

Exhibit 7.2.1: Students Value Environmental Preservation

About the Scale

Students were scored according to their reports of how much they agreed with six statements about preservation of the environment on the *Students Value Environmental Preservation* scale. Cut scores divide the scale into three categories. Students who **Very Strongly Value** environmental preservation had a score at or above the cut score corresponding to “agreeing a lot” with three of the six statements and “agreeing a little” with the other three, on average. Students who **Somewhat Value** environmental preservation had a score at or below the cut score corresponding to “agreeing a little” with three of the six statements and “disagreeing a little” with the other three, on average. All other students **Strongly Value** environmental preservation.

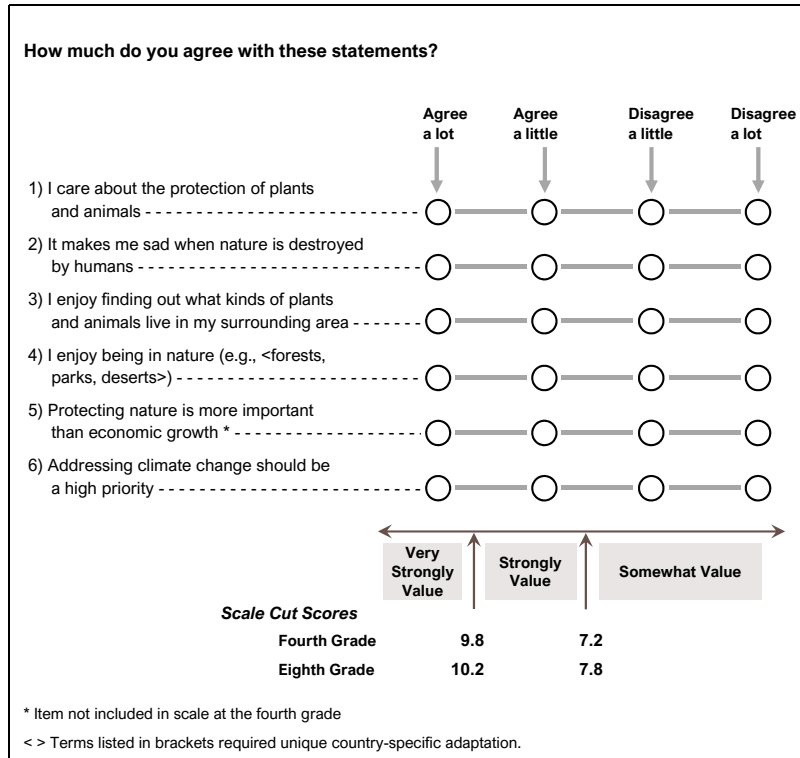


Exhibit 7.2.2: Students Value Environmental Preservation

Country	Very Strongly Value		Strongly Value		Somewhat Value		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	77 (1.3)	494 (5.5)	21 (1.1)	475 (8.5)	2 ~	~ ~	11.0 (0.06)
Armenia	55 (1.1)	479 (5.3)	40 (0.9)	465 (5.7)	5 (0.4)	426 (13.8)	10.1 (0.05)
Australia	53 (1.1)	557 (3.8)	41 (1.0)	552 (4.2)	6 (0.4)	526 (8.0)	9.9 (0.04)
Azerbaijan	53 (1.1)	433 (4.3)	41 (0.9)	404 (5.3)	6 (0.4)	370 (8.8)	9.9 (0.04)
Bahrain	54 (1.0)	493 (4.4)	38 (0.9)	465 (4.6)	8 (0.5)	421 (9.8)	9.9 (0.05)
Belgium (Flemish)	54 (1.1)	505 (4.2)	39 (0.9)	480 (3.6)	7 (0.5)	435 (8.2)	9.9 (0.05)
Belgium (French)	54 (1.0)	500 (3.3)	38 (0.9)	467 (3.3)	7 (0.4)	443 (7.5)	10.0 (0.04)
Bosnia & Herzegovina	61 (1.4)	452 (4.9)	36 (1.3)	451 (6.3)	3 (0.4)	454 (15.8)	10.3 (0.05)
Brazil	53 (0.7)	454 (5.5)	40 (0.6)	432 (5.3)	7 (0.4)	375 (8.2)	9.9 (0.03)
Bulgaria	73 (1.3)	548 (4.6)	24 (1.1)	504 (10.5)	3 (0.5)	414 (31.8)	10.9 (0.07)
Canada	60 (0.7)	537 (2.2)	35 (0.6)	512 (2.8)	5 (0.2)	480 (6.6)	10.2 (0.03)
Chile	61 (1.0)	494 (3.5)	33 (0.9)	482 (3.7)	5 (0.4)	433 (8.5)	10.4 (0.04)
Chinese Taipei	53 (0.9)	569 (2.4)	40 (0.9)	566 (3.0)	8 (0.5)	559 (6.4)	9.8 (0.04)
Cyprus	69 (0.9)	487 (3.1)	28 (0.9)	470 (4.4)	3 (0.3)	442 (11.6)	10.6 (0.04)
Czech Republic	51 (1.0)	527 (3.5)	43 (0.9)	516 (3.2)	5 (0.3)	494 (6.2)	9.8 (0.04)
Denmark	37 (1.0)	552 (3.1)	50 (1.0)	536 (3.4)	13 (0.8)	497 (8.5)	9.1 (0.04)
England	57 (1.3)	572 (4.7)	36 (1.1)	548 (3.7)	7 (0.6)	518 (8.5)	10.0 (0.06)
Finland	49 (1.0)	557 (3.4)	43 (0.8)	538 (4.2)	8 (0.5)	502 (6.9)	9.6 (0.04)
France	54 (1.1)	514 (3.2)	40 (1.1)	484 (5.1)	6 (0.5)	450 (8.1)	10.0 (0.05)
Georgia	65 (1.3)	474 (5.1)	33 (1.2)	447 (4.7)	2 ~	~ ~	10.5 (0.05)
Germany	56 (0.9)	531 (3.0)	38 (0.8)	501 (4.0)	6 (0.4)	479 (8.6)	10.1 (0.04)
Hong Kong SAR	50 (1.1)	549 (4.9)	42 (0.8)	542 (5.1)	9 (0.6)	525 (9.4)	9.8 (0.05)
Hungary	59 (1.0)	549 (3.6)	36 (0.9)	522 (5.2)	5 (0.4)	483 (8.9)	10.2 (0.04)
Iran, Islamic Rep. of	72 (1.0)	440 (5.3)	25 (0.9)	410 (6.3)	3 (0.4)	364 (17.9)	10.8 (0.05)
Ireland	64 (1.0)	549 (3.7)	32 (0.9)	521 (5.0)	4 (0.4)	483 (14.1)	10.3 (0.04)
Italy	61 (0.9)	533 (3.5)	35 (0.9)	499 (3.3)	4 (0.3)	469 (10.0)	10.4 (0.04)
Japan	48 (1.2)	551 (3.9)	47 (1.1)	534 (4.7)	5 (0.4)	531 (7.7)	9.7 (0.04)
Jordan	49 (1.3)	424 (5.6)	41 (1.0)	405 (6.5)	10 (0.8)	392 (8.6)	9.9 (0.07)
Kazakhstan	46 (1.2)	479 (4.6)	49 (1.0)	445 (4.9)	5 (0.4)	414 (9.2)	9.6 (0.04)
Korea, Rep. of	34 (1.0)	585 (5.2)	54 (1.0)	573 (4.0)	12 (0.6)	560 (8.1)	9.1 (0.03)
Kosovo	62 (1.0)	413 (4.2)	35 (1.0)	389 (5.2)	3 (0.4)	356 (11.6)	10.2 (0.05)
Kuwait	54 (1.0)	417 (6.2)	40 (0.9)	380 (6.3)	6 (0.5)	322 (12.9)	10.0 (0.05)
Latvia	52 (1.3)	513 (3.1)	43 (1.2)	497 (4.9)	5 (0.5)	480 (10.6)	9.8 (0.05)
Lithuania	63 (0.9)	529 (3.2)	34 (0.9)	512 (5.4)	4 (0.3)	478 (11.2)	10.2 (0.03)
Macao SAR	54 (0.6)	533 (2.4)	40 (0.6)	524 (2.6)	6 (0.3)	516 (8.1)	9.9 (0.03)
Montenegro	63 (0.8)	481 (2.9)	32 (0.8)	455 (3.9)	5 (0.4)	428 (10.2)	10.4 (0.03)
Morocco	61 (1.7)	411 (6.5)	34 (1.5)	367 (7.6)	6 (0.4)	354 (10.0)	10.5 (0.09)
Netherlands	47 (1.2)	531 (3.1)	43 (1.2)	516 (2.8)	10 (0.7)	482 (7.3)	9.6 (0.06)
New Zealand	53 (0.9)	533 (3.4)	40 (0.8)	511 (3.7)	7 (0.5)	487 (9.2)	9.9 (0.04)
North Macedonia	68 (1.0)	460 (4.1)	27 (0.8)	420 (5.7)	4 (0.4)	381 (11.4)	10.6 (0.05)
Norway (5)	37 (0.9)	544 (3.2)	51 (0.7)	537 (4.0)	12 (0.6)	512 (6.3)	9.1 (0.04)
Oman	51 (0.8)	450 (4.6)	40 (0.8)	415 (5.0)	9 (0.5)	371 (8.3)	9.9 (0.04)
Poland	51 (1.0)	560 (3.2)	43 (0.9)	557 (2.8)	5 (0.4)	538 (7.3)	9.8 (0.04)
Portugal	73 (0.9)	523 (4.2)	25 (0.8)	512 (3.8)	2 ~	~ ~	10.7 (0.04)
Qatar	51 (0.9)	492 (4.0)	39 (0.8)	454 (4.4)	9 (0.4)	397 (9.6)	9.8 (0.04)
Romania	72 (1.2)	531 (5.2)	26 (1.1)	520 (6.3)	3 (0.4)	480 (19.4)	10.8 (0.05)
Saudi Arabia	47 (1.1)	456 (3.9)	40 (0.9)	427 (5.0)	13 (0.6)	396 (5.2)	9.6 (0.05)
Serbia	63 (1.2)	524 (3.8)	33 (1.1)	513 (3.5)	4 (0.4)	491 (9.3)	10.3 (0.05)
Singapore	54 (0.7)	588 (4.1)	39 (0.6)	570 (4.8)	7 (0.4)	550 (7.0)	10.0 (0.03)
Slovak Republic	52 (1.3)	523 (4.9)	42 (1.1)	503 (5.5)	6 (0.5)	462 (12.5)	9.8 (0.05)
Slovenia	57 (1.1)	524 (4.4)	39 (1.0)	522 (4.1)	4 (0.3)	483 (8.6)	10.1 (0.04)
Spain	63 (0.8)	520 (2.6)	33 (0.7)	500 (3.4)	4 (0.3)	457 (7.4)	10.4 (0.03)
Sweden	40 (1.0)	542 (4.7)	48 (0.9)	524 (4.6)	13 (0.6)	493 (6.3)	9.2 (0.04)
Türkiye (5)	75 (0.9)	559 (3.9)	22 (0.8)	540 (6.7)	2 ~	~ ~	10.8 (0.04)
United Arab Emirates	59 (0.4)	523 (1.7)	35 (0.3)	475 (2.6)	6 (0.2)	407 (5.0)	10.1 (0.02)
United States	50 (0.8)	557 (3.3)	42 (0.8)	529 (3.5)	8 (0.4)	490 (5.9)	9.7 (0.03)
Uzbekistan	59 (1.4)	433 (3.5)	36 (1.2)	405 (4.0)	5 (0.4)	369 (9.6)	10.3 (0.06)
International Average	56 (0.1)	510 (0.5)	38 (0.1)	488 (0.6)	6 (0.1)	455 (1.5)	
South Africa (5)	--	--	--	--	--	--	9.1 (0.05)
Benchmarking Participants							
Ontario, Canada	60 (1.0)	546 (3.5)	35 (1.0)	523 (4.4)	5 (0.4)	489 (9.4)	10.2 (0.04)
Quebec, Canada	56 (1.1)	517 (3.2)	39 (1.0)	493 (3.6)	6 (0.4)	469 (8.8)	10.0 (0.04)
Abu Dhabi, UAE	51 (0.8)	482 (2.7)	39 (0.6)	427 (4.1)	9 (0.4)	363 (5.8)	9.8 (0.04)
Dubai, UAE	65 (0.7)	579 (2.0)	31 (0.7)	552 (3.0)	4 (0.3)	506 (8.7)	10.3 (0.03)
Sharjah, UAE	62 (0.9)	521 (4.1)	32 (0.7)	480 (5.2)	5 (0.4)	420 (9.3)	10.3 (0.05)

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.

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

A dash (-) indicates comparable data not available because average achievement could not be accurately estimated. A tilde (~) indicates insufficient data to report result.

Exhibit 7.2.3: Students Value Environmental Preservation

Country	Very Strongly Value		Strongly Value		Somewhat Value		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Australia	38 (0.9)	540 (4.2)	45 (0.9)	519 (4.0)	17 (0.8)	497 (5.3)	9.6 (0.04)
Austria	33 (0.8)	526 (4.3)	49 (0.9)	502 (3.4)	18 (0.8)	464 (6.2)	9.4 (0.03)
Azerbaijan	54 (1.0)	420 (3.4)	37 (0.8)	413 (4.3)	9 (0.5)	399 (7.7)	10.3 (0.04)
Bahrain	53 (0.8)	455 (3.0)	37 (0.8)	442 (3.7)	10 (0.6)	426 (7.9)	10.2 (0.04)
Brazil	56 (0.8)	430 (3.2)	37 (0.8)	434 (4.4)	7 (0.4)	410 (6.4)	10.4 (0.03)
Chile	55 (1.0)	469 (4.2)	39 (0.9)	460 (3.4)	6 (0.5)	426 (9.3)	10.5 (0.04)
Chinese Taipei	37 (0.9)	557 (4.0)	50 (0.8)	553 (2.5)	13 (0.6)	554 (6.8)	9.7 (0.04)
Cyprus	58 (1.0)	476 (4.3)	34 (0.8)	466 (4.3)	8 (0.5)	448 (7.1)	10.5 (0.04)
Czech Republic	30 (0.7)	530 (2.7)	54 (0.7)	515 (2.3)	16 (0.5)	504 (3.7)	9.3 (0.02)
England	35 (1.1)	550 (5.6)	45 (0.9)	537 (5.3)	20 (0.9)	501 (6.3)	9.4 (0.05)
Finland	24 (0.8)	548 (6.1)	49 (0.9)	545 (3.0)	27 (0.9)	519 (3.6)	9.0 (0.04)
France	37 (1.0)	511 (4.3)	48 (1.0)	494 (4.1)	15 (0.9)	470 (4.5)	9.6 (0.04)
Georgia	62 (0.9)	443 (3.2)	33 (0.8)	446 (3.8)	5 (0.5)	424 (6.9)	10.6 (0.04)
Hong Kong SAR	37 (1.1)	536 (5.6)	49 (0.9)	531 (5.6)	15 (0.7)	535 (9.4)	9.7 (0.06)
Hungary	43 (1.0)	534 (3.7)	46 (0.9)	515 (4.5)	11 (0.6)	483 (7.4)	9.9 (0.04)
Iran, Islamic Rep. of	65 (0.7)	414 (4.0)	30 (0.7)	400 (6.7)	5 (0.3)	365 (10.8)	10.6 (0.03)
Ireland	44 (1.3)	545 (3.7)	43 (1.3)	527 (4.6)	13 (0.5)	504 (6.8)	9.9 (0.05)
Israel	36 (0.9)	489 (5.8)	44 (0.7)	488 (3.9)	21 (0.7)	455 (4.5)	9.5 (0.04)
Italy	48 (1.1)	517 (3.7)	43 (1.0)	500 (4.6)	10 (0.5)	465 (6.9)	10.0 (0.04)
Japan	32 (0.8)	553 (4.7)	55 (1.0)	552 (3.8)	12 (0.5)	542 (5.8)	9.5 (0.03)
Jordan	52 (1.0)	427 (3.6)	36 (0.7)	409 (4.6)	12 (0.6)	375 (7.8)	10.2 (0.04)
Kazakhstan	46 (0.9)	444 (3.5)	47 (0.8)	434 (3.2)	7 (0.4)	426 (7.1)	10.1 (0.03)
Korea, Rep. of	27 (0.8)	554 (5.0)	50 (0.9)	550 (3.1)	23 (0.6)	534 (5.1)	9.2 (0.03)
Kuwait	59 (1.1)	429 (4.8)	34 (0.9)	420 (7.5)	8 (0.5)	391 (14.1)	10.4 (0.04)
Lithuania	58 (0.8)	515 (3.3)	35 (0.8)	506 (3.6)	7 (0.4)	490 (6.4)	10.5 (0.03)
Malaysia	46 (0.9)	456 (4.5)	46 (0.8)	415 (3.8)	8 (0.4)	343 (6.3)	10.0 (0.03)
Malta	56 (0.8)	511 (2.3)	35 (0.8)	492 (3.3)	9 (0.5)	465 (8.0)	10.4 (0.03)
Morocco	62 (0.9)	334 (3.4)	30 (0.8)	333 (4.3)	7 (0.4)	326 (7.6)	10.6 (0.03)
Norway (9)	23 (0.7)	517 (4.1)	50 (0.8)	518 (3.2)	26 (0.7)	480 (4.6)	8.9 (0.03)
Oman	47 (0.9)	471 (3.5)	41 (0.8)	451 (2.9)	13 (0.5)	412 (5.8)	9.9 (0.03)
Palestinian Nat'l Auth.	52 (0.8)	393 (2.7)	35 (0.7)	361 (3.3)	13 (0.6)	326 (7.0)	10.2 (0.04)
Portugal	62 (0.9)	522 (2.6)	33 (0.8)	523 (4.4)	5 (0.3)	492 (9.3)	10.7 (0.03)
Qatar	55 (1.4)	490 (4.3)	34 (1.1)	478 (5.4)	11 (0.7)	444 (9.1)	10.3 (0.06)
Romania	69 (1.0)	467 (4.1)	24 (0.8)	461 (5.8)	6 (0.6)	445 (13.8)	11.0 (0.04)
Saudi Arabia	58 (0.8)	421 (4.1)	33 (0.7)	418 (3.9)	9 (0.4)	380 (6.9)	10.5 (0.03)
Singapore	42 (0.9)	602 (5.8)	46 (0.7)	592 (6.0)	12 (0.7)	573 (10.2)	9.9 (0.04)
South Africa (9)	40 (0.8)	378 (4.8)	49 (0.6)	347 (4.7)	11 (0.5)	338 (7.9)	9.6 (0.03)
Sweden	28 (1.1)	559 (4.7)	46 (0.9)	546 (4.7)	26 (1.0)	504 (5.1)	9.1 (0.05)
Türkiye	69 (1.0)	525 (3.3)	27 (0.9)	529 (5.5)	4 (0.4)	511 (12.6)	10.9 (0.04)
United Arab Emirates	58 (0.5)	487 (2.6)	33 (0.5)	483 (2.3)	9 (0.2)	449 (4.0)	10.6 (0.02)
United States	46 (0.8)	531 (4.6)	42 (0.6)	516 (4.4)	13 (0.5)	492 (5.3)	10.0 (0.03)
Uzbekistan	68 (1.0)	399 (3.5)	28 (0.9)	386 (4.5)	4 (0.4)	347 (10.2)	10.8 (0.05)
International Average	48 (0.1)	488 (0.6)	41 (0.1)	476 (0.7)	12 (0.1)	451 (1.2)	
Cote d'Ivoire	--	--	--	--	--	--	9.5 (0.05)
Benchmarking Participants							
Abu Dhabi, UAE	53 (0.8)	459 (4.2)	36 (0.7)	442 (3.9)	11 (0.4)	397 (5.6)	10.3 (0.03)
Dubai, UAE	53 (0.9)	542 (3.4)	37 (0.8)	542 (3.6)	9 (0.5)	525 (5.4)	10.3 (0.04)
Sharjah, UAE	68 (1.7)	492 (6.6)	26 (1.3)	486 (4.3)	6 (0.5)	461 (7.7)	11.0 (0.08)

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