

Exhibit 6.9: 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 10.3, 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 6.7, 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	84 (1.9)	443 (3.3)	16 (1.9)	444 (4.4)	0 (0.2)	~ ~	11.7 (0.09)
Russian Federation	77 (1.8)	545 (4.5)	22 (1.7)	541 (5.5)	1 (0.3)	~ ~	11.2 (0.07)
Turkey	77 (2.9)	491 (4.4)	22 (2.9)	499 (9.2)	1 (0.8)	~ ~	11.5 (0.14)
Kazakhstan	76 (2.0)	535 (4.7)	24 (2.0)	526 (7.5)	0 (0.1)	~ ~	10.9 (0.06)
Lithuania	70 (2.0)	517 (3.0)	28 (1.8)	523 (3.7)	1 (0.6)	~ ~	11.1 (0.09)
Lebanon	63 (4.1)	401 (8.0)	33 (4.2)	395 (9.3)	4 (1.5)	371 (28.9)	11.1 (0.19)
Chinese Taipei	61 (3.8)	564 (3.4)	38 (3.8)	577 (4.5)	1 (0.7)	~ ~	10.6 (0.15)
Kuwait	61 (4.2)	410 (6.5)	35 (4.2)	410 (13.1)	4 (1.5)	381 (29.7)	10.6 (0.18)
Qatar	60 (2.9)	463 (5.0)	38 (3.0)	445 (5.9)	2 (0.7)	~ ~	10.8 (0.09)
Italy	59 (3.5)	495 (3.8)	41 (3.5)	504 (4.2)	0 (0.4)	~ ~	10.5 (0.12)
United Arab Emirates	r 52 (2.5)	485 (4.1)	43 (2.6)	469 (4.9)	5 (0.9)	441 (10.0)	10.4 (0.08)
Morocco	51 (2.3)	400 (3.5)	46 (2.3)	387 (2.9)	3 (0.8)	393 (6.9)	10.3 (0.09)
Japan	48 (3.8)	574 (2.5)	47 (4.0)	566 (2.8)	5 (1.9)	584 (15.4)	9.9 (0.12)
Egypt	48 (3.3)	385 (6.3)	46 (3.5)	360 (6.4)	6 (2.0)	336 (17.4)	10.0 (0.12)
United States	r 45 (2.5)	536 (4.4)	47 (2.6)	529 (4.9)	8 (1.5)	536 (12.0)	9.9 (0.13)
Saudi Arabia	45 (4.0)	391 (6.3)	50 (4.2)	393 (6.7)	5 (2.0)	383 (16.3)	10.0 (0.17)
Oman	42 (3.4)	460 (4.2)	54 (3.5)	452 (4.3)	3 (0.8)	456 (10.3)	10.0 (0.11)
Bahrain	42 (3.2)	470 (5.2)	54 (3.0)	463 (3.7)	3 (1.7)	452 (19.3)	10.1 (0.13)
Ireland	42 (3.5)	533 (5.1)	50 (3.6)	531 (4.0)	8 (1.4)	526 (7.5)	9.8 (0.14)
New Zealand	41 (3.4)	517 (4.9)	53 (3.9)	517 (5.5)	7 (2.3)	502 (15.9)	9.8 (0.13)
Jordan	41 (3.7)	433 (5.4)	55 (3.8)	422 (4.9)	4 (1.2)	411 (12.2)	9.9 (0.13)
Israel	39 (3.4)	510 (6.8)	51 (3.6)	509 (5.9)	10 (2.3)	496 (15.8)	9.6 (0.15)
Iran, Islamic Rep. of	39 (3.4)	449 (6.7)	57 (3.2)	459 (4.6)	3 (1.3)	494 (23.6)	9.9 (0.11)
Malta	37 (0.4)	489 (2.4)	52 (0.4)	479 (1.8)	11 (0.3)	459 (2.9)	9.4 (0.02)
Hong Kong SAR	36 (3.9)	535 (9.2)	59 (4.2)	551 (4.5)	5 (2.0)	546 (12.3)	9.5 (0.13)
Hungary	35 (2.1)	520 (5.1)	55 (2.3)	525 (4.3)	10 (1.6)	550 (6.7)	9.4 (0.11)
Thailand	35 (3.7)	463 (7.9)	60 (4.0)	450 (5.3)	5 (1.7)	469 (17.8)	9.7 (0.16)
Canada	35 (3.6)	531 (3.7)	61 (3.5)	526 (3.5)	4 (1.3)	515 (11.5)	9.7 (0.16)
Norway (9)	33 (4.2)	506 (5.5)	58 (4.4)	511 (3.3)	9 (2.4)	515 (8.6)	9.6 (0.18)
Malaysia	32 (3.6)	470 (8.7)	66 (3.8)	466 (5.4)	2 (1.0)	~ ~	9.6 (0.10)
South Africa (9)	32 (3.4)	386 (9.9)	55 (3.2)	348 (6.8)	13 (2.7)	331 (20.9)	9.5 (0.19)
Sweden	32 (4.0)	521 (6.0)	63 (4.3)	522 (4.3)	5 (1.7)	537 (12.1)	9.5 (0.13)
Australia	31 (2.5)	519 (5.3)	57 (3.2)	512 (3.7)	12 (2.4)	521 (8.0)	9.4 (0.11)
Slovenia	30 (2.0)	551 (3.4)	65 (1.8)	552 (2.6)	5 (1.1)	548 (7.0)	9.4 (0.08)
Chile	19 (3.2)	475 (9.0)	65 (4.1)	449 (4.6)	16 (3.2)	463 (10.4)	8.7 (0.15)
England	r 18 (2.5)	559 (9.5)	61 (2.4)	534 (5.2)	22 (2.1)	534 (6.4)	8.5 (0.14)
Korea, Rep. of	17 (2.4)	549 (5.1)	60 (3.4)	556 (2.5)	23 (3.4)	560 (5.4)	8.5 (0.13)
Botswana (9)	12 (2.4)	416 (10.5)	80 (3.3)	390 (3.0)	8 (2.3)	395 (11.0)	8.9 (0.10)
Singapore	--	--	--	--	--	--	--
International Avg.	45 (0.5)	487 (1.0)	49 (0.5)	481 (0.9)	6 (0.3)	473 (2.7)	

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

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

**Exhibit 6.9: 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	
<b>Benchmarking Participants</b>							
Abu Dhabi, UAE	54 (4.2)	461 (8.5)	42 (4.3)	440 (8.3)	4 (1.8)	423 (15.6)	10.3 (0.16)
Dubai, UAE	50 (2.1)	532 (3.6)	48 (2.6)	512 (3.9)	3 (1.1)	534 (13.9)	10.8 (0.09)
Florida, US	42 (7.1)	511 (12.8)	52 (7.0)	526 (9.4)	6 (2.2)	502 (23.6)	10.0 (0.33)
Norway (8)	34 (3.3)	481 (4.1)	56 (3.5)	494 (3.0)	10 (2.3)	506 (6.6)	9.3 (0.17)
Ontario, Canada	34 (4.7)	526 (4.8)	63 (4.6)	527 (3.8)	4 (1.8)	522 (19.3)	9.5 (0.16)
Quebec, Canada	32 (4.9)	536 (6.7)	62 (5.1)	528 (6.9)	5 (2.1)	504 (15.2)	9.6 (0.15)
Buenos Aires, Argentina	x x	x x	x x	x x	x x	x x	x x

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