

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 (3.1)	455 (4.1)	15 (3.1)	433 (8.3)	0 (0.0)	~ ~	11.9 (0.12)
Poland	84 (3.2)	546 (2.7)	16 (3.2)	555 (4.8)	0 (0.4)	~ ~	11.7 (0.15)
Russian Federation	78 (2.5)	570 (3.9)	22 (2.5)	557 (5.7)	0 (0.0)	~ ~	11.2 (0.10)
Qatar	70 (3.2)	441 (4.8)	27 (3.1)	429 (9.4)	3 (0.9)	390 (33.7)	11.2 (0.15)
Finland	69 (3.4)	552 (2.8)	31 (3.4)	556 (3.4)	0 (0.0)	~ ~	11.0 (0.10)
Turkey	68 (3.2)	484 (4.2)	29 (2.9)	483 (6.7)	2 (1.3)	~ ~	11.4 (0.14)
Chinese Taipei	66 (3.9)	554 (2.3)	31 (3.8)	558 (3.3)	3 (1.1)	546 (13.8)	11.1 (0.15)
Lithuania	66 (3.9)	525 (3.5)	33 (3.8)	535 (4.8)	1 (0.9)	~ ~	11.0 (0.12)
Kazakhstan	65 (3.9)	553 (6.1)	34 (3.9)	547 (7.2)	1 (0.4)	~ ~	10.8 (0.09)
Italy	58 (3.8)	514 (3.6)	39 (3.8)	519 (4.2)	3 (1.1)	518 (12.2)	10.8 (0.15)
Bulgaria	56 (4.4)	535 (6.7)	41 (4.3)	535 (9.1)	3 (1.5)	557 (18.3)	10.5 (0.15)
Kuwait	54 (3.6)	346 (8.6)	39 (3.4)	328 (10.3)	7 (1.6)	333 (14.8)	10.6 (0.15)
Slovak Republic	53 (3.4)	519 (4.0)	43 (3.3)	522 (4.5)	4 (1.2)	517 (13.0)	10.4 (0.13)
United Arab Emirates	52 (1.9)	468 (4.2)	41 (2.2)	437 (6.5)	8 (1.0)	426 (13.2)	10.5 (0.09)
Czech Republic	51 (3.3)	532 (3.3)	46 (3.2)	538 (2.9)	3 (1.1)	529 (16.1)	10.5 (0.12)
Bahrain	50 (1.3)	459 (3.7)	44 (1.5)	462 (4.3)	6 (0.8)	442 (5.6)	10.5 (0.06)
Indonesia	50 (2.9)	401 (7.0)	46 (3.0)	394 (6.8)	4 (1.2)	371 (27.6)	10.4 (0.09)
Morocco	46 (3.2)	366 (6.7)	47 (3.1)	344 (7.2)	6 (1.4)	310 (14.4)	10.1 (0.13)
Croatia	46 (3.4)	531 (2.8)	48 (3.5)	535 (3.0)	6 (1.8)	534 (10.4)	10.0 (0.11)
Saudi Arabia	44 (3.7)	400 (8.0)	45 (3.8)	387 (7.7)	11 (2.2)	365 (17.0)	10.0 (0.15)
Belgium (Flemish)	40 (3.4)	504 (4.2)	56 (3.5)	516 (2.8)	4 (1.6)	529 (12.6)	10.0 (0.10)
Germany	39 (3.2)	527 (4.8)	55 (3.4)	528 (3.5)	6 (1.9)	526 (7.1)	9.8 (0.11)
Iran, Islamic Rep. of	37 (3.4)	425 (8.4)	52 (3.9)	416 (5.9)	11 (2.2)	432 (11.7)	9.6 (0.14)
Japan	37 (3.8)	567 (3.1)	56 (4.0)	570 (2.1)	7 (2.2)	573 (5.0)	9.7 (0.11)
United States	36 (2.8)	542 (4.3)	54 (2.7)	547 (3.2)	10 (1.5)	556 (6.2)	9.8 (0.13)
Cyprus	35 (4.3)	486 (5.0)	59 (4.4)	478 (3.0)	6 (2.3)	478 (9.6)	9.8 (0.12)
Oman	34 (2.5)	427 (5.4)	59 (2.7)	434 (4.6)	6 (1.6)	434 (16.4)	9.9 (0.10)
Hong Kong SAR	34 (4.0)	565 (5.4)	58 (4.1)	552 (3.4)	8 (2.3)	552 (9.5)	9.7 (0.14)
Serbia	33 (3.5)	517 (7.8)	59 (3.6)	530 (3.9)	8 (2.1)	518 (9.3)	9.7 (0.14)
Ireland	33 (3.7)	529 (4.0)	53 (4.3)	529 (3.5)	14 (3.1)	530 (7.1)	9.4 (0.15)
Canada	32 (2.6)	518 (4.2)	57 (2.6)	527 (3.3)	11 (1.6)	531 (4.8)	9.5 (0.09)
New Zealand	31 (2.5)	499 (6.2)	54 (2.8)	508 (2.7)	14 (2.0)	516 (6.0)	9.4 (0.12)
Norway (5)	30 (3.9)	543 (3.6)	62 (3.7)	537 (3.2)	8 (2.1)	535 (6.2)	9.7 (0.17)
Korea, Rep. of	30 (3.4)	591 (3.8)	56 (3.7)	588 (2.5)	15 (2.9)	593 (3.5)	9.3 (0.18)
Hungary	29 (3.2)	529 (7.0)	55 (3.6)	549 (4.4)	16 (2.7)	549 (8.4)	9.2 (0.13)
England	28 (3.5)	539 (6.5)	52 (3.9)	536 (3.5)	19 (2.9)	537 (6.4)	9.2 (0.18)
Spain	28 (2.7)	520 (4.6)	58 (2.8)	517 (3.7)	14 (2.3)	518 (5.5)	9.2 (0.10)
Sweden	27 (3.6)	545 (5.7)	66 (3.8)	539 (4.3)	7 (2.2)	536 (12.0)	9.6 (0.12)
Denmark	27 (3.0)	531 (4.9)	59 (3.3)	523 (3.1)	14 (2.6)	532 (6.1)	9.3 (0.12)
Netherlands	r 27 (3.6)	509 (4.9)	69 (3.7)	520 (3.1)	4 (1.7)	534 (7.9)	9.5 (0.13)
Australia	26 (2.9)	532 (5.8)	67 (2.8)	522 (3.8)	7 (1.7)	526 (4.9)	9.4 (0.11)
Northern Ireland	r 25 (3.8)	526 (5.0)	57 (4.1)	517 (3.6)	17 (3.9)	525 (5.7)	9.1 (0.20)
Chile	23 (3.2)	486 (8.1)	59 (4.1)	476 (4.1)	17 (3.6)	475 (5.9)	9.0 (0.16)
Slovenia	17 (2.5)	541 (4.5)	74 (2.9)	544 (2.7)	9 (2.2)	538 (9.2)	9.1 (0.11)
Portugal	14 (2.8)	521 (7.4)	56 (4.0)	506 (3.0)	30 (3.3)	505 (3.1)	8.5 (0.16)
France	8 (1.8)	488 (10.6)	77 (2.9)	490 (2.7)	15 (2.8)	480 (6.8)	8.7 (0.11)
Singapore	- -	- -	- -	- -	- -	- -	- -
International Avg.	43 (0.5)	506 (0.8)	49 (0.5)	503 (0.7)	8 (0.3)	497 (1.9)	- -

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.

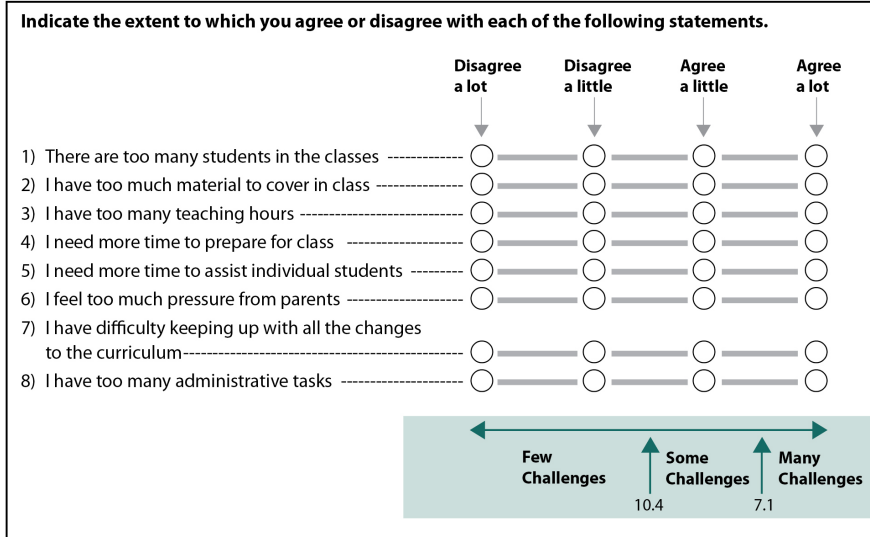
() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

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	57 (3.4)	523 (3.5)	37 (3.4)	509 (6.9)	6 (0.8)	501 (9.3)	10.6 (0.10)
Abu Dhabi, UAE	45 (3.8)	431 (10.0)	46 (4.2)	405 (9.5)	8 (2.5)	381 (33.2)	10.2 (0.17)
Ontario, Canada	34 (3.1)	523 (4.5)	55 (3.0)	535 (3.0)	11 (2.1)	537 (7.1)	9.6 (0.11)
Norway (4)	34 (4.0)	495 (3.5)	55 (4.3)	491 (3.5)	11 (2.5)	499 (7.0)	9.5 (0.13)
Quebec, Canada	30 (5.2)	518 (5.7)	57 (5.3)	528 (5.7)	13 (3.5)	520 (7.5)	9.2 (0.18)
Florida, US	28 (5.1)	547 (9.1)	67 (5.5)	552 (5.9)	4 (2.2)	559 (30.8)	9.7 (0.24)
Buenos Aires, Argentina	x x	x x	x x	x x	x x	x x	x x



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