

Exhibit 6.8: Challenges Facing Teachers

Reported by Teachers

Students were scored according to their teachers' responses concerning eight challenging conditions on the *Challenges Facing Teachers* scale. Students whose teachers faced **Few Challenges** had a score on the scale of at least 10.4, which corresponds to their teachers "disagreeing a little" with four of eight statements and "agreeing a little" with the other four, on average. Students whose teachers faced **Many Challenges** had a score no higher than 7.1, which corresponds to their teachers reporting "agreeing a lot" with four of eight statements and "agreeing a little" with the other four, on average. All other students had teachers that reported facing **Some Challenges**.

Country	Few Challenges		Some Challenges		Many Challenges		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Georgia	85 (3.3)	467 (3.9)	15 (3.3)	446 (11.1)	0 (0.0)	~ ~	11.9 (0.11)
Poland	78 (3.1)	535 (2.5)	21 (2.9)	535 (4.3)	1 (1.0)	~ ~	11.4 (0.13)
Russian Federation	77 (2.6)	567 (4.2)	23 (2.6)	553 (5.9)	0 (0.0)	~ ~	11.2 (0.10)
Finland	71 (3.0)	534 (2.4)	29 (3.0)	538 (3.3)	0 (0.0)	~ ~	11.0 (0.09)
Turkey	68 (3.2)	483 (4.2)	29 (2.9)	485 (7.4)	2 (1.3)	~ ~	11.4 (0.14)
Kazakhstan	65 (3.9)	547 (6.0)	34 (3.9)	542 (7.6)	1 (0.4)	~ ~	10.8 (0.09)
Lithuania	65 (4.0)	532 (3.7)	34 (3.9)	544 (4.7)	1 (0.9)	~ ~	10.9 (0.12)
Qatar	63 (3.2)	448 (4.6)	36 (3.3)	423 (6.1)	1 (0.7)	~ ~	11.0 (0.13)
Bulgaria	60 (4.4)	524 (5.8)	37 (4.4)	523 (8.1)	3 (1.6)	539 (13.8)	10.6 (0.14)
Italy	53 (3.5)	506 (3.9)	44 (3.7)	508 (4.0)	3 (1.0)	510 (13.2)	10.6 (0.13)
Slovak Republic	51 (3.2)	499 (3.1)	44 (2.9)	497 (4.4)	5 (1.2)	494 (10.3)	10.4 (0.13)
Czech Republic	50 (3.5)	527 (3.2)	48 (3.5)	529 (3.0)	2 (0.8)	~ ~	10.5 (0.12)
United Arab Emirates	50 (2.4)	464 (3.9)	44 (2.6)	442 (4.5)	6 (0.8)	433 (13.9)	10.7 (0.11)
Indonesia	47 (3.0)	401 (5.6)	48 (3.2)	397 (5.5)	5 (1.3)	365 (20.2)	10.2 (0.10)
Bahrain	46 (2.5)	453 (3.1)	49 (2.5)	454 (2.8)	5 (0.6)	448 (5.8)	10.3 (0.08)
Kuwait	46 (3.3)	363 (6.2)	46 (3.1)	344 (6.8)	8 (1.8)	329 (12.3)	10.1 (0.13)
Croatia	46 (3.4)	500 (2.9)	48 (3.5)	504 (2.8)	6 (1.8)	504 (10.1)	10.0 (0.11)
Morocco	45 (3.2)	385 (5.6)	45 (3.3)	372 (5.8)	10 (1.7)	361 (10.4)	10.0 (0.15)
Chinese Taipei	45 (3.9)	597 (2.6)	53 (4.0)	597 (2.5)	2 (1.1)	~ ~	10.2 (0.13)
Saudi Arabia	41 (3.6)	392 (7.1)	48 (3.8)	380 (6.0)	11 (2.4)	368 (12.2)	9.8 (0.13)
Belgium (Flemish)	40 (3.4)	539 (3.7)	56 (3.5)	550 (2.7)	4 (1.6)	565 (11.8)	10.0 (0.10)
Jordan	39 (3.3)	395 (6.6)	56 (3.5)	383 (4.6)	5 (1.6)	401 (10.2)	10.0 (0.14)
Japan	38 (3.0)	590 (2.7)	55 (3.2)	595 (2.9)	7 (1.7)	593 (5.9)	9.8 (0.10)
Iran, Islamic Rep. of	37 (3.4)	434 (6.6)	52 (3.9)	429 (5.2)	11 (2.2)	433 (10.4)	9.6 (0.14)
Germany	37 (2.9)	522 (3.5)	58 (3.1)	522 (3.0)	5 (1.7)	507 (13.2)	9.7 (0.11)
United States	36 (2.8)	535 (4.0)	54 (2.7)	539 (3.4)	10 (1.4)	549 (6.1)	9.7 (0.10)
Sweden	33 (4.3)	515 (4.9)	61 (4.6)	522 (3.5)	5 (1.9)	508 (14.6)	9.9 (0.14)
Serbia	33 (3.5)	511 (7.4)	59 (3.6)	523 (3.9)	8 (2.1)	511 (10.5)	9.7 (0.14)
Ireland	33 (3.7)	545 (4.0)	53 (4.3)	547 (3.3)	14 (3.1)	551 (4.9)	9.4 (0.15)
Oman	32 (2.9)	427 (4.7)	60 (2.6)	423 (3.5)	8 (1.8)	448 (10.6)	9.7 (0.11)
South Africa (5)	32 (3.1)	395 (9.0)	57 (2.9)	362 (5.7)	11 (2.1)	396 (14.3)	9.4 (0.14)
New Zealand	31 (2.3)	486 (6.2)	55 (2.7)	492 (2.6)	14 (1.9)	498 (5.9)	9.5 (0.11)
Canada	30 (2.6)	505 (4.3)	58 (2.7)	512 (3.3)	12 (1.4)	520 (4.6)	9.4 (0.09)
Cyprus	30 (3.1)	523 (4.1)	65 (3.1)	523 (3.0)	5 (1.5)	527 (11.0)	9.6 (0.11)
Hong Kong SAR	29 (4.0)	610 (6.1)	64 (4.4)	614 (4.2)	7 (2.5)	632 (13.4)	9.6 (0.17)
Hungary	29 (3.2)	523 (5.6)	56 (3.7)	529 (4.7)	15 (2.5)	539 (8.2)	9.3 (0.12)
Spain	28 (2.9)	506 (5.2)	61 (3.1)	505 (3.2)	11 (2.1)	504 (5.8)	9.3 (0.10)
Korea, Rep. of	27 (3.0)	612 (4.3)	58 (3.6)	604 (2.9)	15 (2.7)	615 (3.8)	9.3 (0.15)
Netherlands	27 (3.6)	524 (3.6)	69 (3.7)	532 (2.0)	4 (1.7)	541 (7.2)	9.5 (0.13)
Northern Ireland	25 (3.7)	581 (6.2)	57 (4.1)	568 (4.9)	18 (3.8)	576 (7.1)	9.1 (0.20)
England	25 (3.4)	555 (9.9)	57 (4.0)	543 (4.5)	19 (3.1)	544 (7.4)	9.2 (0.18)
Australia	24 (2.6)	522 (7.6)	67 (2.5)	515 (4.0)	8 (1.9)	529 (7.8)	9.4 (0.11)
Denmark	22 (3.0)	536 (6.6)	64 (3.7)	538 (4.0)	14 (2.7)	540 (6.4)	9.2 (0.14)
Norway (5)	22 (3.6)	550 (5.0)	69 (3.6)	551 (3.3)	9 (2.5)	541 (6.7)	9.4 (0.16)
Chile	19 (3.3)	467 (8.4)	62 (4.1)	460 (3.4)	18 (3.3)	454 (5.8)	8.9 (0.15)
Slovenia	17 (2.5)	518 (3.5)	74 (2.9)	522 (2.2)	9 (2.2)	517 (7.6)	9.1 (0.11)
Portugal	14 (2.8)	564 (9.6)	56 (4.0)	537 (3.7)	30 (3.3)	539 (3.8)	8.5 (0.16)
France	9 (2.1)	488 (8.2)	76 (2.9)	491 (2.9)	15 (3.0)	476 (6.1)	8.7 (0.12)
Singapore	--	--	--	--	--	--	--
International Avg.	41 (0.5)	504 (0.8)	51 (0.5)	501 (0.7)	8 (0.3)	497 (1.6)	

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

This TIMSS 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.

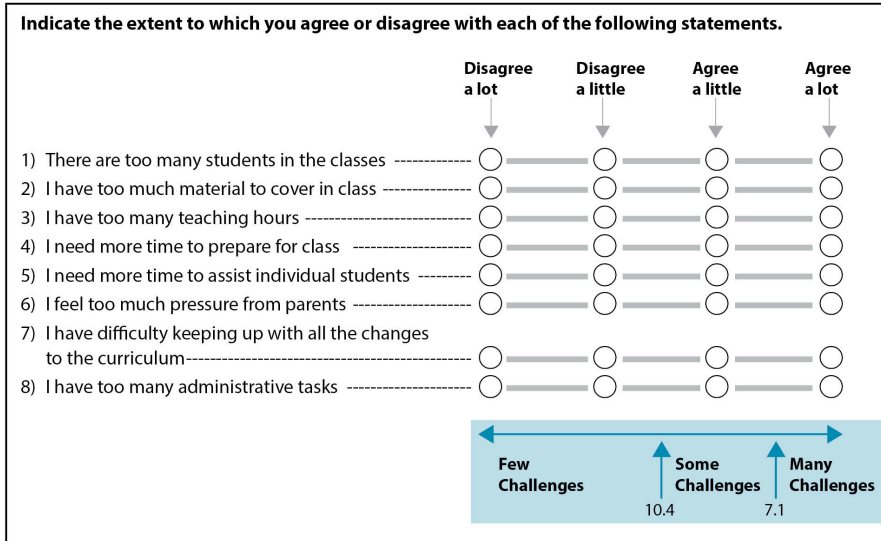
() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

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 "x" indicates data are available for less than 50% of students.

Exhibit 6.8: Challenges Facing Teachers (Continued)

Country	Few Challenges		Some Challenges		Many Challenges		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Benchmarking Participants							
Dubai, UAE	52 (3.8)	521 (3.3)	41 (3.8)	499 (5.4)	7 (0.4)	498 (6.3)	10.7 (0.19)
Abu Dhabi, UAE	49 (3.9)	437 (8.9)	45 (4.3)	406 (8.1)	6 (2.1)	371 (30.3)	10.4 (0.18)
Norway (4)	33 (3.6)	494 (4.1)	53 (4.0)	492 (3.9)	14 (3.2)	507 (4.9)	9.4 (0.16)
Ontario, Canada	32 (3.2)	508 (4.8)	58 (3.2)	515 (3.1)	10 (1.9)	524 (7.1)	9.6 (0.12)
Florida, US	29 (5.2)	547 (9.6)	66 (5.6)	548 (5.4)	5 (2.3)	542 (31.4)	9.6 (0.24)
Quebec, Canada	26 (5.0)	529 (6.7)	58 (5.5)	539 (5.3)	16 (3.6)	533 (6.3)	9.1 (0.18)
Buenos Aires, Argentina	x x	x x	x x	x x	x x	x x	x x



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