

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 (3.4)	454 (3.9)	16 (3.4)	452 (8.0)	1 (0.6)	~ ~	11.6 (0.15)
Russian Federation	73 (3.4)	541 (4.6)	27 (3.4)	530 (8.4)	0 (0.0)	~ ~	11.0 (0.11)
Lithuania	72 (4.0)	509 (3.9)	27 (4.0)	515 (5.8)	1 (0.6)	~ ~	11.0 (0.12)
Turkey	72 (3.5)	456 (5.8)	27 (3.4)	462 (9.0)	1 (0.6)	~ ~	11.4 (0.15)
Lebanon	67 (4.1)	445 (5.4)	32 (4.1)	435 (6.9)	1 (0.5)	~ ~	11.6 (0.22)
Kazakhstan	67 (3.7)	533 (5.5)	33 (3.7)	518 (9.8)	0 (0.4)	~ ~	10.7 (0.10)
Qatar	65 (3.9)	440 (5.3)	33 (3.7)	430 (7.0)	2 (0.8)	~ ~	10.8 (0.15)
Italy	60 (3.4)	490 (3.8)	40 (3.4)	499 (4.6)	0 (0.4)	~ ~	10.5 (0.12)
Chinese Taipei	59 (3.8)	599 (3.9)	39 (3.9)	599 (5.1)	2 (0.9)	~ ~	10.5 (0.13)
Kuwait	58 (4.0)	395 (7.6)	40 (3.9)	390 (7.7)	2 (1.2)	~ ~	10.4 (0.16)
Japan	56 (3.5)	587 (3.5)	40 (3.4)	584 (4.4)	4 (1.4)	602 (5.8)	10.2 (0.11)
United Arab Emirates	52 (2.7)	475 (4.3)	45 (2.7)	454 (4.7)	3 (0.8)	469 (13.4)	10.5 (0.13)
Morocco	48 (3.1)	388 (3.5)	50 (3.1)	381 (2.9)	1 (0.6)	~ ~	10.2 (0.10)
Jordan	48 (3.1)	389 (4.9)	46 (3.2)	381 (4.0)	7 (1.9)	391 (21.3)	10.0 (0.12)
Israel	47 (2.6)	507 (6.0)	48 (2.6)	516 (7.7)	5 (1.2)	490 (19.1)	10.1 (0.12)
Oman	46 (3.7)	401 (5.4)	50 (3.6)	406 (4.3)	4 (1.2)	400 (6.9)	10.2 (0.14)
Bahrain	46 (4.3)	459 (3.3)	52 (4.3)	449 (3.0)	3 (1.2)	489 (29.0)	10.2 (0.14)
United States	44 (3.0)	516 (4.8)	48 (2.8)	518 (5.0)	7 (1.4)	539 (10.9)	9.9 (0.15)
Saudi Arabia	44 (4.4)	372 (7.1)	52 (4.3)	365 (6.2)	4 (1.5)	340 (23.5)	10.0 (0.15)
Canada	44 (3.3)	533 (3.1)	49 (3.3)	527 (3.8)	7 (1.6)	535 (5.9)	9.8 (0.13)
New Zealand	42 (3.0)	484 (5.3)	50 (3.2)	504 (5.8)	8 (2.1)	471 (12.3)	9.7 (0.12)
Egypt	40 (3.7)	401 (5.9)	57 (3.7)	386 (5.8)	4 (1.2)	397 (16.1)	10.0 (0.12)
Sweden	38 (4.1)	495 (5.2)	59 (4.2)	504 (3.5)	3 (1.4)	507 (19.9)	9.7 (0.13)
Thailand	37 (3.8)	442 (8.6)	54 (4.0)	422 (6.3)	9 (2.5)	446 (17.2)	9.6 (0.14)
Ireland	36 (2.8)	522 (5.1)	53 (2.9)	521 (4.3)	11 (2.1)	537 (6.7)	9.4 (0.12)
Malaysia	35 (3.8)	465 (6.0)	64 (3.8)	468 (5.0)	2 (0.9)	~ ~	9.7 (0.09)
Iran, Islamic Rep. of	34 (2.8)	426 (5.7)	60 (3.2)	442 (6.5)	6 (1.8)	436 (19.0)	9.7 (0.12)
Slovenia	33 (2.8)	518 (4.4)	61 (2.8)	517 (2.4)	5 (1.2)	508 (7.8)	9.6 (0.09)
Hong Kong SAR	33 (3.7)	602 (8.1)	63 (3.7)	589 (6.1)	3 (1.5)	612 (8.7)	9.7 (0.12)
England	32 (4.1)	530 (10.5)	57 (4.3)	511 (7.4)	12 (2.7)	510 (14.4)	9.2 (0.17)
Norway (9)	31 (4.1)	511 (4.6)	60 (4.4)	513 (2.7)	9 (2.3)	516 (7.4)	9.4 (0.16)
Australia	29 (2.9)	514 (6.1)	58 (3.3)	505 (3.7)	13 (2.1)	508 (8.0)	9.2 (0.13)
Korea, Rep. of	29 (3.4)	602 (5.2)	57 (3.5)	608 (3.5)	15 (2.6)	606 (6.8)	9.0 (0.14)
Malta	28 (0.1)	478 (2.3)	59 (0.2)	499 (1.5)	13 (0.1)	509 (2.1)	9.1 (0.01)
South Africa (9)	28 (3.1)	419 (10.8)	60 (3.5)	358 (4.4)	12 (2.5)	338 (7.1)	9.1 (0.14)
Hungary	27 (3.3)	521 (10.5)	64 (3.5)	507 (5.0)	9 (2.1)	543 (13.8)	9.3 (0.15)
Chile	20 (3.6)	435 (9.2)	68 (4.4)	430 (4.7)	12 (2.8)	418 (13.3)	9.1 (0.16)
Botswana (9)	17 (3.5)	398 (6.0)	77 (3.3)	390 (2.7)	6 (2.3)	386 (14.1)	9.1 (0.13)
Singapore	--	--	--	--	--	--	--
International Avg.	45 (0.6)	480 (1.0)	49 (0.6)	476 (0.9)	5 (0.3)	481 (2.8)	--

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.

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	
Benchmarking Participants							
Dubai, UAE	59 (3.6)	523 (3.2)	37 (3.5)	496 (4.4)	4 (1.5)	523 (19.6)	10.8 (0.14)
Abu Dhabi, UAE	51 (5.2)	446 (9.3)	46 (5.3)	438 (9.9)	3 (1.1)	424 (20.8)	10.3 (0.22)
Quebec, Canada	45 (5.2)	555 (4.5)	50 (4.9)	544 (5.6)	5 (1.4)	546 (9.4)	9.9 (0.15)
Ontario, Canada	42 (4.0)	525 (3.9)	49 (4.1)	522 (5.1)	9 (2.7)	532 (8.8)	9.6 (0.17)
Florida, US	27 (5.4)	517 (16.3)	60 (5.2)	494 (10.8)	13 (4.3)	504 (21.1)	8.9 (0.21)
Norway (8)	27 (3.2)	484 (3.6)	64 (3.3)	488 (2.6)	9 (2.2)	492 (6.5)	9.3 (0.14)
Buenos Aires, Argentina	x x	x x	x x	x x	x x	x x	x x

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