

Exhibit 5.3.1: Instructional Clarity in Science Lessons

Students' Reports

About the Scale

Students were scored according to their responses to seven statements on the *Instructional Clarity in Science Lessons* scale. Cut scores divide the scale into three categories. Students who reported **High Clarity of Instruction** in their science lessons had a score at or above the cut score corresponding to “agreeing a lot” with four of the seven statements and “agreeing a little” with the other three, on average. Students who reported **Low Clarity of Instruction** in their science lessons had a score at or below the cut score corresponding to “disagreeing a little” with four of the seven statements and “agreeing a little” with the other three, on average. All other students reported **Moderate Clarity of Instruction** in their science lessons.

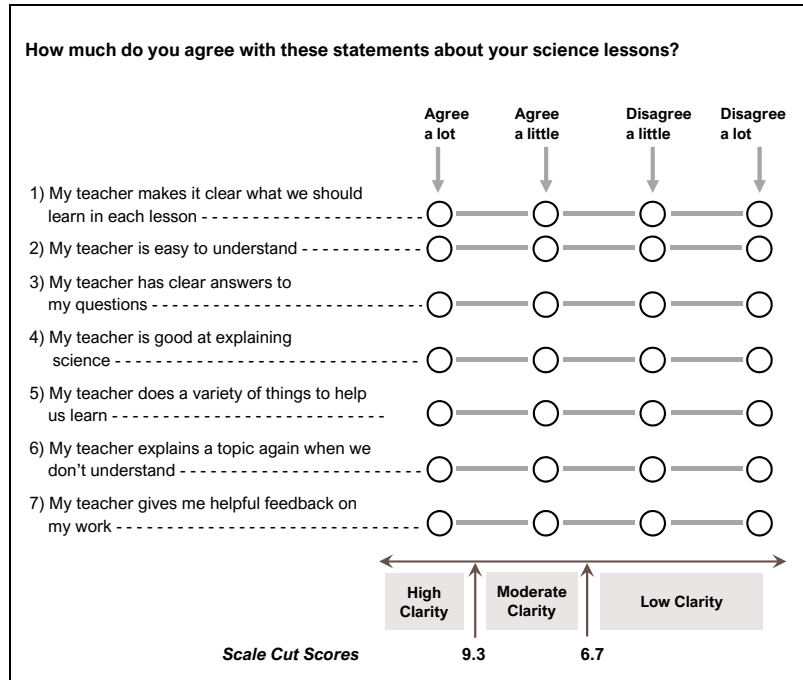


Exhibit 5.3.2: Instructional Clarity in Science Lessons and Average Achievement
Students' Reports in 2023 and 2024

Country	High Clarity of Instruction		Moderate Clarity of Instruction		Low Clarity of Instruction		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Georgia							
Grade 4	84 (0.9)	477 (3.1)	14 (0.8)	437 (4.5)	2 ~	~ ~	10.9 (0.05)
Grade 5	78 (1.2)	499 (3.5)	18 (1.1)	456 (5.9)	3 (0.4)	464 (10.0)	10.6 (0.05)
Italy							
Grade 4	64 (1.1)	516 (2.5)	30 (0.9)	505 (3.5)	5 (0.5)	496 (7.4)	9.8 (0.05)
Grade 5	57 (1.4)	548 (2.6)	34 (1.1)	544 (3.2)	8 (0.8)	524 (12.0)	9.5 (0.06)
Jordan							
Grade 4	76 (1.6)	436 (5.5)	18 (1.2)	394 (6.2)	6 (0.6)	346 (8.2)	10.5 (0.08)
Grade 5	73 (1.6)	454 (5.4)	19 (1.0)	400 (6.3)	8 (1.2)	383 (9.2)	10.3 (0.10)
Korea, Rep. of							
Grade 4	69 (1.3)	588 (2.7)	26 (1.0)	573 (4.7)	5 (0.6)	571 (6.0)	10.0 (0.06)
Grade 5	67 (1.3)	620 (2.2)	26 (1.0)	610 (3.8)	7 (0.7)	599 (5.8)	10.0 (0.06)
Kosovo							
Grade 4	86 (1.0)	415 (2.8)	12 (0.9)	370 (7.6)	2 ~	~ ~	11.0 (0.05)
Grade 5	84 (1.1)	436 (3.0)	14 (0.9)	393 (6.5)	2 ~	~ ~	10.9 (0.05)
Montenegro							
Grade 4	74 (0.8)	474 (1.9)	22 (0.8)	443 (3.6)	4 (0.3)	410 (7.9)	10.3 (0.03)
Grade 5	69 (1.0)	496 (1.7)	25 (1.0)	462 (3.9)	6 (0.4)	457 (6.1)	10.0 (0.04)
North Macedonia							
Grade 4	85 (0.9)	455 (3.5)	12 (0.8)	411 (5.4)	3 (0.3)	381 (10.4)	10.9 (0.04)
Grade 5	79 (1.0)	465 (3.2)	16 (0.8)	435 (5.7)	5 (0.5)	415 (9.5)	10.6 (0.05)
Slovenia							
Grade 4	60 (1.1)	531 (2.2)	35 (1.0)	527 (2.7)	4 (0.3)	505 (6.3)	9.7 (0.04)
Grade 5	50 (1.1)	570 (2.1)	43 (1.0)	565 (2.3)	7 (0.5)	543 (5.4)	9.3 (0.05)
Sweden							
Grade 4	55 (1.5)	535 (3.8)	39 (1.2)	537 (3.5)	6 (0.5)	514 (8.5)	9.5 (0.06)
Grade 5	47 (1.6)	568 (3.3)	43 (1.2)	566 (3.6)	11 (1.0)	543 (6.7)	9.1 (0.08)

This TIMSS context questionnaire scale was established in 2023 based on the combined response distribution of countries that participated in TIMSS 2023. 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 result.

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

