

# PIRLS

## Chapter 6



# 6

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## Teachers and Reading Instruction



Teachers often help students learn to use the library and to use technology to access and exchange information and ideas. They may also assign homework

available for 50 to 69 percent of students, an “s” is included. Where teacher responses are available for less than 50 percent, an “x” replaces the data.

### What Preparation Do Teachers Have for Teaching Reading?

This section presents information about the background characteristics of reading teachers, including gender, age, experience, and teaching assignment. Information also is included about teachers’ formal education, certification, and major area of study.

As shown in Exhibit 6.1, students in many of the PIRLS countries were taught reading by female teachers. Internationally, on average, 81 percent of the fourth-grade students were taught reading by women and 19 percent by men. Countries where reading was taught almost exclusively by female teachers (97% or more) include Italy, Latvia, Lithuania, and the Russian Federation. In several countries, however, at least half (50 to 54%) the students had male reading teachers, including Morocco, The Netherlands, and Turkey.

Internationally, on average, approximately half the fourth-grade students were taught by teachers younger than 40 years old and half by teachers 40 or older. If there was a steady replenishing of the teaching force, one might expect approximately equivalent percentages of students taught by teachers in their 20s, 30s, 40s, and 50s, and, internationally, the situation was very close to this picture. There, of course, was considerable variation among countries. In Cyprus and Singapore, about half the students were taught by teachers in their 20s and in Germany about half by teachers in their 50s.

Considering that, internationally, students, on average, had reading teachers who reported being about 40 years old, it is not surprising that students, on average, had teachers who reported being relatively experienced – about 16 years of teaching experience overall, with 5 years at the fourth grade.

Exhibit 6.2 shows that even though students in Canada (O,Q) (91%), England (88%), and the United States (95%) stayed with a teacher only one year, this policy varied greatly across countries. Internationally, on average, during primary and elementary school about as many students (27%) stayed with their teachers four or more years as stayed only one year (31%). Many of the eastern European countries had students (90% or more) staying with

their teachers for four or more years, including Bulgaria, Lithuania, Macedonia, Moldova, and Romania.

Exhibit 6.3 presents teachers' reports about their teaching responsibilities. Internationally, on average, a slim majority (54%) of the fourth-grade students had reading teachers that reported being their only teacher and having general responsibilities for teaching all subjects. Teachers reported this situation for 80 percent or more of students in Belize, Iceland, Iran, Lithuania, Macedonia, and the Russian Federation. Countries reporting the most specialization for students were Hong Kong (89%), Israel (77%), Italy (85%), and Kuwait (79%). At the fourth grade, sharing teaching responsibilities did not seem to be very prevalent (only 7% internationally, on average). Interestingly, the countries with the most students (one-fourth or more) being taught by teachers sharing responsibilities included Morocco (25%) as well as three of the top-performing countries – Bulgaria (25%), The Netherlands (25%), and Sweden (30%).

Exhibit 6.4 contains information about teachers' formal education and certification. On average, internationally, nearly two-thirds (65%) of students were taught reading by teachers with a university degree and 22 percent by graduates of college or university programs of two or three years in duration. From the requisites for becoming a fourth-grade reading teacher in each of the participating countries described in the *2001 Progress in International Reading Study Study*,<sup>1</sup> it is clear that there are differences in preparation and certification policies. In some countries, all or nearly all the fourth-grade students (more than 90%) were taught reading by teachers with university degrees (Canada (O,Q), Cyprus, England, Germany, Hungary, The Netherlands, New Zealand, Norway, Scotland, Sweden, and the United States). In other countries, the majority of students had teachers that graduated from college or university programs of 2 or 3 three years, often targeted specifically to teaching (Argentina, Greece, Macedonia, Slovenia, and Turkey). Eighty-nine percent of students, on average, internationally, were taught reading by a teacher having a teaching certificate.

Exhibit 6.5 presents teachers' reports about the areas of emphasis in their formal education and training. The results reveal that, on average,



**Exhibit 6.2: Number of Years Students Typically Stay with the Same Classroom Teacher**
**ISC** 4<sup>th</sup> Grade  
2000

Country	Percentage of Students				
	One School Year or Less	Two Years	Three Years	Four or More Years	Varies Greatly
Argentina	45 (4.4)	39 (4.6)	12 (2.8)	1 (0.7)	3 (1.3)
Belize	69 (4.3)	11 (3.0)	1 (0.4)	0 (0.0)	20 (4.0)
Bulgaria	0 (0.0)	2 (0.7)	8 (2.0)	90 (2.1)	0 (0.0)
Canada (O,Q)	91 (1.9)	7 (1.6)	0 (0.0)	0 (0.0)	2 (1.0)
Colombia	37 (4.2)	20 (4.0)	12 (2.9)	19 (4.1)	12 (2.6)
Cyprus	43 (4.8)	22 (4.2)	2 (0.1)	0 (0.0)	33 (4.8)
Czech Republic	1 (0.9)	40 (4.4)	34 (4.2)	14 (3.1)	11 (2.9)
England	88 (2.7)	9 (2.0)	0 (0.0)	1 (0.0)	2 (1.7)
France	62 (4.3)	12 (2.4)	3 (0.7)	1 (0.3)	22 (3.8)
Germany	0 (0.0)	37 (2.7)	7 (1.5)	53 (2.9)	4 (1.3)
Greece	15 (2.8)	41 (4.5)	11 (3.5)	2 (0.1)	32 (4.1)
Hong Kong, SAR	29 (3.9)	16 (3.6)	0 (0.0)	0 (0.0)	55 (4.8)
Hungary	0 (0.0)	29 (3.7)	16 (2.5)	53 (3.6)	2 (1.1)
Iceland	0 (0.0)	15 (0.3)	50 (0.4)	10 (0.2)	26 (0.4)
Iran, Islamic Rep. of	78 (3.8)	5 (1.3)	0 (0.1)	4 (1.8)	13 (3.2)
Israel	16 (3.4)	68 (3.8)	2 (1.3)	1 (0.0)	12 (2.8)
Italy	1 (0.6)	1 (0.9)	14 (2.5)	78 (3.1)	6 (1.9)
Kuwait	27 (3.6)	7 (2.4)	0 (0.0)	1 (0.0)	65 (4.3)
Latvia	2 (1.1)	3 (1.6)	19 (3.6)	74 (4.0)	2 (1.2)
Lithuania	0 (0.0)	0 (0.0)	0 (0.0)	98 (1.3)	2 (1.3)
Macedonia, Rep. of	0 (0.0)	1 (0.7)	0 (0.0)	99 (0.7)	0 (0.3)
Moldova, Rep. of	2 (1.0)	0 (0.0)	4 (1.8)	91 (2.5)	3 (1.4)
Morocco	61 (4.9)	9 (3.1)	3 (2.1)	3 (2.2)	24 (4.2)
Netherlands	75 (4.1)	14 (2.8)	2 (1.2)	0 (0.0)	8 (2.8)
New Zealand	76 (3.5)	15 (2.9)	2 (0.9)	2 (1.4)	4 (2.3)
Norway	0 (0.0)	3 (1.1)	47 (5.0)	39 (4.3)	12 (3.3)
Romania	0 (0.0)	3 (1.3)	3 (1.5)	91 (2.4)	3 (1.7)
<sup>a</sup> Russian Federation	0 (0.0)	0 (0.0)	53 (4.6)	43 (4.4)	4 (1.2)
Scotland	74 (4.2)	21 (3.4)	1 (0.4)	0 (0.0)	5 (2.2)
Singapore	49 (3.6)	48 (3.6)	0 (0.0)	0 (0.0)	2 (1.2)
Slovak Republic	4 (1.6)	32 (3.8)	11 (2.6)	22 (3.3)	31 (3.9)
Slovenia	21 (3.8)	68 (4.2)	4 (1.7)	0 (0.0)	7 (2.2)
Sweden	1 (0.8)	25 (4.0)	70 (4.2)	3 (1.4)	2 (1.2)
Turkey	6 (2.0)	14 (3.1)	22 (4.0)	56 (4.6)	2 (1.2)
United States	95 (2.0)	3 (1.8)	0 (0.0)	0 (0.0)	2 (1.0)
International Avg.	31 (0.5)	18 (0.5)	12 (0.4)	27 (0.4)	12 (0.4)





## Exhibit 6.4: Preparation to Teach Reading

ISC 4<sup>th</sup> Grade  
2000

Country	Percentage of Selected Teachers				Percentage of Certified Teachers
	University Degree	College or University Program* of 2 or 3 Years	Completed Only Upper-Secondary School	Did Not Complete Upper-Secondary School	
Argentina	2 (1.0)	89 (2.5)	9 (2.6)	0 (0.0)	94 (2.5)
Belize	8 (2.7)	21 (3.8)	60 (4.7)	11 (3.0)	74 (4.4)
Bulgaria	76 (3.0)	24 (2.9)	1 (0.0)	0 (0.0)	100 (0.0)
Canada (O,Q)	92 (2.1)	6 (1.8)	1 (1.1)	0 (0.0)	100 (0.1)
Colombia	86 (2.9)	5 (1.5)	10 (2.4)	0 (0.0)	94 (1.7)
Cyprus	94 (2.5)	0 (0.0)	6 (2.5)	0 (0.0)	94 (2.8)
Czech Republic	77 (4.0)	10 (3.0)	12 (2.8)	0 (0.0)	--
England	100 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	98 (1.2)
France	34 (3.3)	23 (2.7)	41 (3.8)	1 (1.0)	93 (2.1)
Germany	92 (0.8)	1 (0.6)	5 (0.9)	1 (0.6)	92 (1.2)
Greece	21 (3.9)	79 (3.9)	0 (0.0)	0 (0.0)	--
Hong Kong, SAR	50 (4.0)	36 (3.9)	13 (3.0)	0 (0.0)	95 (1.9)
Hungary	99 (0.7)	1 (0.7)	0 (0.0)	0 (0.0)	73 (3.9)
Iceland	76 (0.4)	10 (0.3)	11 (0.2)	3 (0.1)	91 (0.2)
Iran, Islamic Rep. of	23 (3.6)	15 (2.4)	52 (4.1)	10 (2.5)	57 (4.3)
Israel	73 (3.3)	27 (3.3)	0 (0.0)	0 (0.0)	97 (1.4)
Italy	26 (3.4)	7 (2.0)	68 (3.3)	0 (0.0)	78 (3.1)
Kuwait	--	--	--	--	53 (4.0)
Latvia	87 (2.6)	8 (2.0)	5 (1.5)	0 (0.0)	92 (2.3)
Lithuania	87 (2.9)	12 (2.7)	1 (0.9)	0 (0.0)	85 (3.1)
Macedonia, Rep. of	26 (4.2)	68 (4.3)	7 (1.8)	0 (0.0)	99 (0.7)
Moldova, Rep. of	51 (4.2)	46 (4.3)	2 (1.0)	1 (0.6)	43 (4.6)
Morocco	--	--	--	--	89 (2.8)
Netherlands	99 (0.6)	0 (0.0)	1 (0.6)	0 (0.0)	99 (0.9)
New Zealand	100 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	100 (0.0)
Norway	99 (0.8)	1 (0.6)	1 (0.5)	0 (0.0)	97 (1.1)
Romania	5 (1.8)	24 (3.4)	71 (3.7)	0 (0.3)	82 (3.0)
Russian Federation	62 (4.0)	37 (4.0)	1 (0.7)	0 (0.0)	96 (1.4)
Scotland	94 (2.3)	0 (0.0)	6 (2.3)	0 (0.0)	99 (0.8)
Singapore	49 (4.4)	38 (4.2)	13 (2.6)	0 (0.0)	95 (1.8)
Slovak Republic	83 (3.5)	0 (0.0)	17 (3.5)	0 (0.0)	94 (2.1)
Slovenia	25 (3.3)	75 (3.4)	1 (0.0)	0 (0.0)	95 (1.9)
Sweden	93 (2.0)	0 (0.0)	7 (2.0)	0 (0.0)	93 (1.6)
Turkey	45 (3.9)	54 (4.0)	1 (0.9)	0 (0.0)	98 (1.2)
United States	100 (0.5)	0 (0.5)	0 (0.0)	0 (0.0)	95 (1.4)
International Avg.	65 (0.5)	22 (0.5)	13 (0.4)	1 (0.1)	89 (0.4)









teachers reported at least monthly use of computerized reading instruction for 63 to 64 percent of students in Singapore and the United States. Similarly, reading material on the Internet was infrequent in more than half the countries. Monthly use for 50 percent or more of students was reported by Canada (O,Q) (54%), New Zealand (56%), and the United States (50%).

Since PIRLS 2001 assessed two major purposes for reading – literary and informational, teachers were asked how often they asked their students to read fiction and nonfiction. The results for use of fiction are presented in Exhibit 6.11 and for nonfiction in Exhibit 6.13. On average, internationally, the use of fiction was much more widespread than the use of nonfiction. Fiction was being used for reading instruction at least weekly for 84 percent of students compared to nonfiction for 56 percent of students. Exhibit 6.12 provides further detail about the different types of fiction used for reading instruction. On average, internationally, teachers reported asking about two-thirds of students (65%) to read stories on at least a weekly basis. Approximately one-third to half also were asked to read fables/fairy tales (45%), poems (41%), and longer books (31%). Countries reporting the lowest percentages of students reading fiction at least weekly were Greece (58%), Hong Kong (43%), and Kuwait (51%).

Nonfiction reading included descriptions and explanations about things, people or events; instruction or manuals about how things work; and charts, diagrams, and graphs. The countries where teachers reported asking the highest percentages of students to read nonfiction on at least a weekly basis were Argentina and the United States (both 88%), with Colombia, Germany, and Italy next (74 to 77%). Countries with the lowest percentages were the Czech Republic, France, Hong Kong, Iceland, and the Slovak Republic (28 to 34%).

Exhibit 6.14 contains teachers' reports about using films, videos, and television in their reading instruction. On average, internationally, 43 percent of students were asked to watch a film version of a children's book or story at least monthly, 60 percent to watch movies, videos or television to obtain information, and 56 percent to compare material presented in different media. Watching movies of stories and to obtain information was especially prevalent for students (90% or more) in Bulgaria, Macedonia, and Romania.

**Exhibit 6.6: Materials Schools Used as a Basis for Their Reading Instructional Programs**
**ISC** 4<sup>th</sup> Grade  
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Country	Percentage of Selected Reading Materials Used as a Basis				
	Reading Series	Textbooks	Variety of Children's Books	Children's Newspapers and/or Magazines	Materials from Different Curricular Areas
Argentina	52 (4.6)	63 (5.0)	40 (4.6)	17 (3.9)	26 (4.2)
Belize	74 (7.3)	55 (7.0)	8 (4.5)	1 (0.9)	10 (3.5)
Bulgaria	59 (3.8)	99 (0.6)	5 (1.7)	3 (1.4)	6 (1.9)
Canada (O,Q)	35 (3.5)	41 (3.2)	36 (3.3)	4 (1.6)	21 (3.3)
Colombia	45 (5.0)	52 (5.0)	28 (4.6)	21 (3.4)	35 (4.5)
Cyprus	8 (3.0)	88 (2.4)	5 (2.2)	3 (1.9)	4 (2.1)
Czech Republic	85 (3.2)	90 (2.5)	4 (2.1)	0 (0.0)	0 (0.0)
England	53 (4.5)	28 (4.0)	48 (4.7)	5 (1.8)	21 (3.7)
France	44 (4.9)	53 (5.2)	46 (4.6)	32 (4.1)	47 (4.9)
Germany	9 (2.4)	93 (1.9)	3 (1.3)	0 (0.0)	17 (2.9)
Greece	--	95 (2.6)	1 (0.0)	0 (0.0)	2 (1.3)
Hong Kong, SAR	16 (3.1)	95 (1.8)	4 (1.9)	3 (1.5)	3 (1.3)
Hungary	70 (3.6)	86 (2.5)	1 (0.6)	1 (1.3)	1 (0.0)
Iceland	88 (0.3)	51 (0.4)	13 (0.3)	0 (0.1)	3 (0.1)
Iran, Islamic Rep. of	23 (3.9)	89 (3.0)	8 (3.6)	3 (1.4)	11 (2.8)
Israel	48 (4.4)	74 (3.8)	29 (3.8)	12 (2.6)	28 (3.9)
Italy	8 (1.7)	91 (2.2)	5 (1.7)	2 (1.1)	12 (2.3)
Kuwait	17 (2.8)	97 (0.1)	13 (2.7)	12 (2.6)	9 (1.8)
Latvia	17 (3.0)	86 (2.8)	3 (1.4)	1 (0.9)	2 (1.3)
Lithuania	52 (4.2)	96 (1.6)	3 (1.5)	2 (1.2)	1 (1.0)
Macedonia, Rep. of	73 (4.0)	96 (1.6)	17 (3.4)	16 (3.6)	11 (2.4)
Moldova, Rep. of	72 (3.6)	81 (2.6)	6 (1.8)	2 (1.3)	11 (2.5)
Morocco	52 (5.0)	64 (5.0)	19 (4.0)	12 (3.3)	64 (4.9)
Netherlands	52 (5.1)	46 (4.8)	19 (3.9)	2 (1.0)	4 (1.7)
New Zealand	83 (3.2)	8 (2.3)	33 (4.1)	5 (1.9)	16 (2.8)
Norway	25 (3.9)	85 (3.8)	15 (4.3)	0 (0.0)	10 (3.8)
Romania	24 (3.6)	98 (1.1)	9 (2.5)	3 (1.2)	11 (3.0)
Russian Federation	56 (4.0)	96 (1.5)	1 (0.5)	1 (0.8)	3 (1.2)
Scotland	95 (2.1)	56 (5.5)	16 (3.5)	2 (1.4)	7 (2.5)
Singapore	22 (2.9)	97 (1.3)	2 (0.8)	2 (1.2)	6 (2.0)
Slovak Republic	65 (3.5)	91 (2.6)	6 (2.0)	6 (2.3)	2 (0.7)
Slovenia	81 (3.3)	73 (3.9)	7 (2.3)	1 (0.0)	1 (0.0)
Sweden	65 (4.3)	57 (3.9)	36 (4.8)	3 (1.6)	20 (3.6)
Turkey	11 (2.5)	98 (1.1)	4 (1.7)	1 (0.9)	3 (1.2)
United States	77 (3.6)	54 (3.8)	32 (4.4)	3 (1.5)	16 (2.8)
International Avg.	49 (0.7)	75 (0.6)	15 (0.5)	5 (0.3)	13 (0.5)



**Exhibit 6.7: Materials Schools Used as a Supplement to Their Reading Instructional Programs**

	Children's Newspapers and/or Magazines					
Argentina	30 (4.1)		28 (4.7)	49 (4.2)	69 (4.3)	52 (4.1)
Belize	14 (6.1)	r	25 (6.9)	54 (7.6)	40 (5.6)	r 45 (4.9)
Bulgaria	36 (3.7)		0 (0.0)	79 (3.3)	50 (4.4)	60 (4.0)
Canada (O,Q)	47 (3.6)		36 (3.1)	53 (3.7)	62 (3.1)	59 (3.7)
Colombia	16 (3.1)		31 (5.2)	39 (5.2)	44 (4.8)	37 (5.1)
Cyprus	r 63 (5.8)		11 (2.4)	68 (5.3)	55 (4.8)	66 (4.2)
Czech Republic	12 (2.7)		8 (2.2)	90 (3.0)	64 (4.4)	61 (4.2)
England	34 (4.2)		59 (4.7)	46 (4.8)	49 (4.6)	69 (4.5)
France	39 (5.7)		32 (4.8)	41 (5.0)	48 (4.6)	41 (4.6)
Germany	69 (3.8)		3 (1.3)	86 (2.8)	55 (3.7)	57 (4.3)
Greece	--		2 (2.2)	51 (4.6)	23 (3.7)	56 (4.1)
Hong Kong, SAR	53 (4.7)		1 (0.9)	68 (4.0)	48 (4.1)	52 (4.4)
Hungary	20 (3.2)		9 (2.4)	86 (2.9)	50 (3.9)	52 (4.3)
Iceland	r 7 (0.2)	r	39 (0.4)	r 77 (0.4)	r 29 (0.4)	r 69 (0.3)
Iran, Islamic Rep. of	34 (4.2)		5 (2.0)	54 (4.2)	53 (4.6)	46 (4.8)
Israel	37 (4.3)		24 (3.8)	61 (4.2)	49 (4.4)	58 (4.7)
Italy	64 (3.8)		3 (1.1)	78 (3.0)	39 (3.8)	54 (4.3)
Kuwait	44 (4.2)		1 (0.0)	57 (3.6)	56 (4.6)	35 (3.0)
Latvia	42 (4.5)		12 (2.9)	90 (2.1)	71 (4.2)	63 (4.4)
Lithuania	34 (4.2)		2 (1.2)	89 (2.4)	66 (3.7)	66 (3.6)
Macedonia, Rep. of	12 (2.9)		3 (1.4)	68 (4.1)	68 (4.3)	50 (4.2)
Moldova, Rep. of	19 (3.4)		15 (2.7)	74 (3.8)	58 (4.3)	52 (4.4)
Morocco	16 (4.3)		14 (3.6)	38 (5.4)	26 (4.7)	16 (4.0)
Netherlands	41 (5.1)		53 (4.9)	79 (4.0)	63 (4.8)	75 (4.1)
New Zealand	10 (2.8)		38 (4.5)	58 (4.2)	70 (4.2)	72 (3.5)
Norway	66 (4.7)		13 (3.6)	76 (4.9)	43 (5.1)	64 (5.1)
Romania	68 (4.2)		0 (0.0)	69 (3.6)	55 (4.7)	47 (4.8)
Russian Federation	41 (3.9)		4 (1.5)	97 (1.1)	71 (3.7)	70 (3.4)
Scotland	3 (1.5)		41 (5.3)	80 (3.6)	38 (5.1)	86 (3.6)
Singapore	60 (3.8)		2 (1.2)	89 (2.4)	69 (3.1)	59 (3.7)
Slovak Republic	13 (2.8)		8 (2.5)	87 (2.7)	75 (3.8)	59 (4.5)
Slovenia	13 (2.6)		19 (3.4)	88 (2.6)	85 (3.3)	64 (4.2)
Sweden	13 (2.9)		19 (3.6)	52 (4.9)	49 (4.8)	63 (4.8)
Turkey	61 (4.3)		2 (1.1)	73 (3.8)	31 (3.8)	40 (3.9)
United States	16 (3.1)		32 (3.9)	62 (5.0)	71 (4.1)	74 (4.2)
International Avg.	34 (0.7)		17 (0.5)	69 (0.7)	54 (0.7)	57 (0.7)





**Exhibit 6.9: Teachers' Use of Workbooks or Worksheets**

Argentina	45 (4.9)	419 (10.0)	44 (5.0)	422 (10.2)	10 (3.2)	426 (11.9)	1 (0.0)	~ ~
Belize	32 (5.5)	324 (10.9)	66 (5.2)	321 (6.3)	2 (1.9)	~ ~	0 (0.0)	~ ~
Bulgaria	19 (3.0)	550 (11.9)	57 (4.1)	555 (5.1)	21 (3.5)	538 (9.0)	4 (1.2)	548 (15.5)
Canada (O,Q)	16 (2.6)	543 (4.3)	65 (3.2)	545 (2.9)	16 (2.3)	544 (6.2)	2 (1.0)	~ ~
Colombia	50 (5.1)	415 (5.8)	41 (5.0)	430 (7.7)	6 (1.8)	452 (22.2)	3 (1.8)	394 (80.2)
Cyprus	25 (3.9)	496 (5.8)	57 (4.5)	496 (4.0)	16 (3.8)	487 (6.5)	2 (0.0)	~ ~
Czech Republic	81 (3.0)	537 (2.6)	18 (3.0)	536 (4.6)	1 (0.7)	~ ~	0 (0.0)	~ ~
England	10 (2.7)	547 (10.1)	64 (4.4)	556 (5.2)	24 (4.0)	553 (5.2)	2 (1.2)	~ ~
France	11 (2.4)	511 (10.6)	70 (3.5)	526 (2.7)	18 (3.1)	530 (6.1)	1 (0.9)	~ ~
Germany	15 (2.4)	540 (5.8)	46 (2.7)	538 (2.8)	32 (3.0)	544 (3.6)	8 (1.6)	531 (6.-13 r

**Exhibit 6.10: Use of Materials for Reading Instruction Other Than Textbooks or a Reading Series, Workbooks or Worksheets**

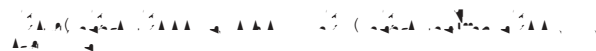
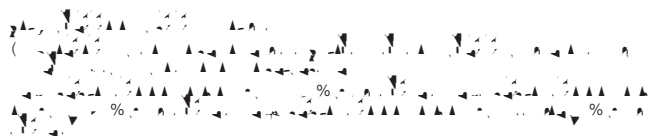
Country	Percentage of Teachers Used Each Material				
	A Variety of Children's Books	Children's Newspapers and/or Magazines	Computer Software for Reading Instruction	Reading Material on the Internet	Two or More of the Previous Supplementary Materials
Argentina	85 (3.7)	89 (3.8)	13 (3.2)	10 (2.7)	80 (4.5)
Belize	r 93 (2.5)	r 56 (4.9)	r 1 (1.0)	r 10 (4.1)	r 52 (5.6)
Bulgaria	97 (0.7)	89 (2.8)	1 (0.9)	1 (0.0)	86 (2.8)
Canada (O,Q)	98 (0.9)	48 (3.2)	45 (3.3)	54 (3.3)	78 (2.8)
Colombia	97 (1.8)	84 (3.7)	9 (2.6)	2 (1.1)	83 (3.9)
Cyprus	96 (1.3)	71 (3.9)	7 (2.7)	22 (3.7)	70 (3.9)
Czech Republic	100 (0.0)	76 (3.8)	10 (2.9)	2 (0.4)	78 (3.7)
England	100 (0.0)	58 (4.1)	46 (4.4)	49 (5.4)	79 (3.5)
France	98 (0.9)	75 (3.4)	23 (3.4)	14 (2.5)	81 (3.3)
Germany	95 (1.3)	61 (3.2)	22 (2.9)	9 (1.9)	64 (3.3)
Greece	88 (3.4)	64 (4.6)	2 (1.2)	6 (2.7)	60 (4.4)
Hong Kong, SAR	90 (2.7)	61 (5.0)	37 (4.6)	29 (3.9)	66 (4.8)
Hungary	100 (0.1)	82 (3.2)	2 (1.2)	5 (2.1)	82 (3.3)
Iceland	98 (0.1)	35 (0.3)	38 (0.4)	24 (0.3)	65 (0.4)
Iran, Islamic Rep. of	74 (3.7)	70 (4.2)	1 (0.6)	2 (0.9)	54 (4.1)
Israel	94 (2.1)	82 (3.5)	30 (3.9)	37 (3.6)	83 (3.6)
Italy	97 (1.3)	67 (3.3)	12 (2.4)	11 (2.4)	69 (3.5)
Kuwait	93 (2.1)	r 90 (1.8)	r 9 (2.4)	r 4 (1.7)	r 86 (2.8)
Latvia	100 (0.0)	75 (4.0)	2 (1.2)	2 (1.2)	74 (4.2)
Lithuania	100 (0.0)	91 (2.5)	7 (2.3)	4 (1.7)	90 (2.7)
Macedonia, Rep. of	96 (1.7)	97 (1.2)	r 6 (2.2)	r 3 (1.6)	r 90 (2.6)
Moldova, Rep. of	93 (2.8)	84 (3.3)	9 (3.2)	1 (0.9)	81 (3.6)
Morocco	64 (5.0)	r 51 (5.3)	r 4 (2.2)	r 8 (2.9)	r 43 (5.7)
Netherlands	96 (1.5)	r 40 (4.8)	r 30 (3.6)	r 8 (2.6)	r 56 (4.6)
New Zealand	100 (0.1)	75 (4.1)	49 (4.7)	56 (4.2)	89 (2.8)
Norway	97 (1.3)	54 (3.9)	28 (3.7)	19 (2.9)	67 (3.9)
Romania	100 (0.1)	87 (2.3)	2 (1.1)	3 (1.4)	86 (2.5)
Russian Federation	100 (0.0)	91 (1.9)	1 (0.6)	1 (0.7)	90 (1.8)
Scotland	98 (1.4)	28 (4.3)	44 (5.0)	18 (3.5)	64 (4.4)
Singapore	92 (2.1)	71 (3.8)	64 (3.6)	44 (4.2)	85 (2.6)
Slovak Republic	100 (0.0)	96 (1.7)	0 (0.0)	0 (0.0)	96 (1.8)
Slovenia	99 (0.7)	90 (2.6)	24 (3.6)	12 (2.9)	90 (2.7)
Sweden	98 (0.7)	73 (2.9)	44 (3.2)	35 (3.4)	82 (2.7)
Turkey	98 (1.1)	77 (3.7)	12 (2.6)	4 (1.4)	76 (4.0)
United States	99 (0.6)	77 (4.2)	63 (3.9)	50 (4.7)	91 (1.8)
International Avg.	95 (0.3)	72 (0.6)	20 (0.5)	16 (0.5)	76 (0.6)

**Exhibit 6.11: Teachers' Use of Fiction for Reading Instruction**

Country	Percentage of Teachers	Average Number of Times Read	Percentage of Teachers	Average Number of Times Read
Argentina	r 78 (4.4)	420 (7.3)	22 (4.4)	431 (16.7)
Belize	r 89 (3.1)	323 (7.6)	11 (3.1)	320 (21.7)
Bulgaria	91 (2.5)	553 (3.9)	9 (2.5)	530 (16.0)
Canada (O,Q)	75 (2.5)	547 (2.6)	25 (2.5)	537 (3.7)
Colombia	91 (2.4)	426 (4.5)	9 (2.4)	391 (19.5)
Cyprus	86 (3.4)	496 (3.2)	14 (3.4)	479 (6.5)
Czech Republic	79 (3.6)	539 (2.7)	21 (3.6)	531 (4.9)
England	80 (3.9)	554 (4.4)	20 (3.9)	554 (7.3)
France	78 (3.7)	525 (3.0)	22 (3.7)	524 (6.2)
Germany	68 (3.1)	541 (2.5)	32 (3.1)	536 (3.1)
Greece	58 (4.7)	531 (6.1)	42 (4.7)	515 (4.9)
Hong Kong, SAR	43 (4.2)	531 (5.4)	57 (4.2)	526 (3.9)
Hungary	98 (1.1)	545 (2.2)	2 (1.1)	~ ~
Iceland	92 (0.2)	513 (1.3)	8 (0.2)	514 (4.2)
Iran, Islamic Rep. of	70 (3.3)	416 (5.8)	30 (3.3)	411 (8.0)
Israel	89 (3.0)	508 (4.1)	11 (3.0)	483 (17.3)
Italy	96 (1.5)	542 (2.5)	4 (1.5)	534 (5.5)
Kuwait	r 51 (4.4)	401 (7.1)	49 (4.4)	397 (6.0)
Latvia	96 (1.7)	546 (2.4)	4 (1.7)	533 (14.3)
Lithuania	95 (1.7)	543 (2.7)	5 (1.7)	552 (15.6)
Macedonia, Rep. of	80 (3.2)	444 (5.4)	20 (3.2)	446 (12.4)
Moldova, Rep. of	99 (0.7)	493 (4.1)	1 (0.7)	~ ~
Morocco	66 (5.0)	339 (9.7)	34 (5.0)	357 (18.2)
Netherlands	r 81 (3.7)	555 (2.9)	19 (3.7)	553 (5.2)
New Zealand	93 (2.2)	530 (4.1)	7 (2.2)	523 (13.7)
Norway	91 (2.1)	500 (3.3)	9 (2.1)	497 (8.9)
Romania	98 (1.0)	512 (4.5)	2 (1.0)	~ ~
Russian Federation	99 (0.8)	527 (4.6)	1 (0.8)	~ ~
Scotland	90 (2.9)	528 (4.1)	10 (2.9)	545 (10.3)
Singapore	72 (3.5)	522 (6.5)	28 (3.5)	544 (9.8)
Slovak Republic	89 (2.5)	519 (3.1)	11 (2.5)	508 (7.5)
Slovenia	90 (2.5)	501 (2.1)	10 (2.5)	503 (8.7)
Sweden	96 (1.3)	562 (2.3)	4 (1.3)	544 (9.1)
Turkey	96 (1.4)	450 (3.7)	4 (1.4)	473 (15.2)
United States	94 (3.0)	542 (3.9)	6 (3.0)	544 (12.1)
International Avg.	84 (0.5)	501 (0.8)	16 (0.5)	495 (2.1)

Exhibit 6.12: Types of Fiction Used for Reading Instruction

Country	Percentage of Students Who Read a Book a Week				
	Fables and Fairy Tales	Stories	Longer Books with Chapters	Poems	Plays
Argentina	57 (4.9)	59 (4.9)	7 (2.4)	37 (4.2)	7 (2.3)
Belize	73 (5.5)	70 (5.9)	13 (4.1)	53 (6.6)	20 (5.5)
Bulgaria	74 (3.7)	85 (3.1)	22 (3.4)	58 (3.9)	2 (1.0)
Canada (O,Q)	16 (2.4)	65 (2.8)	57 (3.1)	12 (2.2)	3 (1.2)
Colombia	84 (3.5)	42 (4.3)	15 (3.2)	47 (4.8)	11 (2.8)
Cyprus	71 (3.8)	66 (4.9)	14 (3.8)	48 (5.0)	6 (2.3)
Czech Republic	41 (4.4)	62 (4.0)	38 (4.2)	23 (3.4)	13 (3.2)
England	11 (3.4)	72 (4.6)	56 (4.6)	29 (4.2)	12 (3.2)
France	18 (2.7)	44 (3.9)	45 (4.3)	35 (3.7)	7 (1.8)
Germany	9 (1.7)	64 (3.0)	13 (1.9)	12 (2.0)	3 (1.2)
Greece	27 (3.7)	42 (4.2)	7 (1.8)	27 (4.0)	3 (1.5)
Hong Kong, SAR	37 (4.3)	26 (4.0)	8 (2.5)	12 (2.9)	3 (1.6)
Hungary	73 (3.7)	91 (2.2)	20 (2.9)	51 (4.0)	1 (0.6)
Iceland	24 (0.3)	77 (0.4)	62 (0.4)	60 (0.4)	5 (0.2)
Iran, Islamic Rep. of	45 (4.3)	22 (3.2)	17 (2.7)	50 (4.3)	8 (1.9)
Israel	61 (5.0)	76 (4.1)	35 (4.1)	43 (4.9)	12 (2.9)
Italy	50 (3.7)	94 (1.9)	25 (3.5)	37 (3.7)	2 (1.2)
Kuwait	19 (3.8)	29 (4.1)	6 (2.3)	30 (3.8)	9 (2.1)
Latvia	54 (3.5)	93 (2.3)	32 (4.0)	53 (4.2)	3 (1.5)
Lithuania	69 (4.1)	77 (3.8)	21 (3.8)	64 (4.0)	11 (2.6)
Macedonia, Rep. of	59 (4.2)	40 (4.3)	8 (2.5)	61 (3.8)	27 (4.0)
Moldova, Rep. of	73 (3.8)	82 (3.2)	19 (3.9)	87 (2.9)	19 (3.8)
Morocco	28 (5.2)	17 (4.6)	20 (4.8)	53 (4.9)	6 (2.6)
Netherlands	8 (2.5)	51 (5.0)	76 (3.9)	12 (2.8)	0 (0.0)
New Zealand	22 (3.3)	88 (2.9)	63 (4.2)	54 (4.3)	21 (3.6)
Norway	29 (3.9)	78 (3.5)	52 (4.0)	33 (4.0)	3 (1.3)
Romania	78 (3.5)	74 (3.8)	7 (2.1)	75 (3.5)	5 (1.9)
Russian Federation	44 (2.9)	99 (0.7)	45 (3.5)	66 (3.2)	5 (1.6)
Scotland	10 (3.1)	77 (4.1)	72 (4.5)	21 (4.7)	1 (0.0)
Singapore	49 (4.1)	58 (3.9)	20 (3.1)	26 (3.6)	5 (1.7)
Slovak Republic	65 (3.6)	53 (3.6)	14 (3.2)	63 (4.1)	1 (0.5)
Slovenia	86 (3.1)	69 (3.8)	11 (2.6)	29 (3.8)	14 (3.0)
Sweden	28 (3.1)	80 (2.9)	90 (1.8)	4 (1.6)	2 (0.7)
Turkey	71 (3.4)	60 (4.3)	13 (2.9)	64 (4.0)	23 (3.3)
United States	22 (3.9)	88 (3.3)	74 (4.8)	22 (4.0)	6 (2.2)
International Avg.	45 (0.6)	65 (0.6)	31 (0.6)	41 (0.7)	8 (0.4)



**Exhibit 6.13: Use of Nonfiction for Reading Instruction**

Country	Percentage of Students		Average Achievement	
	Learned About Nonfiction	Used Nonfiction for Reading Instruction	Percent of Students	Average Achievement
Argentina	88 (3.3)	421 (7.4)	12 (3.3)	435 (14.7)
Belize	69 (6.4)	313 (6.7)	31 (6.4)	348 (12.8)
Bulgaria	37 (3.9)	554 (6.6)	63 (3.9)	549 (5.6)
Canada (O,Q)	60 (3.0)	547 (2.9)	40 (3.0)	541 (3.3)
Colombia	75 (3.6)	422 (4.8)	25 (3.6)	424 (13.4)
Cyprus	65 (4.8)	497 (4.0)	35 (4.8)	490 (4.6)
Czech Republic	31 (4.0)	545 (4.4)	69 (4.0)	533 (2.7)
England	56 (5.1)	552 (5.8)	44 (5.1)	557 (4.9)
France	34 (4.1)	525 (3.9)	66 (4.1)	525 (3.2)
Germany	74 (2.7)	542 (2.5)	26 (2.7)	534 (3.0)
Greece	46 (5.0)	528 (5.6)	54 (5.0)	524 (5.3)
Hong Kong, SAR	28 (3.8)	531 (5.9)	72 (3.8)	527 (3.9)
Hungary	59 (4.1)	547 (2.8)	41 (4.1)	540 (3.9)
Iceland	30 (0.4)	509 (2.1)	70 (0.4)	514 (1.5)
Iran, Islamic Rep. of	49 (3.7)	412 (7.5)	51 (3.7)	415 (4.7)
Israel	49 (3.9)	520 (5.7)	51 (3.9)	490 (6.3)
Italy	77 (3.1)	542 (2.6)	23 (3.1)	538 (5.9)
Kuwait	46 (3.8)	402 (6.9)	54 (3.8)	396 (6.0)
Latvia	36 (4.8)	544 (3.8)	64 (4.8)	546 (3.5)
Lithuania	52 (4.3)	546 (3.9)	48 (4.3)	541 (3.8)
Macedonia, Rep. of	64 (4.6)	444 (7.6)	36 (4.6)	445 (8.7)
Moldova, Rep. of	64 (4.0)	493 (5.5)	36 (4.0)	493 (6.1)
Morocco	40 (5.3)	326 (12.3)	60 (5.3)	355 (12.6)
Netherlands	53 (4.6)	557 (3.2)	47 (4.6)	550 (4.5)
New Zealand	62 (4.2)	531 (4.9)	38 (4.2)	524 (7.1)
Norway	60 (4.5)	503 (3.9)	40 (4.5)	494 (4.3)
Romania	58 (4.3)	513 (5.9)	42 (4.3)	511 (7.2)
Russian Federation	51 (3.2)	538 (4.0)	49 (3.2)	518 (7.3)
Scotland	69 (4.2)	527 (4.5)	31 (4.2)	533 (6.8)
Singapore	59 (4.0)	524 (7.8)	41 (4.0)	535 (7.7)
Slovak Republic	32 (3.7)	523 (4.4)	68 (3.7)	515 (4.2)
Slovenia	58 (4.1)	499 (2.8)	42 (4.1)	505 (2.8)
Sweden	68 (3.2)	560 (3.2)	32 (3.2)	564 (2.3)
Turkey	58 (4.9)	455 (5.3)	42 (4.9)	444 (6.3)
United States	88 (3.1)	539 (3.7)	12 (3.1)	566 (10.8)
International Avg.	56 (0.7)	501 (0.9)	44 (0.7)	501 (1.2)

Exhibit 6.14: Use of Films and Other Media for Reading Instruction

Exhibit 6.14: Use of Films and Other Media for Reading Instruction

### How Often Do Students Read Aloud and Independently in Class?

This section primarily describes teachers' and students' reports about classroom activities related to actually reading, including teachers reading aloud to the class, students reading aloud to the class, and students doing independent reading.

Regarding instruction in two specific reading skills and strategies – decoding and vocabulary – teachers reported little emphasis on decoding but considerable attention to vocabulary (see Exhibit 6.15). Presumably because these are older students who have by and large mastered decoding skills, on average, internationally, teachers reported daily attention to decoding for 23 percent of students and weekly attention for 30 percent of students. The largest percentages of students receiving daily attention were in Hong Kong (53%) and Italy (46%). For vocabulary, on average, internationally, according to their teachers 72 percent of students were helped daily and 24 percent weekly. In Bulgaria, Greece, Lithuania, and Moldova, teachers reported that almost all students (97 to 99 percent) received help daily with vocabulary.

Exhibits 6.16, 6.17, and 6.18 provide students' reports about how often teachers read aloud to the class, students read aloud in class, and students engaged in independent reading, respectively. On average, internationally, most students (63%) reported that their teachers read aloud on a daily basis, and about one in four (24%) on a weekly basis (Exhibit 6.16). Interestingly, the few students (8%) who reported being read to only on a monthly basis had the highest achievement.

As shown in Exhibit 6.17, students reported that they themselves spend rather less time reading aloud in class than do their teachers – 23 percent reported reading aloud daily and 36 percent weekly, on average, across countries. More than 40 percent of students reported reading aloud daily in Argentina, Colombia, Kuwait, Macedonia, Moldova, Morocco, and Romania. Similar to the results for teachers reading aloud, students with the highest achievement reported reading aloud on a monthly basis.

According to students' reports (Exhibit 6.18), independent silent reading was a more frequent activity in fourth-grade classrooms than reading



aloud (either by teachers or students). On average, internationally, two-thirds of students (66%) reported reading silently on their own daily, and a further 27 percent at least weekly. For independent reading compared to reading aloud, however, there was a reversal of the pattern of achievement in relation to frequency. The students with the highest reading achievement also reported the most frequent independent reading (daily). Presumably because they were better readers, teachers were able to allow them more time on their own.

To provide teachers' perspectives on the frequency of oral and silent reading, Exhibit 6.19 shows teachers' reports on how often they read aloud to the class themselves, had students read aloud to the whole class, had students read aloud in small groups or pairs, and had students read silently on their own. On average, internationally, teachers reported that 61 percent of students were in classes where they (the teacher) read aloud daily and 31 percent weekly, which agreed well with the students' reports presented in Exhibit 6.16.

Teachers reported more reading aloud by students in class than did the students themselves. Teachers reported having 56 percent of students, on average, internationally, read aloud to the whole class on a daily basis (whereas this was just 23 percent according to students). Additionally, teachers reported that 13 percent were reading aloud in small groups or pairs on a daily basis and 35 percent weekly.

Agreeing with students that independent silent reading was a frequent classroom activity, teachers reported that 59 percent of students were in classes where silent reading was a daily occurrence.



Exhibit 6.16: Students' Reports About Teachers Reading Aloud in Class

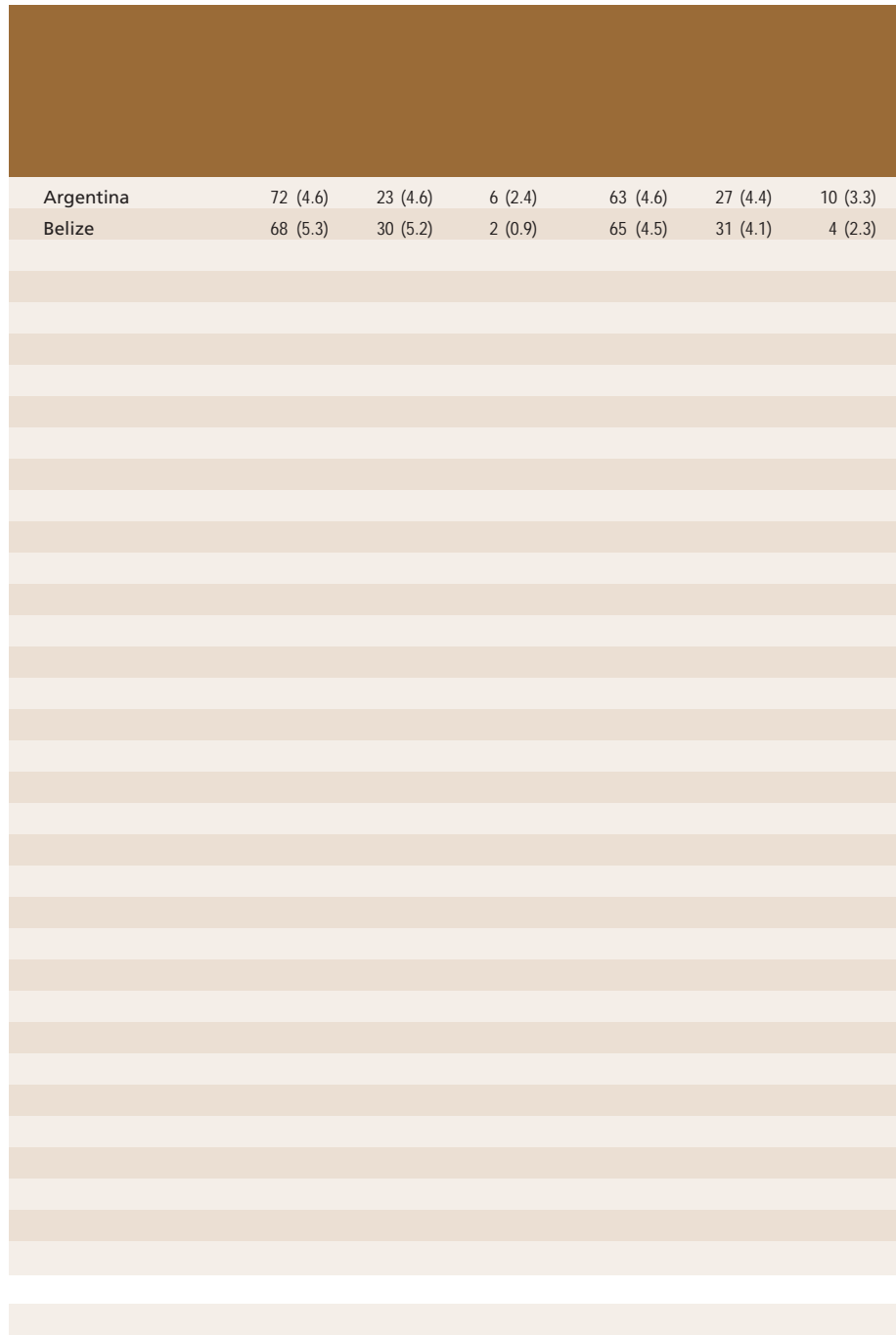
Country	Percentage of Students	Average Achievement	Percentage of Teachers	Average Achievement	Percentage of Teachers	Average Achievement	Percentage of Teachers	Average Achievement
Argentina	78 (1.4)	423 (5.7)	16 (1.0)	438 (8.0)	3 (0.4)	421 (14.8)	3 (0.6)	434 (20.7)
Belize	73 (2.3)	331 (5.5)	18 (1.8)	332 (9.7)	5 (0.7)	312 (21.1)	4 (0.5)	294 (13.4)
Bulgaria	79 (1.4)	552 (3.7)	17 (1.1)	557 (5.1)	2 (0.3)	--	2 (0.5)	--
Canada (O,Q)	58 (1.8)	542 (2.9)	27 (1.4)	548 (3.0)	11 (0.7)	550 (4.0)	5 (0.5)	539 (6.1)
Colombia	89 (1.0)	422 (4.4)	8 (0.8)	450 (8.0)	1 (0.2)	--	1 (0.3)	--
Cyprus	85 (1.2)	495 (3.1)	11 (1.0)	506 (6.9)	2 (0.3)	--	2 (0.3)	--
Czech Republic	35 (1.8)	530 (3.2)	39 (1.8)	540 (3.4)	18 (1.2)	544 (4.0)	8 (1.2)	538 (5.1)
England	50 (2.1)	548 (4.8)	36 (2.0)	554 (4.6)	11 (1.3)	576 (6.4)	4 (0.9)	551 (9.6)
France	51 (2.0)	518 (3.0)	25 (1.2)	534 (3.0)	12 (1.0)	541 (4.3)	11 (1.0)	531 (4.6)
Germany	20 (1.3)	520 (3.9)	36 (1.0)	541 (2.2)	28 (1.0)	551 (2.3)	16 (0.8)	543 (3.2)
Greece	86 (1.5)	524 (3.6)	10 (1.3)	528 (10.8)	2 (0.4)	--	2 (0.5)	--
Hong Kong, SAR	37 (1.6)	532 (3.8)	28 (1.3)	533 (3.8)	14 (0.7)	531 (4.0)	22 (1.1)	516 (3.8)
Hungary	45 (2.5)	537 (3.2)	36 (2.0)	548 (2.3)	15 (1.2)	555 (4.5)	4 (0.6)	539 (8.6)
Iceland	72 (0.8)	514 (1.5)	18 (0.7)	519 (2.7)	5 (0.3)	505 (6.2)	5 (0.4)	494 (5.0)
Iran, Islamic Rep. of	80 (1.1)	417 (4.4)	13 (0.8)	417 (6.3)	2 (0.3)	--	5 (0.5)	389 (7.0)
Israel	75 (0.9)	508 (2.8)	17 (0.7)	523 (5.2)	5 (0.4)	535 (8.9)	3 (0.4)	487 (12.9)
Italy	61 (1.4)	535 (2.7)	26 (1.2)	553 (3.4)	7 (0.6)	559 (5.4)	5 (0.6)	531 (6.1)
Kuwait	85 (0.9)	403 (4.6)	8 (0.5)	383 (5.5)	2 (0.2)	--	5 (0.5)	395 (6.1)
Latvia	39 (1.7)	535 (3.3)	40 (1.3)	550 (2.7)	16 (1.0)	560 (3.7)	6 (0.6)	537 (5.6)
Lithuania	55 (2.1)	536 (2.8)	33 (1.5)	553 (3.5)	9 (0.9)	560 (5.9)	3 (0.5)	523 (9.4)
Macedonia, Rep. of	87 (0.9)	447 (4.5)	10 (0.9)	427 (9.1)	1 (0.2)	--	2 (0.4)	--
Moldova, Rep. of	76 (3.1)	490 (4.1)	19 (3.0)	497 (9.1)	3 (0.8)	516 (28.4)	2 (0.4)	--
Morocco	86 (1.5)	354 (10.1)	10 (1.1)	335 (16.1)	1 (0.2)	--	2 (0.6)	--
Netherlands	51 (2.7)	550 (3.2)	30 (1.8)	560 (2.7)	10 (1.0)	560 (5.5)	9 (1.3)	554 (4.7)
New Zealand	58 (2.9)	528 (5.1)	31 (2.2)	536 (4.8)	8 (1.0)	546 (8.4)	3 (0.5)	497 (11.3)
Norway	63 (2.5)	497 (3.5)	25 (1.6)	505 (4.4)	7 (1.0)	507 (7.0)	4 (0.7)	489 (9.5)
Romania	80 (1.6)	512 (4.9)	16 (1.4)	521 (6.3)	3 (0.4)	502 (16.6)	1 (0.4)	--
Russian Federation	68 (1.9)	525 (5.1)	24 (1.3)	534 (5.0)	6 (0.7)	535 (6.3)	2 (0.4)	--
Scotland	52 (3.0)	521 (4.1)	36 (2.5)	538 (5.0)	8 (0.9)	544 (7.9)	3 (0.4)	522 (14.2)
Singapore	66 (1.2)	527 (4.9)	20 (0.6)	534 (6.0)	7 (0.8)	542 (13.9)	7 (0.4)	510 (8.6)
Slovak Republic	49 (2.4)	510 (3.8)	33 (2.1)	526 (3.7)	13 (1.1)	529 (5.1)	5 (0.6)	520 (7.3)
Slovenia	48 (2.0)	495 (2.7)	37 (1.6)	508 (2.6)	12 (1.1)	514 (5.1)	3 (0.5)	508 (8.2)
Sweden	41 (2.3)	560 (3.0)	42 (1.8)	562 (2.7)	13 (1.2)	561 (3.6)	4 (0.8)	552 (7.5)
Turkey	65 (2.4)	447 (4.0)	26 (1.8)	456 (5.3)	5 (0.7)	452 (10.8)	3 (0.8)	447 (8.2)
United States	57 (3.0)	540 (4.5)	25 (1.9)	544 (5.5)	11 (1.2)	556 (6.2)	6 (0.6)	536 (8.1)
International Avg.	63 (0.3)	498 (0.7)	24 (0.3)	505 (1.1)	8 (0.1)	525 (2.1)	5 (0.1)	499 (2.0)



Exhibit 6.18: Students' Reports About Independent Reading\*

Country	Every Day		Once a Week		Once a Month		Never	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Argentina	68 (1.2)	434 (5.6)	26 (0.9)	422 (6.7)	4 (0.4)	420 (12.1)	3 (0.4)	390 (17.2)
Belize	53 (1.9)	349 (6.2)	32 (1.7)	320 (7.0)	9 (0.5)	287 (7.1)	6 (0.6)	266 (11.6)
Bulgaria	69 (1.5)	560 (3.8)	26 (1.3)	546 (4.9)	3 (0.4)	498 (12.7)	2 (0.4)	--
Canada (O,Q)	82 (0.8)	549 (2.4)	14 (0.7)	530 (4.3)	2 (0.2)	--	1 (0.1)	--
Colombia	70 (1.7)	426 (5.3)	24 (1.6)	422 (5.4)	4 (0.5)	426 (9.7)	2 (0.3)	--
Cyprus	66 (1.2)	504 (3.2)	28 (1.1)	487 (4.1)	4 (0.4)	456 (9.7)	2 (0.2)	--
Czech Republic	51 (1.4)	539 (2.6)	36 (1.1)	535 (3.0)	8 (0.7)	541 (5.5)	5 (0.5)	532 (7.7)
England	83 (1.1)	558 (3.4)	14 (0.9)	535 (5.4)	1 (0.2)	--	1 (0.2)	--
France	68 (1.1)	528 (2.7)	25 (1.0)	522 (3.1)	4 (0.3)	522 (7.7)	3 (0.3)	506 (10.0)
Germany	62 (0.7)	537 (1.9)	28 (0.6)	545 (2.8)	6 (0.3)	546 (4.4)	4 (0.3)	536 (6.3)
Greece	57 (1.7)	526 (4.2)	33 (1.3)	523 (4.2)	6 (0.6)	526 (8.1)	4 (0.6)	530 (7.4)
Hong Kong, SAR	45 (1.0)	538 (3.2)	42 (0.9)	527 (3.0)	9 (0.5)	507 (4.9)	4 (0.3)	493 (6.3)
Hungary	53 (1.5)	547 (2.2)	38 (1.4)	542 (2.9)	6 (0.5)	542 (6.7)	3 (0.4)	526 (7.7)
Iceland	74 (0.7)	517 (1.6)	20 (0.7)	508 (3.0)	4 (0.3)	502 (8.0)	3 (0.3)	482 (9.6)
Iran, Islamic Rep. of	54 (1.0)	428 (4.2)	35 (1.1)	406 (5.3)	7 (0.6)	383 (6.8)	3 (0.3)	370 (9.2)
Israel	70 (1.1)	525 (2.6)	24 (0.9)	493 (5.1)	4 (0.3)	468 (9.8)	3 (0.2)	442 (12.6)
Italy	57 (1.0)	546 (2.6)	31 (0.9)	537 (3.1)	7 (0.6)	534 (5.9)	5 (0.4)	526 (6.7)
Kuwait	46 (1.4)	412 (3.6)	38 (1.1)	396 (5.2)	9 (0.6)	388 (7.9)	7 (0.5)	378 (9.9)
Latvia	68 (1.0)	547 (2.5)	26 (0.9)	544 (2.9)	3 (0.6)	535 (10.2)	2 (0.3)	--
Lithuania	73 (1.0)	544 (2.8)	24 (1.0)	549 (3.6)	3 (0.3)	528 (9.9)	1 (0.2)	--
Macedonia, Rep. of	73 (1.4)	453 (4.5)	23 (1.2)	431 (7.1)	3 (0.6)	409 (16.3)	2 (0.3)	--
Moldova, Rep. of	78 (1.7)	497 (4.1)	19 (1.6)	484 (5.8)	2 (0.3)	--	1 (0.2)	--
Morocco	34 (1.9)	357 (8.7)	47 (2.1)	342 (8.3)	13 (2.2)	351 (19.2)	7 (0.9)	346 (12.1)
Netherlands	68 (1.7)	556 (2.7)	26 (1.3)	555 (2.8)	3 (0.3)	540 (6.4)	3 (0.5)	537 (9.1)
New Zealand	86 (0.8)	538 (3.5)	12 (0.6)	497 (7.0)	1 (0.3)	--	1 (0.3)	--
Norway	57 (1.6)	499 (3.3)	33 (1.4)	503 (3.5)	6 (0.5)	499 (8.2)	3 (0.4)	482 (8.6)
Romania	63 (1.4)	520 (4.6)	30 (1.3)	511 (6.8)	4 (0.5)	488 (12.3)	3 (0.4)	457 (15.1)
Russian Federation	69 (1.2)	531 (4.1)	25 (1.1)	525 (5.8)	3 (0.3)	520 (9.5)	2 (0.3)	--
Scotland	71 (2.0)	533 (3.8)	23 (1.8)	527 (5.3)	3 (0.4)	494 (13.2)	2 (0.4)	--
Singapore	78 (0.9)	543 (4.7)	18 (0.6)	493 (6.2)	3 (0.3)	441 (11.6)	2 (0.2)	--
Slovak Republic	63 (1.5)	521 (3.1)	32 (1.2)	516 (3.7)	4 (0.4)	514 (7.2)	2 (0.3)	--
Slovenia	76 (1.1)	507 (2.2)	21 (1.0)	491 (3.6)	2 (0.3)	--	1 (0.2)	--
Sweden	74 (1.1)	562 (2.4)	23 (0.9)	559 (3.0)	2 (0.3)	--	1 (0.2)	--
Turkey	71 (1.5)	459 (3.7)	24 (1.1)	437 (5.4)	3 (0.5)	396 (8.9)	2 (0.3)	--
United States	84 (0.9)	549 (3.6)	14 (0.8)	518 (6.1)	2 (0.3)	--	1 (0.1)	--
International Avg.	66 (0.2)	507 (0.6)	27 (0.2)	494 (0.8)	4 (0.1)	474 (1.8)	3 (0.1)	459 (2.3)

**Exhibit 6.19: Teachers' Reports About Reading Aloud or Silently in Class**



Argentina	72 (4.6)	23 (4.6)	6 (2.4)	63 (4.6)	27 (4.4)	10 (3.3)
Belize	68 (5.3)	30 (5.2)	2 (0.9)	65 (4.5)	31 (4.1)	4 (2.3)

**Exhibit 6.19: Teachers' Reports About Reading Aloud or Silently in Class (Continued)**

Country	Percentage of Teachers Reporting Reading Aloud or Silently in Class					
	Reading Aloud			Reading Silently		
	Percentage of Teachers Reporting Reading Aloud Daily	Percentage of Teachers Reporting Reading Aloud 2-4 Times a Week	Percentage of Teachers Reporting Reading Aloud 5-7 Times a Week	Percentage of Teachers Reporting Reading Silently Daily	Percentage of Teachers Reporting Reading Silently 2-4 Times a Week	Percentage of Teachers Reporting Reading Silently 5-7 Times a Week
Argentina	21 (4.3)	33 (5.0)	46 (4.7)	68 (5.2)	28 (5.1)	4 (1.8)
Belize	25 (5.4)	57 (6.4)	18 (5.1)	41 (5.3)	43 (5.7)	16 (4.1)
Bulgaria	19 (3.3)	43 (3.7)	38 (3.6)	86 (2.7)	10 (2.4)	3 (1.3)
Canada (O,Q)	11 (2.1)	37 (3.0)	52 (3.2)	71 (3.1)	24 (2.9)	5 (1.2)
Colombia	12 (3.2)	33 (4.1)	54 (4.4)	43 (4.7)	42 (4.3)	15 (3.2)
Cyprus	9 (2.5)	29 (4.8)	62 (4.9)	55 (4.6)	36 (4.5)	9 (3.5)
Czech Republic	3 (1.5)	31 (3.6)	66 (3.7)	43 (4.5)	46 (4.5)	11 (2.7)
England	23 (4.2)	45 (5.0)	32 (4.1)	76 (4.0)	23 (4.0)	2 (1.2)
France	1 (0.8)	11 (2.4)	88 (2.6)	78 (3.3)	20 (3.3)	2 (1.2)
Germany	5 (1.1)	39 (3.0)	56 (2.9)	63 (3.3)	30 (3.4)	7 (1.6)
Greece	16 (3.2)	25 (4.2)	58 (4.8)	49 (5.0)	33 (4.4)	19 (4.2)
Hong Kong, SAR	6 (2.0)	27 (4.3)	68 (4.3)	39 (4.1)	34 (3.9)	28 (4.2)
Hungary	5 (1.7)	20 (3.4)	75 (3.3)	66 (3.6)	28 (3.4)	5 (1.8)
Iceland	4 (0.2)	12 (0.3)	85 (0.3)	47 (0.4)	44 (0.4)	9 (0.2)
Iran, Islamic Rep. of	11 (2.1)	35 (4.2)	54 (4.2)	34 (3.5)	43 (3.3)	23 (3.6)
Israel	23 (4.1)	45 (4.7)	33 (4.6)	61 (4.5)	32 (4.2)	7 (2.4)
Italy	3 (1.2)	22 (3.3)	75 (3.5)	42 (3.9)	42 (3.6)	16 (2.7)
Kuwait	12 (2.5)	29 (3.6)	59 (3.6)	34 (3.3)	47 (3.3)	19 (2.3)
Latvia	11 (2.6)	32 (4.1)	57 (4.5)	73 (3.3)	22 (3.1)	5 (1.8)
Lithuania	7 (2.2)	49 (4.6)	44 (4.5)	57 (3.9)	37 (3.8)	6 (1.7)
Macedonia, Rep. of	10 (2.7)	26 (3.6)	64 (4.2)	44 (4.1)	33 (4.4)	23 (4.0)
Moldova, Rep. of	24 (4.0)	55 (4.7)	21 (3.4)	85 (3.2)	10 (2.6)	5 (1.7)
Morocco	22 (4.3)	19 (3.6)	59 (4.7)	58 (5.0)	34 (5.0)	7 (2.9)
Netherlands	5 (1.9)	48 (4.8)	47 (4.7)	44 (4.4)	50 (4.6)	5 (1.8)
New Zealand	26 (3.9)	54 (4.3)	20 (3.6)	92 (2.1)	8 (2.1)	0 (0.2)
Norway	6 (1.9)	34 (4.3)	60 (4.6)	42 (3.9)	46 (4.1)	12 (2.4)
Romania	7 (1.5)	32 (4.2)	61 (4.1)	71 (3.5)	21 (3.1)	8 (2.2)
Russian Federation	33 (3.2)	43 (3.4)	24 (3.0)	86 (2.3)	11 (2.2)	3 (1.4)
Scotland	36 (4.6)	45 (5.2)	18 (3.9)	62 (4.4)	36 (4.5)	2 (1.3)
Singapore	10 (2.7)	45 (4.7)	45 (4.4)	59 (4.1)	35 (3.9)	6 (1.9)
Slovak Republic	4 (1.5)	34 (3.9)	62 (3.8)	45 (4.2)	40 (4.2)	15 (2.7)
Slovenia	5 (1.6)	31 (3.7)	64 (3.7)	59 (4.1)	35 (4.0)	6 (1.7)
Sweden	5 (1.4)	47 (3.6)	49 (3.4)	78 (2.4)	20 (2.2)	1 (0.7)
Turkey	5 (1.7)	21 (3.5)	74 (3.8)	49 (4.4)	46 (4.2)	5 (2.1)
United States	19 (3.7)	51 (3.9)	30 (3.3)	72 (3.9)	23 (3.9)	5 (2.1)
International Avg.	13 (0.5)	35 (0.7)	52 (0.7)	59 (0.7)	32 (0.6)	9 (0.4)





several different activities after they had read something in class. On average, 59 percent of students were in classes where teachers reported that they had students do at least three of the six activities (write something, answer questions orally, talk to one another, draw pictures or do an art project, do a play or dramatization, or do a group project) after they had read something in class.

Although not an everyday activity in most classes, students did sometimes take a written quiz or test about what they had read. Less than half (45%) the students were in classes that took a quiz about what they had read as often as once a week (see Exhibit 6.25), and in the Czech Republic, England, and Iceland, 50 percent or more of the students reported never or almost never taking a quiz about their reading. Teachers agreed that they gave a written quiz or test about what students had read relatively infrequently. As presented in Exhibit 6.26, the majority of students (52%) were in classes where teachers reported giving a quiz about reading only once or twice a month, and a further 26 percent were in classes where quizzes were almost never given. In Iceland, New Zealand, Norway, Scotland, and Sweden, the majority of students were in such classes.

**Exhibit 6.20: Students Answer Questions Aloud About Class Reading**

	Percent of Students	Average						
Argentina	58 (1.4)	427 (6.1)	24 (1.0)	437 (6.3)	11 (0.8)	429 (9.9)	7 (0.6)	424 (9.0)
Belize	43 (2.1)	330 (6.3)	31 (1.6)	339 (7.2)	14 (0.9)	315 (7.6)	12 (1.2)	318 (6.6)
Bulgaria	70 (1.5)	557 (3.6)	23 (1.1)	552 (4.7)	5 (0.6)	517 (8.9)	2 (0.4)	~ ~
Canada (O,Q)	29 (1.2)	531 (3.2)	34 (1.1)	546 (2.7)	20 (1.0)	559 (3.2)	17 (0.9)	551 (3.9)
Colombia	60 (1.8)	422 (5.0)	25 (1.3)	432 (6.3)	6 (0.6)	420 (8.4)	9 (0.6)	416 (5.9)
Cyprus	68 (1.3)	503 (3.3)	21 (1.2)	488 (4.8)	8 (0.5)	468 (7.9)	3 (0.4)	456 (8.5)
Czech Republic	32 (1.6)	529 (3.3)	34 (1.4)	538 (3.0)	21 (1.1)	549 (3.2)	13 (1.1)	538 (3.3)
England	18 (1.2)	530 (5.1)	35 (1.2)	553 (3.9)	22 (1.0)	563 (4.5)	24 (1.3)	562 (4.8)
France	51 (1.3)	527 (3.0)	29 (1.1)	527 (2.9)	9 (0.6)	534 (5.2)	11 (0.8)	514 (5.5)
Germany	34 (0.8)	536 (2.7)	36 (0.8)	544 (2.1)	18 (0.6)	545 (3.0)	12 (0.6)	536 (3.7)
Greece	79 (1.3)	527 (4.0)	17 (1.1)	525 (5.6)	3 (0.4)	499 (13.5)	2 (0.3)	~ ~
Hong Kong, SAR	32 (1.1)	538 (3.0)	33 (1.2)	534 (3.1)	17 (0.8)	523 (3.9)	18 (0.9)	510 (5.1)
Hungary	52 (1.9)	546 (2.6)	34 (1.4)	544 (2.5)	10 (0.8)	541 (5.2)	4 (0.4)	540 (6.6)
Iceland	21 (0.6)	497 (3.3)	31 (0.6)	520 (2.3)	18 (0.6)	526 (3.4)	30 (0.8)	512 (2.9)
Iran, Islamic Rep. of	59 (1.5)	419 (4.0)	28 (1.2)	420 (6.7)	6 (0.8)	377 (7.6)	6 (0.6)	391 (7.5)
Israel	46 (1.0)	502 (3.6)	33 (0.9)	524 (3.8)	12 (0.6)	514 (5.6)	10 (0.7)	513 (7.3)
Italy	44 (1.2)	534 (2.7)	34 (1.0)	546 (3.2)	14 (0.6)	554 (4.2)	8 (0.5)	543 (5.6)
Kuwait	64 (1.3)	410 (4.6)	20 (0.8)	388 (5.5)	8 (0.5)	372 (7.6)	8 (0.7)	391 (5.8)
Latvia	44 (1.6)	541 (3.1)	41 (1.2)	552 (2.4)	12 (0.7)	544 (4.5)	4 (0.4)	533 (8.5)
Lithuania	47 (1.4)	539 (3.5)	39 (1.2)	549 (3.9)	11 (0.6)	551 (4.7)	3 (0.4)	531 (9.3)
Macedonia, Rep. of	69 (1.5)	452 (4.5)	24 (1.5)	444 (6.9)	6 (0.6)	394 (13.5)	1 (0.2)	~ ~
Moldova, Rep. of	74 (1.9)	498 (4.2)	21 (1.6)	486 (6.6)	3 (0.4)	465 (10.5)	1 (0.2)	~ ~
Morocco	66 (1.8)	363 (11.4)	23 (1.5)	323 (8.9)	7 (0.8)	331 (13.2)	4 (0.7)	349 (22.8)
Netherlands	17 (1.0)	535 (3.9)	21 (0.8)	559 (3.6)	15 (0.8)	559 (3.1)	47 (1.4)	559 (2.7)
New Zealand	23 (1.1)	492 (5.6)	38 (1.2)	534 (4.4)	22 (1.0)	551 (5.3)	17 (1.0)	547 (5.8)
Norway	28 (1.2)	493 (4.8)	39 (1.2)	504 (3.3)	18 (1.0)	508 (4.2)	15 (1.0)	495 (4.9)
Romania	72 (1.6)	519 (4.8)	22 (1.4)	509 (6.2)	3 (0.3)	455 (12.5)	2 (0.3)	~ ~
Russian Federation	54 (1.7)	532 (5.0)	34 (1.4)	528 (4.8)	7 (0.6)	522 (6.7)	5 (0.4)	499 (7.5)
Scotland	24 (2.7)	503 (5.3)	39 (2.0)	533 (4.6)	18 (1.0)	544 (6.5)	20 (1.6)	537 (5.5)
Singapore	26 (0.9)	519 (6.1)	32 (0.8)	532 (5.7)	17 (0.6)	539 (5.8)	26 (0.8)	527 (5.5)
Slovak Republic	38 (1.5)	507 (4.1)	38 (1.3)	526 (3.0)	17 (0.9)	531 (4.3)	6 (0.7)	522 (6.2)
Slovenia	33 (1.5)	489 (3.6)	41 (1.2)	506 (2.7)	22 (1.1)	512 (3.4)	5 (0.6)	509 (5.9)
Sweden	21 (1.0)	553 (3.5)	38 (0.9)	560 (2.6)	24 (0.9)	567 (2.5)	17 (1.1)	565 (3.4)
Turkey	60 (1.4)	462 (4.0)	29 (1.1)	439 (5.3)	7 (0.5)	400 (7.3)	4 (0.4)	441 (9.1)
United States	32 (1.4)	528 (5.0)	31 (1.2)	548 (3.4)	16 (0.9)	557 (6.3)	21 (1.3)	547 (5.7)
International Avg.	45 (0.2)	497 (0.8)	31 (0.2)	502 (0.8)	13 (0.1)	495 (1.2)	11 (0.1)	496 (1.6)

**Exhibit 6.21: Students Answer Questions in Writing About Class Reading\***

Argentina	64 (1.5)	431 (5.4)	27 (1.3)	435 (7.9)	4 (0.5)	422 (15.7)	5 (0.5)	397 (10.8)
Belize	42 (2.2)	329 (6.4)	43 (2.0)	332 (6.1)	9 (0.8)	320 (10.3)	6 (0.6)	327 (11.9)

## Exhibit 6.22: Students Talk in Class with Peers About Reading

Country	Percentage	Mean	SD	Percentage	Mean	SD	Percentage	Mean	SD
Argentina	44 (1.5)	421 (5.8)	24 (0.9)	440 (5.4)	10 (0.7)	430 (10.7)	21 (1.2)	441 (7.9)	
Belize	29 (1.4)	326 (5.6)	31 (1.2)	332 (6.3)	14 (0.7)	309 (8.8)	26 (1.2)	341 (7.8)	
Bulgaria	33 (1.5)	547 (4.5)	35 (1.4)	562 (4.1)	13 (0.8)	556 (5.9)	18 (1.2)	541 (6.6)	
Canada (O,Q)	15 (0.8)	533 (4.0)	29 (0.8)	551 (2.9)	23 (0.7)	552 (3.5)	33 (1.0)	539 (2.6)	
Colombia	47 (2.2)	412 (5.0)	30 (1.6)	431 (5.4)	9 (0.7)	439 (8.2)	14 (1.1)	442 (7.8)	
Cyprus	35 (1.5)	486 (3.5)	37 (1.0)	503 (4.1)	15 (0.8)	498 (6.2)	13 (1.0)	501 (6.0)	
Czech Republic	9 (0.8)	527 (6.0)	23 (1.1)	539 (3.4)	25 (1.0)	552 (2.5)	43 (1.6)	529 (2.9)	
England	11 (0.7)	535 (7.0)	27 (0.9)	560 (4.0)	24 (1.0)	572 (4.9)	39 (1.3)	543 (4.4)	
France	16 (0.8)	518 (4.4)	27 (1.0)	528 (3.4)	19 (1.0)	539 (4.2)	38 (1.0)	522 (2.9)	
Germany	15 (0.5)	533 (3.1)	25 (0.6)	548 (2.2)	20 (0.6)	552 (2.8)	40 (0.9)	533 (2.6)	
Greece	34 (1.3)	520 (3.9)	31 (1.2)	531 (5.0)	13 (0.9)	534 (6.7)	22 (1.3)	519 (5.8)	
Hong Kong, SAR	18 (0.8)	527 (3.8)	34 (0.7)	534 (3.4)	26 (0.8)	533 (3.2)	22 (0.8)	519 (4.5)	
Hungary	14 (1.2)	538 (3.8)	28 (1.3)	545 (3.1)	22 (0.9)	552 (2.9)	36 (1.3)	542 (2.8)	
Iceland	9 (0.5)	491 (5.4)	20 (0.7)	526 (2.7)	18 (0.6)	525 (3.1)	54 (0.8)	510 (1.5)	
Iran, Islamic Rep. of	35 (1.0)	414 (4.4)	41 (1.1)	423 (5.2)	14 (0.9)	413 (6.6)	9 (0.7)	388 (7.9)	
Israel	27 (0.8)	495 (3.7)	31 (0.9)	518 (3.4)	17 (0.8)	530 (5.1)	25 (1.0)	508 (4.4)	
Italy	33 (1.2)	532 (3.3)	30 (1.1)	543 (3.3)	16 (0.9)	557 (3.9)	21 (0.9)	543 (3.5)	
Kuwait	33 (1.0)	405 (4.2)	36 (1.1)	409 (4.2)	15 (0.9)	390 (7.2)	16 (0.7)	385 (6.5)	
Latvia	19 (1.0)	539 (3.7)	35 (1.1)	543 (3.0)	21 (0.8)	555 (3.3)	25 (1.3)	545 (3.0)	
Lithuania	20 (1.0)	535 (4.3)	39 (1.1)	549 (3.0)	20 (0.9)	549 (3.9)	20 (0.9)	539 (3.9)	
Macedonia, Rep. of	46 (1.5)	441 (5.0)	38 (1.3)	453 (5.7)	10 (0.8)	447 (8.8)	5 (0.4)	426 (11.6)	
Moldova, Rep. of	44 (2.5)	501 (4.6)	42 (2.0)	492 (5.0)	9 (0.8)	476 (7.8)	5 (0.6)	464 (10.7)	
Morocco	38 (2.4)	366 (15.0)	39 (2.1)	341 (9.7)	13 (1.0)	346 (13.5)	10 (1.0)	346 (15.2)	
Netherlands	5 (0.5)	527 (7.8)	14 (0.7)	562 (3.6)	18 (0.9)	567 (3.1)	62 (1.2)	552 (2.7)	
New Zealand	17 (0.9)	502 (6.8)	31 (1.2)	535 (5.3)	23 (1.0)	550 (4.9)	29 (1.2)	528 (4.0)	
Norway	8 (0.7)	472 (7.3)	24 (0.9)	507 (4.3)	23 (0.8)	510 (4.1)	46 (1.2)	497 (3.6)	
Romania	36 (2.0)	515 (5.1)	41 (1.6)	516 (5.4)	13 (0.9)	519 (8.8)	10 (1.0)	486 (7.3)	
Russian Federation	25 (1.7)	526 (6.6)	33 (1.0)	527 (5.4)	16 (0.9)	537 (5.4)	26 (1.3)	528 (3.4)	
Scotland	12 (0.8)	498 (6.4)	31 (2.1)	529 (4.9)	20 (0.9)	551 (4.6)	36 (2.0)	527 (4.6)	
Singapore	14 (0.6)	512 (7.7)	24 (0.7)	536 (5.3)	19 (0.6)	533 (6.6)	43 (0.9)	528 (4.6)	
Slovak Republic	16 (1.2)	503 (5.6)	31 (1.1)	530 (2.9)	27 (1.1)	526 (3.5)	25 (1.4)	508 (5.0)	
Slovenia	16 (0.8)	493 (4.7)	30 (1.2)	501 (2.7)	22 (1.1)	511 (3.7)	33 (1.6)	503 (2.9)	
Sweden	7 (0.5)	554 (5.1)	27 (0.9)	569 (3.2)	32 (0.9)	564 (2.5)	34 (1.1)	553 (2.4)	
Turkey	34 (1.2)	454 (4.5)	42 (1.3)	455 (3.9)	14 (0.7)	446 (5.6)	10 (1.2)	421 (10.2)	
United States	14 (0.9)	520 (7.2)	24 (0.9)	549 (4.8)	20 (0.9)	554 (4.8)	42 (1.3)	541 (4.2)	
International Avg.	24 (0.2)	492 (1.0)	31 (0.2)	506 (0.8)	18 (0.1)	508 (1.0)	27 (0.2)	495 (1.0)	

**Exhibit 6.23: Students Do Projects About Class Reading\***

**Exhibit 6.24: Teachers' Reports About Reading Comprehension Activities After Instruction**



Argentina

**Exhibit 6.25: Students' Reports on Taking a Quiz or Test After Reading**

**Exhibit 6.26: Teachers' Reports on Giving a Written Quiz or Test After Students Read**

Country	Every Day		Once a Week		Once a Month		Never	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Argentina	15 (3.2)	431 (16.0)	36 (4.8)	414 (11.7)	34 (4.8)	424 (11.2)	15 (3.6)	415 (13.3)
Belize	11 (3.3)	323 (20.6)	68 (5.4)	322 (6.2)	21 (4.2)	331 (14.8)	1 (0.5)	~ ~
Bulgaria	2 (1.0)	~ ~	13 (2.4)	547 (13.3)	72 (3.5)	551 (5.1)	13 (2.6)	552 (7.3)
Canada (O,Q)	0 (0.4)	~ ~	15 (2.1)	540 (5.4)	62 (3.2)	545 (2.8)	23 (2.7)	548 (6.1)
Colombia	14 (3.5)	398 (13.2)	33 (4.6)	424 (7.8)	42 (4.8)	425 (7.2)	12 (3.0)	439 (21.0)
Cyprus	1 (0.0)	~ ~	14 (3.8)	507 (6.9)	49 (5.7)	490 (4.4)	35 (4.8)	493 (4.6)
Czech Republic	0 (0.4)	~ ~	15 (3.3)	538 (6.3)	62 (4.6)	536 (3.6)	23 (3.6)	539 (4.1)
England	0 (0.0)	~ ~	5 (2.1)	551 (28.1)	45 (4.4)	553 (5.6)	50 (4.5)	556 (4.9)
France	2 (1.0)	~ ~	21 (3.3)	528 (5.8)	62 (3.8)	524 (2.9)	16 (2.8)	528 (6.3)
Germany	0 (0.0)	~ ~	3 (1.1)	548 (6.8)	50 (3.8)	537 (2.8)	47 (3.9)	541 (3.7)
Greece	0 (0.0)	~ ~	22 (4.2)	538 (7.6)	64 (4.5)	520 (4.4)	14 (3.3)	533 (10.4)
Hong Kong, SAR	0 (0.0)	~ ~	11 (2.6)	514 (9.6)	55 (4.4)	526 (4.6)	34 (4.5)	538 (3.9)
Hungary	1 (0.6)	~ ~	4 (1.6)	518 (16.2)	84 (3.2)	545 (2.7)	12 (2.7)	550 (9.5)
Iceland	1 (0.0)	~ ~	3 (0.1)	474 (6.5)	30 (0.4)	501 (2.7)	67 (0.4)	518 (1.3)
Iran, Islamic Rep. of	6 (1.5)	389 (13.4)	34 (4.1)	410 (7.7)	49 (3.9)	417 (6.4)	12 (2.8)	422 (18.9)
Israel	2 (1.4)	~ ~	17 (3.2)	499 (10.9)	68 (3.9)	508 (4.7)	12 (2.8)	528 (11.5)
Italy	11 (2.3)	529 (7.9)	43 (3.1)	538 (4.6)	40 (3.3)	545 (3.1)	6 (1.7)	555 (15.8)
Kuwait	12 (2.8)	388 (12.5)	39 (3.6)	403 (6.6)	32 (3.6)	400 (9.8)	17 (2.9)	397 (11.3)
Latvia	1 (1.1)	~ ~	12 (3.1)	547 (9.1)	76 (4.1)	545 (2.9)	11 (2.9)	548 (5.7)
Lithuania	0 (0.0)	~ ~	12 (2.4)	532 (10.6)	69 (3.7)	544 (3.0)	19 (3.3)	549 (5.7)
Macedonia, Rep. of	3 (1.6)	432 (27.4)	14 (3.0)	428 (16.1)	66 (4.1)	447 (7.1)	16 (3.3)	445 (13.3)
Moldova, Rep. of	10 (2.5)	484 (14.1)	48 (4.5)	490 (5.7)	40 (4.2)	495 (7.4)	2 (1.1)	~ ~
Morocco	1 (1.0)	~ ~	16 (3.6)	348 (13.1)	48 (5.0)	353 (13.9)	35 (4.9)	329 (16.7)
Netherlands	3 (1.6)	556 (10.1)	24 (3.9)	549 (5.2)	62 (4.5)	554 (3.4)	10 (2.8)	562 (5.7)
New Zealand	0 (0.0)	~ ~	4 (1.7)	498 (33.2)	20 (3.3)	532 (8.5)	76 (3.6)	530 (4.8)
Norway	0 (0.0)	~ ~	5 (1.2)	495 (6.4)	30 (3.7)	496 (5.0)	66 (4.0)	501 (3.8)
Romania	2 (1.0)	~ ~	28 (3.4)	507 (9.7)	68 (3.6)	512 (5.6)	3 (1.4)	506 (22.7)
Russian Federation	2 (1.0)	~ ~	6 (1.4)	538 (7.1)	67 (2.9)	529 (6.1)	25 (2.8)	525 (4.9)
Scotland	0 (0.0)	~ ~	4 (1.8)	545 (24.5)	37 (5.2)	524 (6.3)	60 (5.3)	530 (4.4)
Singapore	2 (1.0)	~ ~	10 (2.0)	507 (15.8)	42 (3.9)	533 (8.6)	46 (3.7)	529 (7.2)
Slovak Republic	1 (0.6)	~ ~	9 (2.2)	524 (9.2)	48 (3.8)	521 (3.8)	42 (3.7)	513 (5.5)
Slovenia	1 (0.7)	~ ~	18 (3.3)	496 (5.8)	63 (4.0)	503 (2.6)	18 (3.3)	506 (5.5)
Sweden	1 (0.5)	~ ~	8 (1.7)	558 (5.9)	35 (3.7)	561 (3.9)	57 (3.6)	562 (2.8)
Turkey	2 (1.0)	~ ~	18 (3.5)	452 (10.9)	74 (3.9)	450 (4.2)	6 (1.8)	457 (14.1)
United States	2 (1.1)	~ ~	49 (3.9)	538 (5.1)	40 (3.9)	551 (6.0)	9 (2.1)	529 (10.4)
International Avg.	3 (0.2)	437 (3.6)	19 (0.5)	496 (2.1)	52 (0.7)	501 (1.1)	26 (0.5)	508 (5.6)



### What Library Resources Are Available and How Are They Used?

Since there is ample evidence that access to books and other print resources is an important support for the process of learning to read,<sup>2</sup> PIRLS asked principals if their schools had a library and if individual classrooms had classroom libraries or reading corners. As shown in Exhibit 6.27, almost all students (85%) attended schools with a school library, and the majority (65%) with large holdings – more than 500 books. Many students also had access to classroom libraries. Only five countries, Belize, Cyprus, Germany, Morocco, The Netherlands, and Turkey, had less than 70 percent of students in schools with school libraries, but Cyprus, Germany, The Netherlands, and Turkey compensated for this by having large percentages of students in schools where all or most classrooms had a library or reading corner. In some of these countries, also, students make frequent use of mobile libraries, village libraries, and documentation centers. On average, 57 percent of students were in schools where most or all classrooms had classroom libraries. These were most often reported in Cyprus, Hong Kong, New Zealand, and Scotland, in each of which more than 80 percent of students were in schools where most or all classrooms had such facilities. According to teacher reports, classroom libraries were relatively rare in Colombia, Iran, Macedonia, and Morocco.

In addition to asking principals about school and classroom libraries, PIRLS asked teachers about the situation in their own fourth-grade classroom – whether they had a classroom library or reading corner and, if so, how many books and magazines it contained, how often they gave students time to use it and whether they could borrow books from it to take home. Exhibit 6.28 shows that 69 percent of students, on average, internationally, were in classes where the teacher reported having a classroom library, and in some countries, notably Cyprus, Hong Kong, New Zealand, and the United States, almost all students (more than 95%) were in such classes.

Despite the widespread availability of classroom libraries, students were allowed to use them relatively infrequently, with 62 percent of students, on average, in classes where the teacher reported giving students time to use the classroom library no more than weekly. Highest levels of use were reported in New Zealand and the United States, where 85 percent or more



of students were taught by teachers reporting daily use. Mostly, where there were classroom libraries students were allowed to borrow books to take home

## Exhibit 6.27: Access to Libraries in School

Argentina	17 (3.3)	21 (3.1)	40 (4.7)	22 (4.2)	86 (3.6)	47 (4.4)	46 (5.4)
Belize	32 (3.0)	27 (7.1)	40 (7.6)	1 (0.7)	58 (3.8)	22 (4.5)	r 9 (4.5)
Bulgaria	5 (1.4)	13 (2.6)	47 (3.8)	35 (3.9)	83 (2.7)	66 (3.4)	10 (2.6)
Canada (O,Q)	46 (3.4)	41 (3.7)	11 (1.8)	2 (0.8)	96 (1.1)	91 (1.7)	23 (2.8)
Colombia	14 (3.1)	8 (2.7)	37 (5.3)	41 (4.3)	72 (4.4)	21 (3.2)	26 (4.3)
Cyprus	97 (1.3)	1 (0.1)	2 (1.3)	0 (0.0)	62 (5.5)	r 30 (5.9)	r 3 (1.9)
Czech Republic	6 (2.2)	14 (3.1)	63 (4.0)	18 (3.3)	92 (2.3)	71 (3.8)	11 (2.9)
England	71 (4.4)	20 (3.9)	9 (2.6)	1 (0.0)	91 (2.6)	84 (3.3)	4 (2.0)
France	52 (5.0)	29 (4.4)	16 (3.7)	2 (1.4)	79 (4.1)	64 (4.5)	10 (2.5)
Germany	45 (3.5)	35 (4.0)	19 (3.1)	1 (0.7)	53 (4.0)	22 (3.0)	1 (0.7)
Greece	49 (4.9)	18 (3.8)	16 (2.4)	17 (3.9)	88 (3.3)	22 (3.6)	9 (2.8)
Hong Kong, SAR	97 (1.5)	1 (0.9)	2 (1.2)	0 (0.0)	72 (4.3)	70 (4.3)	18 (3.6)
Hungary	7 (1.9)	41 (4.2)	51 (4.0)	2 (0.9)	95 (1.3)	92 (2.1)	33 (3.5)
Iceland	r 8 (0.3)	25 (0.4)	63 (0.4)	4 (0.1)	r 96 (0.2)	r 95 (0.2)	r 61 (0.4)
Iran, Islamic Rep. of	13 (2.8)	10 (3.2)	21 (3.8)	56 (4.8)	81 (3.0)	35 (4.5)	10 (2.9)
Israel	41 (4.4)	31 (3.7)	25 (4.1)	3 (1.5)	82 (3.5)	r 48 (4.6)	1 (0.9)
Italy	24 (3.4)	32 (3.6)	40 (3.7)	5 (1.5)	91 (2.1)	58 (3.5)	11 (2.3)
Kuwait	10 (2.6)	16 (2.5)	50 (4.0)	23 (2.9)	100 (0.0)	r 58 (3.8)	r 70 (4.0)
Latvia	15 (3.2)	33 (4.5)	42 (4.2)	10 (2.8)	99 (1.3)	96 (1.8)	40 (4.1)
Lithuania	31 (4.1)	33 (4.2)	35 (4.0)	1 (1.0)	98 (0.6)	89 (2.1)	32 (4.2)
Macedonia, Rep. of	5 (1.6)	6 (2.0)	46 (4.0)	43 (4.0)	92 (2.1)	84 (2.8)	4 (1.7)
Moldova, Rep. of	13 (2.6)	17 (3.6)	54 (4.6)	15 (3.1)	100 (0.4)	81 (3.5)	12 (2.8)
Morocco	7 (3.0)	12 (3.4)	33 (4.8)	48 (5.1)	21 (3.4)	0 (0.0)	8 (2.0)
Netherlands	69 (4.7)	17 (3.4)	11 (3.4)	2 (1.4)	63 (4.9)	r 34 (4.7)	1 (0.0)
New Zealand	83 (3.2)	16 (3.2)	1 (0.6)	0 (0.0)	99 (0.4)	97 (1.4)	15 (2.9)
Norway	12 (3.0)	27 (4.0)	58 (4.5)	2 (1.5)	98 (1.1)	85 (3.5)	9 (2.5)
Romania	5 (2.0)	10 (2.9)	62 (4.0)	23 (2.9)	96 (1.3)	92 (2.1)	9 (2.8)
Russian Federation	58 (3.1)	24 (2.9)	18 (2.3)	1 (0.6)	95 (1.4)	88 (1.7)	30 (3.0)
Scotland	81 (4.1)	13 (3.5)	4 (1.8)	1 (1.1)	84 (4.3)	66 (5.0)	4 (2.1)
Singapore	48 (3.8)	34 (3.5)	19 (3.2)	0 (0.0)	100 (0.2)	99 (0.6)	33 (3.7)
Slovak Republic	4 (1.7)	19 (3.4)	45 (4.1)	32 (3.9)	95 (1.7)	74 (3.3)	12 (2.8)
Slovenia	3 (1.1)	21 (3.5)	70 (3.8)	6 (2.1)	100 (0.0)	100 (0.0)	83 (2.9)
Sweden	21 (3.5)	37 (4.4)	36 (4.7)	6 (2.2)	89 (2.7)	76 (3.9)	11 (3.2)
Turkey	57 (4.3)	29 (4.1)	7 (2.2)	7 (2.3)	63 (3.6)	31 (4.0)	2 (1.0)
United States	64 (4.1)	287143 TD(Unit.28547055.4(287143 TDF8.714)Q9o)					

**Exhibit 6.28: Students' Use of Classroom Libraries**

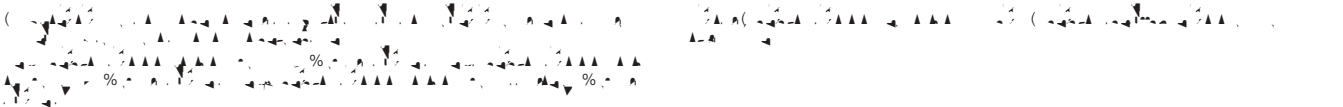
Country	Percentage of Students Who Reported					If Yes, % of Students	Average Number of Books	Average Number of Magazines
	Have a Reading Center	Used the Library			Daily			
		Daily	Weekly	Less than Weekly				
Argentina	54 (5.0)	18 (3.4)	31 (4.5)	51 (5.2)	89 (3.8)	14 (2.8)	6 (1.4)	
Belize	90 (3.3)	67 (4.8)	18 (4.0)	15 (4.0)	68 (4.9)	37 (4.0)	8 (1.1)	
Bulgaria	34 (3.8)	23 (3.6)	8 (1.9)	69 (3.7)	89 (4.3)	8 (2.0)	2 (0.5)	
Canada (O,Q)	88 (2.6)	64 (3.4)	20 (2.4)	16 (2.8)	89 (2.3)	250 (50.8)	15 (2.0)	
Colombia	44 (4.6)	22 (3.7)	13 (3.2)	65 (4.6)	54 (6.0)	26 (5.3)	9 (2.6)	
Cyprus	98 (1.0)	9 (2.2)	76 (4.1)	15 (3.7)	98 (1.6)	53 (2.9)	3 (0.6)	
Czech Republic	57 (4.2)	35 (4.2)	15 (3.3)	50 (4.2)	66 (6.2)	17 (2.4)	2 (0.6)	
England	82 (3.5)	57 (4.7)	21 (3.7)	22 (3.8)	87 (3.3)	211 (37.6)	4 (1.5)	
France	92 (2.3)	54 (4.0)	30 (3.6)	16 (3.0)	85 (2.8)	84 (6.5)	14 (1.7)	
Germany	82 (2.1)	37 (2.6)	29 (2.7)	35 (2.8)	89 (2.0)	51 (3.9)	5 (1.0)	
Greece	61 (4.1)	17 (3.8)	22 (3.5)	61 (4.3)	97 (1.7)	36 (4.9)	4 (2.3)	
Hong Kong, SAR	96 (2.5)	15 (3.1)	45 (4.4)	41 (4.7)	99 (0.9)	167 (15.8)	5 (1.3)	
Hungary	64 (3.2)	48 (4.0)	6 (2.0)	46 (4.0)	82 (3.8)	24 (2.5)	2 (0.5)	
Iceland	46 (0.4)	22 (0.3)	21 (0.3)	57 (0.4)	68 (0.6)	16 (0.2)	1 (0.0)	
Iran, Islamic Rep. of	32 (3.9)	4 (1.5)	19 (3.5)	77 (3.6)	97 (2.2)	24 (5.2)	3 (0.7)	
Israel	78 (3.7)	56 (4.3)	17 (2.7)	26 (4.0)	80 (3.4)	28 (2.8)	6 (1.2)	
Italy	76 (2.8)	18 (2.5)	25 (3.2)	57 (3.5)	96 (1.7)	45 (5.3)	7 (1.8)	
Kuwait	40 (3.5)	3 (1.0)	23 (3.1)	74 (3.3)	81 (5.6)	6 (1.0)	4 (0.7)	
Latvia	67 (4.5)	53 (4.6)	6 (1.8)	41 (4.3)	82 (4.8)	61 (9.5)	11 (2.3)	
Lithuania	82 (3.5)	48 (4.5)	19 (3.3)	33 (4.3)	95 (2.1)	45 (4.4)	5 (0.7)	
Macedonia, Rep. of	45 (3.6)	13 (3.0)	15 (3.1)	72 (3.4)	87 (3.8)	21 (4.8)	2 (1.1)	
Moldova, Rep. of	68 (3.8)	42 (4.9)	20 (3.7)	38 (4.3)	94 (2.7)	40 (6.4)	7 (1.6)	
Morocco	54 (5.4)	9 (2.7)	32 (5.1)	59 (5.2)	87 (4.7)	13 (1.7)	6 (0.9)	
Netherlands	84 (3.5)	58 (4.5)	23 (3.7)	19 (3.8)	16 (3.8)	86 (8.4)	3 (0.7)	
New Zealand	96 (1.6)	86 (3.0)	8 (2.5)	6 (1.9)	65 (4.4)	63 (4.9)	8 (1.4)	
Norway	54 (4.5)	15 (3.2)	33 (4.3)	52 (4.5)	79 (5.0)	33 (5.8)	4 (0.9)	
Romania	49 (4.2)	22 (3.6)	20 (2.8)	58 (4.2)	91 (3.5)	24 (6.4)	4 (0.7)	
Russian Federation	84 (2.5)	64 (3.6)	12 (2.1)	24 (3.1)	94 (2.9)	77 (4.9)	12 (1.4)	
Scotland	91 (2.5)	57 (4.9)	29 (4.1)	13 (3.4)	74 (4.5)	104 (8.2)	3 (0.5)	
Singapore	77 (3.4)	45 (3.5)	25 (3.4)	30 (3.6)	79 (3.7)	51 (3.4)	3 (0.5)	
Slovak Republic	64 (4.0)	21 (3.3)	23 (3.4)	56 (4.2)	82 (4.1)	25 (4.2)	3 (0.5)	
Slovenia	66 (4.3)	45 (4.4)	16 (3.3)	39 (4.5)	73 (4.8)	21 (2.0)	3 (0.4)	
Sweden	47 (2.9)	33 (3.0)	11 (2.0)	56 (2.7)	83 (3.5)	49 (5.5)	2 (0.4)	
Turkey	93 (2.2)	44 (4.4)	45 (4.4)	11 (2.5)	100 (0.0)	71 (3.5)	9 (1.3)	
United States	96 (1.3)	85 (3.3)	9 (1.9)	7 (2.7)	91 (2.5)	219 (20.5)	9 (1.1)	
International Avg.	69 (0.6)	37 (0.6)	22 (0.6)	40 (0.6)	82 (0.6)	60 (2.1)	6 (0.2)	





Exhibit 6.30: Students' Overall Library Use in School\*

Country	Daily		Once a Week		Less than a Week	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Argentina	31 (4.3)	408 (9.9)	51 (4.3)	419 (8.9)	18 (4.2)	452 (14.5)
Belize	72 (4.2)	332 (7.2)	22 (3.9)	306 (14.7)	6 (2.7)	322 (20.5)
Bulgaria	32 (3.8)	559 (7.7)	38 (3.4)	551 (4.9)	31 (3.9)	549 (10.3)
Canada (O,Q)	64 (3.4)	544 (3.0)	32 (3.2)	546 (4.0)	4 (1.8)	539 (7.0)
Colombia	35 (4.6)	411 (8.3)	36 (4.6)	443 (6.8)	29 (4.8)	437 (11.3)
Cyprus	10 (2.4)	494 (8.0)	84 (3.4)	494 (3.6)	6 (2.7)	479 (10.5)
Czech Republic	36 (4.4)	545 (3.8)	30 (4.1)	533 (6.1)	34 (4.5)	533 (3.1)
England	60 (4.5)	554 (4.3)	34 (4.3)	552 (7.0)	6 (2.3)	568 (11.6)
France	55 (3.9)	527 (3.0)	40 (3.9)	523 (4.6)	5 (1.5)	523 (6.6)
Germany	45 (3.1)	541 (3.5)	41 (3.3)	537 (3.0)	13 (2.3)	542 (3.9)
Greece	20 (4.3)	534 (10.8)	50 (4.9)	531 (6.4)	30 (5.1)	517 (6.5)
Hong Kong, SAR	20 (3.9)	537 (6.5)	58 (5.1)	526 (4.4)	21 (4.1)	524 (8.7)
Hungary	52 (4.3)	550 (3.3)	26 (3.8)	545 (5.8)	22 (3.4)	531 (5.5)
Iceland	40 (0.4)	514 (1.9)	52 (0.4)	511 (1.7)	8 (0.2)	514 (5.1)
Iran, Islamic Rep. of	8 (2.4)	441 (18.5)	64 (4.4)	425 (7.6)	28 (3.8)	421 (12.1)
Israel	59 (4.0)	528 (4.5)	31 (4.1)	488 (9.5)	10 (2.5)	448 (24.3)
Italy	21 (2.9)	543 (4.7)	33 (3.6)	540 (5.1)	45 (3.7)	541 (4.5)
Kuwait	3 (1.2)	402 (16.4)	66 (3.3)	404 (5.6)	31 (3.3)	397 (6.2)
Latvia	54 (4.4)	547 (3.8)	28 (4.1)	537 (4.9)	19 (2.8)	550 (5.4)
Lithuania	50 (4.3)	540 (3.8)	36 (4.1)	542 (4.7)	14 (3.1)	557 (7.3)
Macedonia, Rep. of	21 (3.4)	494 (10.0)	42 (4.7)	461 (7.9)	37 (4.6)	428 (9.4)
Moldova, Rep. of	61 (4.7)	497 (5.8)	37 (4.7)	486 (6.6)	2 (1.2)	~ ~
Morocco	x x	x x	x x	x x	x x	x x
Netherlands	61 (4.7)	551 (3.7)	34 (4.4)	559 (3.4)	5 (1.7)	562 (9.9)
New Zealand	86 (2.9)	527 (4.3)	12 (2.8)	543 (11.3)	1 (0.8)	~ ~
Norway	18 (3.5)	501 (6.8)	62 (4.1)	498 (3.9)	20 (3.3)	504 (6.7)
Romania	30 (4.3)	511 (9.6)	52 (4.3)	516 (6.3)	18 (3.5)	508 (12.6)
Russian Federation	68 (3.7)	531 (3.9)	26 (3.7)	520 (9.6)	6 (1.9)	528 (13.5)
Scotland	57 (4.9)	525 (5.4)	39 (4.7)	534 (5.7)	3 (2.0)	526 (9.6)
Singapore	47 (3.5)	528 (7.6)	43 (3.6)	533 (10.2)	10 (2.0)	504 (14.1)
Slovak Republic	25 (3.4)	518 (5.7)	35 (3.5)	521 (4.5)	39 (3.8)	516 (5.8)
Slovenia	66 (4.3)	502 (2.8)	30 (4.0)	502 (3.4)	4 (1.8)	499 (14.1)
Sweden	49 (3.5)	563 (3.5)	37 (3.4)	558 (3.2)	13 (2.6)	564 (5.5)
Turkey	48 (4.8)	461 (6.1)	49 (4.6)	445 (6.3)	3 (1.3)	443 (7.9)
United States	86 (2.7)	544 (4.3)	13 (2.5)	535 (8.5)	1 (0.6)	~ ~
International Avg.	44 (0.7)	509 (1.2)	40 (0.7)	505 (1.1)	16 (0.5)	501 (2.0)



## How Are Computers Used for Reading Instruction?

To explore the use of information technology in teaching reading, PIRLS asked teachers and students about the availability of computers and how they were used. According to their teachers, half the fourth-grade students across all countries had access to computers, but computer availability varied dramatically from country to country, as shown in Exhibit 6.31. Whereas almost all students (more than 90%) in Canada (O,Q), England, Iceland, The Netherlands, New Zealand, Scotland, Singapore, Sweden, and the United States had computers available in the classroom or elsewhere in the school, the large majority (more than 80%) in Belize, Bulgaria, Colombia, Greece, Iran, Kuwait, Macedonia, Moldova, the Russian Federation, the Slovak Republic, and Turkey had no access to computers. Among students with access, less than one-third (29%) were in classes with a computer in the classroom, and less than half (45%) had computers available somewhere else in the school. Classroom computers were most common in Canada (O,Q), England, The Netherlands, New Zealand, Scotland, Sweden, and the United States.

Internet access for classes with computers available also varied considerably. Countries with high levels of computer availability and high levels of Internet access included Canada (O,Q), Iceland, New Zealand, Sweden, and the United States, where almost all students had access to computers with Internet connections, according to their teachers.

Exhibit 6.31 also presents teachers' reports of students' use of the computer for developing reading skills and strategies, reading stories, and writing stories. On average, less than one-third (32%) of students in classes with access to computers used them for writing stories or other texts at least once a month. Among countries with high levels of computer availability, use of the computer for writing was most common in England and New Zealand, where more than 90 percent of students were in classes where this occurred at least monthly, but Canada (O,Q), Iceland, Scotland, Sweden, and the United States also had high percentages of students in this category. Teachers generally reported less frequently asking students to use the computer for reading stories or developing reading skills and strategies – these activities were most common in Canada (O,Q), New Zealand, Singapore, and the United States.

On average, across countries, 70 percent of students reported that they had used a computer at some time, and in about one-third of the countries this applied to almost all students (more than 90%). Computer use was more frequent at home than in school, on average, but relatively high use both at home and school was reported in Canada (O,Q), England, Hong Kong, Scotland, and the United States (Exhibit 6.32).



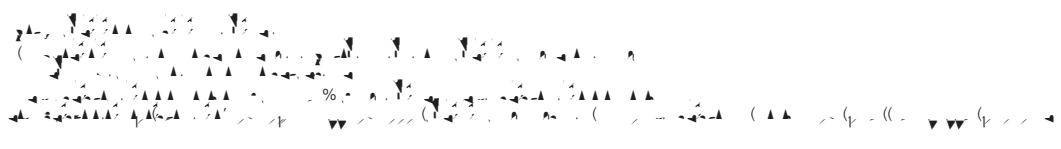
Exhibit 6.31: Computer Availability and Instructional Use



Argentina	70 (4.0)	4 (1.9)	26 (3.6)	10 (2.4)	10 (2.5)	11 (2.3)	19 (3.3)
Belize	r 95 (1.9)	r 2 (0.9)	r 2 (1.0)	r 1 (1.3)	r 1 (c0 Tc0 Tw(Argent3 436.64 -13 ref0.h6.64 -13		
Belize	70 8.6)	1.4)	9.0)	r #.0)	10 (6.5)		
Belize							

Exhibit 6.32: Students' Reports on Computer Use

Country	Percentage of Students Reporting Use of Computer	Percentage of Students Reporting Use of Computer		
		At Home	At School	At the Office
Argentina	62 (2.0)	33 (1.8)	28 (2.4)	29 (1.6)
Belize	47 (3.6)	24 (2.4)	10 (1.6)	20 (1.5)
Bulgaria	60 (2.1)	21 (1.2)	10 (1.5)	32 (1.4)
Canada (O,Q)	94 (0.4)	76 (0.8)	69 (1.7)	31 (1.0)
Colombia	54 (3.2)	18 (1.6)	37 (3.4)	19 (1.5)
Cyprus	59 (1.7)	44 (1.6)	15 (1.7)	19 (1.1)
Czech Republic	75 (1.3)	50 (1.4)	18 (1.8)	22 (1.0)
England	97 (0.4)	74 (1.0)	67 (2.7)	29 (1.0)
France	95 (0.5)	60 (1.0)	38 (2.8)	24 (0.9)
Germany	85 (0.6)	66 (0.8)	17 (1.5)	19 (0.7)
Greece	62 (2.0)	37 (1.8)	13 (2.4)	26 (1.2)
Hong Kong, SAR	95 (0.5)	61 (1.3)	68 (2.6)	19 (0.6)
Hungary	77 (1.5)	52 (1.2)	28 (3.1)	23 (1.0)
Iceland	91 (0.5)	69 (0.9)	59 (0.8)	28 (0.9)
Iran, Islamic Rep. of	11 (1.1)	7 (0.8)	1 (0.3)	5 (0.5)
Israel	93 (0.6)	78 (0.8)	59 (2.6)	43 (1.0)
Italy	75 (1.2)	53 (1.0)	24 (2.5)	17 (0.7)
Kuwait	64 (1.7)	48 (1.6)	9 (0.9)	23 (1.1)
Latvia	58 (1.7)	25 (1.2)	17 (2.3)	20 (0.9)
Lithuania	53 (1.7)	29 (1.3)	7 (1.3)	19 (1.0)
Macedonia, Rep. of	60 (2.1)	32 (1.7)	8 (0.9)	28 (1.4)
Moldova, Rep. of	21 (1.9)	6 (0.8)	5 (1.1)	7 (0.8)
Morocco	32 (3.1)	18 (2.1)	9 (1.7)	12 (1.6)
Netherlands	93 (0.5)	76 (0.9)	50 (2.9)	24 (0.8)
New Zealand	94 (0.6)	70 (1.2)	59 (2.2)	38 (1.4)
Norway	92 (0.7)	70 (1.0)	22 (2.3)	27 (1.2)
Romania	42 (2.4)	18 (1.5)	13 (2.3)	17 (1.4)
Russian Federation	37 (1.8)	12 (0.7)	6 (1.1)	16 (0.8)
Scotland	95 (0.7)	68 (0.9)	63 (3.0)	34 (1.1)
Singapore	94 (0.4)	70 (0.7)	39 (1.9)	25 (0.8)
Slovak Republic	54 (1.6)	34 (1.2)	5 (0.9)	17 (0.9)
Slovenia	78 (1.1)	58 (1.2)	16 (1.5)	28 (1.2)
Sweden	97 (0.3)	75 (0.7)	35 (2.0)	25 (0.8)
Turkey	44 (3.0)	15 (1.3)	22 (3.4)	18 (1.3)
United States	94 (0.5)	71 (1.2)	70 (2.2)	32 (1.3)
International Avg.	70 (0.3)	46 (0.2)	29 (0.4)	23 (0.2)



### What Is the Role of Reading Homework?

According to students' reports presented in Exhibit 6.33, most students (82%) were given reading for homework at least once a week, and 60 percent at least three times a week. When they have reading homework, students reported spending, on average, just over half an hour on it. Countries where students reported the greatest amounts of reading homework included Cyprus, Greece, Lithuania, Moldova, Romania, the Russian Federation, and the Slovak Republic, where more than 80 percent reported having homework three or more times a week. Students in The Netherlands, one of the highest-performing countries, reported being assigned the least homework – 55 percent of students were in classes where reading homework was assigned less than once a week or never.

To provide the teacher's perspective on homework, PIRLS developed an Index of Reading for Homework that combined the amount of reading homework teachers reported assigning with the frequency with which they assigned it. Students at the high level of the index were expected to spend more than 30 minutes on reading homework at least once a week, those at the low level no more than 30 minutes less than once a week, and those at the medium level all other combinations. As shown in Exhibit 6.34, reading homework assignment practice varies enormously across the PIRLS countries, from 90 percent of students at the high level in Hungary to just 5 percent in The Netherlands. On average, internationally, 44 percent of students were at the high level, 46 percent at the medium, and just 10 percent at the low level.



**Exhibit 6.34: Index of Reading for Homework (RFH)**

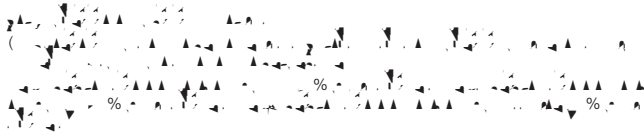




Exhibit 6.35: Emphasis on Sources to Monitor Students' Progress in Reading

ISC 4<sup>th</sup> Grade  
2000

Country	Percentage of Teachers Reporting				
	Teacher Observation	Classroom	Diagnostic Tests	National Regional Examinations	Standardized Tests
Argentina	r 73 (4.1)	59 (5.1)	58 (4.6)	15 (2.9)	r 8 (2.5)
Belize	r 55 (5.3)	r 74 (3.7)	r 39 (5.2)	r 15 (3.7)	r 16 (4.6)
Bulgaria	84 (2.9)	71 (3.8)	37 (4.0)	28 (3.8)	60 (3.8)
Canada (O,Q)	74 (3.2)	53 (3.4)	23 (2.6)	11 (1.9)	7 (1.7)
Colombia	68 (4.5)	65 (4.0)	60 (4.6)	7 (2.2)	3 (1.4)
Cyprus	91 (3.1)	50 (4.4)	54 (4.5)	3 (2.0)	0 (0.2)
Czech Republic	62 (4.0)	34 (4.9)	19 (3.5)	2 (1.1)	2 (1.7)
England	80 (3.8)	24 (4.5)	31 (4.8)	40 (5.2)	13 (3.3)
France	80 (3.2)	74 (3.4)	44 (4.1)	26 (3.4)	10 (2.0)
Germany	49 (3.2)	33 (3.2)	20 (2.6)	r 4 (1.5)	r 6 (1.7)
Greece	95 (1.9)	84 (3.4)	--	--	5 (2.2)
Hong Kong, SAR	28 (3.8)	40 (4.6)	27 (4.1)	11 (2.5)	5 (1.9)
Hungary	77 (3.9)	78 (3.3)	41 (4.3)	29 (3.8)	15 (2.9)
Iceland	56 (0.3)	14 (0.3)	31 (0.4)	11 (0.2)	36 (0.4)
Iran, Islamic Rep. of	62 (4.1)	76 (3.2)	61 (4.3)	22 (2.9)	20 (3.2)
Israel	71 (4.3)	64 (4.1)	44 (4.7)	19 (3.6)	r 7 (2.1)
Italy	77 (3.4)	82 (3.0)	49 (3.9)	4 (1.8)	16 (2.6)
Kuwait	r 56 (4.2)	72 (3.3)	r 52 (3.8)	r 39 (3.4)	r 18 (3.1)
Latvia	63 (4.4)	44 (3.7)	33 (4.0)	24 (2.9)	17 (2.4)
Lithuania	80 (3.9)	66 (4.2)	23 (3.4)	--	12 (3.0)
Macedonia, Rep. of	79 (3.8)	70 (4.0)	35 (4.4)	26 (4.0)	23 (3.7)
Moldova, Rep. of	68 (4.5)	92 (2.3)	55 (4.5)	65 (4.5)	38 (4.9)
Morocco	r 77 (4.5)	71 (4.5)	r 69 (4.6)	r 16 (4.0)	r 34 (5.1)
Netherlands	78 (3.6)	58 (4.4)	74 (4.0)	71 (3.8)	r 18 (3.2)
New Zealand	68 (4.3)	19 (3.5)	56 (4.7)	--	19 (3.6)
Norway	69 (4.0)	13 (2.9)	29 (3.7)	--	15 (3.0)
Romania	73 (4.4)	85 (3.4)	41 (4.6)	19 (3.8)	17 (3.8)
Russian Federation	71 (3.6)	69 (3.4)	64 (3.8)	27 (3.2)	43 (4.0)
Scotland	92 (2.5)	26 (4.0)	14 (2.6)	51 (5.3)	6 (2.6)
Singapore	45 (3.5)	47 (3.8)	14 (2.7)	52 (3.7)	19 (3.2)
Slovak Republic	47 (4.4)	35 (3.8)	19 (3.1)	3 (1.4)	14 (3.0)
Slovenia	67 (4.1)	49 (4.1)	15 (3.0)	3 (1.5)	3 (1.5)
Sweden	90 (1.8)	12 (1.8)	24 (2.6)	39 (3.1)	11 (1.8)
Turkey	75 (3.9)	80 (3.0)	36 (4.7)	10 (2.4)	16 (3.2)
United States	69 (4.4)	52 (3.3)	24 (4.2)	16 (3.0)	19 (3.2)
International Avg.	70 (0.6)	55 (0.6)	39 (0.7)	23 (0.6)	16 (0.5)





**Exhibit 6.36: Use of Portfolios (Collections of Students' Work) to Monitor Students' Progress in Reading**

Argentina	57 (4.7)	415 (8.1)	38 (5.0)	423 (10.0)	5 (2.3)	416 (18.2)
Belize	19 (3.8)	328 (14.7)	50 (5.6)	323 (8.2)	31 (6.0)	324 (13.9)
Bulgaria	34 (4.1)	554 (6.6)	63 (4.3)	549 (5.0)	3 (1.5)	533 (52.9)
Canada (O,Q)	27 (3.2)	550 (4.2)	49 (3.5)	546 (3.6)	25 (2.6)	539 (4.7)
Colombia	49 (4.5)	422 (7.5)	31 (4.0)	429 (8.9)	19 (3.7)	410 (9.8)
Cyprus	17 (3.3)	504 (7.5)	59 (5.8)	492 (3.9)	24 (5.0)	487 (6.3)
Czech Republic	11 (2.5)	549 (9.9)	59 (4.3)	535 (3.2)	29 (3.9)	537 (3.5)
England	20 (4.3)	542 (7.0)	68 (4.6)	558 (4.7)	12 (3.1)	553 (8.3)
France	72 (3.2)	526 (2.7)	26 (3.0)	521 (4.9)	3 (1.5)	520 (8.5)
Germany	13 (2.2)	525 (6.7)	59 (2.9)	540 (2.9)	28 (3.1)	546 (3.1)
Greece	39 (4.7)	525 (7.2)	47 (4.4)	525 (5.8)	13 (2.9)	530 (8.2)
Hong Kong, SAR	14 (3.1)	519 (8.4)	34 (4.2)	530 (5.8)	52 (4.8)	530 (4.4)
Hungary	28 (3.3)	536 (4.6)	43 (4.3)	549 (3.9)	29 (3.2)	545 (5.0)
Iceland	22 (0.3)	519 (2.3)	64 (0.4)	512 (1.5)	14 (0.3)	509 (3.6)
Iran, Islamic Rep. of	19 (3.4)	422 (11.7)	40 (4.5)	411 (8.9)	41 (4.7)	411 (8.1)
Israel	27 (4.3)	524 (8.0)	64 (4.5)	506 (5.1)	9 (2.6)	481 (22.3)
Italy	31 (3.8)	544 (5.3)	41 (3.4)	536 (3.9)	28 (3.6)	547 (4.2)
Kuwait	44 (3.7)	405 (7.8)	39 (3.6)	396 (6.2)	17 (3.2)	379 (11.3)
Latvia	7 (2.3)	575 (7.8)	75 (3.9)	541 (2.5)	17 (3.7)	545 (7.6)
Lithuania	30 (4.3)	547 (5.2)	57 (4.5)	543 (3.5)	12 (2.7)	536 (8.9)
Macedonia, Rep. of	16 (3.4)	415 (18.2)	30 (6.7)	59 (3.9)	4	28 (3.6)

**Exhibit 6.37: Approaches to Assessing Students' Performance in Reading**

