.5)	464 (4.1)	16 (3.1)	437 (6.6)	9.5 (0.17)
Kuwait	18 (3.5)	454 (10.7)	80 (3.6)	442 (6.3)	2 (1.1)	--	9.9 (0.12)
Oman	17 (2.6)	468 (7.4)	64 (3.6)	459 (4.1)	18 (3.0)	442 (8.7)	9.3 (0.13)
Lebanon	17 (2.0)	393 (12.7)	76 (2.1)	376 (5.4)	7 (1.4)	350 (16.1)	9.6 (0.11)
Jordan	14 (2.9)	490 (11.4)	75 (3.3)	453 (5.3)	11 (2.0)	401 (18.6)	9.4 (0.13)
Egypt	12 (2.9)	402 (16.6)	82 (3.5)	386 (5.7)	7 (1.9)	408 (20.2)	9.4 (0.11)
Morocco	11 (1.4)	431 (8.5)	78 (1.9)	392 (3.1)	11 (1.4)	374 (6.2)	9.2 (0.07)
Iran, Islamic Rep. of	11 (2.4)	459 (13.2)	76 (3.2)	449 (4.4)	13 (2.4)	443 (12.3)	9.1 (0.10)
United States r	11 (1.8)	545 (13.6)	78 (2.8)	533 (4.0)	11 (2.1)	462 (18.6)	9.3 (0.10)
South Africa (9)	8 (1.3)	413 (12.0)	77 (2.6)	367 (3.6)	15 (2.3)	360 (5.9)	9.0 (0.08)
<b>International Average</b>	<b>26 (0.5)</b>	<b>515 (1.3)</b>	<b>66 (0.5)</b>	<b>484 (0.7)</b>	<b>8 (0.3)</b>	<b>457 (2.7)</b>	
<b>Benchmarking Participants</b>							
Dubai, UAE r	51 (3.0)	583 (4.7)	47 (3.1)	522 (5.4)	3 (0.6)	488 (13.9)	11.0 (0.08)
Moscow City, Russian Fed.	42 (2.5)	579 (3.3)	49 (2.3)	559 (3.7)	9 (1.4)	553 (4.7)	10.5 (0.13)
Abu Dhabi, UAE r	26 (2.6)	502 (9.5)	67 (3.0)	391 (5.6)	7 (1.3)	349 (18.5)	9.9 (0.10)
Ontario, Canada s	23 (5.2)	556 (10.4)	72 (5.5)	512 (4.5)	6 (2.5)	503 (7.0)	9.9 (0.23)
Western Cape, RSA (9)	13 (3.2)	506 (31.8)	62 (4.3)	447 (6.7)	25 (3.3)	389 (7.0)	8.8 (0.17)
Gauteng, RSA (9)	10 (2.3)	452 (19.9)	75 (3.5)	424 (5.0)	15 (2.9)	389 (10.7)	9.2 (0.11)
Quebec, Canada y	--	--	--	--	--	--	--

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.

A "y" indicates data are available for less than 40% of the students.