

Exhibit 10.1: Students' Views on Engaging Teaching in Science Lessons

Reported by Students

Students were scored according to their degree of agreement with ten statements on the *Students' Views on Engaging Teaching in Science Lessons* scale. Students who experienced **Very Engaging Teaching** in science lessons had a score on the scale of at least 9.0, which corresponds to their "agreeing a lot" with five of the ten statements and "agreeing a little" with the other five, on average. Students who experienced teaching that was **Less than Engaging** had a score no higher than 7.0, which corresponds to their "disagreeing a little" with five of the ten statements and "agreeing a little" with the other five, on average. All other students experienced **Engaging Teaching** in science lessons.

Country	Very Engaging Teaching		Engaging Teaching		Less than Engaging Teaching		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Bulgaria	88 (1.0)	543 (5.4)	10 (0.9)	507 (10.0)	2 (0.3)	~ ~	11.1 (0.06)
Portugal	88 (0.7)	509 (2.3)	11 (0.7)	504 (3.7)	2 (0.2)	~ ~	10.8 (0.04)
Iran, Islamic Rep. of	86 (0.9)	427 (4.0)	11 (0.9)	404 (11.5)	2 (0.3)	~ ~	11.0 (0.05)
Serbia	85 (0.9)	526 (3.9)	13 (0.7)	528 (5.6)	2 (0.3)	~ ~	10.9 (0.05)
Oman	85 (0.8)	443 (3.2)	12 (0.6)	390 (5.3)	3 (0.2)	335 (8.2)	10.7 (0.04)
Turkey	84 (0.7)	495 (3.0)	14 (0.7)	436 (5.8)	2 (0.2)	~ ~	10.7 (0.04)
Morocco	83 (1.0)	366 (5.0)	14 (0.9)	319 (8.7)	3 (0.3)	267 (21.4)	10.6 (0.06)
Indonesia	81 (1.0)	409 (4.9)	16 (0.8)	367 (7.1)	2 (0.3)	~ ~	10.6 (0.06)
Spain	81 (1.2)	520 (2.6)	15 (0.8)	514 (4.3)	4 (0.6)	513 (8.6)	10.6 (0.07)
Russian Federation	80 (0.9)	567 (3.0)	18 (0.8)	568 (4.7)	2 (0.3)	~ ~	10.4 (0.05)
Kuwait	79 (1.1)	349 (6.4)	17 (0.9)	309 (10.0)	3 (0.4)	262 (16.9)	10.6 (0.06)
Bahrain	79 (0.7)	472 (2.6)	15 (0.6)	431 (6.2)	6 (0.5)	400 (11.1)	10.5 (0.04)
Hungary	78 (1.0)	544 (3.2)	19 (0.8)	539 (5.2)	3 (0.3)	534 (9.6)	10.5 (0.05)
Lithuania	75 (0.9)	531 (2.6)	21 (0.8)	519 (3.7)	3 (0.3)	506 (9.9)	10.2 (0.05)
United States	75 (0.7)	551 (2.2)	19 (0.5)	543 (3.2)	6 (0.4)	526 (4.8)	10.3 (0.04)
Qatar	74 (1.0)	452 (3.8)	20 (0.9)	413 (6.8)	7 (0.4)	376 (9.3)	10.3 (0.05)
United Arab Emirates	73 (0.8)	469 (2.8)	21 (0.6)	420 (4.1)	6 (0.3)	394 (7.5)	10.3 (0.04)
Saudi Arabia	72 (1.3)	406 (5.1)	21 (1.3)	374 (7.2)	7 (0.5)	370 (9.2)	10.2 (0.06)
Northern Ireland	72 (1.2)	519 (2.7)	23 (0.9)	522 (3.3)	6 (0.8)	526 (7.4)	10.0 (0.06)
Chile	72 (1.1)	484 (2.8)	21 (0.8)	471 (3.7)	7 (0.5)	460 (5.8)	10.2 (0.05)
Norway (5)	72 (1.3)	538 (2.9)	23 (1.0)	539 (2.8)	5 (0.5)	536 (7.1)	10.0 (0.05)
Kazakhstan	72 (1.4)	557 (4.7)	27 (1.3)	532 (5.4)	1 (0.2)	~ ~	10.2 (0.07)
Ireland	71 (1.3)	529 (2.7)	24 (1.2)	533 (3.9)	5 (0.4)	520 (6.6)	10.0 (0.06)
Canada	71 (0.8)	528 (2.4)	24 (0.7)	525 (2.6)	5 (0.3)	518 (6.7)	10.1 (0.04)
Italy	70 (1.1)	519 (2.7)	25 (0.9)	519 (3.3)	4 (0.5)	495 (8.5)	9.9 (0.05)
England	70 (1.3)	534 (2.5)	24 (0.9)	544 (3.9)	6 (0.6)	535 (6.6)	9.9 (0.06)
Croatia	69 (1.3)	536 (2.2)	29 (1.2)	531 (3.6)	2 (0.4)	~ ~	10.2 (0.06)
Slovak Republic	69 (1.3)	518 (3.2)	25 (1.0)	529 (3.6)	6 (0.5)	522 (7.6)	10.0 (0.06)
Germany	68 (1.2)	532 (2.4)	27 (1.0)	536 (3.1)	5 (0.5)	528 (7.6)	9.9 (0.05)
Cyprus	65 (1.5)	485 (2.3)	22 (1.0)	482 (5.0)	12 (1.2)	478 (5.7)	9.7 (0.08)
Belgium (Flemish)	65 (1.4)	509 (2.4)	32 (1.2)	519 (2.9)	3 (0.4)	510 (6.6)	9.7 (0.05)
Australia	63 (1.0)	524 (3.2)	29 (0.8)	528 (3.6)	8 (0.5)	517 (5.5)	9.7 (0.05)
Poland	63 (1.4)	546 (2.6)	29 (1.0)	550 (3.2)	7 (0.7)	549 (6.1)	9.8 (0.06)
Netherlands	63 (1.0)	518 (2.8)	32 (1.0)	519 (3.5)	5 (0.5)	504 (6.3)	9.6 (0.04)
Slovenia	62 (1.0)	545 (2.8)	33 (1.0)	544 (3.0)	5 (0.5)	522 (6.5)	9.7 (0.05)
New Zealand	61 (1.0)	504 (3.4)	31 (1.0)	514 (2.8)	8 (0.5)	499 (6.1)	9.6 (0.05)
Czech Republic	60 (1.4)	531 (2.7)	33 (1.2)	541 (3.2)	6 (0.6)	535 (5.2)	9.5 (0.06)
Georgia	60 (1.5)	460 (4.3)	38 (1.5)	450 (4.1)	2 (0.2)	~ ~	10.0 (0.06)
Finland	60 (1.2)	556 (2.7)	34 (1.1)	554 (2.7)	6 (0.5)	532 (5.5)	9.4 (0.04)
France	60 (1.1)	487 (2.9)	34 (0.9)	492 (3.5)	5 (0.5)	480 (6.5)	9.6 (0.05)
Sweden	59 (1.1)	537 (4.2)	35 (1.0)	548 (3.5)	6 (0.5)	533 (8.4)	9.4 (0.04)
Chinese Taipei	58 (1.1)	559 (2.0)	31 (0.8)	553 (2.7)	11 (0.8)	541 (5.2)	9.5 (0.06)
Singapore	56 (0.9)	595 (3.9)	35 (0.7)	587 (4.2)	9 (0.6)	577 (5.8)	9.4 (0.04)
Hong Kong SAR	55 (1.2)	562 (3.6)	33 (0.9)	553 (3.0)	12 (0.8)	544 (4.8)	9.4 (0.06)
Denmark	49 (1.5)	530 (2.6)	38 (1.2)	526 (2.3)	13 (1.1)	523 (4.8)	9.0 (0.07)
Korea, Rep. of	33 (1.4)	597 (2.3)	50 (0.9)	587 (2.3)	17 (1.2)	583 (3.7)	8.4 (0.06)
Japan	28 (1.1)	571 (2.8)	49 (1.0)	572 (2.2)	23 (1.2)	562 (3.2)	8.1 (0.05)
International Avg.	69 (0.2)	510 (0.5)	25 (0.1)	500 (0.7)	6 (0.1)	489 (1.3)	

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.

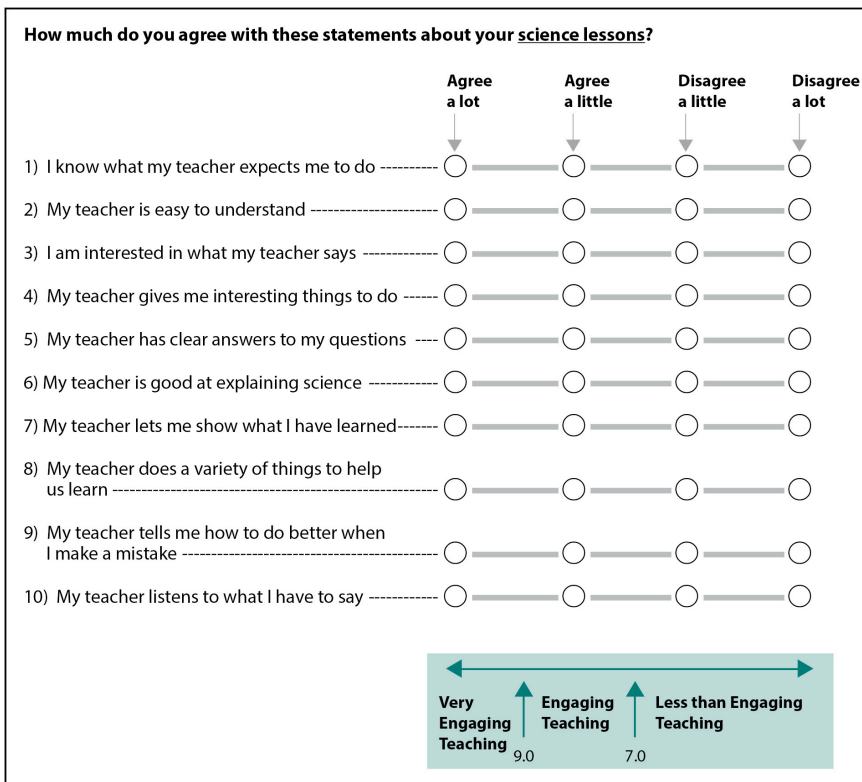
A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students.

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

Exhibit 10.1: Students' Views on Engaging Teaching in Science Lessons (Continued)

Country	Very Engaging Teaching		Engaging Teaching		Less than Engaging Teaching		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Benchmarking Participants							
Dubai, UAE	80 (0.8)	528 (2.0)	17 (0.7)	492 (3.9)	4 (0.3)	456 (8.6)	10.6 (0.04)
Buenos Aires, Argentina	78 (1.1)	426 (4.4)	18 (0.9)	425 (7.5)	4 (0.5)	432 (15.5)	10.4 (0.06)
Norway (4)	77 (1.1)	495 (2.2)	20 (0.9)	490 (3.3)	4 (0.5)	482 (9.8)	10.3 (0.06)
Florida, US	76 (1.6)	556 (5.0)	19 (1.4)	541 (6.0)	5 (0.5)	505 (10.3)	10.4 (0.07)
Ontario, Canada	70 (1.2)	533 (2.7)	24 (1.1)	528 (3.2)	5 (0.4)	524 (6.9)	10.0 (0.05)
Abu Dhabi, UAE	67 (1.7)	434 (6.2)	26 (1.4)	392 (8.0)	7 (0.5)	368 (12.4)	10.0 (0.08)
Quebec, Canada	66 (1.3)	525 (4.3)	29 (1.1)	525 (5.6)	5 (0.7)	525 (9.0)	9.9 (0.07)



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