

SECTION 7

Students' Reading Attitudes and Behaviors

The results in this section about Students' Reading Attitudes and Behaviors are based on students' responses to the PIRLS 2021 Student Questionnaire. The TIMSS & PIRLS International Study Center conducted a series of analyses to establish that there was little or no discernable impact in the responses to the Student Questionnaire due to COVID-19 or delayed testing. The exhibits include the results for all 57 countries and 8 benchmarking entities that participated in PIRLS 2021 (with the 14 countries that delayed testing highlighted in pink).

Many of the PIRLS 2021 Context Questionnaire items were combined into scales measuring a single underlying latent construct related to reading achievement. This section provides results for two scales: *Students Like Reading* and *Students Confident in Reading*.

PIRLS used item response theory (IRT) scaling methods, specifically the Rasch partial credit model (PCM), to place items on a scale and produce scale scores (see Chapter 15 in [Methods and Procedures: PIRLS 2021 Technical Report](#)). Each context questionnaire scale enabled students to be classified into regions corresponding to high, middle, and low values on the construct. The "About the Scale" tab associated with each exhibit contains the questionnaire items. It also describes how the three regions reported in the exhibit were defined in terms of combinations of response categories.

PIRLS assessments have contributed to a considerable body of research showing that students with positive attitudes toward reading typically have higher reading achievement. However, it is unclear whether students' positive attitudes toward reading lead to higher reading achievement or whether their positive attitudes result from higher reading achievement. There is evidence in the reading research literature that attitudes and reading achievement have a reciprocal rather than a causal relationship.

Students Like Reading

To create the *Students Like Reading* scale, PIRLS asked students how much they agreed with a series of eight statements about their attitudes toward reading and two items about how often they read outside of school (the items are provided in “About the Scale”). PIRLS used IRT scaling to summarize the results and then classified students into three regions on the scale, “very much like reading,” “somewhat like reading,” and “do not like reading.”

Exhibit 7.1 presents the *Students Like Reading* scale results for the PIRLS 2021 countries, including the percentages of students classified into the three levels of attitudes toward reading (from positive to negative) together with their average achievement. The results are ordered by the percentage of students who reported they “very much like reading” (from highest to lowest). In general, fourth grade students had positive attitudes about reading—42 percent, on average, reported they “very much like reading” and another 40 percent reported that they “somewhat like reading.” However, as a matter of some concern in today’s information-driven society, 18 percent of these young students, on average, responded negatively that they “do not like reading.”

There was a modest relationship between liking reading and reading achievement at the fourth grade. Students who responded that they “do not like reading” had lower average reading achievement (491) than students who “very much like reading” (513) and students who “somewhat like reading” (501).

Exhibit 7.1: Students Like Reading

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

☐ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country	Very Much Like Reading		Somewhat Like Reading		Do Not Like Reading		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Kosovo	85 (0.9)	426 (3.0)	13 (0.8)	407 (5.9)	2 ~	~ ~	12.4 (0.05)
Uzbekistan	83 (0.9)	446 (2.8)	15 (0.8)	403 (5.2)	2 ~	~ ~	12.5 (0.07)
Albania	81 (0.7)	517 (3.2)	17 (0.6)	503 (5.0)	2 ~	~ ~	12.1 (0.05)
North Macedonia	70 (1.3)	446 (6.4)	24 (1.0)	443 (5.2)	6 (0.6)	435 (10.2)	11.5 (0.07)
Iran, Islamic Rep. of ☒	66 (1.2)	424 (4.2)	29 (1.0)	400 (7.7)	5 (0.6)	356 (15.1)	11.2 (0.06)
Azerbaijan	63 (1.1)	446 (3.8)	32 (0.9)	439 (4.5)	5 (0.5)	421 (10.3)	11.2 (0.05)
Turkiye	62 (1.2)	503 (3.3)	32 (1.0)	486 (4.9)	6 (0.4)	487 (6.4)	11.2 (0.06)
Morocco	62 (1.7)	388 (4.4)	33 (1.6)	353 (6.8)	5 (0.9)	318 (10.6)	11.1 (0.08)
Saudi Arabia	61 (1.2)	462 (3.6)	32 (1.1)	432 (5.2)	7 (0.5)	438 (6.7)	11.1 (0.06)
Portugal	60 (1.0)	520 (2.6)	34 (0.8)	518 (3.0)	6 (0.4)	525 (4.9)	11.0 (0.04)
Montenegro	59 (0.8)	495 (2.1)	33 (0.7)	483 (2.3)	8 (0.6)	472 (4.4)	11.0 (0.04)
Georgia	59 (1.2)	498 (2.9)	34 (0.9)	493 (2.9)	7 (0.7)	504 (8.6)	10.9 (0.05)
Oman	58 (1.1)	447 (4.0)	36 (1.0)	415 (4.6)	6 (0.4)	387 (8.5)	10.9 (0.06)
Jordan	55 (1.5)	394 (5.7)	34 (1.1)	369 (6.7)	10 (1.1)	356 (13.3)	10.7 (0.07)
Spain	54 (1.0)	527 (2.6)	35 (0.8)	517 (2.7)	11 (0.5)	509 (3.8)	10.7 (0.05)
Kazakhstan	53 (1.0)	501 (2.6)	39 (0.8)	504 (3.4)	7 (0.4)	518 (5.8)	10.6 (0.04)
United Arab Emirates	53 (0.5)	501 (1.9)	37 (0.4)	469 (2.5)	10 (0.2)	464 (3.8)	10.6 (0.02)
Bahrain	51 (1.0)	474 (3.7)	39 (0.9)	452 (3.9)	10 (0.5)	437 (6.9)	10.6 (0.04)
Bulgaria	51 (1.4)	548 (3.4)	37 (1.3)	541 (4.2)	12 (0.7)	511 (5.5)	10.6 (0.06)
South Africa ☒	50 (1.6)	312 (4.6)	40 (1.3)	275 (5.5)	11 (0.6)	262 (10.5)	10.6 (0.09)
Qatar	49 (1.1)	500 (4.0)	40 (0.9)	477 (4.6)	11 (0.6)	467 (5.5)	10.5 (0.05)
Brazil ☒	47 (1.6)	425 (6.0)	39 (1.3)	426 (6.2)	14 (0.8)	436 (7.9)	10.4 (0.07)
Malta	46 (1.2)	516 (3.6)	39 (0.9)	517 (3.5)	15 (0.9)	510 (4.1)	10.3 (0.06)
Serbia	45 (1.5)	516 (4.3)	40 (1.5)	514 (3.4)	16 (1.1)	508 (4.6)	10.2 (0.06)
Egypt	44 (1.6)	406 (5.8)	45 (1.5)	370 (6.2)	12 (0.7)	346 (8.1)	10.3 (0.06)
Italy	41 (0.9)	541 (2.6)	42 (0.8)	536 (2.6)	17 (0.7)	533 (3.0)	10.0 (0.04)
Israel ☒	40 (1.0)	519 (2.6)	41 (0.8)	507 (2.9)	19 (0.8)	507 (3.1)	9.9 (0.05)
Chinese Taipei	39 (1.0)	560 (2.3)	43 (0.9)	537 (2.5)	19 (0.8)	526 (3.2)	9.9 (0.05)
New Zealand	38 (0.8)	532 (3.2)	44 (0.7)	521 (3.0)	18 (0.7)	511 (2.8)	9.9 (0.04)
Cyprus	37 (1.0)	517 (3.2)	41 (0.7)	511 (3.8)	21 (0.9)	501 (3.7)	9.8 (0.05)
France	36 (1.1)	526 (2.8)	47 (0.9)	514 (2.8)	17 (0.7)	490 (3.7)	9.9 (0.05)
Russian Federation	35 (1.4)	564 (5.6)	47 (1.0)	570 (3.5)	18 (0.9)	567 (3.4)	9.8 (0.06)
Germany	34 (0.9)	544 (3.2)	44 (0.9)	530 (2.5)	22 (0.7)	509 (3.1)	9.6 (0.04)
Singapore	33 (0.8)	607 (4.1)	47 (0.8)	586 (3.3)	20 (0.6)	560 (3.8)	9.6 (0.03)
Austria	32 (1.1)	539 (2.6)	46 (1.0)	530 (2.9)	22 (1.1)	517 (3.1)	9.6 (0.05)
Belgium (French)	31 (1.1)	498 (3.9)	45 (0.9)	498 (3.2)	24 (1.0)	484 (3.2)	9.6 (0.06)
Ireland	31 (1.0)	593 (3.6)	45 (0.9)	578 (2.9)	23 (0.9)	556 (3.1)	9.5 (0.04)
Macao SAR	31 (0.6)	553 (1.9)	48 (0.6)	535 (1.6)	21 (0.5)	512 (2.7)	9.6 (0.02)
Hong Kong SAR	30 (0.9)	590 (2.9)	47 (0.8)	573 (3.0)	23 (0.8)	550 (4.0)	9.6 (0.05)
Slovak Republic	29 (1.0)	530 (3.4)	45 (1.1)	534 (3.5)	26 (1.0)	523 (3.7)	9.4 (0.04)
Australia ☒	29 (0.9)	562 (3.8)	45 (1.0)	542 (2.8)	26 (0.9)	517 (3.2)	9.4 (0.05)
England ☒	29 (0.8)	570 (3.7)	48 (0.9)	562 (2.8)	24 (1.1)	536 (3.4)	9.4 (0.05)
Northern Ireland	28 (1.0)	585 (3.7)	47 (0.9)	570 (2.8)	25 (1.0)	542 (3.2)	9.4 (0.05)
Slovenia	28 (0.7)	530 (2.8)	50 (0.9)	521 (2.3)	23 (1.0)	507 (2.8)	9.4 (0.04)
Czech Republic	27 (1.0)	540 (4.1)	49 (1.1)	545 (2.3)	23 (0.8)	530 (3.0)	9.4 (0.04)
Belgium (Flemish)	27 (0.9)	516 (3.3)	43 (0.7)	512 (2.8)	29 (1.0)	505 (2.6)	9.3 (0.05)
Hungary	27 (1.0)	555 (4.7)	46 (0.9)	539 (4.0)	28 (0.9)	527 (3.7)	9.3 (0.04)
United States	25 (1.4)	559 (8.6)	50 (1.4)	557 (6.3)	24 (1.4)	530 (6.7)	9.4 (0.06)
Finland	23 (0.8)	563 (3.9)	46 (0.8)	555 (2.6)	30 (0.9)	533 (2.5)	9.1 (0.04)
Poland	23 (1.1)	555 (4.0)	49 (1.2)	556 (2.5)	28 (1.0)	536 (3.3)	9.2 (0.05)
Croatia	23 (0.9)	560 (4.5)	52 (1.1)	557 (2.7)	25 (1.1)	554 (3.5)	9.3 (0.05)
Lithuania	22 (0.8)	555 (3.6)	48 (0.9)	555 (2.8)	30 (1.0)	548 (2.5)	9.1 (0.04)
Sweden	18 (0.6)	544 (4.1)	47 (0.9)	550 (2.6)	35 (0.9)	539 (2.5)	8.8 (0.04)
Netherlands	17 (0.9)	543 (3.9)	46 (1.0)	535 (2.7)	37 (1.1)	511 (3.4)	8.8 (0.04)
Latvia	16 (0.8)	538 (5.3)	47 (1.2)	533 (2.7)	37 (1.0)	520 (2.8)	8.8 (0.03)
Denmark	14 (0.7)	566 (4.2)	50 (0.9)	545 (2.5)	36 (1.1)	524 (3.0)	8.7 (0.04)
Norway (5)	13 (0.6)	556 (4.2)	46 (0.8)	547 (2.4)	41 (1.1)	528 (2.4)	8.6 (0.04)
International Average	42 (0.1)	513 (0.5)	40 (0.1)	501 (0.5)	18 (0.1)	491 (0.8)	
Benchmarking Participants							
Dubai, UAE	50 (0.9)	555 (2.2)	39 (0.7)	552 (2.4)	11 (0.4)	552 (4.1)	10.5 (0.04)
South Africa (6) ☒	47 (1.2)	413 (3.7)	42 (0.9)	362 (5.6)	11 (0.8)	360 (11.3)	10.4 (0.05)
Abu Dhabi, UAE	46 (0.9)	474 (3.9)	41 (0.7)	416 (4.3)	13 (0.4)	414 (5.8)	10.3 (0.04)
Alberta, Canada	40 (1.4)	548 (4.2)	43 (1.3)	542 (4.1)	17 (0.8)	523 (4.7)	10.0 (0.06)
British Columbia, Canada	37 (1.1)	547 (3.7)	45 (1.1)	536 (4.4)	18 (1.0)	515 (4.7)	9.9 (0.05)
Newfoundland & Labrador, Canada	36 (1.4)	532 (4.4)	43 (1.1)	528 (3.4)	20 (1.0)	507 (5.3)	9.8 (0.08)
Quebec, Canada	36 (1.1)	559 (3.1)	45 (1.0)	552 (3.1)	19 (1.0)	536 (3.7)	9.8 (0.05)
Moscow City, Russian Federation	30 (1.0)	605 (2.5)	47 (0.7)	598 (2.6)	23 (0.9)	590 (2.6)	9.6 (0.05)

This PIRLS context questionnaire scale was established in 2016 based on the combined response distribution of countries that participated in PIRLS 2016. 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 tilde (~) indicates insufficient data to report result.

Exhibit 7.1: Students Like Reading

Students' Reports

About the Scale

Students were scored on the *Students Like Reading* scale according to their degree of agreement with eight statements and how often they did two reading activities outside of school. Students who **Very Much Like Reading** had a score at or above the cut score corresponding to "agreeing a lot" with four of the eight statements and "agreeing a little" with the other four, as well as doing one of the two reading activities outside of school "every day or almost every day," on average. Students who **Do Not Like Reading** had a score at or below the cut score corresponding to "disagreeing a little" with four of the eight statements and "agreeing a little" with the other four, as well as doing one of the two the reading activities only "once or twice a month," on average. All other students **Somewhat Like Reading**.

What do you think about reading? Tell how much you agree with each of these statements.

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
1) I like talking about what I read with other people -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) I would be happy if someone gave me a book as a present -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) I think reading is boring ^R -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) I would like to have more time for reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) I enjoy reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) I learn a lot from reading -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7) I like to read things that make me think -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8) I like it when a book helps me imagine other worlds -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

^R Reverse coded

Very Much Like Somewhat Like Do Not Like

10.4 8.3

How often do you do these things outside of school?

	Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
9) I read for fun -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10) I read to find out about things I want to learn -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Very Much Like Somewhat Like Do Not Like

10.4 8.3

Scale Cut Scores

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2021
 Downloaded from <https://pirls2021.org/results>

Exhibit 7.2 reports results for the *Students Like Reading* scale by gender, with countries ordered according to the difference between the percentage of girls and the percentage of boys who “very much like reading” from lowest to highest. Across countries in general, higher percentages of girls than boys responded that they “very much like reading,” on average—46 percent of girls vs. 37 percent of boys.

Exhibit 7.2: Students Like Reading by Gender

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country		Very Much Like Reading		Somewhat Like Reading		Do Not Like Reading		Gender Difference in Percent of Students who Very Much Like Reading	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	More Girls Than Boys	More Boys Than Girls
Brazil ☒	Girls	48 (1.6)	438 (6.2)	40 (1.4)	438 (7.6)	12 (1.0)	433 (12.6)		
	Boys	47 (2.2)	411 (7.4)	38 (1.8)	414 (8.3)	15 (1.1)	438 (10.3)		
Norway (5)	Girls	15 (0.9)	565 (5.6)	49 (1.1)	553 (2.7)	37 (1.2)	536 (3.0)		
	Boys	12 (0.8)	547 (6.5)	43 (1.2)	540 (3.5)	45 (1.5)	521 (2.9)		
Poland	Girls	25 (1.4)	563 (5.3)	53 (1.4)	565 (2.9)	22 (1.2)	547 (4.6)		
	Boys	22 (1.4)	547 (5.3)	45 (1.5)	547 (3.1)	34 (1.4)	529 (4.0)		
Russian Federation	Girls	37 (1.4)	571 (4.8)	47 (1.3)	577 (3.6)	16 (1.1)	572 (4.9)		
	Boys	33 (1.5)	556 (7.2)	46 (1.3)	563 (4.6)	21 (1.0)	563 (4.0)		
Macao SAR	Girls	33 (0.9)	558 (2.4)	48 (0.9)	539 (2.0)	19 (0.7)	517 (3.5)		
	Boys	29 (0.8)	548 (3.0)	48 (0.9)	531 (2.4)	23 (0.7)	508 (3.7)		
Kosovo	Girls	87 (1.1)	436 (2.9)	12 (1.0)	406 (7.9)	2 ~	~ ~		
	Boys	83 (1.0)	415 (3.7)	15 (0.9)	407 (7.2)	2 ~	~ ~		
Belgium (Flemish)	Girls	29 (1.2)	517 (3.8)	44 (1.0)	517 (3.1)	27 (1.3)	510 (3.3)		
	Boys	25 (1.0)	516 (4.2)	43 (1.0)	508 (3.6)	32 (1.2)	500 (3.4)		
Hong Kong SAR	Girls	32 (1.1)	593 (3.5)	49 (1.1)	576 (3.3)	19 (1.0)	553 (4.7)		
	Boys	28 (1.3)	586 (3.9)	46 (1.3)	570 (3.9)	27 (1.1)	548 (4.8)		
Sweden	Girls	20 (1.0)	550 (4.8)	48 (1.3)	558 (3.3)	32 (1.3)	546 (3.1)		
	Boys	15 (0.7)	536 (5.9)	46 (1.3)	541 (3.1)	39 (1.4)	534 (3.1)		
Denmark	Girls	16 (1.0)	572 (5.2)	51 (1.4)	550 (3.0)	33 (1.4)	528 (3.7)		
	Boys	12 (0.9)	557 (6.3)	48 (1.2)	539 (3.2)	40 (1.4)	521 (4.0)		
Iran, Islamic Rep. of ☒	Girls	69 (1.7)	434 (6.3)	27 (1.5)	404 (12.0)	4 (0.6)	347 (24.4)		
	Boys	64 (1.4)	414 (5.4)	31 (1.2)	396 (8.2)	5 (0.9)	362 (17.9)		
Netherlands	Girls	20 (1.2)	545 (5.4)	47 (1.3)	541 (3.3)	33 (1.3)	517 (4.6)		
	Boys	15 (1.1)	541 (4.8)	45 (1.5)	528 (3.7)	40 (1.5)	506 (3.6)		
Egypt	Girls	47 (2.1)	412 (5.7)	43 (1.8)	378 (7.3)	10 (0.9)	357 (9.2)		
	Boys	41 (1.8)	400 (7.7)	47 (1.7)	362 (7.1)	13 (0.8)	337 (9.6)		
Ireland	Girls	35 (1.4)	598 (4.8)	46 (1.2)	582 (3.4)	19 (1.2)	560 (4.4)		
	Boys	28 (1.3)	588 (4.7)	44 (1.4)	574 (3.5)	27 (1.4)	554 (4.0)		
Latvia	Girls	19 (1.2)	547 (6.2)	50 (1.5)	547 (3.3)	31 (1.3)	531 (3.2)		
	Boys	13 (0.9)	526 (6.4)	44 (1.4)	517 (3.7)	43 (1.4)	512 (3.9)		
Azerbaijan	Girls	67 (1.3)	456 (4.2)	30 (1.2)	448 (5.8)	4 (0.5)	425 (13.8)		
	Boys	60 (1.3)	437 (4.7)	34 (1.2)	432 (5.1)	6 (0.7)	419 (10.5)		
United States	Girls	29 (2.0)	563 (8.8)	50 (2.2)	557 (8.3)	21 (1.9)	538 (9.3)		
	Boys	22 (1.7)	555 (12.3)	51 (1.8)	557 (6.5)	27 (1.6)	523 (8.2)		
Uzbekistan	Girls	87 (0.8)	456 (3.1)	12 (0.8)	415 (5.8)	2 ~	~ ~		
	Boys	80 (1.2)	435 (3.4)	18 (1.1)	396 (6.6)	3 (0.5)	350 (14.8)		
Belgium (French)	Girls	35 (1.5)	501 (5.4)	45 (1.3)	503 (3.7)	20 (1.1)	491 (4.6)		
	Boys	28 (1.5)	496 (4.2)	45 (1.3)	493 (3.9)	28 (1.5)	479 (4.1)		
England ☒	Girls	32 (1.1)	574 (4.7)	48 (1.1)	567 (3.1)	19 (1.1)	538 (4.9)		
	Boys	25 (1.1)	566 (5.0)	47 (1.3)	556 (4.1)	28 (1.5)	535 (4.2)		
New Zealand	Girls	42 (1.2)	544 (4.0)	43 (1.1)	528 (3.4)	16 (0.9)	513 (4.2)		
	Boys	34 (1.1)	517 (4.0)	45 (1.3)	515 (3.9)	20 (0.9)	509 (3.3)		
Lithuania	Girls	25 (1.2)	562 (4.5)	49 (1.3)	568 (3.2)	25 (1.4)	557 (3.1)		
	Boys	18 (0.9)	545 (5.1)	47 (1.2)	542 (3.5)	35 (1.2)	542 (3.4)		
Chinese Taipei	Girls	43 (1.3)	565 (2.7)	42 (1.2)	541 (3.4)	15 (0.9)	535 (4.2)		
	Boys	35 (1.3)	553 (2.8)	43 (1.1)	533 (2.8)	22 (1.1)	521 (4.1)		
Qatar	Girls	53 (1.3)	504 (4.3)	38 (1.2)	486 (5.9)	9 (0.6)	473 (8.1)		
	Boys	45 (1.8)	494 (5.6)	41 (1.5)	468 (5.5)	14 (1.0)	464 (7.2)		
Singapore	Girls	37 (1.1)	613 (4.1)	47 (1.0)	594 (3.0)	16 (0.7)	564 (4.5)		
	Boys	29 (0.9)	598 (5.0)	47 (0.8)	577 (4.2)	25 (0.8)	558 (4.5)		
Kazakhstan	Girls	57 (1.2)	511 (2.9)	36 (1.1)	513 (3.6)	6 (0.5)	519 (7.2)		
	Boys	49 (1.2)	490 (3.4)	43 (1.1)	497 (4.2)	8 (0.6)	517 (6.9)		
Finland	Girls	28 (1.1)	569 (4.0)	46 (1.2)	561 (3.1)	26 (1.3)	543 (3.6)		
	Boys	19 (0.9)	554 (5.6)	46 (1.1)	548 (3.4)	34 (1.2)	525 (2.9)		
Hungary	Girls	31 (1.4)	565 (4.5)	46 (1.4)	544 (4.7)	23 (1.1)	528 (4.8)		
	Boys	23 (1.1)	542 (6.7)	45 (1.0)	533 (4.4)	33 (1.2)	526 (4.4)		
Malta	Girls	51 (1.5)	522 (4.2)	38 (1.6)	518 (4.4)	11 (1.1)	508 (6.9)		
	Boys	42 (1.7)	511 (4.8)	39 (1.4)	515 (5.1)	18 (0.9)	510 (5.0)		
Albania	Girls	86 (1.1)	527 (3.5)	13 (1.0)	506 (8.5)	1 ~	~ ~		
	Boys	77 (1.2)	506 (3.8)	20 (1.1)	501 (5.6)	2 ~	~ ~		
Portugal	Girls	65 (1.1)	524 (2.7)	30 (1.1)	519 (2.8)	5 (0.5)	529 (6.0)		
	Boys	56 (1.2)	516 (3.0)	37 (1.1)	518 (4.1)	7 (0.6)	521 (6.5)		
Spain	Girls	59 (1.2)	529 (3.1)	33 (1.2)	516 (3.7)	8 (0.6)	506 (6.8)		
	Boys	50 (1.3)	525 (2.9)	37 (1.1)	519 (3.3)	13 (0.9)	510 (4.4)		
Czech Republic	Girls	32 (1.5)	540 (4.7)	49 (1.4)	548 (2.7)	19 (1.0)	530 (4.4)		
	Boys	23 (1.2)	539 (5.9)	50 (1.4)	542 (3.2)	28 (1.3)	530 (3.7)		

This PIRLS context questionnaire scale was established in 2016 based on the combined response distribution of countries that participated in PIRLS 2016. 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 tilde (~) indicates insufficient data to report result.

Exhibit 7.2: Students Like Reading by Gender

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

(Continued)

Country		Very Much Like Reading		Somewhat Like Reading		Do Not Like Reading		Gender Difference in Percent of Students who Very Much Like Reading	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	More Girls Than Boys	More Boys Than Girls
Australia ☒	Girls	34 (1.4)	569 (4.4)	45 (1.4)	547 (3.2)	21 (1.1)	527 (4.0)		
	Boys	24 (1.1)	552 (5.5)	45 (1.3)	538 (3.8)	31 (1.3)	510 (4.1)		
Germany	Girls	38 (1.3)	549 (3.6)	43 (1.2)	536 (3.2)	19 (1.1)	514 (4.5)		
	Boys	29 (1.1)	537 (4.4)	46 (1.3)	524 (3.5)	26 (1.1)	505 (3.8)		
Croatia	Girls	28 (1.4)	562 (5.3)	53 (1.5)	564 (3.3)	20 (1.2)	560 (4.7)		
	Boys	18 (1.1)	556 (5.1)	52 (1.6)	551 (3.4)	31 (1.6)	551 (4.5)		
Israel ☒	Girls	45 (1.4)	520 (3.4)	39 (1.2)	509 (4.2)	16 (0.9)	507 (4.8)		
	Boys	35 (1.2)	518 (3.8)	43 (1.1)	505 (3.3)	22 (1.1)	507 (4.1)		
Austria	Girls	38 (1.7)	546 (3.6)	45 (1.3)	537 (3.4)	17 (1.5)	522 (4.0)		
	Boys	27 (1.3)	531 (3.3)	46 (1.3)	524 (3.5)	26 (1.3)	513 (4.3)		
Türkiye	Girls	67 (1.4)	512 (3.4)	29 (1.2)	493 (5.7)	4 (0.5)	497 (10.3)		
	Boys	57 (1.4)	494 (3.9)	35 (1.1)	481 (5.5)	8 (0.6)	482 (7.3)		
Slovenia	Girls	33 (1.1)	537 (3.4)	51 (1.2)	530 (2.5)	16 (1.0)	512 (3.8)		
	Boys	22 (0.9)	520 (4.2)	48 (1.4)	511 (2.9)	29 (1.5)	505 (3.1)		
Northern Ireland	Girls	33 (1.2)	590 (4.4)	48 (1.2)	578 (3.0)	19 (1.2)	557 (4.8)		
	Boys	22 (1.4)	576 (5.3)	45 (1.2)	559 (4.6)	32 (1.4)	532 (4.2)		
Morocco	Girls	68 (2.1)	403 (4.8)	29 (2.0)	367 (8.7)	4 (0.9)	330 (15.8)		
	Boys	57 (1.8)	372 (5.4)	36 (1.7)	342 (6.9)	7 (1.0)	312 (11.6)		
United Arab Emirates	Girls	58 (0.7)	510 (2.8)	34 (0.6)	485 (3.3)	8 (0.3)	467 (4.8)		
	Boys	47 (1.0)	489 (3.7)	41 (0.7)	454 (4.1)	12 (0.5)	462 (5.8)		
Bahrain	Girls	56 (1.5)	492 (4.3)	36 (1.3)	477 (5.1)	8 (0.7)	460 (10.6)		
	Boys	45 (1.2)	450 (4.3)	43 (1.1)	430 (4.9)	12 (0.8)	422 (8.4)		
Bulgaria	Girls	57 (1.8)	553 (3.7)	34 (1.6)	550 (5.7)	9 (0.8)	511 (8.8)		
	Boys	45 (1.7)	541 (4.6)	39 (1.5)	534 (5.3)	15 (1.3)	510 (7.0)		
Montenegro	Girls	66 (1.1)	504 (2.4)	30 (1.1)	494 (3.1)	5 (0.6)	478 (6.7)		
	Boys	54 (1.1)	485 (2.9)	35 (1.1)	474 (3.3)	11 (0.9)	470 (5.8)		
North Macedonia	Girls	76 (1.5)	458 (6.5)	19 (1.3)	452 (7.6)	4 (0.5)	451 (17.6)		
	Boys	64 (1.8)	430 (7.6)	29 (1.4)	436 (6.1)	7 (0.9)	424 (9.9)		
Oman	Girls	64 (1.5)	464 (4.3)	32 (1.3)	428 (5.5)	5 (0.5)	383 (13.0)		
	Boys	52 (1.3)	426 (4.8)	40 (1.1)	404 (5.3)	8 (0.7)	390 (10.5)		
Italy	Girls	47 (1.1)	544 (2.7)	39 (1.0)	540 (3.6)	14 (0.9)	531 (4.2)		
	Boys	35 (1.2)	536 (3.3)	45 (1.2)	532 (2.8)	20 (0.8)	534 (3.3)		
South Africa ☒	Girls	56 (1.8)	336 (5.4)	35 (1.5)	304 (5.6)	9 (0.7)	282 (11.4)		
	Boys	43 (1.6)	281 (4.9)	44 (1.4)	252 (6.3)	13 (0.8)	248 (14.0)		
Serbia	Girls	51 (1.9)	521 (5.0)	37 (1.8)	516 (4.8)	12 (1.3)	517 (6.0)		
	Boys	39 (1.7)	510 (4.9)	42 (1.7)	512 (3.8)	19 (1.5)	502 (6.4)		
Georgia	Girls	65 (1.3)	508 (3.5)	30 (1.2)	507 (3.9)	5 (0.6)	508 (8.5)		
	Boys	53 (1.4)	486 (3.8)	39 (1.1)	483 (3.5)	8 (0.9)	501 (11.2)		
France	Girls	43 (1.3)	529 (3.4)	45 (1.1)	522 (3.5)	12 (0.8)	495 (4.8)		
	Boys	30 (1.2)	522 (3.8)	48 (1.2)	507 (3.2)	22 (1.1)	487 (4.3)		
Slovak Republic	Girls	36 (1.5)	535 (3.9)	44 (1.7)	539 (3.7)	20 (1.3)	521 (4.7)		
	Boys	23 (1.1)	522 (5.2)	46 (1.3)	529 (4.4)	31 (1.5)	524 (4.2)		
Jordan	Girls	62 (2.1)	410 (7.2)	30 (1.6)	383 (8.7)	8 (1.1)	379 (12.4)		
	Boys	48 (2.0)	373 (8.0)	38 (1.5)	358 (9.7)	13 (1.8)	343 (20.1)		
Saudi Arabia	Girls	67 (1.5)	476 (4.3)	28 (1.3)	448 (7.6)	6 (0.7)	446 (10.5)		
	Boys	52 (1.9)	437 (5.6)	39 (1.8)	416 (7.2)	9 (0.6)	431 (8.6)		
Cyprus	Girls	45 (1.2)	520 (3.4)	41 (0.9)	513 (4.5)	14 (0.9)	506 (5.5)		
	Boys	30 (1.2)	512 (4.8)	42 (1.0)	510 (4.0)	28 (1.3)	499 (4.1)		
International Average	Girls	46 (0.2)	521 (0.6)	39 (0.2)	508 (0.7)	15 (0.1)	496 (1.1)		
	Boys	37 (0.2)	504 (0.7)	42 (0.2)	494 (0.6)	21 (0.1)	484 (1.0)		
Benchmarking Participants									
Quebec, Canada	Girls	37 (1.5)	565 (3.5)	46 (1.5)	555 (3.9)	16 (1.1)	541 (5.9)		
	Boys	34 (1.3)	551 (4.0)	44 (1.1)	548 (3.5)	22 (1.3)	533 (4.2)		
Moscow City, Russian Federation	Girls	33 (1.1)	609 (2.7)	46 (0.9)	605 (2.9)	21 (1.0)	596 (3.4)		
	Boys	28 (1.3)	600 (3.7)	48 (1.0)	592 (2.8)	24 (1.0)	585 (3.1)		
Alberta, Canada	Girls	43 (1.9)	556 (5.4)	42 (1.7)	548 (4.5)	15 (1.0)	523 (7.6)		
	Boys	38 (1.7)	538 (5.2)	44 (1.6)	536 (5.4)	18 (1.3)	524 (7.3)		
British Columbia, Canada	Girls	41 (1.6)	554 (4.3)	43 (1.4)	542 (4.7)	16 (1.3)	518 (5.6)		
	Boys	34 (1.1)	539 (4.3)	47 (1.2)	531 (5.6)	20 (1.1)	512 (5.6)		
Dubai, UAE	Girls	55 (1.4)	559 (3.3)	37 (1.0)	559 (3.7)	8 (0.7)	543 (6.0)		
	Boys	46 (1.6)	551 (3.3)	41 (1.3)	545 (3.7)	13 (0.7)	557 (5.2)		
Newfoundland & Labrador, Canada	Girls	41 (1.9)	542 (4.1)	42 (1.8)	532 (4.3)	17 (1.2)	509 (6.8)		
	Boys	31 (1.9)	519 (6.3)	44 (1.4)	524 (4.3)	24 (1.6)	505 (7.0)		
Abu Dhabi, UAE	Girls	52 (0.9)	485 (4.3)	37 (0.9)	433 (4.9)	11 (0.5)	422 (8.1)		
	Boys	40 (1.4)	459 (6.6)	45 (1.0)	401 (5.6)	15 (0.7)	408 (8.5)		
South Africa (6) ☒	Girls	54 (1.3)	431 (3.9)	37 (0.9)	387 (6.8)	9 (0.8)	370 (14.6)		
	Boys	39 (1.5)	385 (4.5)	48 (1.2)	342 (6.0)	14 (0.9)	353 (11.9)		

Students Confident in Reading

The PIRLS 2021 *Students Confident in Reading* scale asked students how much they agreed with six statements about how well they can read. Based on their responses, students were classified according to the degree of confidence they had in their own reading ability—“very confident in reading,” “somewhat confident in reading,” or “not confident in reading” (see “About the Scale”).

For the PIRLS 2021 countries, Exhibit 7.3 presents the percentages of students in each of the three categories of confidence in reading along with their average reading achievement. Internationally on average, 43 percent of students reported being “very confident in reading,” 35 percent of students were “somewhat confident in reading,” and 22 percent were “not confident in reading.”

The results of the PIRLS 2021 *Students Confident in Reading* scale show that the fourth grade students have an accurate self-assessment of their own level of reading skills as measured by PIRLS. Fourth grade students who reported being “very confident in reading” had relatively high average achievement (541), similar to almost reaching the High International Benchmark (550) of reading achievement (see report section on [International Benchmarks](#)). Those who were “somewhat confident in reading” had mid-range achievement on average (498), and those who were “not confident in reading” had an average achievement of 449, which falls short of reaching the Intermediate International Benchmark (475).

Exhibit 7.3: Students Confident in Reading

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

☐ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country	Very Confident in Reading		Somewhat Confident in Reading		Not Confident in Reading		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Bulgaria	61 (1.0)	567 (2.6)	26 (0.9)	521 (3.8)	13 (0.9)	460 (7.8)	10.5 (0.05)
Kosovo	59 (1.0)	445 (2.8)	25 (0.9)	412 (4.9)	16 (0.8)	360 (5.3)	10.7 (0.05)
Serbia	58 (1.2)	537 (2.9)	29 (1.1)	500 (4.0)	14 (0.7)	452 (5.4)	10.4 (0.05)
Finland	57 (0.8)	574 (2.3)	30 (0.6)	534 (2.5)	13 (0.6)	488 (4.8)	10.5 (0.03)
Albania	56 (1.4)	535 (2.8)	26 (1.1)	502 (5.4)	18 (0.9)	467 (4.9)	10.5 (0.06)
Sweden	56 (0.9)	573 (2.3)	32 (0.7)	526 (2.2)	12 (0.6)	478 (3.9)	10.5 (0.04)
Montenegro	56 (0.7)	515 (2.0)	28 (0.7)	477 (2.6)	16 (0.6)	430 (3.5)	10.3 (0.03)
North Macedonia	56 (1.9)	473 (4.8)	26 (1.2)	437 (5.6)	19 (1.3)	382 (8.9)	10.5 (0.08)
Poland	55 (1.2)	572 (2.1)	34 (1.2)	539 (2.7)	11 (0.7)	482 (5.3)	10.5 (0.05)
Cyprus	55 (0.8)	537 (2.8)	30 (0.6)	496 (3.2)	15 (0.7)	449 (4.5)	10.4 (0.04)
Germany	53 (1.0)	561 (2.2)	31 (0.8)	513 (2.9)	16 (0.6)	469 (3.6)	10.3 (0.04)
Austria	51 (0.9)	560 (2.2)	34 (0.7)	514 (2.4)	15 (0.7)	469 (3.1)	10.3 (0.04)
Singapore	51 (0.9)	622 (2.6)	33 (0.7)	574 (3.1)	16 (0.7)	514 (4.8)	10.3 (0.04)
Iran, Islamic Rep. of ☒	50 (1.2)	454 (4.0)	31 (1.0)	391 (6.5)	19 (1.2)	346 (7.6)	10.2 (0.06)
Italy	49 (1.0)	560 (2.2)	36 (0.8)	529 (2.6)	15 (0.7)	489 (2.8)	10.2 (0.04)
Ireland	49 (1.2)	609 (2.6)	34 (1.0)	564 (3.0)	17 (0.7)	516 (3.6)	10.1 (0.05)
Turkiye	48 (1.0)	529 (3.3)	36 (0.9)	484 (3.8)	17 (0.7)	435 (4.5)	10.0 (0.04)
Uzbekistan	47 (1.4)	461 (3.1)	32 (1.1)	440 (3.3)	21 (0.9)	384 (4.1)	10.1 (0.06)
Northern Ireland	47 (1.1)	603 (3.0)	37 (1.0)	550 (2.8)	16 (0.6)	501 (4.4)	10.1 (0.04)
Netherlands	47 (1.0)	556 (2.5)	32 (1.0)	516 (2.9)	21 (0.8)	482 (3.5)	9.9 (0.04)
Slovenia	46 (0.7)	550 (2.0)	37 (0.7)	512 (2.5)	17 (0.6)	462 (2.9)	10.2 (0.03)
Croatia	46 (1.0)	583 (2.8)	38 (0.9)	552 (2.6)	16 (0.9)	503 (4.1)	10.0 (0.04)
Qatar	46 (1.0)	533 (3.3)	32 (0.9)	480 (4.3)	23 (1.0)	423 (3.9)	10.1 (0.05)
Denmark	45 (0.9)	576 (2.1)	36 (0.9)	530 (2.8)	19 (0.8)	479 (3.4)	10.1 (0.04)
England ☒	45 (1.2)	594 (2.6)	34 (1.0)	544 (3.2)	21 (0.7)	504 (3.7)	9.9 (0.05)
Israel ☒	45 (1.0)	561 (2.0)	30 (0.8)	501 (2.5)	25 (0.9)	449 (3.2)	9.9 (0.04)
Norway (5)	44 (0.9)	575 (2.1)	36 (0.8)	530 (2.2)	19 (0.7)	484 (3.2)	10.0 (0.04)
United Arab Emirates	44 (0.5)	552 (1.7)	30 (0.3)	483 (2.1)	26 (0.5)	404 (2.8)	9.9 (0.02)
United States	44 (2.4)	594 (5.4)	36 (2.0)	542 (4.7)	21 (1.4)	486 (9.8)	9.9 (0.09)
Belgium (French)	44 (0.9)	531 (2.4)	36 (0.9)	483 (3.7)	20 (0.8)	439 (3.6)	9.9 (0.04)
Slovak Republic	43 (1.0)	559 (2.3)	33 (1.1)	530 (3.1)	24 (1.0)	486 (4.8)	9.8 (0.05)
France	43 (0.9)	543 (2.9)	40 (0.9)	509 (2.5)	17 (0.7)	458 (4.0)	9.9 (0.03)
Kazakhstan	43 (0.9)	526 (2.7)	34 (0.8)	509 (2.9)	24 (0.8)	465 (3.5)	9.9 (0.04)
Hungary	43 (0.9)	579 (2.8)	35 (0.8)	533 (3.4)	23 (0.9)	481 (4.9)	9.9 (0.04)
Australia ☒	43 (1.0)	582 (2.2)	38 (0.8)	528 (2.5)	19 (0.8)	477 (4.5)	9.9 (0.04)
Georgia	42 (0.9)	531 (2.7)	33 (0.8)	487 (3.0)	24 (0.9)	456 (4.5)	9.8 (0.04)
Belgium (Flemish)	42 (1.0)	540 (2.5)	34 (0.8)	507 (2.5)	23 (0.8)	466 (2.6)	9.9 (0.04)
Portugal	42 (0.8)	554 (2.2)	37 (0.7)	513 (2.5)	21 (0.7)	465 (3.0)	9.8 (0.04)
Bahrain	42 (1.1)	510 (3.5)	35 (0.9)	455 (4.1)	23 (0.7)	386 (4.1)	9.9 (0.04)
Malta	40 (1.1)	557 (2.2)	36 (1.0)	508 (3.3)	23 (0.8)	464 (3.8)	9.8 (0.04)
Czech Republic	39 (0.8)	571 (2.4)	39 (0.8)	539 (2.2)	21 (0.6)	494 (4.1)	9.7 (0.03)
Spain	39 (0.9)	554 (2.3)	41 (0.9)	517 (2.7)	20 (0.7)	474 (3.0)	9.7 (0.03)
Azerbaijan	39 (1.3)	475 (4.0)	35 (1.0)	443 (4.2)	26 (1.0)	406 (4.4)	9.7 (0.06)
Russian Federation	39 (1.0)	596 (3.3)	40 (0.8)	569 (3.6)	21 (1.0)	520 (4.5)	9.7 (0.04)
Saudi Arabia	38 (1.4)	498 (3.6)	31 (0.8)	458 (4.0)	30 (1.2)	425 (5.1)	9.7 (0.07)
Lithuania	38 (0.9)	590 (2.6)	38 (0.9)	552 (2.2)	25 (0.8)	503 (2.7)	9.7 (0.03)
Oman	36 (1.1)	478 (4.7)	37 (0.9)	427 (3.8)	27 (1.0)	382 (4.7)	9.6 (0.05)
New Zealand	34 (0.9)	577 (2.4)	38 (0.7)	527 (2.9)	28 (0.8)	466 (3.1)	9.5 (0.03)
Hong Kong SAR	32 (1.0)	605 (2.9)	39 (0.9)	573 (3.0)	29 (0.9)	539 (3.7)	9.4 (0.04)
Chinese Taipei	31 (0.9)	580 (2.0)	38 (0.7)	545 (2.4)	31 (0.7)	506 (3.0)	9.4 (0.04)
Morocco	31 (1.4)	420 (4.6)	42 (1.5)	378 (6.8)	27 (1.5)	312 (5.7)	9.4 (0.05)
Brazil ☒	29 (1.2)	496 (4.4)	37 (1.3)	445 (4.5)	34 (1.3)	357 (6.8)	9.2 (0.06)
Jordan	27 (1.3)	425 (6.6)	39 (1.4)	390 (7.0)	33 (1.5)	341 (7.5)	9.2 (0.06)
Latvia	24 (0.9)	567 (2.9)	43 (0.9)	539 (2.3)	32 (1.0)	489 (3.5)	9.1 (0.04)
Macao SAR	22 (0.6)	575 (2.0)	43 (0.8)	542 (1.9)	35 (0.7)	503 (1.7)	9.0 (0.02)
Egypt	22 (1.2)	435 (5.4)	37 (1.0)	385 (5.9)	41 (1.4)	359 (6.9)	9.0 (0.05)
South Africa ☒	18 (0.9)	402 (6.4)	35 (0.6)	301 (5.1)	47 (1.0)	247 (4.6)	8.8 (0.04)
International Average	43 (0.1)	541 (0.4)	35 (0.1)	498 (0.5)	22 (0.1)	449 (0.6)	
Benchmarking Participants							
British Columbia, Canada	51 (1.1)	568 (3.3)	32 (1.0)	525 (4.1)	17 (1.0)	475 (5.2)	10.2 (0.05)
Dubai, UAE	51 (0.7)	591 (1.8)	31 (0.6)	544 (2.2)	18 (0.6)	478 (3.4)	10.3 (0.03)
Alberta, Canada	50 (1.3)	575 (2.8)	33 (1.1)	527 (3.7)	17 (0.9)	478 (5.4)	10.2 (0.06)
Newfoundland & Labrador, Canada	48 (0.9)	561 (3.4)	34 (1.0)	513 (3.3)	18 (0.9)	462 (5.1)	10.1 (0.05)
Moscow City, Russian Federation	44 (0.9)	624 (2.2)	39 (0.7)	593 (2.1)	17 (0.7)	548 (2.6)	9.9 (0.03)
Quebec, Canada	43 (1.2)	579 (3.0)	35 (0.7)	545 (3.0)	22 (0.9)	510 (3.7)	9.9 (0.06)
Abu Dhabi, UAE	37 (0.8)	542 (3.6)	31 (0.7)	444 (3.9)	33 (0.8)	365 (4.3)	9.6 (0.04)
South Africa (6) ☒	25 (0.9)	490 (5.7)	38 (0.7)	386 (4.8)	37 (0.9)	322 (4.5)	9.1 (0.04)

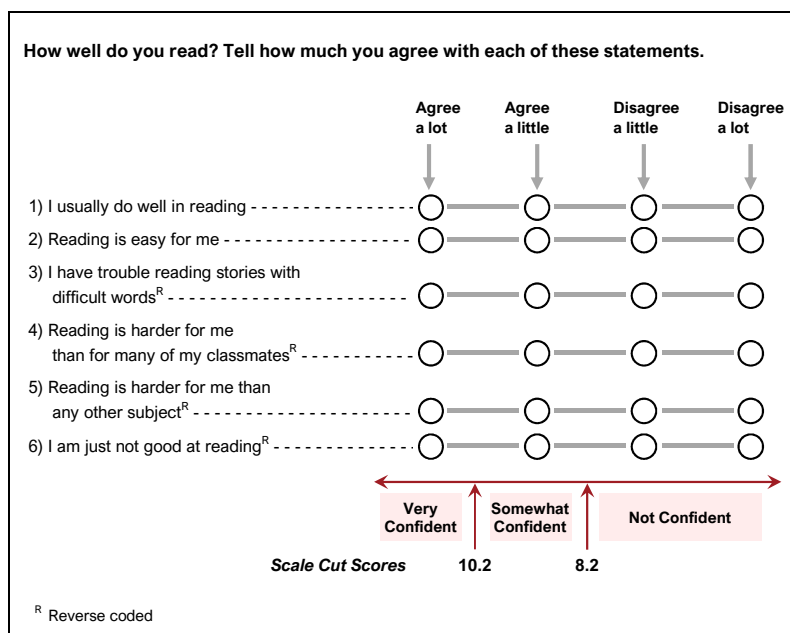
This PIRLS context questionnaire scale was established in 2016 based on the combined response distribution of countries that participated in PIRLS 2016. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units 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.

Exhibit 7.3: Students Confident in Reading*Students' Reports***About the Scale**

Students were scored according to their responses to six statements on the *Students Confident in Reading* scale. Cut scores divide the scale into three categories. Students **Very Confident in Reading** 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 were **Not Confident in Reading** had a score at or below the cut score corresponding to “disagreeing a little” with three of the six statements and “agreeing a little” with the other three, on average. All other students were **Somewhat Confident in Reading**.



SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2021
Downloaded from <https://pirls2021.org/results>



IEA

TIMSS & PIRLS
International Study Center
Lynch School of Education
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Exhibit 7.4 shows the results for the *Students Confident in Reading* scale separately for girls and for boys. On average, across countries, there was little difference between the percentages of girls and boys in each of the scale categories—46 percent of girls and 40 percent of boys reported being “very confident in reading,” 34 percent of girls and 35 percent of boys were “somewhat confident,” and 19 percent of girls and 25 percent of boys were “not confident.” However, there was considerable variation across countries in the magnitude of the difference between the percentage of girls and the percentage of boys classified as “very confident in reading,” ranging from little or no difference in Belgium (French), Hong Kong SAR, Denmark, Macao SAR, and Brazil to an 18 percentage point difference favoring girls in Saudi Arabia.

Exhibit 7.4: Students Confident in Reading by Gender

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country		Very Confident in Reading		Somewhat Confident in Reading		Not Confident in Reading		Gender Difference in Percent of Students Very Confident in Reading	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	More Girls Than Boys	More Boys Than Girls
Belgium (French)	Girls	43 (1.3)	534 (3.3)	38 (1.2)	489 (4.4)	18 (1.0)	443 (4.7)		
	Boys	44 (1.3)	527 (2.9)	34 (1.2)	477 (3.8)	22 (1.2)	436 (4.8)		
Hong Kong SAR	Girls	32 (1.3)	607 (3.9)	41 (1.1)	577 (3.2)	28 (1.2)	543 (3.7)		
	Boys	32 (1.4)	603 (3.5)	37 (1.3)	569 (4.0)	31 (1.3)	535 (4.9)		
Denmark	Girls	45 (1.2)	581 (3.0)	36 (1.1)	536 (3.1)	19 (1.1)	487 (3.8)		
	Boys	45 (1.3)	570 (2.6)	37 (1.3)	523 (3.6)	18 (1.1)	471 (5.8)		
Macao SAR	Girls	23 (0.9)	578 (2.5)	44 (1.1)	547 (2.2)	33 (1.0)	507 (2.3)		
	Boys	22 (0.8)	572 (2.8)	42 (1.1)	536 (3.0)	36 (1.0)	500 (2.6)		
Brazil ☒	Girls	30 (1.4)	503 (6.3)	38 (1.4)	447 (6.4)	32 (1.6)	375 (8.7)		
	Boys	28 (1.4)	489 (5.7)	37 (1.6)	443 (6.7)	35 (1.5)	339 (6.9)		
Ireland	Girls	50 (1.6)	615 (3.4)	32 (1.3)	568 (4.2)	18 (1.1)	523 (4.7)		
	Boys	48 (1.6)	603 (2.9)	36 (1.4)	561 (3.8)	16 (0.9)	508 (5.1)		
Belgium (Flemish)	Girls	43 (1.2)	540 (3.3)	35 (1.1)	512 (2.8)	22 (1.1)	470 (3.6)		
	Boys	42 (1.4)	540 (3.0)	34 (1.1)	501 (3.3)	25 (1.2)	462 (3.3)		
Netherlands	Girls	47 (1.3)	560 (3.1)	33 (1.3)	521 (3.3)	20 (0.9)	490 (4.4)		
	Boys	46 (1.4)	551 (3.2)	32 (1.5)	511 (3.6)	23 (1.1)	476 (4.1)		
United States	Girls	45 (3.3)	598 (7.0)	36 (2.9)	545 (4.2)	19 (2.0)	488 (9.2)		
	Boys	43 (2.5)	589 (5.4)	35 (2.1)	539 (6.9)	22 (1.8)	485 (13.3)		
England ☒	Girls	46 (1.4)	598 (3.6)	34 (1.3)	546 (3.5)	20 (1.0)	513 (4.5)		
	Boys	44 (1.6)	589 (3.4)	34 (1.4)	543 (4.3)	22 (1.1)	496 (5.0)		
France	Girls	44 (1.2)	548 (3.5)	39 (1.1)	517 (3.2)	17 (1.0)	465 (5.3)		
	Boys	42 (1.0)	538 (3.3)	40 (1.0)	501 (3.0)	18 (1.0)	452 (5.0)		
Czech Republic	Girls	41 (1.2)	570 (3.2)	39 (1.2)	543 (2.9)	21 (1.0)	492 (5.4)		
	Boys	38 (1.2)	572 (3.1)	39 (1.1)	535 (3.0)	22 (1.1)	496 (5.0)		
Chinese Taipei	Girls	32 (1.0)	586 (2.2)	40 (1.0)	551 (3.0)	28 (1.0)	509 (4.4)		
	Boys	30 (1.2)	574 (2.5)	37 (1.0)	540 (2.9)	33 (1.1)	504 (2.9)		
Portugal	Girls	44 (1.2)	555 (2.5)	37 (1.0)	511 (2.7)	19 (1.0)	472 (3.7)		
	Boys	41 (1.0)	554 (2.5)	37 (0.9)	515 (3.1)	22 (1.0)	460 (3.7)		
Poland	Girls	57 (1.6)	582 (2.9)	34 (1.5)	545 (3.4)	9 (0.8)	488 (7.4)		
	Boys	54 (1.5)	563 (2.7)	34 (1.5)	533 (3.5)	12 (0.9)	479 (6.6)		
New Zealand	Girls	35 (1.2)	585 (3.4)	39 (1.0)	531 (3.3)	25 (1.1)	469 (4.5)		
	Boys	32 (1.1)	569 (3.2)	38 (1.1)	522 (3.9)	30 (1.0)	464 (3.3)		
Egypt	Girls	24 (1.6)	438 (6.1)	37 (1.3)	392 (6.3)	39 (1.6)	370 (7.9)		
	Boys	20 (1.3)	430 (6.4)	36 (1.5)	378 (7.7)	44 (1.7)	349 (8.2)		
Malta	Girls	42 (1.6)	558 (3.7)	36 (1.3)	510 (4.2)	22 (1.2)	463 (4.7)		
	Boys	39 (1.3)	556 (2.6)	37 (1.0)	506 (3.9)	24 (1.1)	464 (5.2)		
Russian Federation	Girls	40 (1.3)	602 (4.0)	41 (1.0)	572 (3.7)	19 (1.2)	527 (5.1)		
	Boys	37 (1.5)	590 (3.5)	39 (1.2)	566 (4.5)	24 (1.4)	514 (5.7)		
Spain	Girls	41 (1.2)	553 (2.9)	40 (1.1)	518 (3.4)	19 (1.1)	474 (4.1)		
	Boys	38 (1.1)	555 (2.5)	42 (1.2)	516 (3.1)	20 (0.8)	474 (4.1)		
Northern Ireland	Girls	48 (1.2)	610 (3.4)	38 (1.1)	561 (3.0)	14 (0.9)	514 (5.9)		
	Boys	45 (1.6)	595 (3.8)	36 (1.5)	538 (3.9)	19 (0.9)	491 (5.8)		
Germany	Girls r	55 (1.3)	568 (2.8)	31 (1.1)	515 (3.6)	14 (0.8)	473 (5.2)		
	Boys r	51 (1.3)	554 (2.9)	31 (1.1)	511 (3.8)	18 (1.0)	466 (4.6)		
Slovak Republic	Girls	45 (1.5)	561 (3.1)	32 (1.5)	533 (3.5)	23 (1.6)	489 (6.3)		
	Boys	41 (1.4)	557 (3.0)	35 (1.4)	526 (3.9)	25 (1.3)	481 (5.0)		
Cyprus	Girls	57 (1.2)	540 (3.0)	29 (1.0)	496 (3.9)	14 (0.8)	454 (5.6)		
	Boys	53 (1.2)	534 (3.6)	31 (1.0)	495 (3.9)	17 (1.0)	446 (4.9)		
Slovenia	Girls	49 (1.2)	556 (2.3)	37 (1.2)	519 (2.7)	15 (0.8)	472 (4.0)		
	Boys	44 (1.1)	544 (2.8)	36 (1.1)	506 (3.1)	20 (0.8)	454 (3.7)		
Israel ☒	Girls	48 (1.2)	557 (2.8)	29 (1.1)	502 (2.9)	23 (1.1)	449 (4.4)		
	Boys	42 (1.2)	565 (2.6)	31 (1.0)	500 (3.6)	27 (1.1)	448 (4.1)		
Singapore	Girls	54 (1.1)	626 (2.6)	32 (1.0)	579 (3.7)	14 (0.7)	526 (5.3)		
	Boys	48 (1.1)	617 (3.3)	33 (0.9)	569 (3.4)	18 (0.9)	506 (6.1)		
Serbia	Girls	60 (2.1)	536 (4.1)	27 (1.7)	509 (4.5)	12 (1.1)	457 (9.3)		
	Boys	55 (1.5)	537 (3.3)	30 (1.5)	493 (5.1)	15 (1.5)	448 (5.9)		
Australia ☒	Girls	46 (1.3)	585 (3.1)	38 (1.2)	535 (3.4)	16 (1.2)	489 (4.9)		
	Boys	40 (1.3)	578 (3.5)	38 (1.1)	522 (3.4)	22 (1.1)	468 (6.0)		
Norway (5)	Girls	47 (1.2)	580 (2.6)	35 (1.0)	535 (2.6)	17 (0.8)	494 (4.0)		
	Boys	42 (1.1)	569 (2.7)	37 (0.9)	525 (3.0)	21 (1.0)	476 (3.9)		
Sweden	Girls	59 (1.2)	578 (2.7)	31 (1.1)	531 (3.2)	10 (0.8)	486 (5.5)		
	Boys	53 (0.9)	567 (2.5)	33 (0.9)	521 (3.4)	14 (0.8)	472 (4.8)		
United Arab Emirates	Girls	47 (0.7)	552 (2.4)	30 (0.5)	490 (3.5)	23 (0.5)	413 (2.9)		
	Boys	41 (0.9)	552 (3.0)	29 (0.5)	475 (4.0)	30 (0.9)	396 (4.3)		
Qatar	Girls	48 (1.2)	533 (3.8)	32 (0.9)	484 (4.8)	20 (0.9)	429 (6.1)		
	Boys	43 (1.7)	532 (4.5)	31 (1.5)	474 (5.8)	26 (1.5)	419 (5.0)		

This PIRLS context questionnaire scale was established in 2016 based on the combined response distribution of countries that participated in PIRLS 2016. 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.

Exhibit 7.4: Students Confident in Reading by Gender

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

(Continued)

Country		Very Confident in Reading		Somewhat Confident in Reading		Not Confident in Reading		Gender Difference in Percent of Students Very Confident in Reading	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	More Girls Than Boys	More Boys Than Girls
Iran, Islamic Rep. of ☒	Girls	53 (2.1)	461 (6.0)	30 (1.4)	397 (8.8)	17 (1.7)	349 (9.6)		
	Boys	47 (1.7)	447 (5.3)	33 (1.4)	387 (7.7)	20 (1.7)	343 (8.9)		
Montenegro	Girls	60 (1.1)	521 (2.2)	28 (1.0)	483 (3.3)	13 (0.9)	445 (5.0)		
	Boys	53 (1.0)	508 (2.8)	28 (0.9)	471 (3.5)	19 (0.9)	420 (4.5)		
South Africa ☒	Girls	22 (1.0)	414 (6.2)	36 (0.8)	329 (5.6)	43 (1.1)	270 (4.6)		
	Boys	15 (1.1)	385 (10.2)	34 (1.0)	270 (5.4)	51 (1.3)	228 (5.3)		
Latvia	Girls	28 (1.3)	575 (4.0)	43 (1.3)	551 (3.1)	29 (1.2)	499 (4.3)		
	Boys	21 (1.0)	557 (4.0)	44 (1.2)	527 (2.7)	35 (1.4)	481 (4.6)		
Finland	Girls	60 (1.0)	579 (2.5)	27 (0.9)	542 (3.6)	12 (0.8)	498 (4.9)		
	Boys	53 (1.0)	568 (2.8)	33 (0.8)	527 (2.9)	13 (0.8)	478 (6.6)		
Lithuania	Girls	41 (1.3)	594 (3.1)	38 (1.4)	561 (2.8)	21 (1.2)	512 (4.0)		
	Boys	34 (1.2)	584 (3.2)	38 (1.0)	543 (3.1)	28 (0.9)	496 (3.3)		
Hungary	Girls	46 (1.2)	583 (3.2)	35 (1.0)	535 (4.2)	18 (0.9)	483 (5.7)		
	Boys	39 (1.4)	574 (3.5)	34 (1.1)	531 (4.5)	27 (1.2)	481 (5.4)		
Kosovo	Girls	63 (1.3)	450 (2.7)	24 (1.1)	423 (5.7)	13 (0.9)	368 (7.4)		
	Boys	56 (1.2)	438 (3.8)	25 (1.3)	401 (6.2)	19 (1.0)	355 (6.1)		
Austria	Girls	55 (1.4)	565 (2.5)	32 (1.3)	519 (3.1)	13 (0.9)	471 (4.9)		
	Boys	48 (1.2)	554 (3.0)	35 (1.0)	510 (2.9)	17 (1.0)	468 (3.3)		
Turkiye	Girls	52 (1.1)	535 (3.5)	35 (1.2)	487 (4.7)	14 (0.8)	442 (5.9)		
	Boys	44 (1.2)	521 (4.1)	37 (1.1)	482 (4.1)	19 (1.0)	431 (4.9)		
Italy	Girls	53 (1.2)	562 (2.4)	34 (1.0)	529 (3.1)	13 (0.7)	486 (4.0)		
	Boys	45 (1.2)	556 (2.7)	37 (1.0)	529 (2.9)	17 (0.9)	491 (3.6)		
Croatia	Girls	50 (1.4)	586 (3.5)	36 (1.4)	556 (3.4)	14 (1.2)	506 (6.3)		
	Boys	42 (1.4)	581 (3.5)	40 (1.4)	548 (2.9)	18 (1.2)	501 (4.7)		
Morocco	Girls	36 (1.6)	431 (5.1)	42 (1.7)	391 (6.8)	22 (1.6)	324 (6.9)		
	Boys	27 (1.5)	406 (5.7)	42 (1.9)	366 (7.8)	31 (1.6)	305 (6.2)		
North Macedonia	Girls	60 (2.2)	481 (5.2)	25 (1.4)	445 (6.5)	14 (1.5)	391 (9.2)		
	Boys	51 (2.3)	462 (5.3)	26 (1.8)	428 (7.9)	23 (1.8)	376 (12.3)		
Bahrain	Girls	46 (1.6)	523 (3.9)	35 (1.2)	475 (5.4)	19 (1.0)	409 (7.0)		
	Boys	37 (1.1)	494 (4.8)	35 (1.1)	434 (4.8)	28 (1.0)	370 (4.8)		
Oman	Girls	41 (1.4)	486 (5.1)	36 (1.3)	438 (4.8)	23 (1.2)	401 (5.9)		
	Boys	31 (1.3)	468 (5.8)	37 (1.1)	416 (4.8)	32 (1.2)	368 (5.8)		
Bulgaria	Girls	66 (1.2)	571 (2.8)	23 (1.2)	528 (5.1)	11 (1.0)	455 (9.0)		
	Boys	56 (1.3)	562 (4.1)	29 (1.2)	516 (4.3)	16 (1.2)	463 (9.5)		
Jordan	Girls	32 (1.8)	429 (8.0)	39 (1.6)	406 (8.0)	29 (1.8)	360 (8.0)		
	Boys	22 (1.7)	417 (8.5)	41 (2.3)	373 (10.8)	38 (2.4)	326 (11.4)		
Uzbekistan	Girls	53 (1.6)	470 (3.2)	31 (1.3)	449 (4.1)	16 (1.0)	394 (5.1)		
	Boys	42 (1.6)	450 (4.2)	34 (1.3)	432 (4.1)	25 (1.2)	378 (5.0)		
Kazakhstan	Girls	48 (1.1)	530 (2.9)	34 (1.0)	515 (3.0)	18 (0.9)	471 (4.7)		
	Boys	37 (1.3)	522 (3.5)	33 (1.2)	502 (3.8)	29 (1.1)	461 (3.9)		
Georgia	Girls	49 (1.3)	535 (2.9)	31 (1.1)	494 (3.6)	20 (1.0)	470 (5.6)		
	Boys	37 (1.0)	526 (4.2)	35 (1.1)	481 (3.8)	28 (1.2)	446 (4.9)		
Albania	Girls	63 (1.8)	542 (3.2)	22 (1.4)	512 (6.1)	15 (1.1)	474 (7.3)		
	Boys	50 (1.7)	526 (3.5)	30 (1.6)	495 (6.6)	20 (1.3)	463 (5.7)		
Azerbaijan	Girls	46 (1.4)	480 (4.4)	33 (1.2)	448 (5.6)	21 (1.2)	413 (6.1)		
	Boys	33 (1.7)	468 (5.1)	37 (1.3)	439 (5.6)	30 (1.4)	402 (4.9)		
Saudi Arabia	Girls r	45 (2.0)	501 (4.5)	32 (1.0)	465 (5.7)	23 (1.6)	436 (7.3)		
	Boys r	27 (1.8)	490 (5.4)	30 (1.2)	445 (5.8)	43 (1.6)	416 (6.6)		
International Average		46 (0.2)	545 (0.5)	34 (0.2)	504 (0.6)	19 (0.1)	457 (0.8)	30	15 0 15 30
		40 (0.2)	535 (0.5)	35 (0.2)	492 (0.6)	25 (0.2)	444 (0.8)		
Benchmarking Participants									
Moscow City, Russian Federation	Girls	45 (1.2)	627 (2.5)	40 (1.0)	598 (2.4)	15 (0.8)	556 (3.0)		
	Boys	43 (1.2)	621 (2.6)	37 (1.1)	588 (2.6)	19 (1.0)	541 (3.5)		
British Columbia, Canada	Girls	53 (1.5)	574 (3.5)	32 (1.2)	528 (4.5)	15 (1.2)	479 (6.4)		
	Boys	50 (1.5)	562 (4.0)	31 (1.4)	523 (5.4)	18 (1.2)	472 (8.0)		
Quebec, Canada	Girls	44 (1.7)	584 (3.9)	35 (1.1)	548 (3.8)	21 (1.1)	515 (5.1)		
	Boys	42 (1.3)	574 (3.0)	35 (1.1)	542 (3.7)	23 (1.1)	505 (4.7)		
Dubai, UAE	Girls	53 (1.0)	594 (2.6)	32 (0.8)	543 (3.6)	16 (0.7)	477 (4.3)		
	Boys	50 (1.0)	588 (2.7)	31 (0.8)	545 (3.0)	20 (0.9)	479 (5.3)		
Alberta, Canada	Girls	52 (1.6)	583 (4.0)	31 (1.6)	529 (4.6)	17 (1.2)	479 (7.0)		
	Boys	48 (1.8)	566 (3.5)	34 (1.5)	525 (5.0)	18 (1.4)	477 (7.4)		
Abu Dhabi, UAE	Girls	38 (1.0)	542 (4.2)	32 (0.9)	453 (5.2)	29 (0.9)	376 (4.6)		
	Boys	34 (1.3)	542 (5.7)	29 (0.9)	433 (5.7)	36 (1.2)	355 (6.3)		
South Africa (6) ☒	Girls	29 (1.3)	496 (6.5)	38 (0.9)	404 (5.3)	33 (1.2)	343 (5.0)		
	Boys	21 (1.1)	481 (6.7)	38 (1.1)	366 (6.2)	41 (1.3)	303 (5.4)		
Newfoundland & Labrador, Canada	Girls	53 (1.4)	565 (3.6)	32 (1.1)	516 (3.9)	15 (1.0)	464 (6.8)		
	Boys	44 (1.4)	557 (4.7)	36 (1.5)	510 (5.0)	20 (1.2)	460 (6.9)		

Students Use Digital Devices to Find and Read Information

Students participating in PIRLS 2021 were asked to indicate how much time they spent using a computer, tablet, or smartphone to find and read information for schoolwork on a normal school day. Interpreting the results depends on a number of factors, including the regularity of schoolwork that involves searching for information, the difficulty of the searches, students' personal interests, and their inclination to not become distracted by extraneous information.

Exhibit 7.5 presents the countries' results in alphabetic order together with average achievement for three categories of time spent—"more than 30 minutes per school day," "30 minutes or less per school day," and "no time per school day."

On average, about half the students (52%) were in the middle category of time spent, spending "30 minutes or less per school day" using digital devices to find and read information, and these students had the highest average reading achievement (512). Relatively fewer students reported spending either "more than 30 minutes" (25%) or "no time" (23%) per school day finding and reading digital information. The students who reported spending the most time, "more than 30 minutes per school day," had somewhat lower achievement (502) than those that spent "30 minutes or less," which could indicate a number of situations (e.g., they were assigned extra practice work, were just slower readers, or spent more time becoming distracted). The students who reported spending "no time" had the lowest average achievement (486). This finding about the distribution of digital device use and associated achievement is consistent with other research (e.g., Bundsgaard & Gerrick, 2017¹).

¹ Bundsgaard, J., & Gerrick, J. (2017). Patterns of students' computer use and relations to their computer and information literacy: results of a latent class analysis and implications for teaching and learning. *Large-scale Assessments in Education*, 5(16), 1-15.

Exhibit 7.5: Students Use Digital Devices to Find and Read Information

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

⌘ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country	More Than 30 Minutes per School Day		30 Minutes or Less per School Day		No Time per School Day	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Albania	29 (1.4)	513 (4.1)	57 (1.2)	521 (3.8)	14 (1.0)	489 (5.3)
Australia ⌘	27 (1.1)	545 (2.9)	57 (1.1)	547 (2.3)	17 (1.0)	516 (5.2)
Austria	17 (0.6)	508 (3.5)	46 (1.0)	533 (2.8)	36 (1.1)	538 (2.6)
Azerbaijan	25 (0.8)	443 (4.2)	46 (1.0)	456 (4.4)	29 (1.0)	422 (3.8)
Bahrain	38 (0.9)	464 (3.6)	50 (0.8)	473 (3.0)	12 (0.6)	412 (7.1)
Belgium (Flemish)	16 (0.6)	506 (3.7)	55 (1.0)	508 (2.4)	30 (1.0)	519 (2.9)
Belgium (French)	14 (0.7)	478 (4.4)	35 (1.4)	491 (3.3)	51 (1.6)	502 (3.7)
Brazil ⌘	25 (1.0)	420 (6.7)	47 (1.1)	456 (5.5)	29 (1.4)	395 (5.5)
Bulgaria	25 (1.3)	542 (4.3)	50 (1.4)	554 (3.7)	25 (1.4)	515 (5.0)
Chinese Taipei	16 (0.6)	542 (3.1)	52 (1.0)	549 (2.5)	32 (1.1)	539 (2.5)
Croatia	25 (0.9)	545 (4.4)	64 (1.4)	566 (2.4)	12 (1.0)	536 (4.7)
Cyprus	16 (0.9)	508 (4.7)	51 (1.4)	521 (2.8)	33 (1.6)	499 (4.1)
Czech Republic	19 (0.7)	531 (3.3)	49 (1.0)	548 (2.6)	32 (1.2)	537 (2.9)
Denmark	24 (1.1)	534 (3.7)	57 (1.0)	543 (2.4)	19 (1.1)	541 (3.8)
Egypt	25 (1.0)	392 (4.4)	36 (1.5)	389 (6.4)	39 (1.4)	376 (7.3)
England ⌘	23 (1.1)	554 (3.8)	61 (1.1)	565 (2.7)	17 (1.0)	543 (4.2)
Finland	18 (0.8)	538 (4.3)	60 (0.9)	556 (2.3)	22 (0.9)	544 (3.8)
France	11 (0.6)	496 (5.1)	38 (1.6)	517 (2.8)	52 (1.8)	517 (3.3)
Georgia	32 (1.0)	496 (3.5)	57 (1.2)	505 (2.6)	11 (0.8)	459 (7.5)
Germany r	17 (0.7)	513 (3.8)	48 (1.0)	530 (2.7)	35 (1.1)	535 (2.8)
Hong Kong SAR	21 (0.8)	576 (3.7)	66 (0.9)	578 (2.6)	13 (0.6)	541 (5.4)
Hungary	24 (0.8)	530 (4.5)	53 (1.1)	552 (3.3)	23 (0.9)	528 (5.1)
Iran, Islamic Rep. of ⌘	24 (1.2)	415 (6.5)	40 (1.4)	426 (5.1)	36 (1.5)	400 (8.0)
Ireland	16 (0.8)	565 (4.1)	57 (1.4)	580 (2.9)	27 (1.6)	582 (3.5)
Israel ⌘	26 (0.9)	506 (3.2)	50 (0.9)	520 (2.5)	24 (0.9)	504 (3.8)
Italy	17 (0.7)	523 (3.1)	32 (1.0)	531 (2.7)	51 (1.2)	548 (2.3)
Jordan	30 (1.3)	390 (6.1)	43 (1.5)	395 (6.7)	26 (1.4)	357 (8.8)
Kazakhstan	40 (0.8)	503 (2.4)	46 (1.0)	517 (3.1)	14 (0.6)	467 (5.0)
Kosovo	40 (1.0)	430 (3.2)	47 (1.1)	428 (3.5)	13 (0.7)	388 (6.0)
Latvia	26 (1.0)	524 (3.7)	63 (1.0)	535 (2.7)	11 (0.7)	504 (6.7)
Lithuania	24 (0.8)	547 (4.1)	63 (0.9)	559 (2.2)	13 (0.7)	536 (3.9)
Macao SAR	21 (0.6)	541 (2.4)	62 (0.8)	542 (1.5)	16 (0.5)	506 (3.4)
Malta	28 (0.9)	514 (3.4)	58 (1.1)	523 (2.9)	14 (0.7)	495 (7.0)
Montenegro	27 (0.9)	486 (2.6)	51 (0.9)	498 (2.2)	22 (0.8)	476 (3.5)
Morocco	26 (1.1)	381 (4.8)	46 (1.4)	387 (5.3)	28 (1.5)	346 (8.1)
Netherlands	23 (1.0)	527 (3.5)	57 (1.1)	529 (3.0)	20 (1.1)	523 (3.2)
New Zealand	28 (0.9)	528 (3.2)	53 (0.8)	531 (2.7)	19 (0.8)	499 (3.1)
North Macedonia	33 (1.3)	441 (6.2)	53 (1.7)	461 (4.1)	14 (1.6)	398 (9.1)
Northern Ireland	20 (0.9)	562 (3.7)	66 (1.0)	572 (2.2)	13 (0.9)	547 (6.3)
Norway (5)	29 (1.3)	540 (3.1)	61 (1.2)	545 (2.0)	10 (0.7)	516 (5.2)
Oman	33 (1.0)	437 (5.1)	52 (0.9)	444 (3.7)	15 (0.7)	398 (6.0)
Poland	30 (0.9)	537 (2.9)	59 (0.9)	559 (2.5)	11 (0.6)	535 (4.6)
Portugal	23 (0.7)	511 (2.7)	53 (0.9)	524 (2.6)	24 (0.9)	522 (3.6)
Qatar	35 (0.9)	495 (4.2)	51 (0.8)	495 (4.0)	15 (0.6)	450 (5.0)
Russian Federation	26 (0.6)	563 (4.4)	54 (0.9)	578 (3.5)	20 (0.8)	549 (5.3)
Saudi Arabia	31 (0.9)	457 (3.8)	48 (1.0)	461 (3.9)	21 (0.9)	429 (5.3)
Serbia	33 (1.2)	512 (3.2)	49 (1.1)	520 (3.6)	17 (0.9)	503 (6.2)
Singapore	28 (0.6)	594 (3.4)	57 (0.7)	592 (3.2)	15 (0.5)	561 (5.0)
Slovak Republic	19 (0.7)	532 (3.8)	58 (1.1)	542 (2.7)	23 (1.1)	504 (6.1)
Slovenia	22 (0.7)	509 (3.3)	53 (0.8)	529 (2.0)	25 (0.7)	512 (3.4)
South Africa ⌘	27 (0.8)	325 (6.4)	34 (0.8)	313 (6.0)	39 (1.0)	262 (4.3)
Spain	25 (0.7)	518 (3.0)	57 (0.7)	526 (2.1)	18 (0.7)	517 (3.6)
Sweden	27 (0.9)	543 (2.9)	62 (1.0)	549 (2.5)	12 (0.8)	534 (5.9)
Turkiye	32 (1.0)	495 (3.6)	56 (1.0)	509 (3.4)	12 (1.0)	450 (7.2)
United Arab Emirates	36 (0.5)	504 (2.1)	51 (0.5)	498 (2.1)	13 (0.3)	409 (3.8)
United States	23 (1.3)	545 (8.1)	60 (1.5)	555 (7.4)	17 (1.3)	535 (11.4)
Uzbekistan	22 (0.9)	434 (3.6)	35 (1.1)	448 (3.6)	43 (1.6)	433 (3.2)
International Average	25 (0.1)	502 (0.5)	52 (0.1)	512 (0.5)	23 (0.1)	486 (0.7)
Benchmarking Participants						
Alberta, Canada	30 (1.3)	540 (3.9)	56 (1.4)	545 (3.4)	14 (1.0)	529 (7.4)
British Columbia, Canada	27 (1.0)	536 (3.4)	55 (1.1)	543 (4.1)	18 (1.0)	524 (5.4)
Newfoundland & Labrador, Canada	26 (1.2)	522 (3.9)	56 (1.4)	533 (3.1)	18 (0.8)	510 (7.9)
Quebec, Canada	25 (1.0)	552 (3.4)	55 (1.2)	554 (2.9)	20 (1.0)	544 (4.7)
Moscow City, Russian Federation	23 (0.6)	594 (2.9)	58 (0.8)	604 (2.0)	19 (0.7)	589 (3.5)
South Africa (6) ⌘	35 (0.9)	409 (5.4)	43 (1.0)	392 (5.4)	22 (1.3)	347 (5.5)
Abu Dhabi, UAE	33 (0.6)	468 (4.2)	50 (0.8)	460 (4.1)	16 (0.6)	367 (5.5)
Dubai, UAE	38 (0.7)	561 (2.0)	54 (0.7)	560 (1.7)	8 (0.4)	482 (5.8)

() 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.

Exhibit 7.5: Students Use Digital Devices to Find and Read Information*Students' Reports*

About the Item	
How much time do you spend using a computer, tablet, or smartphone to <i>find and read information</i> for your <u>schoolwork</u> on a normal school day?	
No time - - - -	<input type="radio"/>
30 minutes or less - - - -	<input type="radio"/>
More than 30 minutes - - - -	<input type="radio"/>

SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2021
Downloaded from <https://pirls2021.org/results>

Exhibit 7.6 shows that on average, the results for the time spent using digital devices to find and read information on a normal school day were similar for girls and boys, but with somewhat more girls in the middle time spent category—“30 minutes or less per school day” (56% vs. 49%). On average, 24 percent of girls reported spending “more than 30 minutes” per school day using digital devices to find and read information, 56 percent reported “30 minutes or less,” and 21 percent reported “no time.” In comparison, 27 percent of boys reported spending “more than 30 minutes” per school day, 49 percent reported spending “30 minutes or less,” and 25 percent reported spending “no time.”

Exhibit 7.6: Students Use Digital Devices to Find and Read Information by Gender

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☒ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

Country		More Than 30 Minutes per School Day		30 Minutes or Less per School Day		No Time per School Day	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Albania	Girls	26 (1.8)	524 (6.0)	60 (1.6)	532 (3.9)	14 (1.2)	492 (7.1)
	Boys	32 (1.6)	505 (4.6)	54 (1.5)	509 (4.7)	14 (1.2)	487 (7.4)
Australia ☒	Girls	24 (1.3)	551 (4.6)	61 (1.3)	554 (3.2)	16 (1.2)	531 (6.4)
	Boys	30 (1.4)	541 (3.9)	53 (1.4)	538 (3.0)	17 (1.3)	502 (6.3)
Austria	Girls	15 (0.8)	510 (5.0)	54 (1.4)	539 (3.7)	31 (1.4)	548 (3.2)
	Boys	19 (1.0)	507 (4.7)	40 (1.3)	524 (3.1)	41 (1.3)	530 (3.5)
Azerbaijan	Girls	22 (1.0)	451 (5.5)	49 (1.5)	468 (5.0)	29 (1.4)	429 (5.7)
	Boys	27 (1.0)	437 (5.0)	43 (1.2)	445 (5.0)	30 (1.2)	417 (5.2)
Bahrain	Girls	37 (1.3)	483 (4.6)	53 (1.2)	494 (4.2)	10 (0.5)	448 (12.4)
	Boys	39 (1.3)	445 (4.5)	46 (1.2)	449 (3.6)	15 (1.1)	387 (6.6)
Belgium (Flemish)	Girls	14 (0.8)	504 (4.9)	57 (1.5)	512 (2.7)	29 (1.5)	525 (3.4)
	Boys	18 (1.0)	507 (4.2)	52 (1.2)	504 (3.4)	30 (1.1)	514 (3.8)
Belgium (French)	Girls	12 (0.9)	479 (6.2)	37 (1.8)	497 (3.9)	51 (2.0)	507 (4.8)
	Boys	15 (1.0)	476 (5.5)	33 (1.5)	484 (4.1)	52 (1.6)	498 (3.9)
Brazil ☒	Girls	23 (1.4)	429 (7.6)	51 (1.4)	468 (6.0)	26 (1.7)	397 (7.5)
	Boys	26 (1.5)	412 (7.8)	43 (1.5)	442 (7.1)	31 (1.7)	393 (7.1)
Bulgaria	Girls	22 (1.7)	558 (4.6)	54 (2.0)	559 (4.1)	24 (1.7)	520 (6.3)
	Boys	28 (1.5)	531 (5.9)	47 (1.5)	549 (4.5)	25 (1.4)	511 (6.7)
Chinese Taipei	Girls	14 (0.7)	553 (3.9)	57 (1.2)	556 (2.9)	29 (1.2)	541 (3.4)
	Boys	18 (0.8)	534 (3.9)	46 (1.2)	542 (2.9)	36 (1.4)	537 (2.9)
Croatia	Girls	22 (1.2)	550 (5.2)	70 (1.6)	570 (3.3)	8 (1.2)	539 (8.5)
	Boys	27 (1.4)	542 (5.2)	58 (1.8)	562 (2.9)	15 (1.2)	535 (6.4)
Cyprus	Girls	15 (0.9)	513 (5.8)	56 (1.6)	526 (3.2)	29 (1.7)	499 (4.9)
	Boys	17 (1.1)	503 (5.3)	47 (1.4)	516 (3.3)	37 (1.7)	499 (4.7)
Czech Republic	Girls	17 (1.0)	536 (3.8)	52 (1.2)	548 (3.1)	30 (1.4)	538 (4.6)
	Boys	21 (1.0)	528 (4.5)	46 (1.5)	547 (3.4)	33 (1.6)	536 (3.2)
Denmark	Girls	21 (1.4)	543 (4.3)	61 (1.3)	548 (3.0)	18 (1.5)	548 (4.1)
	Boys	26 (1.4)	526 (4.8)	53 (1.3)	538 (3.2)	21 (1.2)	534 (5.1)
Egypt	Girls	25 (1.3)	400 (5.0)	37 (1.7)	395 (7.0)	38 (1.9)	386 (8.1)
	Boys	25 (1.2)	385 (5.7)	34 (1.8)	383 (8.0)	40 (1.6)	367 (8.6)
England ☒	Girls	22 (1.3)	559 (4.8)	65 (1.2)	569 (3.4)	14 (1.0)	547 (6.5)
	Boys	24 (1.3)	549 (5.7)	56 (1.5)	560 (3.7)	20 (1.3)	540 (4.9)
Finland	Girls	16 (0.8)	545 (4.8)	66 (1.2)	564 (2.6)	18 (1.0)	554 (4.6)
	Boys	21 (1.0)	534 (5.4)	54 (1.2)	547 (2.7)	26 (1.3)	538 (4.7)
France	Girls	10 (0.9)	507 (7.0)	40 (1.9)	525 (3.3)	50 (2.3)	522 (4.0)
	Boys	11 (0.8)	486 (6.1)	35 (1.6)	508 (3.3)	54 (1.8)	512 (3.6)
Georgia	Girls	31 (1.1)	505 (4.4)	60 (1.4)	515 (3.0)	9 (0.8)	473 (9.5)
	Boys	33 (1.4)	488 (4.1)	54 (1.5)	494 (3.5)	13 (1.1)	449 (8.0)
Germany	Girls r	15 (0.9)	515 (5.1)	51 (1.4)	538 (3.5)	33 (1.5)	543 (3.5)
	Boys r	18 (1.0)	511 (4.7)	46 (1.1)	520 (3.4)	37 (1.3)	529 (3.7)
Hong Kong SAR	Girls	20 (1.1)	577 (4.0)	70 (1.3)	582 (2.8)	9 (0.7)	546 (7.7)
	Boys	22 (1.0)	574 (4.9)	62 (1.3)	575 (3.4)	16 (1.0)	537 (6.1)
Hungary	Girls	21 (1.0)	538 (5.2)	56 (1.4)	559 (3.5)	23 (1.1)	531 (5.6)
	Boys	27 (1.1)	523 (5.5)	49 (1.2)	545 (4.2)	24 (1.1)	525 (6.0)
Iran, Islamic Rep. of ☒	Girls	22 (1.6)	426 (7.5)	42 (2.0)	432 (8.0)	36 (2.3)	412 (10.9)
	Boys	26 (1.6)	407 (8.3)	38 (1.8)	420 (7.0)	36 (1.9)	391 (9.3)
Ireland	Girls	13 (1.0)	572 (5.9)	63 (1.7)	584 (3.6)	24 (1.8)	588 (5.7)
	Boys	19 (1.1)	559 (4.9)	51 (1.7)	574 (3.7)	30 (1.9)	578 (3.7)
Israel ☒	Girls	26 (1.2)	506 (3.9)	54 (1.2)	523 (3.3)	20 (1.1)	500 (5.5)
	Boys	26 (1.1)	506 (4.5)	47 (1.3)	517 (2.8)	27 (1.3)	506 (4.3)
Italy	Girls	16 (0.9)	527 (4.1)	32 (1.2)	535 (3.5)	52 (1.4)	551 (2.7)
	Boys	18 (1.0)	519 (3.8)	32 (1.2)	528 (3.2)	50 (1.4)	545 (2.7)
Jordan	Girls	29 (1.8)	406 (8.2)	47 (1.8)	411 (8.1)	24 (2.1)	373 (8.0)
	Boys	32 (1.8)	374 (8.5)	39 (2.1)	374 (10.2)	29 (1.9)	344 (14.1)
Kazakhstan	Girls	41 (1.1)	511 (2.8)	47 (1.1)	525 (3.1)	12 (0.6)	471 (5.9)
	Boys	39 (1.1)	495 (3.5)	45 (1.2)	508 (3.6)	16 (0.8)	463 (6.3)
Kosovo	Girls	38 (1.1)	439 (3.7)	49 (1.3)	436 (3.5)	13 (0.9)	401 (7.1)
	Boys	42 (1.3)	421 (4.1)	44 (1.5)	417 (4.6)	14 (0.9)	375 (8.4)
Latvia	Girls	24 (1.2)	538 (4.8)	68 (1.5)	546 (3.5)	8 (1.3)	523 (7.6)
	Boys	28 (1.3)	512 (4.7)	58 (1.3)	523 (3.4)	14 (1.0)	493 (8.1)
Lithuania	Girls	22 (1.1)	559 (4.6)	67 (1.2)	567 (2.4)	11 (1.1)	555 (5.1)
	Boys	26 (1.1)	537 (5.1)	60 (1.2)	551 (2.6)	14 (0.8)	521 (4.8)
Macao SAR	Girls	21 (0.7)	549 (3.1)	66 (1.0)	545 (1.8)	13 (0.8)	507 (5.3)
	Boys	22 (0.8)	533 (3.5)	59 (1.0)	539 (2.2)	19 (0.8)	505 (3.8)
Malta	Girls	27 (1.3)	519 (5.3)	61 (1.3)	524 (4.0)	12 (1.0)	496 (10.7)
	Boys	29 (1.3)	509 (4.6)	56 (1.6)	522 (3.8)	15 (1.0)	495 (7.0)

() 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.

Exhibit 7.6: Students Use Digital Devices to Find and Read Information by Gender

Students' Reports

Assessed Fourth Grade Students at the End of the School Year

☞ Assessed one year later than originally scheduled

■ Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

(Continued)

Country		More Than 30 Minutes per School Day		30 Minutes or Less per School Day		No Time per School Day	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Montenegro	Girls	24 (1.1)	497 (4.5)	55 (1.1)	507 (2.5)	21 (1.0)	482 (4.6)
	Boys	29 (1.1)	477 (3.4)	48 (1.3)	488 (3.0)	23 (1.1)	470 (4.6)
Morocco	Girls	25 (1.5)	403 (5.5)	48 (1.8)	404 (5.5)	27 (1.7)	357 (8.7)
	Boys	27 (1.2)	362 (6.3)	45 (1.5)	369 (6.1)	29 (1.7)	337 (9.1)
Netherlands	Girls	21 (1.4)	533 (4.7)	60 (1.4)	535 (3.8)	19 (1.3)	531 (4.6)
	Boys	24 (1.3)	522 (4.4)	55 (1.3)	523 (3.6)	21 (1.2)	515 (4.3)
New Zealand	Girls	27 (0.9)	535 (4.7)	57 (1.0)	540 (3.4)	16 (0.9)	502 (4.9)
	Boys	30 (1.4)	521 (4.4)	50 (1.3)	521 (3.4)	21 (1.2)	496 (4.0)
North Macedonia	Girls	33 (1.7)	453 (6.8)	55 (2.1)	471 (5.0)	12 (1.5)	410 (12.2)
	Boys	33 (1.5)	429 (7.5)	51 (2.0)	450 (4.8)	17 (2.0)	390 (9.9)
Northern Ireland	Girls	21 (1.1)	569 (4.6)	70 (1.2)	582 (2.9)	9 (0.8)	569 (8.5)
	Boys	20 (1.2)	552 (5.1)	62 (1.4)	560 (3.1)	18 (1.3)	535 (7.9)
Norway (5)	Girls	28 (1.7)	546 (4.2)	63 (1.7)	553 (2.3)	9 (0.9)	527 (7.3)
	Boys	30 (1.3)	535 (3.7)	58 (1.1)	536 (2.6)	11 (0.9)	507 (5.0)
Oman	Girls	35 (1.3)	452 (6.2)	53 (1.4)	459 (4.5)	12 (0.9)	412 (7.0)
	Boys	32 (1.2)	420 (5.8)	51 (1.2)	427 (4.6)	18 (0.9)	388 (7.7)
Poland	Girls	24 (1.3)	553 (4.4)	65 (1.3)	565 (3.2)	10 (0.9)	546 (6.0)
	Boys	35 (1.2)	527 (3.6)	53 (1.4)	553 (3.2)	12 (0.8)	527 (5.7)
Portugal	Girls	21 (0.8)	515 (3.7)	57 (1.2)	527 (2.8)	22 (1.2)	520 (4.2)
	Boys	25 (0.9)	508 (3.3)	50 (1.1)	521 (3.0)	25 (1.0)	523 (4.8)
Qatar	Girls	32 (1.4)	501 (5.0)	55 (1.2)	502 (4.3)	13 (0.9)	455 (6.1)
	Boys	38 (1.1)	489 (5.4)	46 (1.2)	486 (5.3)	16 (0.9)	445 (7.4)
Russian Federation	Girls	25 (0.9)	569 (4.6)	58 (1.1)	585 (3.2)	17 (0.9)	554 (5.9)
	Boys	27 (0.8)	558 (5.2)	51 (1.1)	570 (5.2)	22 (1.1)	546 (6.6)
Saudi Arabia	Girls	31 (1.3)	472 (5.2)	51 (1.6)	475 (5.5)	18 (1.2)	440 (7.9)
	Boys	31 (1.4)	435 (5.3)	45 (1.2)	439 (5.2)	25 (1.2)	418 (6.8)
Serbia	Girls	31 (1.6)	518 (5.1)	52 (1.6)	523 (4.3)	17 (1.3)	510 (9.2)
	Boys	36 (1.9)	507 (3.7)	47 (1.7)	517 (4.4)	17 (1.3)	497 (7.8)
Singapore	Girls	28 (0.8)	601 (3.6)	60 (0.8)	599 (3.2)	12 (0.6)	573 (5.9)
	Boys	29 (0.9)	588 (4.5)	53 (1.0)	585 (3.8)	18 (0.7)	553 (6.1)
Slovak Republic	Girls	16 (1.0)	539 (4.7)	63 (1.6)	545 (3.1)	21 (1.5)	502 (6.6)
	Boys	23 (1.0)	526 (5.2)	51 (1.2)	538 (3.1)	26 (1.1)	505 (7.1)
Slovenia	Girls	18 (0.9)	519 (4.1)	59 (1.3)	535 (2.5)	23 (1.1)	523 (3.8)
	Boys	26 (1.0)	503 (4.2)	47 (1.2)	521 (2.7)	27 (1.2)	503 (4.7)
South Africa ☞	Girls	28 (1.0)	354 (6.5)	34 (0.9)	342 (5.9)	39 (1.2)	285 (4.7)
	Boys	26 (1.0)	293 (7.4)	35 (1.1)	284 (7.0)	39 (1.2)	239 (5.2)
Spain	Girls	24 (0.8)	516 (4.3)	61 (1.1)	527 (2.7)	15 (0.9)	518 (4.8)
	Boys	25 (1.0)	520 (3.3)	54 (1.0)	524 (2.8)	20 (0.9)	516 (4.5)
Sweden	Girls	25 (1.2)	555 (4.0)	65 (1.2)	554 (2.9)	10 (0.9)	543 (7.3)
	Boys	28 (1.1)	533 (3.3)	59 (1.3)	543 (3.0)	13 (1.0)	527 (7.4)
Turkiye	Girls	29 (1.2)	505 (4.7)	59 (1.4)	518 (3.8)	13 (1.2)	450 (8.5)
	Boys	35 (1.2)	487 (4.4)	53 (1.1)	499 (3.9)	12 (1.0)	451 (8.6)
United Arab Emirates	Girls	34 (0.6)	512 (3.4)	56 (0.6)	507 (2.8)	11 (0.5)	424 (4.9)
	Boys	39 (0.6)	496 (3.6)	46 (0.7)	486 (4.2)	15 (0.5)	398 (5.1)
United States	Girls	22 (1.7)	538 (11.7)	63 (2.1)	560 (7.3)	15 (1.6)	543 (12.3)
	Boys	24 (1.6)	551 (7.7)	58 (1.8)	549 (9.1)	18 (2.0)	528 (13.5)
Uzbekistan	Girls	22 (1.2)	445 (4.8)	36 (1.4)	463 (3.7)	42 (1.7)	443 (3.8)
	Boys	22 (1.2)	423 (4.3)	34 (1.4)	432 (5.0)	44 (1.9)	425 (4.0)
International Average	Girls	24 (0.2)	510 (0.7)	56 (0.2)	520 (0.5)	21 (0.2)	494 (0.9)
	Boys	27 (0.2)	494 (0.7)	49 (0.2)	503 (0.6)	25 (0.2)	479 (0.9)
Benchmarking Participants							
Alberta, Canada	Girls	25 (1.8)	551 (5.6)	62 (2.0)	548 (3.8)	12 (1.1)	542 (9.5)
	Boys	34 (1.4)	533 (4.5)	50 (1.6)	540 (4.8)	16 (1.3)	519 (9.4)
British Columbia, Canada	Girls	25 (1.2)	544 (4.3)	59 (1.5)	550 (4.0)	16 (1.3)	530 (5.3)
	Boys	30 (1.3)	529 (4.5)	50 (1.5)	537 (5.3)	20 (1.3)	520 (7.5)
Newfoundland & Labrador, Canada	Girls	25 (1.3)	529 (5.0)	60 (1.7)	537 (4.0)	15 (1.1)	523 (7.3)
	Boys	28 (1.6)	516 (5.4)	52 (1.8)	527 (3.9)	20 (1.2)	500 (10.1)
Quebec, Canada	Girls	22 (1.3)	563 (4.2)	61 (1.4)	557 (3.4)	17 (1.0)	549 (6.8)
	Boys	29 (1.1)	544 (4.4)	49 (1.5)	550 (3.5)	22 (1.4)	541 (5.5)
Moscow City, Russian Federation	Girls	23 (0.9)	601 (3.3)	61 (1.0)	609 (2.3)	17 (0.9)	595 (3.6)
	Boys	24 (0.8)	588 (3.8)	55 (1.2)	599 (2.5)	20 (1.0)	584 (4.3)
South Africa (6) ☞	Girls	38 (1.3)	430 (5.9)	42 (1.2)	415 (5.7)	20 (1.5)	367 (6.2)
	Boys	32 (1.0)	382 (6.8)	43 (1.2)	367 (6.5)	25 (1.4)	328 (6.4)
Abu Dhabi, UAE	Girls	31 (0.8)	478 (4.7)	55 (1.0)	472 (4.3)	13 (0.7)	377 (8.0)
	Boys	36 (0.9)	458 (6.3)	45 (1.0)	445 (6.7)	20 (0.8)	360 (7.6)
Dubai, UAE	Girls	35 (1.2)	564 (3.7)	59 (1.2)	563 (2.8)	6 (0.5)	488 (7.8)
	Boys	42 (0.9)	559 (3.4)	49 (1.0)	558 (2.9)	9 (0.6)	478 (8.5)