# PIRILS

**Chapter 8** 



## **Chapter 8**

Students' Reading Attitudes, Self-Concept, and Out-of-School Activities

Literacy activities at home and in school encourage and reinforce students' positive reading attitudes. The reading curriculum in most countries emphasizes students' positive attitudes toward reading as a major objective. Students who enjoy reading usually read more frequently, thus broadening their knowledge of text situations, expanding their literary experiences, and improving their comprehension skills.

### What Are Students' Attitudes Toward Reading?

To examine fourth-graders' views on reading for enjoyment and appreciating books, PIRLS created an Index of Students' Attitudes Toward Reading. The index was based on students' agreement with the following statements related to reading:

- I read only if I have to (reverse coded).
- I like talking about books with other people.
- I would be happy if someone gave me a book as a present.
- I think reading is boring (reverse coded).
- · I enjoy reading.

Responses to each statement, ranging from disagree a lot to agree a lot on a 4-point scale, were averaged across each student. Students in the high category agreed or agreed a lot with all of the statements about reading. Stu-

dents in the low category of students' attitudes toward reading disagreed or disagreed a lot with all of the statements. The medium level of the index indicates all other combinations of responses. The results are shown in Exhibit 8.1.

Student attitudes toward reading were generally positive. About half the students, on average, internationally, were categorized in the high category of the index, and over 90 percent of the students were in either the high or medium category. At least 60 percent of the students in Iran, Moldova, Macedonia, Greece, Romania, and Bulgaria were at the high level; the country with the largest percentage of students at this level was Iran with 71 percent. Within all countries, students with the most positive attitudes had the highest reading achievement.

Exhibit 8.2 presents the percentage of boys and girls at each of the levels in the index. More girls than boys had positive attitudes in all countries. There were significantly greater percentages of girls in the high cat-



egory, whereas there were greater percentages of boys than girls in the medium and low categories. On average, internationally, 60 percent of the students in the high category were girls and 42 percent boys. Countries with the greatest

differences (at least 24%) between girls and boys at the high level included Cyprus, Latvia, Lithuania, The Netherlands, Singapore, and Slovenia.

### What Are Students' Perceptions of Their Reading Ability?

Students possess self-awareness of their abilities and limitations in their coursework at school. Pos-

itive perceptions of their reading ability may influence their perseverance with a task, or may encourage their engagement in activities related to academic performance.

To examine students' conceptions of their reading ability, PIRLS asked students to respond to the following statements about how well they read:

- Reading is very easy for me.
- I do not read as well as other students in my class (reverse coded).
- Reading aloud is very hard for me (reverse coded).

Response options ranged from disagree a lot to agree a lot on a 4-point scale. PIRLS combined students' responses to these three statements to form an Index of Students' Reading Self-Concept. Students in the high category agreed or agreed a lot with all three statements about their perceived competence in reading. Students in the low category disagreed or disagreed a lot with all three statements. The medium level of the index indicates all other combinations of responses. Results of this index are presented in Exhibit 8.3.

Less than half the students, internationally (40%), were at the high level of the index with percentages of students for individual countries ranging from 23 to 56 percent. In six countries – Italy, Sweden, Bulgaria, Slovenia, Cyprus, and Israel – more than half of the students were in the high category. On average, across countries, the majority of students were in the medium cat-

Student attitudes toward reading were generally positive. egory (55%), while only 5 percent were in the low category. Students with a positive reading self-concept had higher achievement in each of the PIRLS countries.

The percentages of boys and girls at each level of the index are shown in Exhibit 8.4. On average, internationally, more girls were in the high category than boys (43% vs. 36%). Italy and Sweden were the only countries with more than 50 percent of both girls and boys in the high category. In most countries, more girls than boys had positive reading self-concepts. There were no significant gender differences at any level in Iceland and The Netherlands. In addition, England, France, Scotland, and the United States did not have significantly different percentages of girls and boys at the high or medium levels.

### Exhibit 8.1: Index of Students' Attitudes Toward Reading (SATR)



		gh ATR		dium ATR		ow ATR	
Countries	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percentage of Students at High Level of SATR
Iran, Islamic Rep. of	71 (1.9)	432 (4.0)	27 (1.8)	375 (4.7)	3 (0.3)	344 (14.5)	······•
Moldova, Rep. of	65 (1.9)	506 (4.3)	33 (1.9)	470 (4.7)	2 (0.3)	~ ~	·····•
Macedonia, Rep. of	62 (1.5)	480 (4.0)	37 (1.5)	395 (5.7)	1 (0.2)	~ ~	·····o
Greece	61 (1.7)	536 (3.8)	33 (1.4)	509 (4.9)	6 (0.6)	507 (9.3)	•
Romania	60 (1.7)	539 (4.5)	38 (1.7)	476 (6.2)	1 (0.2)	~ ~	·····o
Bulgaria	60 (1.6)	573 (3.3)	36 (1.4)	524 (4.8)	4 (0.5)	510 (10.8)	·····o
Turkey	59 (1.5)	478 (3.3)	40 (1.4)	410 (4.6)	1 (0.2)	~ ~	o
Slovenia	59 (1.4)	523 (2.4)	35 (1.3)	475 (3.4)	6 (0.6)	469 (6.9)	······o
France	58 (1.1)	548 (2.4)	39 (1.2)	499 (3.3)	3 (0.3)	480 (5.9)	·····o
Cyprus	57 (1.3)	513 (3.5)	37 (1.0)	471 (3.6)	7 (0.7)	486 (7.0)	·····o
Italy	56 (1.3)	555 (2.5)	38 (1.2)	524 (3.2)	6 (0.5)	523 (5.0)	•о
Russian Federation	54 (1.8)	544 (3.8)	42 (1.7)	510 (6.0)	4 (0.4)	519 (6.0)	о
Canada (O,Q)	54 (1.0)	566 (2.4)	38 (1.0)	523 (2.6)	8 (0.4)	511 (4.7)	o
Sweden	54 (1.1)	581 (2.1)	39 (0.9)	542 (2.6)	7 (0.6)	520 (4.6)	о
Singapore	54 (1.3)	561 (4.6)	42 (1.2)	490 (5.8)	5 (0.3)	506 (7.2)	о
New Zealand	51 (1.3)	560 (4.2)	41 (1.3)	499 (4.4)	8 (0.8)	507 (6.9)	о
Germany	50 (0.9)	563 (1.8)	40 (0.7)	520 (2.5)	10 (0.5)	510 (3.2)	·····o
Hungary	50 (1.2)	565 (2.7)	40 (1.0)	525 (2.4)	10 (0.8)	522 (4.2)	·····o
Hong Kong, SAR	49 (1.2)	545 (2.7)	46 (1.1)	513 (3.5)	5 (0.3)	510 (6.9)	••••••
Kuwait r	49 (1.2)	419 (4.6)	47 (1.2)	385 (5.2)	4 (0.4)	371 (14.5)	·····•
Iceland	49 (1.0)	538 (1.9)	45 (1.0)	495 (1.9)	6 (0.4)	471 (4.3)	·····•
Morocco	48 (2.2)	383 (12.7)	49 (2.2)	323 (10.2)	3 (1.0)	319 (19.7)	o
Scotland	47 (1.3)	554 (3.9)	42 (1.1)	510 (4.3)	11 (0.9)	498 (5.6)	o
Colombia	47 (1.6)	445 (5.1)	50 (1.5)	405 (5.0)	3 (0.3)	433 (8.3)	о
Lithuania	46 (1.5)	560 (2.5)	48 (1.4)	531 (3.1)	6 (0.6)	524 (5.8)	o
Israel	44 (1.4)	534 (3.1)	48 (1.2)	488 (3.9)	8 (0.6)	508 (6.0)	o
England	44 (1.4)	584 (3.9)	43 (1.2)	531 (3.8)	13 (0.9)	521 (5.2)	o
Norway	44 (1.2)	529 (3.4)	47 (1.0)	481 (3.4)	9 (0.6)	460 (6.7)	o
Slovak Republic	44 (1.5)	540 (3.0)	50 (1.3)	504 (3.4)	6 (0.6)	495 (5.7)	o
Netherlands	43 (1.3)	575 (2.4)	42 (1.0)	543 (2.8)	15 (0.8)	528 (3.6)	o
Argentina r	43 (1.3)	453 (6.4)	52 (1.1)	417 (5.7)	4 (0.5)	424 (11.6)	o
Latvia	43 (1.6)	566 (2.6)	49 (1.5)	530 (2.6)	8 (0.6)	528 (3.7)	o
United States	42 (1.1)	569 (3.7)	44 (0.9)	528 (4.4)	13 (0.9)	513 (5.1)	о
Czech Republic	40 (1.2)	561 (3.2)	52 (1.2)	525 (2.7)	7 (0.6)	500 (3.7)	о
Belize	33 (1.4)	372 (6.9)	62 (1.4)	310 (5.2)	5 (0.6)	311 (9.3)	о
International Avg.	51 (0.2)	524 (0.7)	43 (0.2)	479 (0.7)	6 (0.1)	478 (1.6)	·····o

Index of Students' Attitudes Toward Reading (SATR) Based on students' agreement with the following: I read only if I have to; I like talking about books with other people; I would be happy if someone gave me a book as a present; I think reading is boring; and I enjoy reading. Average is computed on a 4-point scale: Disagree a lot = 1,

Disagree a little = 2, Agree a little = 3, and Agree a lot = 4. Responses for negative statement were reverse-coded. High level indicates an average greater than 3 through 4. Medium level indicates an average of 2 through 3. Low level indicates an average of 1 to less than 2.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

A dash (–) indicates data are not available. A tilde ( $\sim$ ) indicates insufficient data to report achievement.

### Exhibit 8.2: Index of Students' Attitudes Toward Reading (SATR) by Gender



Countries	Hig SAT Percent of	R	S	dium ATR of Students		w TR f Students
	Girls	Boys	Girls	Boys	Girls	Boys
Argentina r	50 (1.6)	36 (1.5)	48 (1.5)	57 (1.3)	2 (0.3)	7 (1.0)
Belize	36 (1.8)	29 (1.6)	60 (2.2)	64 (1.6)	4 (0.8)	6 (0.8)
Bulgaria	70 (1.6)	49 (2.0)	28 (1.5)	45 (1.9)	2 (0.4)	6 (0.8)
Canada (O,Q)	65 (1.3)	43 (1.2)	32 (1.2)	44 (1.2)	4 (0.5)	13 (0.7)
Colombia	52 (1.7)	42 (2.2)	46 (1.6)	55 (2.0)	2 (0.4)	3 (0.5)
Cyprus	69 (1.8)	45 (1.9)	28 (1.7)	45 (1.5)	2 (0.5)	10 (1.1)
Czech Republic	49 (1.5)	33 (1.6)	47 (1.4)	57 (1.7)	4 (0.7)	10 (1.0)
England	53 (1.9)	35 (1.5)	39 (1.6)	47 (1.5)	8 (0.9)	18 (1.3)
France	65 (1.5)	51 (1.4)	33 (1.6)	44 (1.4)	2 (0.4)	5 (0.5)
Germany	61 (1.2)	40 (1.1)	35 (1.1)	45 (0.8)	4 (0.4)	15 (0.8)
Greece	68 (2.1)	55 (2.1)	29 (1.9)	37 (1.8)	3 (0.6)	8 (0.9)
Hong Kong, SAR	60 (1.3)	38 (1.3)	39 (1.3)	54 (1.4)	2 (0.3)	8 (0.6)
Hungary	59 (1.4)	40 (1.6)	35 (1.2)	46 (1.4)	6 (0.6)	14 (1.2)
Iceland	59 (1.5)	39 (1.3)	39 (1.4)	51 (1.5)	2 (0.4)	9 (0.8)
Iran, Islamic Rep. of	74 (2.1)	67 (2.6)	24 (2.0)	30 (2.4)	2 (0.4)	3 (0.5)
Israel	53 (1.6)	35 (1.6)	41 (1.5)	54 (1.5)	5 (0.7)	10 (0.9)
Italy	67 (1.5)	46 (1.4)	30 (1.4)	45 (1.4)	3 (0.5)	9 (0.8)
Kuwait s	55 (1.6)	42 (2.0)	43 (1.6)	51 (2.0)	2 (0.3)	6 (0.7)
Latvia	57 (1.9)	29 (1.8)	39 (1.8)	58 (1.7)	4 (0.6)	12 (1.0)
Lithuania	59 (1.7)	33 (1.9)	38 (1.5)	58 (1.9)	3 (0.6)	10 (0.9)
Macedonia, Rep. of	68 (1.7)	56 (1.8)	31 (1.7)	43 (1.8)	0 (0.1)	1 (0.4)
Moldova, Rep. of	72 (2.2)	59 (2.0)	27 (2.1)	39 (2.0)	1 (0.3)	3 (0.5)
Morocco	54 (2.7)	43 (2.4)	43 (2.6)	53 (2.4)	2 (0.9)	4 (1.1)
Netherlands	57 (1.6)	30 (1.6)	37 (1.3)	48 (1.2)	6 (0.6)	23 (1.3)
New Zealand	60 (1.7)	43 (1.6)	36 (1.7)	46 (1.6)	4 (0.7)	12 (1.2)
Norway	55 (1.4)	33 (1.6)	40 (1.3)	54 (1.5)	5 (0.6)	13 (1.2)
Romania	67 (1.8)	54 (2.1)	33 (1.7)	44 (2.1)	1 (0.2)	2 (0.5)
Russian Federation	63 (1.8)	46 (2.0)	35 (1.8)	49 (1.8)	2 (0.4)	5 (0.6)
Scotland	56 (1.6)	38 (1.8)	39 (1.6)	45 (1.5)	6 (0.7)	17 (1.5)
			33 (1.3)	i i _	2 (0.3)	7 (0.5)
Singapore Slovak Republic	66 (1.4) • 54 (1.8) •	42 (1.3) 33 (1.7)	43 (1.7)	51 (1.3) • 57 (1.5) •	4 (0.6)	9 (0.9)
Slovenia	71 (1.7)	46 (1.7)	27 (1.6)	43 (1.5)	2 (0.4)	10 (1.2)
Sweden					3 (0.4)	10 (1.2)
	(,	43 (1.5)	32 (1.3)			
Turkey	(=, =	52 (1.5)	34 (1.9)	` '	1 (0.1)	1 (0.3)
United States	52 (1.6)	33 (1.3)	40 (1.1)	49 (1.5)	8 (1.1)	19 (1.2)
International Acces	60 (0.3)	42 (0.2)	27 (0.2)	40 (0.3)	2 (0.4)	0 (0.3)
International Avg.	60 (0.3)	42 (0.3)	37 (0.3)	49 (0.3)	3 (0.1)	9 (0.2)

Significantly greater percentage than other gender

Index of Students' Attitudes Toward Reading (SATR)

Based on students' agreement with the following: I read only if I have to; I like talking about books with other people; I would be happy if someone gave me a book as a present; I think reading is boring; and I enjoy reading. Average is computed on a 4-point scale: Disagree a lot = 1,

Disagree a little = 2, Agree a little = 3, and Agree a lot = 4. Responses for negative statement were reverse-coded. High level indicates an average greater than 3 through 4. Medium level indicates an average of 2 through 3. Low level indicates an average of 1 to less than 2.

An "r" indicates data are available for 70-84% of the students. An "s" indicates data are available for 50-69% of the students. An "x" indicates data are available for less than 50% of the students.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

A dash (–) indicates data are not available. A tilde (~) indicates insufficient data to report achievement

### Exhibit 8.3: Index of Students' Reading Self Concept (SRSC)



	H SF	igh RSC		dium RSC		ow ISC	
Countries	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percentage of Students at High Level of SRSC
Italy	56 (1.2)	558 (2.3)	41 (1.1)	523 (3.3)	4 (0.4)	498 (6.2)	о
Sweden	54 (0.8)	581 (2.2)	43 (0.8)	541 (2.7)	2 (0.2)	~ ~	
Bulgaria	52 (1.4)	583 (3.3)	44 (1.3)	524 (4.4)	4 (0.4)	500 (9.4)	
Slovenia	52 (1.1)	528 (2.1)	45 (1.1)	478 (2.8)	3 (0.3)	438 (11.2)	
Cyprus	51 (0.8)	521 (3.6)	45 (0.8)	471 (3.0)	3 (0.4)	444 (10.7)	·····•
Israel	51 (1.0)	535 (2.7)	46 (0.9)	486 (3.5)	3 (0.3)	458 (10.1)	·····•
Greece	49 (1.0)	544 (3.7)	48 (1.1)	510 (3.8)	3 (0.3)	478 (14.1)	·····o
Norway	49 (1.1)	531 (3.3)	47 (1.1)	477 (3.6)	4 (0.4)	412 (8.7)	·····o
Netherlands	48 (0.9)	568 (2.8)	47 (0.9)	546 (2.5)	5 (0.4)	508 (5.4)	
Iceland	48 (0.8)	536 (1.8)	49 (0.8)	497 (1.9)	3 (0.3)	452 (8.4)	
Hungary	47 (1.0)	572 (2.2)	46 (1.1)	524 (2.4)	7 (0.5)	486 (5.0)	о
Kuwait r	46 (0.9)	424 (4.0)	50 (0.9)	382 (4.9)	4 (0.4)	364 (10.1)	······o
United States	46 (1.3)	569 (3.7)	47 (1.1)	525 (4.5)	7 (0.6)	490 (7.0)	······o
Canada (O,Q)	46 (0.8)	570 (2.5)	49 (0.7)	528 (2.7)	5 (0.3)	490 (5.3)	······o
Macedonia, Rep. of	45 (1.3)	490 (3.9)	53 (1.3)	413 (5.1)	2 (0.3)	~ ~	o
Germany	43 (0.8)	564 (2.4)	50 (0.8)	526 (2.0)	6 (0.3)	494 (4.0)	о
Romania	42 (1.5)	545 (5.1)	54 (1.4)	493 (4.9)	4 (0.7)	452 (12.7)	о
Turkey	40 (1.3)	484 (4.0)	58 (1.3)	429 (3.7)	3 (0.3)	393 (13.6)	·····•
Slovak Republic	37 (1.2)	544 (3.0)	56 (1.2)	506 (3.1)	6 (0.5)	481 (6.5)	•••••
Russian Federation	36 (1.2)	552 (3.7)	57 (1.0)	518 (4.5)	7 (0.7)	494 (12.5)	о
Scotland	36 (1.4)	560 (4.0)	57 (1.3)	515 (4.2)	8 (0.6)	486 (5.7)	о
Singapore	35 (0.9)	556 (4.7)	59 (0.8)	516 (5.4)	5 (0.3)	487 (6.6)	o
Moldova, Rep. of	34 (1.8)	523 (5.5)	60 (1.8)	479 (3.7)	6 (0.6)	465 (7.2)	·····o
Czech Republic	33 (1.0)	560 (3.4)	60 (1.0)	530 (2.5)	6 (0.5)	496 (5.1)	·····•
England	33 (0.9)	588 (3.6)	58 (1.0)	542 (3.8)	9 (0.5)	493 (6.6)	·····•
Lithuania	32 (1.0)	572 (3.5)	60 (1.1)	533 (2.7)	8 (0.6)	514 (5.3)	·····•
New Zealand	32 (0.9)	572 (3.9)	61 (1.0)	514 (4.3)	7 (0.5)	483 (8.5)	·····•
Iran, Islamic Rep. of	31 (1.7)	452 (4.7)	66 (1.6)	399 (3.8)	3 (0.3)	361 (12.2)	o
Morocco	31 (1.8)	386 (13.9)	65 (1.8)	336 (8.8)	4 (0.7)	350 (24.4)	o
Latvia	28 (1.1)	579 (2.7)	60 (1.1)	535 (2.5)	11 (0.7)	517 (3.9)	······o
France	28 (0.9)	549 (3.0)	66 (0.9)	521 (2.6)	6 (0.4)	486 (6.0)	o
Argentina r	26 (1.2)	473 (6.5)	69 (1.2)	420 (5.2)	5 (0.5)	396 (12.8)	о
Colombia	23 (1.1)	467 (6.2)	72 (1.1)	411 (4.3)	4 (0.5)	412 (9.8)	·····o
Belize	23 (1.2)	380 (7.4)	69 (1.3)	317 (5.0)	8 (0.6)	296 (10.2)	o
Hong Kong, SAR	23 (0.8)	549 (3.7)	69 (0.8)	525 (3.2)	9 (0.5)	509 (4.3)	·····o
International Avg.	40 (0.2)	530 (0.7)	55 (0.2)	485 (0.7)	5 (0.1)	457 (1.6)	o

Index of Students' Reading Self Concept (SRSC)

Based on students' agreement with the following: reading is very easy for me; I do not read as well as other students in my class; and reading aloud is very hard for me. Average is computed on a 4-point scale: Disagree a lot = 1, Disagree a little = 2, Agree a little = 3, and Agree a lot = 4. Responses

for negative statement were reverse-coded. High indicates an average of greater than 3 through 4. Medium indicates an average of 2 through 3. Low indicates an average of 1 to less than 2.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

A dash (–) indicates data are not available. A tilde (–) indicates insufficient data to report achievement.

### Exhibit 8.4: Index of Students' Reading Self Concept (SRSC) by Gender



Countries	Hig SRS Percent of		SI	dium RSC of Students	SR	ow SC f Students
	Girls	Boys	Girls	Boys	Girls	Boys
Argentina r	27 (1.4)	24 (1.5)	68 (1.4)	71 (1.6)	4 (0.6)	6 (0.8)
Belize	25 (1.4)	21 (1.4)	68 (1.5)	70 (1.5)	7 (0.7)	9 (0.9)
Bulgaria	59 (1.6)	44 (1.6)	38 (1.5)	50 (1.7)	3 (0.4)	6 (0.7)
Canada (O,Q)	48 (1.1)	43 (1.1)	47 (1.0)	51 (1.0)	5 (0.4)	6 (0.5)
Colombia	25 (1.3)	21 (1.4)	71 (1.3)	74 (1.5)	4 (0.7)	5 (0.7)
Cyprus	58 (1.3)	44 (1.3)	40 (1.3)	51 (1.4)	2 (0.4)	5 (0.7)
Czech Republic	36 (1.7)	31 (1.2)	58 (1.7)	63 (1.3)	6 (0.8)	7 (0.8)
England	34 (1.3)	32 (1.4)	59 (1.3)	57 (1.4)	7 (0.6)	11 (0.8)
France	29 (1.4)	27 (1.2)	65 (1.2)	67 (1.2)	5 (0.6)	7 (0.6)
Germany	46 (1.1)	40 (1.1)	48 (1.1)	53 (1.1)	6 (0.5)	7 (0.5)
Greece	52 (1.5)	46 (1.5)	46 (1.6)	51 (1.7)	2 (0.4)	4 (0.8)
Hong Kong, SAR	25 (1.4)	20 (0.9)	69 (1.3)	69 (1.0)	6 (0.5)	11 (0.6)
Hungary	52 (1.3)	42 (1.3)	42 (1.2)	50 (1.5)	6 (0.5)	9 (0.8)
Iceland	49 (1.0)	47 (1.2)	49 (1.0)	49 (1.2)	3 (0.4)	4 (0.4)
Iran, Islamic Rep. of	35 (2.3)	28 (2.1)	62 (2.2)	70 (2.0)	3 (0.3)	3 (0.5)
Israel	54 (1.4)	47 (1.4)	43 (1.3)	49 (1.4)	3 (0.5)	3 (0.4)
Italy	61 (1.4)	51 (1.4)	37 (1.4)	44 (1.2)	2 (0.4)	5 (0.6)
Kuwait s	49 (1.4)	44 (1.1)	48 (1.1)	52 (1.3)	3 (0.4)	5 (0.7)
Latvia	33 (1.5)	24 (1.1)	56 (1.6)	64 (1.1)	11 (0.9)	12 (0.9)
Lithuania	37 (1.4)	28 (1.4)	55 (1.5)	64 (1.4)	8 (0.8)	7 (0.7)
Macedonia, Rep. of	50 (1.8)	41 (1.5)	49 (1.8)	57 (1.5)	1 (0.3)	3 (0.5)
Moldova, Rep. of	40 (2.3)	27 (1.8)	56 (2.1)	64 (1.9)	4 (0.6)	9 (0.9)
Morocco	35 (2.2)	27 (1.9)	62 (2.1)	67 (2.1)	3 (0.6)	5 (0.9)
Netherlands	49 (1.3)	47 (1.3)	46 (1.3)	47 (1.3)	6 (0.6)	5 (0.6)
New Zealand	34 (1.4)	30 (1.3)	60 (1.3)	62 (1.6)	5 (0.7)	8 (0.9)
Norway	52 (1.4)	46 (1.4)	44 (1.4)	50 (1.5)	5 (0.5)	4 (0.5)
Romania	46 (1.8)	37 (1.6)	51 (1.7)	57 (1.6)	3 (0.7)	6 (0.9)
Russian Federation	40 (1.6)	32 (1.4)	54 (1.4)	60 (1.3)	6 (0.7)	8 (0.9)
Scotland	37 (1.9)	34 (1.7)	56 (2.0)	57 (1.6)	7 (0.8)	9 (0.8)
Singapore	37 (1.2)	33 (1.0)	58 (1.1)	61 (0.9)	5 (0.3)	6 (0.5)
Slovak Republic	42 (1.6)	33 (1.5)	53 (1.6)	59 (1.6)	5 (0.6)	8 (0.7)
Slovenia	58 (1.6)	45 (1.6)	40 (1.6)	51 (1.5)	2 (0.4)	4 (0.5)
Sweden	57 (1.3)	51 (1.6)	41 (1.2)	46 (1.5)	2 (0.3)	3 (0.3)
Turkey	45 (1.7)	35 (1.4)	54 (1.8)	62 (1.3)	2 (0.4)	4 (0.4)
United States	47 (1.5)	45 (1.8)	47 (1.4)	47 (1.6)	5 (0.6)	8 (0.8)

Significantly greater percentage than other gender

Index of Students' Reading Self Concept (SRSC)

Based on students' agreement with the following: reading is very easy for me; I do not read as well as other students in my class; and reading aloud is very hard for me. Average is computed on a 4-point scale: Disagree a lot = 1, Disagree a little = 2, Agree a little = 3, and Agree a lot = 4. Responses

for negative statement were reverse-coded. High indicates an average of greater than 3 through 4. Medium indicates an average of 2 through 3. Low indicates an average of 1 to less than 2.

An "r" indicates data are available for 70-84% of the students. An "s" indicates data are available for 50-69% of the students. An "s" indicates data are available for less than 50% of the students.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

A dash (–) indicates data are not available. A tilde (~) indicates insufficient data to report achievement.

### How Often Do Students Engage in Literacy Activities Outside of School?

Students engage in many literacy activities outside of school, whether they are reading or talking about reading with members of their families. At home, students read texts in various formats for many purposes. They may read stories, novels, or comic books for recreation, or they may read books, magazines, newspapers, or other nonfiction materials for information. Engagement in reading activities outside of school can support students' intrinsic motivation to read and learn, and broaden the scope of students' background knowledge.

To learn more about students' reading habits, PIRLS asked students how often they read different types of text when they were not in school. Students' reports of their general reading habits are presented in Exhibit 8.5. Internationally, on average, 40 percent of students reported reading for fun every day or almost every day, and 69 percent at least once a week. In Bulgaria, France, Iceland, Lithuania, Moldova, and the Russian Federation, more than half the students reported reading for fun every day or almost every day. In nearly all countries, students who reported reading for fun outside of school daily or almost daily had higher average reading achievement than those reading for fun less frequently.

Exhibits 8.6 through 8.9 provide information on the frequency with which students read different types of text. Students' reports of how often they read stories or novels outside of school are shown in Exhibit 8.6. On average, internationally, nearly two-thirds of students (63%) reported reading stories or novels at least once a week. Countries with the highest percentages of students reading stories or novels every day or almost every day included the Colombia, Russian Federation, and Singapore. In the Czech Republic, Germany, Italy, Latvia, Norway, and the Slovak Republic, more than half of the students reported reading stories or novels twice a month or less.

Exhibit 8.7 presents students' reports of how often they read stories or novels outside of school by gender. Of the students who reported reading stories or novels every day or almost every day in each country, the percentage of girls was equal to or higher than the percentage of boys. Only in Cyprus, Iran,

Morocco, and Romania was the percentage of girls not significantly different from the percentage of boys. On average, internationally, more than two-thirds of the girls (70%) and more than half of the boys (55%) read stories or novels at least once a week. More than 50 percent of girls in Italy and the Slovak Republic reported reading stories or novels twice a month or less. Half or more of the boys in Germany, Italy, and the Slovak Republic never or almost never read stories or novels outside of school.

Students' reports on how often they read for information outside of school (books that explain things, magazines, newspapers, and directions or instructions) are presented in Exhibit 8.8. Internationally, on average, 18 percent of the students reported reading for information every day or almost every day. However, most students reported doing this kind of reading once or twice a week. Students in The Netherlands and Sweden reported doing relatively little reading for information. These countries had the smallest percentages of students who reported reading for information at least once or twice a week (27% and 37%, respectively) and the largest percentages reporting never or almost never reading such texts once or twice a month or less (72% and 63%, respectively). Only in Argentina, Bulgaria, Colombia, Kuwait, Macedonia, and Turkey did more than one-quarter of students report reading informational text daily.

Exhibit 8.9 shows students' reports of reading for information outside of school by gender. Internationally, 62 percent of girls and 59 percent of boys read for information at least once a week. More than three-quarters of both girls and boys in Colombia and Macedonia read for information at least once a week. Gender differences in reading for information were less pronounced in students' reading for information than in students' reading of stories or novels. Significantly greater percentages of boys in Cyprus, Greece, and Sweden read for information outside of school every day or almost every day. Significantly greater percentages of girls in Bulgaria, New Zealand, and Scotland read for information outside of school at least once a week.

Students' interactions with their families about what they are reading can help foster an interest in learning and improve students' abilities to construct meaning from text. PIRLS asked both students and their parents how often they talked about what the student was reading. Exhibit 8.10 shows parents' reports of how often they talked with their children about what the children were reading. Students' reports of how often they talked with their families about their reading are summarized in Exhibit 8.11. On average, internationally, about one-third of the students' parents reported talking with their children daily about what they were reading. The same percentage of students reported talking every day or almost every day with their families about what they were reading. In Colombia, Cyprus, and Iran, the percentages of students who reported talking daily with their families about reading were higher than the percentages of students whose parents reported talking daily. This difference may be a result of students talking about their reading with other members of the family besides their parents.

### **How Often Do Students Watch Television or Videos?**

Exhibit 8.12 presents students' reports of how often they watched television or videos on a normal school day. On average, internationally, 43 percent of students reported watching television or videos less than 1 hour a day and 45 percent watching television or videos between 1 and 5 hours a day. The average number of hours students spent watching television or videos across countries was 2 hours per day. Half or more of the students in Belize, Germany, Greece, Iceland, Iran, Italy, Kuwait, Morocco, Norway, the Russian Federation, and Turkey reported spending less than an hour a day watching television or videos. In comparison, more than one-third of students in Argentina, England, Israel, and the Slovak Republic said they watched three or more hours of television or videos on a normal school day.

### **Exhibit 8.5:** Students Read for Fun Outside of School



		Day or Every Day	Once or Tw	vice a Week	Once or Tw	ice a Month	Never or A	lmost Never
Countries	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achieveme
Argentina r	37 (1.1)	424 (6.9)	24 (1.1)	436 (6.0)	12 (0.8)	418 (10.2)	28 (1.2)	428 (6.6)
Belize	31 (1.2)	336 (6.9)	26 (0.9)	327 (6.5)	13 (0.9)	311 (8.3)	30 (1.3)	332 (7.0)
Bulgaria	51 (1.6)	570 (3.8)	28 (1.0)	551 (3.9)	11 (1.0)	529 (9.4)	10 (1.0)	497 (8.4)
Canada (O,Q)	39 (1.1)	571 (2.9)	23 (0.7)	543 (2.7)	12 (0.5)	527 (3.0)	25 (0.9)	513 (2.6)
Colombia	49 (1.8)	415 (4.9)	26 (1.0)	438 (5.4)	10 (0.6)	435 (8.2)	15 (1.0)	427 (7.2)
Cyprus	46 (1.1)	503 (3.6)	31 (1.0)	500 (3.9)	12 (0.9)	481 (6.5)	12 (0.9)	472 (5.8)
Czech Republic	38 (1.3)	555 (3.1)	33 (1.2)	540 (2.2)	12 (0.8)	524 (3.9)	17 (0.9)	504 (4.2)
England	33 (1.3)	583 (4.1)	26 (0.9)	554 (4.8)	14 (0.9)	555 (4.3)	27 (1.3)	516 (4.4)
France	50 (1.2)	548 (2.7)	26 (0.9)	517 (3.6)	9 (0.6)	506 (4.8)	15 (0.8)	483 (3.9
Germany	48 (0.8)	555 (2.2)	24 (0.7)	535 (2.4)	11 (0.4)	525 (3.2)	18 (0.8)	517 (3.2
Greece	46 (1.5)	533 (4.3)	34 (1.2)	524 (4.7)	14 (0.8)	516 (5.2)	6 (0.5)	491 (10.
Hong Kong, SAR	21 (0.8)	539 (3.3)	38 (0.8)	532 (3.4)	26 (0.7)	525 (3.4)	14 (0.6)	511 (4.2
Hungary	40 (1.2)	558 (3.1)	33 (1.0)	536 (2.9)	16 (0.8)	543 (2.9)	11 (0.6)	521 (2.9
Iceland	52 (0.8)	533 (1.9)	22 (0.7)	508 (2.5)	9 (0.5)	489 (4.9)	18 (0.6)	479 (2.7
Iran, Islamic Rep. of	35 (1.2)	415 (4.8)	39 (1.5)	423 (5.4)	12 (0.6)	408 (5.6)	14 (1.1)	396 (4.8
Israel	44 (1.1)	528 (3.6)	27 (0.8)	511 (4.2)	13 (0.7)	497 (6.4)	17 (0.8)	484 (4.3
Italy	31 (1.1)	561 (3.2)	24 (0.8)	546 (3.1)	10 (0.6)	537 (5.1)	35 (1.0)	521 (3.0
Kuwait r	33 (0.8)	413 (4.9)	37 (1.0)	403 (4.6)	17 (0.7)	394 (5.4)	13 (0.6)	373 (7.5
Latvia	44 (1.3)	561 (2.8)	33 (0.9)	539 (3.1)	10 (0.7)	540 (4.7)	13 (0.9)	515 (3.6
Lithuania	53 (1.5)	553 (2.9)	31 (1.3)	540 (3.6)	10 (0.7)	524 (4.8)	6 (0.6)	520 (7.4
Macedonia, Rep. of	47 (1.5)	457 (5.1)	28 (1.0)	448 (5.3)	12 (1.3)	420 (11.2)	13 (0.9)	440 (8.0
Moldova, Rep. of	50 (2.2)	501 (4.3)	33 (1.5)	490 (4.7)	10 (0.8)	484 (8.0)	7 (0.8)	467 (8.2
Morocco	32 (1.9)	337 (9.8)	37 (1.5)	353 (9.4)	17 (1.3)	362 (14.8)	14 (2.3)	385 (15.
Netherlands	37 (1.2)	577 (2.7)	20 (0.8)	558 (3.5)	10 (0.6)	547 (3.5)	34 (1.1)	531 (3.0
New Zealand	43 (1.4)	563 (4.3)	23 (0.9)	523 (4.8)	13 (0.7)	513 (7.6)	20 (1.1)	482 (4.8
Norway	39 (1.1)	527 (4.0)	28 (0.9)	497 (3.6)	12 (0.6)	490 (5.7)	22 (1.0)	462 (4.3
Romania	28 (1.8)	514 (7.0)	30 (1.2)	515 (5.3)	16 (1.2)	521 (8.4)	27 (1.8)	508 (5.7
Russian Federation	59 (1.3)	533 (4.1)	29 (1.1)	527 (5.9)	6 (0.5)	509 (7.2)	6 (0.8)	512 (5.3
Scotland	31 (1.1)	558 (4.3)	23 (0.9)	533 (5.0)	11 (0.5)	532 (6.0)	35 (1.6)	500 (4.0
	30 (1.1)	561 (6.6)	23 (0.6)	533 (5.0)	14 (0.4)	517 (6.1)	33 (1.0)	505 (4.3
Singapore Slovak Republic	40 (1.2)	529 (3.9)	33 (0.9)	522 (3.0)	14 (0.4)	517 (6.1)	13 (0.8)	485 (4.4
Slovenia	45 (1.3)	518 (2.4)	29 (0.9)	497 (3.1)	12 (0.7)		14 (0.9)	473 (4.7
Sweden	45 (1.3)				, ,	492 (4.3) 547 (3.2)		
		579 (2.7)	32 (0.8)	556 (3.0)	13 (0.6)	547 (3.2)	11 (0.7)	523 (3.5
Turkey United States	38 (1.1)	459 (4.3)	36 (1.0)	449 (4.8)	13 (0.6)	438 (4.8)	13 (0.7)	439 (5.2
Officed States	35 (1.2)	564 (3.8)	22 (1.0)	553 (4.9)	12 (0.7)	541 (6.3)	32 (1.0)	515 (5.0
International Avg.	40 (0.2)	515 (0.8)	29 (0.2)	502 (0.8)	12 (0.1)	492 (1.1)	18 (0.2)	478 (1.0

Background data provided by students.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

### Exhibit 8.6: Students Read Stories or Novels Outside of School



		Day or very Day	Once or Tw	rice a Week	Once or Tw	ice a Month	Never or Al	most Never
Countries	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievemer
Argentina	33 (1.1)	417 (7.4)	25 (1.1)	432 (7.8)	13 (0.8)	430 (10.0)	29 (1.3)	434 (6.3)
Belize	32 (1.4)	342 (6.1)	30 (0.9)	334 (7.1)	14 (0.7)	317 (6.9)	25 (1.6)	315 (7.3)
Bulgaria	28 (1.2)	571 (5.0)	29 (1.0)	555 (4.1)	21 (1.0)	558 (4.8)	22 (1.6)	519 (7.0)
Canada (O,Q)	46 (0.9)	559 (3.1)	28 (0.7)	543 (2.7)	15 (0.6)	528 (3.2)	10 (0.6)	505 (4.1)
Colombia	51 (1.8)	413 (4.8)	27 (1.1)	430 (6.1)	11 (0.8)	445 (7.3)	12 (0.9)	436 (7.4)
Cyprus	29 (1.0)	504 (4.7)	37 (1.2)	497 (3.3)	21 (0.9)	496 (4.6)	13 (0.7)	472 (5.6)
Czech Republic	21 (1.1)	550 (3.8)	23 (1.0)	542 (3.4)	19 (0.8)	545 (3.4)	37 (1.3)	524 (2.9)
England	38 (1.2)	574 (3.8)	32 (0.9)	553 (4.6)	17 (0.7)	547 (4.3)	13 (0.8)	501 (4.2)
France	30 (1.2)	545 (3.8)	28 (0.8)	524 (3.1)	20 (0.7)	522 (3.8)	22 (1.0)	505 (3.0)
Germany	27 (0.7)	556 (2.5)	20 (0.7)	543 (2.4)	15 (0.6)	538 (3.4)	38 (1.0)	527 (2.3)
Greece	29 (1.2)	537 (4.5)	38 (1.4)	521 (5.1)	21 (1.0)	523 (4.6)	12 (0.8)	513 (6.8)
Hong Kong, SAR	20 (1.0)	542 (3.5)	44 (0.9)	535 (3.1)	23 (0.8)	521 (3.7)	12 (0.6)	499 (5.1)
Hungary	33 (0.9)	551 (3.3)	33 (1.0)	541 (2.8)	23 (0.9)	543 (2.4)	12 (0.7)	532 (3.9)
Iceland	44 (0.7)	529 (2.2)	26 (0.6)	511 (2.4)	14 (0.6)	507 (3.3)	16 (0.5)	483 (3.2)
Iran, Islamic Rep. of	22 (0.9)	415 (6.1)	42 (0.9)	423 (4.8)	21 (0.9)	422 (4.8)	14 (1.3)	380 (6.7)
Israel	30 (1.1)	507 (5.1)	27 (1.0)	499 (4.1)	15 (0.7)	510 (4.9)	28 (1.3)	527 (3.7)
Italy	15 (0.8)	562 (4.5)	18 (0.7)	542 (3.9)	17 (0.6)	550 (4.1)	51 (1.1)	533 (2.5)
Kuwait r	28 (1.3)	414 (4.5)	36 (1.2)	406 (4.6)	21 (1.0)	397 (6.4)	16 (1.2)	371 (8.4)
Latvia	23 (0.9)	559 (4.2)	27 (0.9)	545 (3.5)	20 (0.8)	548 (3.4)	30 (1.0)	532 (2.8)
Lithuania	27 (1.2)	551 (3.6)	31 (1.0)	544 (3.3)	20 (0.9)	556 (4.3)	22 (1.1)	526 (4.0)
Macedonia, Rep. of	49 (1.4)	447 (5.5)	34 (1.2)	448 (6.1)	14 (1.1)	441 (7.7)	3 (0.4)	414 (10.8
Moldova, Rep. of	23 (1.5)	501 (5.0)	44 (1.9)	494 (4.2)	22 (1.5)	492 (6.8)	11 (1.1)	475 (6.5)
Morocco	18 (1.1)	340 (9.0)	34 (1.6)	345 (8.0)	25 (1.2)	354 (8.4)	23 (2.4)	366 (25.6
Netherlands	48 (1.1)	565 (2.8)	26 (0.9)	551 (2.5)	12 (0.6)	548 (3.6)	14 (0.8)	530 (3.9)
New Zealand	46 (1.5)	556 (4.7)	30 (1.1)	527 (4.3)	13 (0.8)	509 (5.8)	10 (0.8)	457 (7.8)
Norway	18 (0.9)	519 (5.5)	25 (0.9)	499 (3.7)	19 (0.9)	505 (4.3)	37 (1.4)	488 (3.9)
Romania	20 (1.2)	503 (5.4)	38 (1.5)	517 (5.2)	27 (1.2)	527 (6.0)	15 (1.2)	489 (7.8)
Russian Federation	56 (1.6)	533 (4.6)	30 (1.0)	525 (5.4)	9 (0.7)	523 (6.2)	6 (0.6)	506 (4.9)
Scotland	40 (1.3)	550 (4.6)	32 (1.0)	523 (3.8)	15 (0.7)	526 (4.7)	13 (0.9)	481 (7.0)
Singapore	53 (1.1)	553 (4.9)	27 (0.8)	517 (4.8)	11 (0.5)	492 (6.1)	9 (0.5)	464 (7.8)
Slovak Republic	15 (0.9)	531 (4.9)	21 (0.9)	525 (3.8)	22 (0.9)	524 (3.3)	42 (1.2)	509 (3.8)
Slovenia	26 (1.2)	515 (3.1)	27 (1.1)	501 (3.2)	19 (1.0)	497 (3.6)	27 (1.4)	496 (3.4)
Sweden	33 (0.8)	580 (2.6)	33 (0.7)	557 (2.7)	22 (0.6)	555 (3.0)	11 (0.6)	528 (3.6)
Turkey	35 (1.3)	459 (4.3)	41 (0.9)	454 (4.1)	17 (0.9)	441 (5.2)	7 (0.6)	403 (7.1)
United States	34 (1.5)	560 (4.0)	28 (1.1)	548 (4.3)	17 (0.8)	548 (5.5)	21 (1.0)	505 (6.0)

<sup>()</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

Exhibit 8.7: Students Read Stories or Novels Outside of School by Gender



	Every I Almost E		Once or Tw	rice a Week	Once or Twi	ce a Month	Never or Al	most Never
Countries	Percent of Girls	Percent of Boys						
Argentina	41 (1.3)	24 (1.5)	27 (1.5)	23 (1.4)	13 (1.0)	14 (1.3)	19 (1.1)	39 (1.8)
Belize	35 (1.5)	29 (1.8)	30 (1.5)	29 (1.0)	14 (1.0)	14 (1.1)	21 (1.6)	28 (2.2)
Bulgaria	35 (1.6)	20 (1.3)	30 (1.2)	27 (1.5)	18 (1.4)	25 (1.3)	17 (1.5)	28 (1.9)
Canada (O,Q)	55 (1.2)	37 (1.1)	27 (0.9)	30 (1.0)	13 (0.8)	18 (0.8)	6 (0.5)	14 (1.0)
Colombia	56 (2.2)	46 (2.4)	26 (1.6)	27 (1.2)	9 (0.9)	13 (1.2)	8 (1.0)	15 (1.4)
Cyprus	30 (1.6)	27 (1.4)	38 (1.6)	36 (1.4)	20 (1.3)	22 (1.3)	12 (0.8)	15 (1.0)
Czech Republic	27 (1.6)	15 (1.4)	27 (1.4)	19 (0.9)	20 (1.2)	18 (1.2)	25 (1.5)	47 (1.8)
England	45 (1.5)	29 (1.6)	35 (1.4)	28 (1.3)	14 (1.0)	21 (1.3)	6 (0.7)	21 (1.4)
France	39 (1.5)	21 (1.3)	32 (1.3)	25 (1.2)	17 (1.0)	22 (1.1)	12 (0.9)	31 (1.5)
Germany	36 (1.2)	18 (0.8)	24 (0.9)	17 (0.8)	15 (0.8)	15 (0.8)	25 (1.2)	50 (1.4)
Greece	34 (1.8)	24 (1.3)	39 (1.9)	37 (1.6)	18 (1.3)	24 (1.3)	9 (1.2)	15 (1.1)
Hong Kong, SAR	23 (1.3)	17 (0.9)	51 (1.1)	38 (1.1)	19 (1.1)	28 (1.0)	7 (0.6)	18 (1.0)
Hungary	39 (1.2)	26 (1.2)	35 (1.4)	31 (1.2)	20 (1.1)	26 (1.1)	6 (0.6)	17 (1.2)
Iceland	51 (1.0)	36 (1.0)	26 (0.9)	26 (1.0)	12 (0.7)	16 (0.9)	10 (0.7)	21 (0.9)
Iran, Islamic Rep. of	23 (1.0)	21 (1.4)	42 (1.2)	42 (1.5)	20 (1.0)	23 (1.2)	15 (1.9)	14 (1.1)
Israel	34 (1.4)	26 (1.3)	29 (1.2)	25 (1.2)	14 (0.8)	16 (1.1)	24 (1.4)	33 (1.7)
Italy	19 (1.1)	11 (0.7)	21 (1.1)	15 (0.9)	17 (1.0)	16 (0.9)	42 (1.4)	58 (1.4)
Kuwait r	34 (1.7)	21 (1.9)	38 (1.1)	33 (2.1)	18 (1.4)	24 (1.5)	10 (1.0)	22 (2.4)
Latvia	29 (1.9)	18 (1.3)	29 (1.2)	25 (1.3)	20 (1.3)	20 (1.1)	21 (1.3)	37 (1.5)
Lithuania	35 (1.5)	18 (1.4)	35 (1.4)	27 (1.3)	17 (1.1)	23 (1.4)	13 (1.0)	31 (1.7)
Macedonia, Rep. of	52 (1.7)	45 (1.6)	33 (1.3)	35 (1.5)	13 (1.2)	15 (1.5)	2 (0.4)	4 (0.5)
Moldova, Rep. of	26 (1.8)	20 (1.6)	44 (2.3)	43 (1.8)	21 (1.7)	24 (1.6)	9 (1.2)	12 (1.4)
Morocco	18 (1.4)	18 (1.3)	36 (2.1)	32 (1.7)	27 (1.5)	24 (1.6)	19 (2.4)	27 (2.9)
Netherlands	61 (1.2)	35 (1.4)	25 (1.1)	27 (1.2)	8 (0.7)	17 (1.0)	6 (0.8)	21 (1.2)
New Zealand	55 (1.8)	38 (1.9)	31 (1.8)	30 (1.2)	9 (0.9)	17 (1.2)	5 (0.6)	15 (1.4)
Norway	27 (1.5)	11 (1.0)	29 (1.1)	21 (1.3)	19 (1.4)	20 (1.2)	26 (1.6)	48 (2.0)
Romania	21 (1.5)	19 (1.4)	38 (1.9)	38 (1.6)	28 (1.8)	26 (1.3)	13 (1.3)	17 (1.7)
Russian Federation	64 (1.8)	47 (1.6)	26 (1.3)	33 (1.1)	7 (0.9)	11 (0.8)	3 (0.5)	8 (0.9)
Scotland	49 (1.6)	32 (1.7)	33 (1.4)	30 (1.4)	11 (0.9)	20 (1.3)	8 (0.9)	18 (1.5)
Singapore	61 (1.4)	45 (1.2)	25 (1.1)	29 (1.0)	9 (0.6)	13 (0.6)	5 (0.5)	12 (0.8)
Slovak Republic	19 (1.3)	11 (1.0)	24 (1.4)	18 (1.2)	24 (1.2)	20 (1.1)	33 (1.7)	51 (1.6)
Slovenia	33 (1.7)	19 (1.3)	29 (1.4)	26 (1.3)	18 (1.3)	21 (1.3)	21 (1.7)	34 (1.7)
Sweden	43 (1.3)	24 (1.0)	32 (1.0)	34 (1.0)	18 (0.9)	25 (0.7)	6 (0.6)	16 (0.9)
Turkey	39 (1.6)	31 (1.4)	41 (1.3)	41 (1.2)	15 (1.1)	20 (1.1)	5 (0.6)	8 (0.8)
United States	40 (2.1)	28 (1.5)	30 (1.6)	27 (1.3)	15 (1.0)	19 (0.9)	16 (1.1)	26 (1.3)

Significantly greater percentage than other gender

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2001

### Exhibit 8.8: Students Read for Information Outside of School\*



Countries		Day or very Day	Once or Tw	rice a Week	Once or Tw	ice a Month	Never or A	lmost Never
Countries	Percent of Students	Average Achievement						
Argentina r	30 (1.1)	419 (6.5)	41 (1.1)	433 (5.9)	23 (1.2)	435 (8.4)	6 (0.6)	439 (12.6)
Belize	18 (1.6)	344 (7.6)	41 (1.2)	340 (6.0)	31 (1.4)	316 (6.8)	9 (0.8)	300 (11.8)
Bulgaria	27 (1.2)	560 (4.8)	44 (1.2)	560 (3.8)	21 (1.1)	549 (5.5)	7 (1.0)	494 (12.0)
Canada (O,Q)	13 (0.6)	534 (3.9)	41 (0.7)	546 (2.7)	36 (0.8)	549 (2.8)	10 (0.5)	539 (4.4)
Colombia	39 (2.3)	405 (5.5)	39 (1.6)	438 (5.8)	18 (1.4)	437 (7.0)	3 (0.4)	435 (14.2)
Cyprus	15 (0.6)	485 (4.9)	53 (1.1)	500 (3.3)	29 (1.2)	500 (4.3)	4 (0.4)	461 (10.9)
Czech Republic	13 (0.9)	520 (3.9)	47 (1.2)	541 (2.2)	33 (1.1)	542 (2.9)	7 (0.7)	533 (6.3)
England	12 (0.8)	530 (6.0)	43 (1.1)	548 (3.5)	37 (1.2)	568 (4.5)	8 (0.6)	549 (7.5)
France	12 (0.6)	514 (4.2)	39 (0.9)	526 (3.2)	39 (1.0)	529 (2.8)	11 (0.6)	528 (4.9)
Germany	14 (0.6)	531 (3.1)	38 (0.8)	543 (2.2)	35 (0.7)	544 (2.6)	13 (0.6)	532 (3.0)
Greece	12 (0.9)	513 (5.9)	51 (1.5)	521 (4.4)	32 (1.1)	536 (4.5)	5 (0.5)	532 (10.3)
Hong Kong, SAR	8 (0.5)	523 (5.1)	43 (1.0)	533 (3.4)	40 (0.8)	527 (3.1)	8 (0.5)	519 (5.2)
Hungary	19 (0.8)	536 (3.2)	46 (0.9)	548 (2.6)	28 (1.0)	546 (2.8)	7 (0.4)	536 (5.6)
Iceland	9 (0.5)	508 (5.2)	33 (0.8)	516 (2.1)	40 (0.8)	514 (2.2)	18 (0.7)	514 (3.5)
Iran, Islamic Rep. of	14 (0.8)	424 (5.9)	39 (1.4)	426 (4.4)	38 (1.4)	412 (4.7)	10 (0.9)	372 (8.0)
Israel	22 (1.0)	492 (5.3)	43 (1.0)	510 (3.4)	27 (0.9)	524 (4.2)	8 (0.5)	539 (6.8)
Italy	12 (0.7)	534 (4.7)	39 (0.9)	543 (2.9)	38 (1.0)	543 (2.8)	11 (0.6)	544 (4.9)
Kuwait r	25 (1.0)	410 (4.9)	43 (1.4)	404 (4.0)	24 (1.1)	393 (6.4)	8 (0.8)	372 (12.3)
Latvia	19 (0.9)	538 (3.8)	52 (1.4)	545 (2.6)	25 (1.4)	550 (3.6)	4 (0.4)	557 (5.4)
Lithuania	21 (1.0)	537 (3.7)	52 (0.9)	547 (2.9)	25 (1.2)	545 (4.0)	2 (0.2)	~ ~
Macedonia, Rep. of	37 (1.4)	445 (5.5)	47 (1.4)	452 (5.0)	14 (0.9)	441 (8.1)	2 (0.5)	~ ~
Moldova, Rep. of	18 (1.5)	491 (5.0)	45 (1.9)	500 (5.1)	29 (1.6)	490 (4.3)	7 (1.1)	474 (8.0)
Morocco	11 (1.1)	343 (12.5)	39 (1.8)	341 (8.2)	32 (2.0)	350 (9.0)	17 (2.9)	389 (36.5)
Netherlands	4 (0.5)	530 (6.8)	23 (0.7)	546 (3.7)	43 (0.9)	559 (2.5)	29 (0.9)	558 (2.9)
New Zealand	15 (0.9)	515 (6.2)	42 (1.1)	530 (4.4)	34 (1.1)	540 (4.0)	9 (0.7)	528 (8.1)
Norway	10 (0.7)	485 (6.1)	38 (1.1)	502 (3.0)	38 (1.1)	506 (3.8)	13 (1.0)	491 (6.3)
Romania	19 (1.4)	510 (5.3)	48 (1.4)	523 (5.0)	28 (1.4)	510 (6.3)	4 (0.5)	454 (10.8)
Russian Federation	20 (1.0)	516 (6.1)	48 (1.2)	531 (4.7)	27 (1.0)	535 (4.8)	5 (0.7)	530 (5.6)
Scotland	14 (0.8)	511 (5.9)	43 (1.1)	530 (4.4)	35 (1.3)	539 (4.4)	8 (0.7)	513 (10.1)
Singapore	24 (0.7)	533 (5.6)	47 (0.6)	531 (5.3)	24 (0.6)	525 (5.4)	4 (0.3)	508 (9.6)
Slovak Republic	20 (0.9)	514 (4.9)	49 (1.0)	524 (2.8)	26 (0.9)	520 (3.3)	5 (0.5)	481 (10.7)
Slovenia	23 (1.1)	501 (3.3)	46 (1.1)	504 (2.5)	25 (0.9)	506 (3.1)	5 (0.5)	480 (7.5)
Sweden	6 (0.4)	557 (5.3)	31 (0.7)	561 (2.9)	41 (0.8)	566 (2.4)	22 (0.9)	554 (3.3)
Turkey	29 (1.6)	465 (4.8)	44 (1.2)	454 (3.9)	22 (1.3)	438 (4.2)	5 (1.2)	385 (15.1)
United States	17 (0.9)	527 (5.1)	44 (1.0)	542 (3.8)	30 (1.0)	556 (4.2)	8 (0.6)	544 (7.7)
International Avg.	18 (0.2)	494 (0.9)	43 (0.2)	504 (0.7)	31 (0.2)	504 (0.8)	9 (0.1)	490 (1.9)

<sup>\*</sup>Based on students' responses on how often they read to find out about things and how often they read the following things outside of school: books that explain things; magazines; newspapers; directions or instructions. Average is computed on a 4-point scale: Every day or almost every day = 1, Once or twice a week = 2, Once or twice a month = 3, and Never or almost never = 4.

Every day or almost every day indicates an average of 1 to less than 1.75. Once or twice a week indicates an average of 1.75 through 2.5. Once or twice a month indicates an average of greater than 2.5 through 3.25. Never or almost never indicates an average of greater than 3.25 through 4.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

A dash (–) indicates data are not available. A tilde ( $\sim$ ) indicates insufficient data to report achievement.

### Exhibit 8.9: Students Read for Information Outside of School by Gender\*



Company	Every Almost E	Day or very Day	Once or Tw	rice a Week	Once or Twi	ce a Month	Never or Al	most Never
Countries	Percent of Girls	Percent of Boys						
Argentina r	32 (1.5)	29 (1.4)	41 (1.6)	42 (1.6)	22 (1.6)	24 (1.5)	5 (0.7)	6 (0.9)
Belize	20 (2.0)	17 (1.7)	42 (1.6)	40 (1.8)	30 (1.9)	33 (1.6)	8 (0.9)	11 (1.1)
Bulgaria	29 (1.6)	25 (1.4)	47 (1.5)	42 (1.4)	19 (1.3)	24 (1.3)	5 (0.8)	9 (1.3)
Canada (O,Q)	13 (0.7)	13 (0.7)	43 (1.0)	40 (0.9)	37 (1.1)	35 (1.1)	8 (0.6)	12 (0.7)
Colombia	40 (2.6)	38 (2.6)	38 (1.7)	41 (1.9)	19 (1.9)	18 (1.4)	3 (0.6)	3 (0.6)
Cyprus	13 (1.0)	17 (0.9)	56 (1.4)	50 (1.5)	28 (1.5)	29 (1.5)	3 (0.5)	4 (0.6)
Czech Republic	14 (1.2)	13 (1.0)	46 (1.8)	47 (1.6)	33 (1.6)	33 (1.3)	7 (0.9)	7 (0.8)
England	12 (1.1)	12 (1.0)	45 (1.5)	42 (1.4)	37 (1.6)	36 (1.6)	6 (0.8)	10 (0.8)
France	11 (0.9)	12 (0.9)	39 (1.3)	39 (1.3)	40 (1.4)	37 (1.3)	10 (1.0)	12 (0.9)
Germany	14 (0.8)	14 (0.7)	41 (1.1)	35 (1.0)	35 (1.1)	35 (1.1)	10 (0.7)	15 (0.9)
Greece	10 (1.1)	15 (1.2)	49 (2.3)	52 (1.9)	36 (1.8)	29 (1.6)	5 (0.8)	4 (0.7)
Hong Kong, SAR	8 (0.6)	8 (0.7)	47 (1.2)	39 (1.2)	38 (1.0)	42 (1.1)	6 (0.6)	11 (0.6)
Hungary	21 (1.2)	17 (1.1)	47 (1.2)	45 (1.4)	27 (1.3)	29 (1.1)	6 (0.5)	9 (0.7)
Iceland	8 (0.6)	9 (0.8)	32 (1.0)	33 (1.2)	42 (1.1)	39 (1.1)	18 (0.9)	18 (1.0)
Iran, Islamic Rep. of	13 (1.1)	14 (1.1)	38 (1.6)	40 (2.0)	39 (1.5)	36 (2.1)	10 (1.1)	10 (1.3)
Israel	23 (1.2)	21 (1.2)	45 (1.5)	42 (1.3)	25 (1.2)	28 (1.2)	7 (0.9)	8 (0.7)
Italy	12 (0.8)	12 (0.9)	38 (1.1)	40 (1.4)	39 (1.4)	36 (1.4)	11 (0.7)	12 (0.9)
Kuwait r	27 (1.3)	23 (1.5)	44 (1.4)	41 (2.3)	23 (1.1)	25 (1.8)	6 (1.0)	11 (1.2)
Latvia	21 (1.2)	18 (1.2)	54 (1.7)	50 (1.7)	23 (1.4)	27 (1.8)	3 (0.5)	5 (0.7)
Lithuania	23 (1.3)	20 (1.4)	53 (1.4)	52 (1.5)	24 (1.4)	26 (1.5)	1 (0.3)	3 (0.4)
Macedonia, Rep. of	38 (1.8)	36 (1.5)	47 (1.6)	47 (1.7)	13 (1.1)	15 (1.1)	2 (0.4)	2 (0.6)
Moldova, Rep. of	19 (1.9)	17 (1.4)	49 (2.3)	42 (2.0)	27 (1.7)	31 (1.9)	5 (1.1)	9 (1.3)
Morocco	11 (1.5)	12 (1.2)	41 (2.2)	38 (2.1)	33 (2.4)	32 (2.1)	15 (3.0)	19 (3.1)
Netherlands	4 (0.6)	4 (0.6)	23 (1.1)	24 (1.0)	43 (1.1)	42 (1.4)	29 (1.1)	30 (1.3)
New Zealand	19 (1.3)	12 (1.1)	44 (1.5)	39 (1.5)	31 (1.7)	37 (1.5)	6 (0.7)	11 (1.0)
Norway	11 (1.1)	10 (1.0)	38 (1.5)	38 (1.4)	38 (1.7)	38 (1.5)	13 (1.2)	14 (1.4)
Romania	19 (1.7)	20 (1.7)	48 (1.6)	48 (2.0)	29 (1.6)	27 (1.6)	3 (0.6)	5 (0.7)
Russian Federation	21 (1.2)	19 (1.3)	47 (1.6)	49 (1.4)	27 (1.1)	27 (1.3)	4 (0.6)	6 (0.9)
Scotland	16 (1.1)	13 (1.2)	46 (1.4)	40 (1.7)	33 (1.6)	36 (1.5)	5 (0.8)	11 (1.1)
Singapore	27 (1.1)	21 (0.7)	47 (1.0)	48 (1.0)	23 (1.0)	26 (0.8)	3 (0.3)	5 (0.4)
Slovak Republic	20 (1.2)	20 (1.1)	50 (1.4)	48 (1.3)	26 (1.2)	26 (1.2)	4 (0.5)	5 (0.8)
Slovenia	24 (1.3)	22 (1.4)	47 (1.5)	46 (1.5)	24 (1.3)	26 (1.4)	5 (0.6)	6 (0.7)
Sweden	4 (0.5)	8 (0.7)	30 (1.3)	31 (1.0)	43 (1.3)	40 (0.8)	23 (1.5)	21 (1.0)
Turkey	30 (1.9)	28 (1.8)	45 (1.6)	44 (1.4)	21 (1.6)	22 (1.5)	4 (1.6)	5 (1.1)
United States	18 (1.3)	17 (1.0)	45 (1.6)	44 (1.2)	31 (1.6)	30 (1.2)	6 (0.8)	9 (0.9)
International Avg.	18 (0.2)	17 (0.2)	44 (0.3)	42 (0.3)	30 (0.2)	31 (0.2)	8 (0.2)	10 (0.2)

Significantly greater percentage than other gender

Every day or almost every day indicates an average of 1 to less than 1.75. Once or twice a week indicates an average of 1.75 through 2.5. Once or twice a month indicates an average of greater than 2.5 through 3.25. Never or almost never indicates an average of greater than 3.25 through 4.

<sup>\*</sup>Based on students' responses on how often they read to find out about things and how often they read the following things outside of school: books that explain things; magazines; newspapers; directions or instructions. Average is computed on a 4-point scale: Every day or almost every day = 1, Once or twice a week = 2, Once or twice a month = 3, and Never or almost never = 4.

<sup>( )</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

A dash (–) indicates data are not available. A tilde (~) indicates insufficient data to report achievement.

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2001

#### Exhibit 8.10: Parents Talk with Their Child About What the Child is Reading



6		Day or Every Day	Once or Tw	vice a Week	Once or Twi	ce a Month	Never or Al	most Neve
Countries	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achieveme
Argentina s	43 (1.3)	432 (5.9)	34 (1.1)	433 (6.8)	12 (0.8)	430 (9.2)	11 (0.8)	406 (10.
Belize s	36 (1.8)	341 (6.1)	38 (1.7)	336 (6.3)	15 (1.3)	320 (9.7)	11 (1.3)	287 (9.3
Bulgaria	48 (1.4)	560 (3.6)	34 (1.0)	557 (4.2)	11 (0.8)	547 (8.7)	7 (1.1)	496 (12
Canada (O,Q) r	29 (0.9)	556 (3.4)	49 (0.9)	549 (2.4)	18 (0.7)	547 (3.1)	4 (0.3)	534 (7.4
Colombia	36 (1.5)	425 (5.0)	38 (1.2)	423 (5.0)	15 (0.9)	435 (8.0)	11 (0.8)	420 (6.2
Cyprus s	38 (1.0)	493 (4.4)	42 (1.1)	496 (4.4)	15 (0.8)	491 (6.6)	4 (0.5)	462 (10
Czech Republic	14 (0.9)	535 (4.0)	48 (1.2)	541 (3.1)	31 (1.0)	543 (3.0)	7 (0.5)	527 (7.2
England s	30 (1.0)	572 (5.2)	54 (1.1)	571 (3.7)	14 (0.8)	574 (7.3)	3 (0.5)	554 (14
France	31 (0.9)	528 (3.2)	47 (0.8)	530 (3.1)	16 (0.6)	531 (3.4)	6 (0.5)	503 (6.
Germany	17 (0.5)	539 (2.9)	45 (0.8)	546 (2.3)	27 (0.8)	546 (2.6)	11 (0.5)	531 (4.
Greece	65 (1.4)	522 (3.8)	25 (1.0)	534 (5.6)	6 (0.6)	532 (7.2)	4 (0.6)	526 (9.4
Hong Kong, SAR	14 (0.7)	534 (3.9)	33 (1.1)	532 (3.3)	33 (0.8)	528 (3.2)	20 (0.9)	526 (3.
Hungary	36 (1.0)	541 (2.5)	46 (0.9)	547 (2.7)	15 (0.7)	554 (3.7)	3 (0.4)	533 (8.
Iceland r	39 (0.8)	510 (2.1)	44 (0.8)	521 (1.9)	14 (0.6)	524 (4.3)	4 (0.4)	511 (7.
Iran, Islamic Rep. of	32 (0.9)	429 (4.4)	33 (1.0)	423 (5.1)	19 (0.6)	396 (5.6)	16 (1.1)	391 (5.
Israel	хх	хх						
Italy	21 (0.7)	552 (3.3)	53 (1.0)	544 (2.6)	15 (0.6)	549 (3.4)	10 (0.5)	526 (5.
Kuwait r	50 (0.8)	403 (5.0)	30 (0.7)	403 (4.6)	11 (0.4)	404 (6.6)	8 (0.4)	379 (6.
Latvia	31 (1.2)	542 (2.8)	44 (1.3)	550 (3.0)	18 (0.7)	550 (4.9)	7 (0.6)	538 (5.
Lithuania	30 (1.1)	532 (3.7)	41 (0.9)	544 (2.9)	22 (1.0)	559 (3.4)	6 (0.5)	547 (6.
Macedonia, Rep. of r	67 (1.2)	447 (5.2)	26 (0.9)	455 (7.1)	5 (0.4)	461 (10.2)	3 (0.7)	450 (1
Moldova, Rep. of	38 (1.3)	499 (4.2)	43 (1.3)	493 (4.7)	12 (0.7)	489 (7.3)	7 (0.6)	465 (6.
Morocco								
Netherlands s	18 (1.0)	561 (4.9)	44 (1.4)	565 (3.0)	28 (1.1)	564 (2.6)	10 (0.7)	559 (4.
New Zealand r	29 (1.3)	536 (5.0)	49 (1.4)	544 (3.7)	18 (0.9)	531 (6.5)	4 (0.4)	495 (1
Norway	23 (1.0)	488 (4.9)	49 (1.2)	505 (3.6)	23 (1.2)	512 (4.4)	5 (0.4)	504 (9.
Romania	45 (1.2)	517 (4.8)	36 (1.3)	516 (5.0)	12 (0.8)	515 (11.1)	7 (0.8)	470 (12
Russian Federation	48 (1.1)	528 (4.4)	36 (0.8)	532 (5.5)	11 (0.7)	526 (6.2)	5 (0.3)	515 (5.
Scotland s	31 (1.2)	541 (4.9)	53 (1.1)	542 (4.8)	13 (0.8)	555 (5.7)	3 (0.6)	506 (12
Singapore	22 (0.6)	536 (5.3)	39 (0.7)	532 (5.1)	26 (0.6)	532 (5.2)	13 (0.5)	514 (7.
Slovak Republic	30 (1.0)	513 (3.6)	47 (0.8)	522 (3.0)	18 (0.8)	530 (4.2)	5 (0.4)	518 (8.
Slovenia	27 (0.8)	500 (3.1)	52 (0.9)	501 (2.4)	18 (0.8)	514 (3.8)	3 (0.3)	516 (10
Sweden	20 (0.8)	561 (3.4)	49 (0.9)	563 (2.5)	24 (0.7)	567 (2.6)	6 (0.4)	563 (4.
Turkey	38 (1.1)	464 (4.2)	35 (1.0)	451 (4.4)	14 (0.8)	443 (5.6)	13 (1.0)	422 (5.
United States								
International Avg.	34 (0.2)	507 (0.7)	42 (0.2)	510 (0.8)	17 (0.1)	509 (1.1)	7 (0.1)	490 (1.

Background data provided by parents.

<sup>()</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

Exhibit 8.11: Students Talk with Their Families About What the Students are Reading



**4th Grade** PIRLS 2001

Countries		Day or very Day	Once or Tw	rice a Week	Once or Twi	ce a Month	Never or A	lmost Never
Countries	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievemer
Argentina	47 (1.3)	419 (5.9)	24 (0.9)	442 (6.5)	10 (0.7)	420 (8.5)	19 (1.1)	433 (8.4)
Belize	40 (1.9)	337 (5.9)	24 (1.2)	329 (6.6)	14 (0.7)	322 (8.8)	22 (1.0)	321 (8.0)
Bulgaria	47 (1.5)	551 (4.6)	27 (0.9)	564 (4.4)	11 (0.7)	556 (6.2)	15 (1.1)	533 (7.0)
Canada (O,Q)	29 (0.9)	542 (3.2)	30 (0.7)	550 (2.9)	20 (0.8)	554 (2.9)	21 (0.8)	531 (3.1)
Colombia	53 (1.9)	414 (4.9)	25 (1.3)	437 (6.2)	10 (0.7)	442 (7.6)	12 (1.0)	432 (6.9)
Cyprus	50 (1.2)	496 (3.6)	26 (1.1)	498 (3.6)	12 (0.7)	492 (5.7)	12 (0.8)	488 (5.3)
Czech Republic	16 (1.0)	521 (4.4)	27 (1.1)	546 (3.1)	25 (0.9)	553 (3.4)	32 (1.2)	527 (3.1)
England	21 (1.0)	529 (4.1)	33 (1.0)	568 (3.5)	21 (0.7)	570 (4.5)	26 (1.2)	543 (5.1)
France	26 (0.9)	523 (3.7)	27 (0.8)	532 (3.4)	18 (0.9)	535 (4.1)	28 (0.9)	517 (3.1)
Germany	17 (0.7)	531 (3.4)	26 (0.7)	545 (2.6)	20 (0.6)	550 (2.6)	37 (0.9)	535 (2.5)
Greece	60 (1.4)	521 (3.7)	22 (1.1)	529 (5.6)	9 (0.8)	538 (7.2)	9 (0.6)	530 (6.3)
Hong Kong, SAR	22 (0.9)	535 (3.4)	31 (0.8)	535 (3.3)	26 (0.7)	526 (3.7)	21 (0.9)	516 (4.8)
Hungary	27 (1.2)	538 (3.3)	32 (1.1)	550 (3.1)	20 (0.7)	546 (2.6)	21 (0.9)	541 (2.9)
Iceland	23 (0.6)	500 (2.8)	25 (0.8)	523 (2.6)	18 (0.7)	525 (3.0)	35 (0.9)	511 (2.4)
Iran, Islamic Rep. of	55 (1.3)	420 (3.8)	28 (0.9)	416 (6.3)	10 (0.6)	402 (6.7)	8 (0.8)	388 (7.5)
Israel	36 (1.1)	501 (4.0)	28 (0.8)	521 (3.6)	16 (0.8)	528 (5.4)	21 (0.9)	505 (4.2)
Italy	37 (0.9)	539 (2.8)	27 (0.8)	548 (3.4)	13 (0.6)	544 (4.5)	23 (0.8)	533 (3.4)
Kuwait r	53 (1.0)	403 (4.6)	26 (0.8)	404 (4.9)	12 (0.6)	395 (6.3)	10 (0.6)	388 (7.2)
Latvia	26 (1.2)	537 (3.9)	34 (1.0)	547 (3.1)	19 (0.9)	553 (3.6)	21 (0.9)	547 (3.3)
Lithuania	30 (1.0)	532 (3.6)	32 (1.0)	551 (3.4)	19 (0.9)	553 (3.8)	19 (0.9)	539 (3.6)
Macedonia, Rep. of	62 (1.3)	444 (4.9)	26 (1.1)	453 (6.4)	8 (0.6)	446 (11.3)	4 (0.4)	444 (12.0
Moldova, Rep. of	41 (2.0)	489 (4.9)	35 (1.4)	497 (4.4)	14 (1.2)	502 (5.7)	10 (1.2)	480 (6.4)
Morocco	44 (1.8)	350 (8.8)	32 (1.2)	348 (9.1)	14 (1.0)	336 (12.8)	10 (1.4)	399 (22.8
Netherlands	9 (0.5)	555 (5.6)	19 (0.9)	561 (3.6)	18 (0.8)	564 (3.1)	55 (1.1)	549 (2.7)
New Zealand	26 (1.2)	517 (5.3)	30 (1.0)	544 (4.5)	20 (1.1)	544 (6.5)	23 (1.0)	516 (4.5)
Norway	19 (0.7)	482 (4.7)	27 (0.9)	503 (3.6)	20 (0.7)	516 (4.7)	35 (1.1)	498 (4.0)
Romania	49 (1.9)	508 (4.4)	30 (1.3)	518 (6.6)	12 (0.8)	527 (8.7)	10 (0.9)	508 (8.0)
Russian Federation	50 (1.2)	528 (4.8)	27 (1.0)	526 (5.0)	12 (0.8)	535 (6.2)	12 (1.0)	528 (5.5)
Scotland	24 (1.3)	504 (5.2)	33 (1.2)	541 (4.2)	18 (1.0)	554 (3.9)	25 (1.3)	519 (6.6)
Singapore	23 (0.7)	520 (6.3)	27 (0.6)	535 (5.4)	19 (0.5)	537 (5.8)	31 (0.8)	524 (5.2)
Slovak Republic	23 (1.1)	510 (4.3)	31 (1.1)	532 (3.0)	23 (0.9)	526 (3.3)	23 (1.3)	503 (5.5)
Slovenia	25 (1.1)	492 (3.2)	31 (1.0)	507 (2.9)	20 (0.9)	511 (4.6)	24 (1.3)	501 (3.4)
Sweden	17 (0.8)	551 (3.8)	30 (0.8)	568 (2.8)	28 (0.8)	567 (2.6)	25 (1.0)	553 (2.9)
Turkey	48 (1.3)	457 (4.1)	31 (1.1)	453 (4.7)	12 (0.7)	439 (4.7)	10 (1.3)	423 (10.6
United States	27 (0.8)	532 (4.7)	28 (1.2)	556 (3.7)	18 (0.7)	554 (5.1)	26 (1.1)	532 (5.5)

Background data provided by students.

<sup>()</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

Exhibit 8.12: Students Spend Time Watching Television or Videos on a Normal School Day



**4th Grade** PIRLS 2001

Countries	Less tha	n 1 Hour		our up to ours		ours up to ours	5 Hours	or More	Average Number
Countries	Percent of Students	Average Achievement	of Hours per Day						
Argentina	37 (1.4)	423 (5.7)	21 (1.0)	436 (8.0)	17 (0.8)	422 (8.0)	25 (1.1)	427 (6.3)	2.6 (0.06
Belize	59 (1.6)	337 (5.4)	15 (0.9)	314 (8.4)	9 (0.7)	302 (9.1)	16 (1.3)	331 (8.6)	1.8 (0.07
Bulgaria	30 (1.2)	542 (4.6)	38 (1.3)	564 (4.6)	18 (0.8)	552 (5.4)	15 (0.9)	542 (5.3)	2.4 (0.05
Canada (O,Q)	44 (1.0)	541 (3.1)	32 (0.8)	558 (2.7)	11 (0.5)	545 (3.3)	13 (0.6)	522 (3.8)	2.0 (0.03
Colombia	49 (1.6)	415 (4.4)	21 (1.1)	440 (6.0)	13 (1.0)	427 (7.7)	17 (1.1)	431 (6.3)	2.0 (0.06
Cyprus	45 (1.3)	495 (3.2)	29 (1.0)	502 (4.7)	12 (0.7)	500 (5.0)	13 (0.9)	477 (6.6)	2.0 (0.05
Czech Republic	30 (1.1)	539 (3.2)	44 (1.0)	545 (2.5)	14 (0.9)	538 (3.9)	12 (0.7)	502 (4.9)	2.2 (0.04
England	27 (1.1)	544 (6.2)	36 (1.0)	569 (3.3)	17 (0.9)	569 (5.1)	20 (1.1)	522 (5.0)	2.6 (0.05
France	47 (1.2)	530 (3.7)	37 (1.2)	531 (2.8)	7 (0.6)	515 (5.0)	8 (0.7)	487 (5.2)	1.7 (0.04
Germany	52 (1.0)	541 (2.1)	33 (0.8)	546 (2.6)	8 (0.5)	533 (4.6)	7 (0.5)	513 (3.5)	1.6 (0.03
Greece	59 (1.2)	527 (4.2)	29 (1.2)	532 (4.2)	6 (0.7)	518 (5.8)	6 (0.5)	482 (9.0)	1.4 (0.03
Hong Kong, SAR	39 (1.7)	513 (3.4)	37 (1.0)	541 (3.0)	16 (0.9)	538 (4.1)	9 (0.6)	530 (6.0)	2.0 (0.06
Hungary	42 (1.3)	546 (2.7)	32 (0.9)	554 (2.9)	14 (0.8)	539 (3.7)	12 (0.8)	514 (3.7)	2.0 (0.05
Iceland	62 (0.9)	514 (1.5)	28 (0.8)	523 (2.8)	5 (0.3)	511 (5.2)	4 (0.4)	476 (6.1)	1.2 (0.03
Iran, Islamic Rep. of	56 (1.2)	413 (4.6)	22 (0.9)	420 (4.9)	11 (0.6)	415 (9.3)	10 (0.6)	411 (7.9)	1.7 (0.04
Israel	32 (1.1)	479 (4.0)	29 (0.9)	530 (4.2)	14 (0.6)	529 (4.5)	25 (1.1)	521 (3.4)	2.6 (0.05
Italy	58 (1.2)	539 (2.6)	28 (0.9)	554 (3.0)	7 (0.5)	534 (5.0)	7 (0.5)	507 (5.2)	1.5 (0.04
Kuwait r	51 (1.3)	404 (3.9)	30 (1.1)	399 (6.4)	10 (0.6)	395 (7.9)	9 (0.5)	396 (6.6)	r 1.7 (0.04
Latvia	27 (1.0)	537 (4.0)	42 (1.4)	556 (3.1)	17 (0.8)	553 (3.8)	15 (0.8)	520 (4.0)	2.4 (0.04
Lithuania	35 (1.1)	525 (3.4)	36 (1.1)	562 (3.1)	18 (0.8)	546 (4.4)	12 (0.9)	541 (4.4)	2.2 (0.05
Macedonia, Rep. of	48 (1.7)	440 (4.9)	34 (1.2)	467 (4.6)	10 (0.8)	430 (10.3)	8 (0.8)	422 (8.5)	1.7 (0.05
Moldova, Rep. of	37 (1.8)	480 (4.6)	34 (1.7)	506 (5.3)	16 (0.9)	494 (6.0)	14 (1.3)	492 (5.1)	2.2 (0.07
Morocco	56 (2.2)	358 (11.0)	24 (1.5)	342 (7.2)	9 (0.7)	336 (10.7)	11 (1.2)	346 (17.1)	1.6 (0.08
Netherlands	26 (1.1)	558 (3.2)	44 (1.2)	565 (2.4)	16 (0.9)	547 (3.8)	14 (1.0)	526 (5.1)	2.4 (0.05
New Zealand	40 (1.4)	533 (4.5)	32 (1.2)	551 (4.5)	12 (0.8)	506 (6.4)	16 (1.0)	500 (5.8)	2.1 (0.06
Norway	52 (1.2)	498 (3.7)	34 (1.0)	505 (3.2)	8 (0.6)	507 (8.0)	5 (0.5)	473 (7.3)	1.5 (0.04
Romania	36 (1.5)	498 (4.9)	38 (1.5)	527 (5.8)	16 (1.0)	527 (7.1)	10 (0.8)	500 (6.0)	2.1 (0.05
Russian Federation	50 (1.2)	526 (4.4)	31 (1.3)	536 (4.7)	12 (0.7)	528 (6.7)	7 (0.4)	513 (6.0)	1.7 (0.03
Scotland	38 (1.2)	521 (5.0)	32 (0.9)	545 (4.2)	13 (0.8)	539 (5.0)	17 (1.0)	505 (4.5)	2.3 (0.05
Singapore	47 (1.0)	523 (5.3)	33 (0.8)	546 (5.2)	10 (0.4)	530 (5.3)	10 (0.6)	492 (8.0)	1.8 (0.04
Slovak Republic	21 (1.0)	510 (4.2)	41 (1.2)	529 (3.3)	21 (1.0)	523 (4.0)	17 (1.0)	502 (3.9)	2.7 (0.05
Slovenia	39 (1.3)	501 (2.9)	40 (1.1)	510 (2.6)	10 (0.7)	505 (5.3)	11 (1.0)	474 (6.0)	2.0 (0.05
Sweden	23 (0.7)	564 (2.8)	55 (0.8)	566 (2.4)	15 (0.5)	556 (4.2)	7 (0.5)	527 (5.4)	2.2 (0.02
Turkey	60 (1.3)	450 (3.5)	25 (1.0)	455 (4.9)	8 (0.6)	445 (11.3)	6 (0.6)	430 (9.3)	1.4 (0.04
United States	41 (1.5)	541 (4.2)	30 (1.1)	564 (3.8)	11 (0.6)	559 (6.9)	18 (1.4)	502 (4.8)	2.2 (0.07
International Avg.	43 (0.2)	497 (0.7)	33 (0.2)	511 (0.8)	12 (0.1)	500 (1.1)	12 (0.1)	482 (1.1)	2.0 (0.0

<sup>()</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.