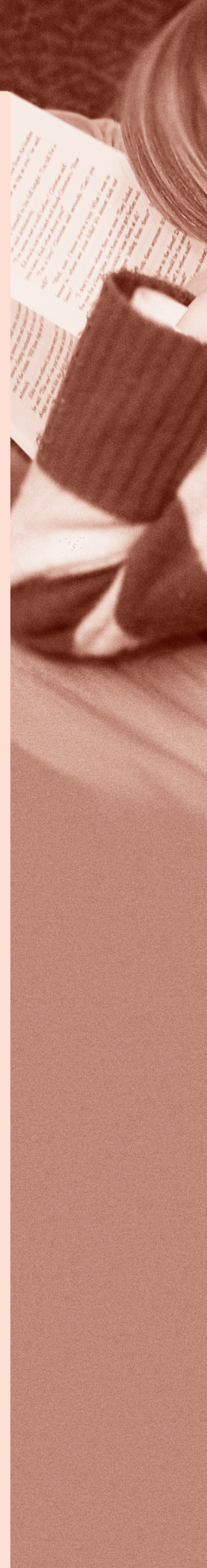


Chapter 5

School Curriculum and Organization for Teaching Reading

The school curriculum for reading instruction is affected by many factors within a country, including the degree of centralization, availability of resources, and the structure of primary schools within the education system. The *PIRLS 2006 Encyclopedia* summarizes the structure of the education system for each of the PIRLS 2006 countries and Canadian provinces and specifically describes the reading curriculum for the fourth year of schooling. This chapter combines reports of parents, reading teachers, and school principals that describe students' reading readiness for school, the structural characteristics of fourth-grade reading curricula, school policies that support the curricula, and the organization of time and classrooms for teaching reading.

Because students were the basis for sampling, the student remains the unit of analysis, regardless of the source of information from the questionnaires. That is, data shown in the tables in this chapter are the percentages of students whose parents, teachers, or school principals reported on a particular activity or characteristic. When a parent, teacher, or principal did not complete the assigned questionnaire, the background data were not available for those students. If the percentage of students with background data fell below 85 percent, a special notation was made in the tables. An "r" is included next to data where responses are available for 70 to 84 percent of students, an "s" where responses are available for 50 to 69 percent of students, and an "x" is included where responses are available for less than 50 percent.



In Luxembourg, because school administration is shared between the Ministry of Education and the local town or city councils, primary schools do not have principals and school background data are not available.

How Well Prepared Are Students to Learn to Read?

Preprimary education, in the form of preschool, kindergarten, or an early childhood education center, plays an important role in preparing children for primary school. According to the *PIRLS 2006 Encyclopedia*, many countries have compulsory preprimary education, and enrollment rates are increasing in countries where preprimary education is voluntary. In many countries, Ministries of Education have published curriculum guidelines for preprimary education, much as they do for primary education.

Exhibit 5.1 contains parents' reports of the number of years their children participated in preprimary education. Although attendance differed dramatically from country to country, on average internationally, 45 percent of fourth-grade students had at least 3 years of preprimary education. In Belgium (Flemish) and Hungary, 85 percent of students had attended at least 3 years of primary education, and 75–78 percent had in Belgium (French), Denmark, and France. Interestingly, on average internationally, reading achievement increased with the amount of time spent in preprimary education, with students who had not attended preprimary school having an international average reading score of 455, compared to 510 for those students receiving 3 years or more of preprimary education.

Exhibit 5.2 presents parents' responses to the question about the age at which their children started formal primary school. Parents in New Zealand, Scotland, and Trinidad and Tobago reported that 90 percent or more of their children began school at age 5 or younger (parents' reports were not available for England, the other PIRLS 2006 country where students typically start school at age 5). According to parents, age 5 also was the predominant school entry age (63 to 91% of the students) in the five Canadian provinces. In 18 countries, parents reported age 6 as the predominant entry age (65 to 89% of the students). The 12 countries where parents reported children started

school predominantly at age 7 or older (60 to 89% of students) included eight Eastern European countries (Bulgaria, Hungary, Latvia, Lithuania, Macedonia, Moldova, Romania, and the Russian Federation), two Asian countries (Chinese Taipei and Singapore), Iran, and Sweden.

Regardless of the age at which they begin primary school, children enter with a range of literacy skills acquired at home or in preprimary education. To examine to what extent children are prepared for school and equipped with some basic skills as a foundation for formal reading instruction, PIRLS asked parents how well their child could do each of the following early literacy activities when he or she first entered primary school:

- ▶ Recognize most of the alphabet,
- ▶ Write letters of the alphabet,
- ▶ Read some words,
- ▶ Write some words, and
- ▶ Read sentences.

For each of the activities, parents were given four response options, including *very well*, *moderately well*, *not very well*, and *not at all*. PIRLS averaged parents' responses across the five activities to form a 4-point scale summarizing the children's early literacy skills. The results are presented in Exhibit 5.3. The first column in Exhibit 5.3 shows the percentage of fourth-grade students whose parents reported that their children entered primary school able to do the five activities very well, together with the average reading achievement for those students. For countries that collected this information in both PIRLS 2001 and PIRLS 2006, changes are shown, with an indication of whether or not that difference was statistically significant. For PIRLS 2006, the percentages of fourth-grade students who entered school able to perform the literacy skills very well are shown in the graph by the red bar and, when corresponding PIRLS 2001 results were available, the white bar shows the percentage from PIRLS 2001. The second page of the exhibit presents the data for the remaining three categories—moderately well, not very well, and not at all.

In PIRLS 2006, on average internationally, parents reported that nearly one third of their children could perform the early literacy activities very well. On average internationally, students were distributed fairly evenly across categories, with about another one third in the “moderately well” category, one fourth in the “not very well” category, and 12 percent in the “not at all” category. More than half the students in Trinidad and Tobago, Israel, Singapore, Macedonia, Hong Kong SAR, and Spain had parents who reported that their children could perform the early literacy activities very well. In contrast, according to their parents, one fifth or more of the students in Morocco, Iran, Georgia, Romania, Norway, Hungary, Belgium (Flemish), and the Slovak Republic could not perform the early literacy activities at all beginning school.

Parents’ assessments of their children’s early literacy skills corresponded well with reading achievement at the fourth grade. Reading achievement, on average internationally, was 525 for those students whose parents reported their children could perform the activities very well, 499 for performing the activities moderately well, 484 for performing them not very well, and 474 for not being able to perform the activities at all.

Given the strong association between parents’ assessments of early literacy skills and students’ reading achievement in the fourth year of schooling, the changes between 2001 and 2006 are encouraging. In 17 of the 22 participants that also had data from 2001, there were increases in the “very well” category, with seven of these also having increases in the “moderately well” category, including Moldova, Lithuania, the Russian Federation, Iceland, Scotland, Germany, and Hungary. However, in the Canadian province of Ontario, parents reported increases in both the percentages of their children entering school unable to perform the literacy skills and not being able to perform them very well.

PIRLS asked school principals to estimate the percentages of students entering their schools with each of the same five early literacy skills. There were four response options—*more than 75%*, *51–75%*, *25–50%*, and *less than 25%*. The responses were averaged across the five activities to summarize the

results. Exhibit 5.4 presents the principals' reports for PIRLS 2006 together with changes from PIRLS 2001. In Chinese Taipei, 94 percent of students were in schools where principals reported that most children (more than 75%) entered school with early literacy skills, and 86 percent were in such schools in Hong Kong SAR. More than half were in such schools in England (56%), Singapore (70%), Spain (56%), and the United States (65%). Iceland, Israel, Latvia, Singapore, and the United States had a significant increase from 2001 in the percentage of students in this category.

On average internationally, however, 44 percent of the fourth-grade students were in schools where relatively few children (less than 25%) entered school with these literacy skills. In 10 countries, two thirds or more of students were in schools where relatively few students beginning school had these literacy skills. These countries included Austria, Belgium (Flemish), Georgia, Germany, Hungary, Iran, New Zealand, Scotland, the Slovak Republic, and Slovenia. Three Canadian provinces were also in this situation (Alberta, Ontario, and Quebec). As might be anticipated, principals were not as positive about students' early literacy skills as were students' parents. Similarly, the principals agreed with parents about improvements in early literacy skills, but the picture was slightly less positive. According to school principals, the percentages of students in schools where relatively few students begin school with literacy skills decreased between 2001 and 2006 in Bulgaria, Germany, Iceland, Israel, Latvia, the Netherlands, Norway, Romania, and the Russian Federation.

Exhibit 5.1 Number of Years Children Attended Preprimary Education (Preschool, Kindergarten, and Other Similar Programs) **PIRLS 2006**
4th Grade

Countries	Country Has Compulsory Preprimary Education	Did Not Attend		Up to and Including 1 Year		More than 1 Year Up to and Including 2 Years		Between 2 and 3 Years		3 Years or More	
		Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Austria	○	2 (0.2)	~ ~	7 (0.6)	527 (4.8)	31 (1.4)	535 (3.1)	5 (0.4)	542 (5.2)	56 (1.6)	545 (2.4)
Belgium (Flemish)	○	1 (0.2)	~ ~	0 (0.1)	~ ~	2 (0.3)	~ ~	12 (0.6)	539 (4.5)	85 (0.8)	551 (1.9)
Belgium (French)	○	1 (0.2)	~ ~	1 (0.2)	~ ~	4 (0.4)	486 (10.5)	17 (0.8)	491 (3.8)	77 (1.1)	506 (2.6)
¹ Bulgaria	○	13 (1.2)	537 (9.7)	7 (0.8)	525 (8.3)	12 (0.8)	543 (7.5)	15 (0.9)	542 (6.9)	53 (1.8)	560 (4.0)
Canada, Alberta	r ○	32 (1.3)	559 (3.8)	27 (1.0)	564 (3.4)	31 (1.1)	570 (3.3)	6 (0.4)	574 (5.8)	4 (0.7)	570 (9.7)
Canada, British Columbia	r ●	25 (1.4)	554 (4.3)	20 (0.9)	564 (4.6)	36 (1.2)	566 (3.3)	12 (0.9)	568 (5.1)	8 (0.6)	571 (6.6)
Canada, Nova Scotia	●	23 (0.8)	539 (3.4)	24 (0.9)	545 (3.2)	33 (1.0)	549 (3.0)	11 (0.6)	551 (4.3)	9 (0.5)	550 (4.9)
Canada, Ontario	○	47 (1.5)	556 (3.2)	13 (0.7)	563 (5.8)	23 (0.8)	553 (3.5)	8 (0.7)	571 (7.5)	9 (0.7)	562 (6.1)
Canada, Quebec	○	35 (1.5)	530 (3.9)	27 (1.3)	542 (3.7)	20 (1.0)	539 (3.4)	6 (0.7)	541 (6.1)	12 (1.1)	531 (5.9)
Chinese Taipei	○	1 (0.2)	~ ~	6 (0.4)	524 (5.9)	42 (1.0)	534 (2.3)	26 (0.6)	538 (2.7)	25 (0.8)	543 (2.8)
Denmark	○	1 (0.1)	~ ~	3 (0.3)	556 (7.5)	4 (0.5)	518 (6.6)	14 (0.8)	543 (4.5)	78 (1.2)	551 (2.4)
England	○	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x
France	○	1 (0.1)	~ ~	0 (0.1)	~ ~	4 (0.4)	514 (7.1)	20 (0.7)	514 (3.4)	75 (0.8)	528 (2.2)
Georgia	○	35 (2.0)	471 (5.0)	7 (0.7)	465 (8.1)	20 (1.1)	470 (3.5)	9 (0.6)	477 (5.8)	29 (1.4)	476 (4.8)
Germany	○	2 (0.2)	~ ~	2 (0.3)	~ ~	11 (0.8)	547 (4.7)	18 (0.7)	549 (4.3)	67 (1.1)	557 (2.2)
Hong Kong SAR	○	1 (0.2)	~ ~	1 (0.1)	~ ~	3 (0.4)	559 (6.8)	29 (0.8)	561 (2.6)	66 (0.8)	567 (2.4)
Hungary	●	0 (0.1)	~ ~	2 (0.3)	~ ~	5 (0.5)	531 (9.9)	8 (0.6)	543 (7.7)	85 (0.9)	556 (2.8)
Iceland	r ○	1 (0.2)	~ ~	2 (0.3)	~ ~	5 (0.4)	508 (6.3)	20 (0.7)	509 (3.6)	72 (0.8)	520 (1.8)
Indonesia	○	38 (2.8)	381 (5.0)	13 (1.3)	421 (7.0)	33 (2.5)	433 (3.9)	5 (0.6)	419 (8.9)	12 (1.1)	396 (6.3)
Iran, Islamic Rep. of	○	49 (2.1)	392 (3.8)	30 (1.3)	440 (3.9)	14 (0.8)	458 (4.3)	2 (0.3)	~ ~	5 (0.6)	474 (9.5)
Israel	s ●	8 (1.2)	444 (10.2)	5 (0.6)	444 (11.6)	15 (1.1)	482 (7.9)	11 (0.8)	516 (7.8)	61 (1.6)	557 (3.0)
Italy	○	2 (0.3)	~ ~	2 (0.3)	~ ~	9 (0.6)	546 (7.8)	17 (0.7)	540 (5.0)	70 (1.1)	558 (2.7)
Kuwait	r ○	13 (0.8)	325 (8.5)	8 (0.6)	341 (10.9)	69 (1.1)	337 (4.4)	5 (0.5)	353 (12.2)	5 (0.5)	355 (10.8)
Latvia	●	15 (1.0)	532 (4.8)	6 (0.5)	530 (7.2)	18 (0.9)	532 (4.5)	12 (0.7)	545 (4.6)	49 (1.2)	551 (2.5)
Lithuania	○	30 (1.4)	524 (3.0)	6 (0.4)	531 (3.9)	10 (0.6)	537 (3.6)	9 (0.5)	547 (3.4)	45 (1.4)	546 (2.1)
Luxembourg	●	13 (0.5)	541 (3.1)	4 (0.3)	545 (4.7)	69 (0.8)	565 (1.3)	7 (0.4)	558 (4.4)	7 (0.3)	555 (4.4)
¹ Macedonia, Rep. of	○	24 (1.2)	426 (5.9)	37 (1.3)	431 (4.8)	18 (0.8)	461 (5.8)	6 (0.5)	490 (8.1)	15 (1.0)	492 (6.3)
Moldova, Rep. of	○	14 (1.7)	490 (8.1)	10 (1.1)	491 (6.3)	16 (1.0)	503 (4.9)	13 (0.8)	502 (4.5)	47 (1.8)	504 (3.4)
Morocco	-	28 (2.2)	296 (12.8)	9 (0.9)	299 (8.2)	29 (1.4)	336 (7.0)	13 (0.9)	349 (8.2)	20 (1.2)	339 (6.9)
Netherlands	s ○	3 (0.5)	545 (8.5)	3 (0.4)	550 (7.5)	56 (1.4)	555 (2.0)	34 (1.2)	561 (2.2)	5 (0.5)	536 (5.9)
New Zealand	s ○	4 (0.4)	532 (7.9)	5 (0.5)	522 (9.2)	30 (0.9)	551 (2.8)	31 (0.9)	552 (3.8)	29 (1.0)	548 (3.1)
Norway	○	9 (0.9)	490 (6.9)	3 (0.3)	490 (8.5)	11 (0.7)	484 (3.5)	15 (1.0)	491 (5.5)	62 (1.9)	507 (2.8)
Poland	●	34 (1.9)	513 (3.2)	17 (0.9)	506 (4.2)	16 (1.0)	519 (4.5)	5 (0.4)	529 (5.6)	28 (1.4)	543 (3.6)
Qatar	s ○	33 (0.5)	345 (2.6)	25 (0.7)	355 (2.9)	29 (0.6)	371 (3.3)	6 (0.3)	369 (7.0)	6 (0.3)	352 (6.7)
Romania	●	6 (1.0)	401 (14.7)	5 (0.6)	452 (12.4)	19 (1.2)	471 (9.7)	18 (1.4)	498 (6.1)	51 (1.9)	511 (3.8)
Russian Federation	○	20 (1.2)	545 (6.3)	4 (0.3)	561 (7.2)	8 (0.7)	563 (6.6)	9 (0.5)	574 (5.4)	59 (1.3)	571 (3.0)
Scotland	s ○	2 (0.3)	~ ~	14 (1.2)	556 (6.5)	52 (1.5)	534 (4.6)	19 (1.0)	549 (4.9)	13 (1.0)	552 (8.1)
Singapore	○	2 (0.1)	~ ~	1 (0.2)	~ ~	13 (0.5)	531 (4.2)	26 (0.6)	554 (3.1)	57 (0.8)	571 (2.9)
Slovak Republic	○	5 (0.6)	473 (11.9)	11 (0.8)	515 (6.7)	15 (0.7)	523 (4.3)	11 (0.7)	529 (4.8)	59 (1.3)	545 (2.3)
Slovenia	○	14 (1.2)	513 (4.3)	5 (0.4)	498 (5.4)	13 (0.7)	520 (3.3)	14 (0.7)	524 (3.8)	54 (1.3)	528 (2.2)
South Africa	r ○	13 (0.5)	281 (5.4)	18 (0.6)	307 (6.6)	23 (0.7)	308 (7.0)	14 (0.4)	291 (9.6)	31 (0.7)	318 (8.1)
Spain	s ○	4 (0.6)	480 (9.0)	3 (0.4)	500 (10.2)	17 (1.0)	511 (5.4)	16 (0.9)	515 (3.8)	59 (1.6)	530 (3.1)
Sweden	○	4 (0.4)	516 (7.0)	5 (0.5)	540 (6.9)	20 (1.1)	539 (3.6)	12 (0.6)	549 (3.5)	60 (1.5)	559 (2.5)
Trinidad and Tobago	○	6 (0.7)	375 (11.6)	8 (0.5)	456 (9.2)	43 (1.2)	446 (5.4)	27 (1.0)	450 (5.7)	16 (0.9)	423 (7.5)
United States	○	--	--	--	--	--	--	--	--	--	--
International Avg.		12 (0.2)	455 (1.6)	8 (0.1)	479 (1.5)	21 (0.2)	496 (1.0)	15 (0.1)	505 (1.0)	45 (0.2)	510 (0.9)

● Yes
○ No

Background data provided by parents and National Research Coordinators.

¹ Compulsory preprimary education was introduced in 2004, but does not affect the students tested in PIRLS 2006.

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

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.

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

NOTE: The International Average does not include the results from the Canadian provinces.

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Exhibit 5.2 Age Students Began Primary School

PIRLS 2006
4th Grade

Countries	5 Years Old or Younger		6 Years Old		7 Years Old		8 Years Old or Older	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Austria	3 (0.2)	543 (7.8)	77 (0.8)	544 (2.2)	20 (0.8)	528 (3.2)	1 (0.1)	~ ~
Belgium (Flemish)	17 (0.6)	548 (2.8)	78 (0.7)	550 (2.0)	4 (0.3)	525 (4.1)	0 (0.1)	~ ~
Belgium (French)	19 (0.7)	504 (3.9)	77 (0.8)	504 (2.9)	4 (0.4)	453 (8.9)	0 (0.0)	~ ~
Bulgaria	0 (0.1)	~ ~	11 (0.8)	553 (7.3)	84 (1.0)	551 (4.3)	5 (0.7)	518 (8.8)
Canada, Alberta	r 74 (0.9)	563 (2.6)	25 (0.9)	570 (3.7)	1 (0.2)	~ ~	0 (0.1)	~ ~
Canada, British Columbia	r 80 (1.1)	563 (2.9)	18 (1.1)	563 (4.9)	1 (0.3)	~ ~	0 (0.1)	~ ~
Canada, Nova Scotia	91 (0.5)	547 (2.1)	9 (0.5)	533 (5.2)	0 (0.1)	~ ~	0 (0.1)	~ ~
Canada, Ontario	88 (1.0)	558 (2.7)	11 (1.0)	556 (5.5)	1 (0.2)	~ ~	0 (0.1)	~ ~
Canada, Quebec	63 (1.4)	533 (3.3)	35 (1.3)	543 (3.4)	1 (0.2)	~ ~	0 (0.1)	~ ~
Chinese Taipei	5 (0.4)	531 (4.5)	16 (0.8)	546 (3.9)	57 (0.8)	535 (2.1)	22 (0.7)	535 (2.9)
Denmark	5 (0.4)	546 (6.7)	44 (1.1)	547 (2.5)	48 (1.1)	552 (2.5)	2 (0.3)	~ ~
England	x x	x x	x x	x x	x x	x x	x x	x x
France	13 (0.5)	523 (3.6)	84 (0.6)	525 (2.1)	3 (0.4)	494 (7.3)	0 (0.1)	~ ~
Georgia	6 (0.4)	483 (6.8)	73 (1.1)	474 (3.5)	20 (1.2)	457 (4.7)	1 (0.3)	~ ~
Germany	4 (0.3)	563 (5.5)	73 (0.8)	555 (2.3)	22 (0.7)	544 (2.9)	1 (0.2)	~ ~
Hong Kong SAR	10 (0.5)	558 (3.9)	80 (0.7)	567 (2.3)	9 (0.6)	559 (5.0)	1 (0.2)	~ ~
Hungary	1 (0.1)	~ ~	30 (1.0)	555 (4.0)	67 (1.0)	553 (3.1)	2 (0.3)	~ ~
Iceland	r 13 (0.6)	514 (3.7)	86 (0.6)	517 (1.6)	0 (0.1)	~ ~	0 (0.0)	~ ~
Indonesia	6 (0.5)	414 (6.6)	58 (1.7)	410 (4.0)	34 (1.7)	398 (4.8)	2 (0.3)	~ ~
Iran, Islamic Rep. of	1 (0.1)	~ ~	39 (1.6)	411 (4.9)	58 (1.6)	426 (3.7)	3 (0.3)	416 (11.6)
Israel	s 15 (1.2)	468 (8.8)	73 (1.3)	541 (3.3)	12 (0.9)	525 (8.3)	1 (0.2)	~ ~
Italy	14 (0.7)	539 (5.0)	83 (0.7)	556 (2.9)	2 (0.3)	~ ~	0 (0.1)	~ ~
Kuwait	r 17 (0.8)	331 (8.1)	76 (0.9)	337 (4.5)	7 (0.4)	338 (11.0)	0 (0.1)	~ ~
Latvia	1 (0.3)	~ ~	22 (0.9)	548 (2.7)	74 (0.9)	542 (2.5)	3 (0.4)	503 (8.9)
Lithuania	3 (0.3)	521 (6.4)	31 (1.3)	534 (2.2)	65 (1.3)	541 (1.9)	1 (0.2)	~ ~
Luxembourg	18 (0.7)	551 (2.6)	70 (0.8)	564 (1.4)	12 (0.5)	549 (3.1)	0 (0.1)	~ ~
Macedonia, Rep. of	3 (0.4)	453 (12.1)	38 (1.1)	457 (4.6)	58 (1.2)	442 (2.2)	2 (0.4)	~ ~
Moldova, Rep. of	1 (0.2)	~ ~	22 (1.5)	504 (4.8)	72 (1.5)	501 (3.1)	4 (0.4)	469 (7.1)
Morocco	5 (0.5)	336 (13.5)	65 (1.6)	333 (6.3)	27 (1.5)	302 (7.7)	3 (0.4)	280 (21.6)
Netherlands	s 13 (0.8)	557 (3.9)	79 (0.9)	558 (1.7)	8 (0.8)	532 (4.4)	0 (0.1)	~ ~
New Zealand	s 97 (0.4)	548 (2.1)	3 (0.3)	545 (9.9)	1 (0.1)	~ ~	0 (0.1)	~ ~
Norway	20 (0.9)	496 (3.7)	79 (0.9)	502 (2.6)	2 (0.3)	~ ~	0 (0.0)	~ ~
Poland	9 (0.6)	523 (5.5)	89 (0.6)	520 (2.4)	2 (0.3)	~ ~	0 (0.1)	~ ~
Qatar	r 14 (0.5)	354 (4.1)	71 (0.6)	359 (1.7)	14 (0.4)	355 (3.7)	1 (0.1)	~ ~
Romania	1 (0.2)	~ ~	19 (1.3)	489 (5.8)	77 (1.3)	492 (5.8)	4 (0.4)	461 (11.3)
Russian Federation	1 (0.1)	~ ~	30 (0.9)	560 (5.0)	66 (0.9)	568 (3.3)	3 (0.3)	533 (7.4)
Scotland	s 99 (0.3)	543 (3.3)	1 (0.3)	~ ~	0 (0.1)	~ ~	0 (0.0)	~ ~
Singapore	4 (0.3)	536 (5.5)	31 (0.5)	571 (3.2)	64 (0.6)	556 (3.0)	1 (0.1)	~ ~
Slovak Republic	2 (0.3)	~ ~	71 (0.8)	534 (3.1)	26 (0.7)	530 (2.8)	0 (0.2)	~ ~
Slovenia	7 (0.4)	522 (5.0)	56 (0.8)	525 (3.0)	36 (0.7)	521 (2.4)	0 (0.1)	~ ~
South Africa	r 12 (0.5)	270 (7.0)	35 (0.9)	331 (8.9)	42 (0.8)	310 (5.2)	12 (0.6)	245 (4.9)
Spain	s 50 (1.3)	515 (2.6)	48 (1.3)	529 (3.3)	1 (0.3)	~ ~	1 (0.3)	~ ~
Sweden	1 (0.2)	~ ~	21 (1.2)	543 (3.8)	78 (1.2)	554 (2.5)	1 (0.1)	~ ~
Trinidad and Tobago	91 (0.6)	442 (4.9)	7 (0.6)	420 (9.5)	1 (0.2)	~ ~	1 (0.2)	~ ~
United States	--	--	--	--	--	--	--	--
International Avg.	16 (0.1)	491 (1.1)	51 (0.2)	503 (0.7)	31 (0.1)	491 (0.9)	2 (0.0)	~ ~

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by parents.

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

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.

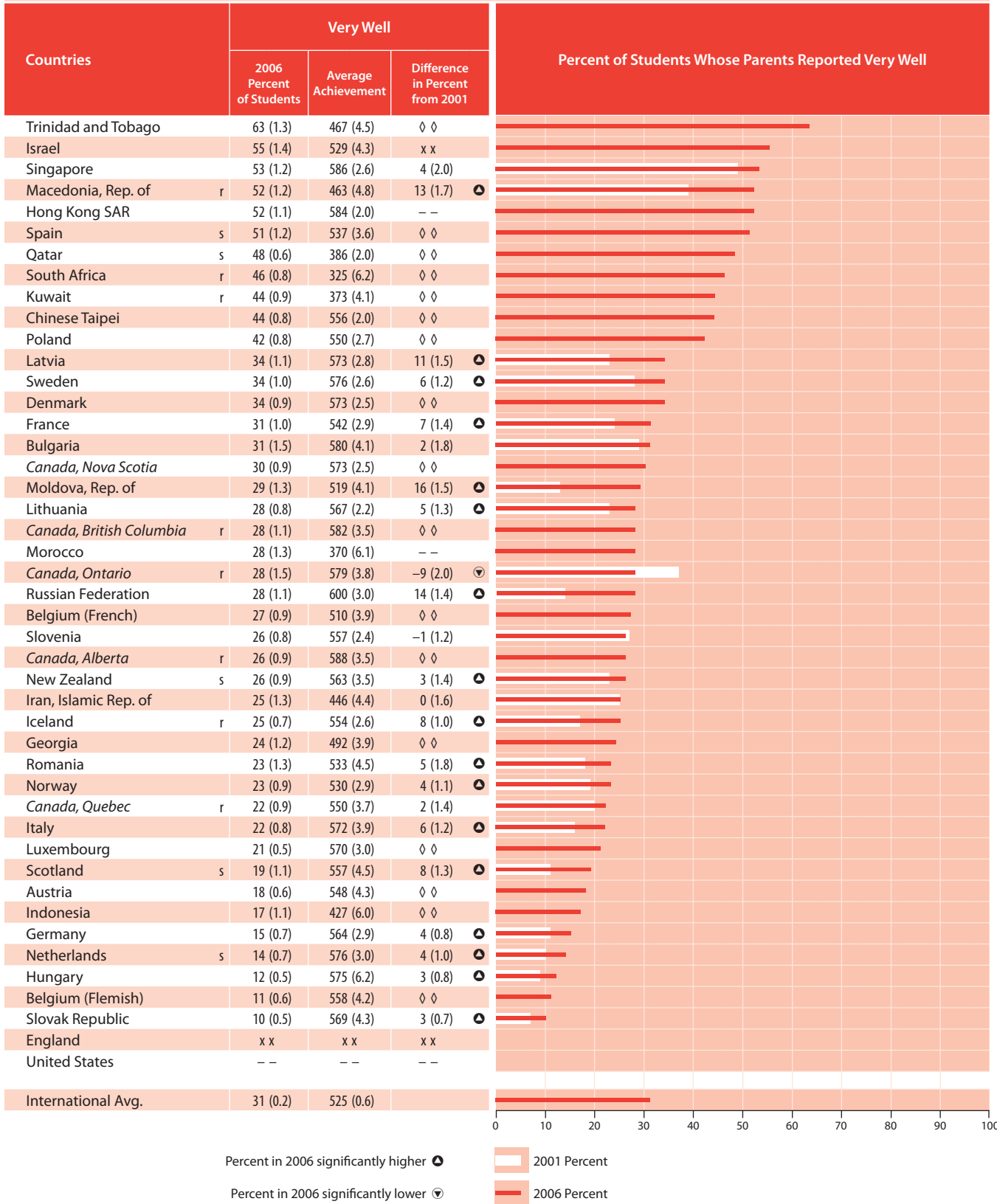
A dash (–) indicates comparable data are not available. A tilde (~) indicates insufficient data to report achievement.

NOTE: The International Average does not include the results from the Canadian provinces.



Exhibit 5.3 How Well Students Could Perform Beginning Literacy Activities When They Entered School with Trends

PIRLS 2006
4th Grade



SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Percent in 2006 significantly higher ▲
Percent in 2006 significantly lower ▼

2001 Percent (light red bar)
2006 Percent (dark red bar)

Based on parents' assessments of how well their child could do the following when he/she began primary school: recognize most of the letters of the alphabet, write letters of the alphabet, read some words, write some words, and read sentences. Average is computed across the 5 items based on a 4-point scale: Not at all = 1, Not very well = 2, Moderately well = 3, and Very well = 4. Very well indicates an average response score of greater than 3.25 through 4. Moderately well indicates an average response score of greater than 2.5

through 3.25. Not very well indicates an average of 1.75 through 2.5. Not at all indicates an average of 1 to less than 1.75.
() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

Exhibit 5.3 How Well Students Could Perform Beginning Literacy Activities When They Entered School with Trends (Continued)

PIRLS 2006
4th Grade

Countries	Moderately Well			Not Very Well			Not at All		
	2006 Percent of Students	Average Achievement	Difference in Percent from 2001	2006 Percent of Students	Average Achievement	Difference in Percent from 2001	2006 Percent of Students	Average Achievement	Difference in Percent from 2001
Trinidad and Tobago	29 (1.0)	406 (5.6)	◊ ◊	7 (0.6)	363 (12.2)	◊ ◊	1 (0.4)	~ ~	◊ ◊
Israel	26 (1.0)	520 (5.8)	x x	13 (0.7)	538 (6.2)	x x	5 (0.5)	541 (10.4)	x x
Singapore	37 (0.9)	541 (3.0)	-1 (1.4)	9 (0.5)	494 (5.5)	-2 (1.0) ▼	1 (0.1)	~ ~	-1 (0.2)
Macedonia, Rep. of	r 31 (0.9)	442 (4.2)	-3 (1.5) ▼	13 (0.7)	433 (6.7)	-6 (1.1) ▼	4 (0.5)	413 (12.7)	-3 (1.1) ▼
Hong Kong SAR	42 (0.8)	552 (2.4)	--	6 (0.5)	515 (4.8)	--	1 (0.1)	~ ~	--
Spain	s 35 (1.0)	510 (3.2)	◊ ◊	11 (0.8)	489 (4.9)	◊ ◊	3 (0.4)	487 (12.4)	◊ ◊
Qatar	s 29 (0.7)	345 (3.0)	◊ ◊	18 (0.5)	318 (3.0)	◊ ◊	5 (0.4)	317 (7.6)	◊ ◊
South Africa	r 35 (0.6)	293 (6.3)	◊ ◊	15 (0.4)	292 (8.0)	◊ ◊	4 (0.2)	258 (9.1)	◊ ◊
Kuwait	r 28 (0.9)	319 (6.0)	◊ ◊	20 (0.9)	302 (8.3)	◊ ◊	8 (0.5)	299 (10.6)	◊ ◊
Chinese Taipei	45 (0.8)	526 (2.5)	◊ ◊	10 (0.5)	507 (4.4)	◊ ◊	1 (0.2)	~ ~	◊ ◊
Poland	40 (0.8)	505 (3.4)	◊ ◊	14 (0.6)	492 (3.9)	◊ ◊	4 (0.3)	494 (9.3)	◊ ◊
Latvia	41 (0.8)	538 (2.6)	-2 (1.2)	20 (0.9)	511 (3.5)	-8 (1.4) ▼	5 (0.5)	491 (7.5)	-2 (0.8) ▼
Sweden	36 (0.9)	549 (3.1)	1 (1.1)	24 (1.0)	534 (3.3)	-4 (1.3) ▼	6 (0.5)	508 (5.8)	-3 (0.7) ▼
Denmark	43 (1.1)	546 (2.5)	◊ ◊	20 (0.9)	519 (3.6)	◊ ◊	4 (0.4)	508 (8.4)	◊ ◊
France	41 (0.9)	522 (2.7)	0 (1.4)	23 (0.8)	510 (2.7)	-5 (1.3) ▼	5 (0.4)	502 (8.6)	-1 (0.6)
Bulgaria	31 (1.1)	557 (4.2)	-2 (1.5)	21 (1.0)	532 (5.7)	-2 (1.4)	18 (1.9)	514 (10.1)	2 (2.6)
Canada, Nova Scotia	42 (0.8)	545 (2.5)	◊ ◊	24 (0.7)	521 (3.5)	◊ ◊	5 (0.3)	505 (5.6)	◊ ◊
Moldova, Rep. of	35 (0.9)	502 (3.4)	7 (1.4) ▲	26 (1.0)	486 (3.8)	-11 (1.7) ▼	11 (1.1)	479 (8.4)	-13 (1.9) ▼
Lithuania	46 (0.8)	537 (1.7)	7 (1.5) ▲	23 (0.7)	509 (2.4)	-3 (1.2) ▼	3 (0.4)	485 (7.1)	-9 (0.7) ▼
Canada, British Columbia	r 40 (1.0)	563 (3.5)	◊ ◊	25 (0.9)	548 (3.9)	◊ ◊	7 (0.5)	543 (6.5)	◊ ◊
Morocco	35 (1.6)	318 (7.3)	--	15 (1.0)	303 (11.1)	--	21 (2.3)	286 (13.6)	--
Canada, Ontario	r 38 (1.2)	556 (3.1)	-3 (1.6)	25 (1.3)	544 (3.8)	7 (1.5) ▲	8 (0.7)	524 (7.3)	5 (0.8) ▲
Russian Federation	37 (1.0)	570 (3.3)	7 (1.7) ▲	25 (0.9)	541 (4.4)	-8 (1.5) ▼	10 (0.9)	517 (4.6)	-14 (1.9) ▼
Belgium (French)	37 (0.8)	500 (3.1)	◊ ◊	26 (0.8)	497 (3.9)	◊ ◊	10 (0.7)	498 (5.4)	◊ ◊
Slovenia	34 (0.7)	525 (2.3)	-2 (1.3)	26 (0.8)	503 (2.9)	0 (1.2)	13 (0.5)	497 (3.6)	3 (0.9) ▲
Canada, Alberta	r 39 (1.0)	565 (3.2)	◊ ◊	27 (0.8)	551 (3.2)	◊ ◊	7 (0.5)	536 (5.5)	◊ ◊
New Zealand	s 40 (0.9)	551 (2.7)	-1 (1.5)	26 (0.8)	535 (3.8)	-2 (1.4)	8 (0.6)	528 (5.9)	-1 (0.9)
Iran, Islamic Rep. of	29 (1.1)	427 (4.0)	-1 (1.6)	21 (0.9)	421 (4.4)	1 (1.3)	25 (1.7)	392 (6.3)	0 (2.4)
Iceland	r 31 (0.8)	516 (2.1)	3 (1.2) ▲	32 (0.9)	502 (2.1)	-5 (1.2) ▼	12 (0.6)	480 (4.4)	-6 (0.9) ▼
Georgia	28 (1.0)	479 (4.2)	◊ ◊	25 (1.0)	468 (3.7)	◊ ◊	22 (1.3)	458 (7.3)	◊ ◊
Romania	30 (1.3)	505 (4.4)	1 (1.8)	25 (1.2)	484 (5.4)	-7 (1.8) ▼	22 (2.0)	433 (10.3)	0 (2.4)
Norway	28 (0.7)	504 (3.7)	-9 (1.4) ▼	29 (0.7)	491 (3.6)	-1 (1.3)	20 (1.0)	476 (4.7)	7 (1.2) ▲
Canada, Quebec	r 36 (1.1)	540 (3.3)	3 (1.6) ▲	30 (1.0)	529 (3.8)	-6 (1.5) ▼	11 (0.6)	515 (6.1)	1 (1.1)
Italy	38 (0.8)	555 (3.4)	2 (1.2)	27 (0.7)	546 (3.4)	-5 (1.2) ▼	13 (0.5)	540 (4.0)	-3 (0.8) ▼
Luxembourg	37 (0.7)	555 (2.1)	◊ ◊	30 (0.7)	560 (1.8)	◊ ◊	12 (0.4)	559 (3.0)	◊ ◊
Scotland	s 45 (1.2)	546 (4.4)	4 (1.7) ▲	25 (1.2)	531 (5.2)	-10 (1.7) ▼	11 (0.7)	528 (9.0)	-2 (1.3)
Austria	31 (0.8)	540 (2.6)	◊ ◊	33 (0.8)	538 (2.3)	◊ ◊	17 (0.7)	536 (3.4)	◊ ◊
Indonesia	51 (1.7)	416 (3.8)	◊ ◊	22 (1.6)	386 (5.7)	◊ ◊	10 (1.7)	369 (6.5)	◊ ◊
Germany	32 (0.8)	552 (2.7)	3 (1.1) ▲	34 (0.6)	551 (2.8)	-1 (1.0)	18 (0.9)	551 (3.6)	-6 (1.1) ▼
Netherlands	s 35 (1.1)	555 (2.4)	6 (1.5) ▲	35 (0.9)	551 (2.3)	-3 (1.4) ▼	16 (0.9)	550 (3.5)	-6 (1.4) ▼
Hungary	20 (0.7)	556 (4.6)	3 (1.0) ▲	31 (0.8)	549 (3.5)	-2 (1.2)	37 (0.9)	549 (2.8)	-4 (1.3) ▼
Belgium (Flemish)	29 (0.8)	545 (2.5)	◊ ◊	34 (0.8)	548 (2.1)	◊ ◊	25 (0.9)	549 (2.7)	◊ ◊
Slovak Republic	21 (0.7)	547 (3.1)	2 (1.1)	39 (0.9)	534 (2.6)	1 (1.2)	30 (1.0)	512 (4.1)	-6 (1.4) ▼
England	x x	x x	x x	x x	x x	x x	x x	x x	x x
United States	--	--	--	--	--	--	--	--	--
International Avg.	35 (0.2)	499 (0.6)		23 (0.1)	484 (0.8)		12 (0.2)	474 (1.3)	

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

▲ Percent in 2006 significantly higher

▼ Percent in 2006 significantly lower

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.

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

A diamond (◊) indicates the country did not participate in the 2001 assessment.

NOTE: The International Average does not include the results from the Canadian provinces.

Trend Note: The primary education systems of the Russian Federation and Slovenia underwent structural changes. Data for Canada, Ontario include only public schools.

Exhibit 5.4 Principals' Estimates of the Percentage of Students Entering School Able to Perform Beginning Literacy Skills with Trends **PIRLS 2006**
4th Grade

Countries	More than 75% Begin School with Skills		51–75% Begin School with Skills		25–50% Begin School with Skills		Less than 25% Begin School with Skills	
	Percent of Students	Difference in Percent From 2001	Percent of Students	Difference in Percent From 2001	Percent of Students	Difference in Percent From 2001	Percent of Students	Difference in Percent From 2001
Austria	0 (0.0)	0 0	2 (1.2)	0 0	14 (3.4)	0 0	84 (3.6)	0 0
Belgium (Flemish)	2 (1.2)	0 0	5 (2.2)	0 0	19 (3.7)	0 0	73 (4.1)	0 0
Belgium (French)	r 6 (2.3)	0 0	20 (3.6)	0 0	35 (4.7)	0 0	39 (4.6)	0 0
Bulgaria	7 (2.2)	2 (2.8)	19 (3.6)	8 (4.5)	32 (3.7)	6 (5.0)	42 (4.0)	-16 (5.2) ▼
Canada, Alberta	2 (1.3)	0 0	5 (1.4)	0 0	23 (3.3)	0 0	70 (3.7)	0 0
Canada, British Columbia	3 (1.5)	0 0	7 (2.1)	0 0	29 (3.4)	0 0	62 (3.9)	0 0
Canada, Nova Scotia	3 (1.7)	0 0	7 (2.3)	0 0	30 (4.0)	0 0	60 (4.3)	0 0
Canada, Ontario	2 (1.7)	-32 (5.1) ▼	4 (1.9)	-28 (5.4) ▼	14 (3.7)	-10 (5.8)	79 (4.2)	70 (4.8) ▲
Canada, Quebec	2 (1.5)	-15 (4.1) ▼	2 (1.3)	-11 (3.6) ▼	9 (2.8)	-17 (5.6) ▼	87 (3.5)	43 (6.4) ▲
Chinese Taipei	94 (2.0)	0 0	5 (2.0)	0 0	0 (0.0)	0 0	1 (0.5)	0 0
Denmark	35 (4.4)	0 0	37 (4.6)	0 0	21 (3.1)	0 0	7 (2.3)	0 0
England	s 56 (5.4)	-5 (7.6)	22 (4.3)	4 (6.2)	14 (3.3)	3 (4.6)	8 (2.8)	-1 (4.1)
France	19 (3.2)	-2 (4.8)	32 (4.0)	4 (5.6)	25 (4.1)	-9 (6.5)	23 (4.2)	6 (5.3)
Georgia	3 (1.1)	0 0	3 (1.4)	0 0	20 (3.9)	0 0	74 (4.1)	0 0
Germany	2 (1.2)	1 (1.4)	2 (0.8)	1 (0.8)	24 (3.7)	16 (4.1) ▲	73 (3.7)	-19 (4.1) ▼
Hong Kong SAR	86 (3.0)	--	14 (3.0)	--	0 (0.0)	--	0 (0.0)	--
Hungary	0 (0.0)	0 (0.0)	1 (0.8)	0 (1.3)	6 (2.1)	1 (2.7)	93 (2.2)	-1 (3.0)
Iceland	r 7 (0.2)	2 (0.2) ▲	36 (0.3)	14 (0.5) ▲	43 (0.3)	4 (0.5) ▲	14 (0.3)	-21 (0.4) ▼
Indonesia	16 (2.8)	0 0	16 (3.4)	0 0	18 (3.7)	0 0	50 (4.5)	0 0
Iran, Islamic Rep. of	4 (1.4)	0 (2.1)	4 (1.2)	3 (1.3) ▲	4 (1.3)	1 (2.1)	88 (2.2)	-4 (3.1)
Israel	16 (3.4)	9 (4.0) ▲	17 (3.4)	9 (4.1) ▲	30 (4.0)	16 (4.9) ▲	37 (4.1)	-33 (5.7) ▼
Italy	2 (1.2)	0 (1.6)	15 (3.2)	1 (3.9) ▲	29 (3.6)	1 (5.2)	54 (4.4)	-2 (6.0)
Kuwait	20 (3.4)	0 0	16 (3.1)	0 0	12 (2.8)	0 0	52 (4.2)	0 0
Latvia	40 (4.9)	31 (5.3) ▲	33 (4.1)	2 (5.5)	20 (3.5)	-13 (5.5) ▼	7 (1.9)	-20 (4.4) ▼
Lithuania	7 (2.2)	-1 (2.8)	15 (3.4)	4 (4.4)	32 (3.9)	5 (5.5)	46 (4.0)	-9 (6.0)
¹ Luxembourg	--	--	--	--	--	--	--	--
Macedonia, Rep. of	r 4 (2.1)	-1 (2.9)	15 (3.6)	0 (4.9)	30 (3.7)	-6 (5.8)	51 (4.2)	6 (6.3)
Moldova, Rep. of	11 (2.9)	-8 (4.7)	20 (3.7)	6 (4.7)	28 (3.9)	-8 (5.8)	42 (4.5)	10 (6.1)
Morocco	r 31 (5.1)	9 (6.7)	15 (3.2)	-2 (5.0)	19 (3.7)	1 (4.5)	36 (4.9)	-8 (7.0)
Netherlands	r 2 (1.2)	0 (1.7)	10 (3.1)	5 (3.6)	27 (4.3)	10 (5.5)	61 (5.1)	-14 (6.5) ▼
New Zealand	5 (1.6)	-1 (2.4)	9 (2.3)	1 (3.1)	14 (2.6)	-7 (4.2)	72 (3.3)	7 (4.9)
Norway	3 (1.6)	3 (1.6)	10 (3.1)	3 (4.0)	49 (4.9)	11 (6.6)	38 (4.2)	-17 (6.4) ▼
Poland	r 16 (3.7)	0 0	18 (3.6)	0 0	13 (3.4)	0 0	53 (5.3)	0 0
Qatar	26 (0.2)	0 0	17 (0.2)	0 0	10 (0.2)	0 0	46 (0.2)	0 0
Romania	2 (1.1)	-4 (2.3)	15 (3.3)	6 (4.1)	30 (4.3)	10 (5.3)	53 (4.5)	-12 (5.9) ▼
Russian Federation	11 (2.4)	4 (3.0)	27 (3.0)	8 (4.1)	31 (3.2)	-2 (4.8)	31 (3.3)	-10 (5.0) ▼
Scotland	r 4 (2.3)	3 (2.6)	7 (2.4)	1 (3.5)	16 (4.0)	6 (5.1)	72 (4.9)	-10 (6.4)
Singapore	70 (0.0)	7 (3.5) ▲	22 (0.0)	-5 (3.5)	6 (0.0)	-2 (2.0)	1 (0.0)	0 (0.8)
Slovak Republic	0 (0.0)	-1 (1.0)	0 (0.0)	0 (0.0)	11 (2.6)	7 (3.2) ▲	89 (2.6)	-5 (3.3)
Slovenia	0 (0.0)	-61 (4.3) ▼	7 (2.2)	-8 (3.9) ▼	27 (3.7)	13 (4.7) ▲	67 (4.1)	55 (4.8) ▲
South Africa	7 (1.9)	0 0	9 (2.1)	0 0	19 (2.3)	0 0	65 (3.0)	0 0
Spain	56 (3.6)	0 0	20 (3.3)	0 0	14 (2.8)	0 0	10 (2.3)	0 0
Sweden	15 (3.3)	2 (4.5)	28 (4.1)	-6 (6.3)	42 (4.2)	6 (6.5)	15 (3.3)	-2 (5.1)
Trinidad and Tobago	12 (2.7)	0 0	28 (4.0)	0 0	26 (4.0)	0 0	34 (4.3)	0 0
United States	65 (3.7)	17 (5.8) ▲	12 (2.6)	-10 (4.4) ▼	10 (2.5)	-4 (3.9)	13 (2.6)	-3 (4.1)
International Avg.	20 (0.4)		15 (0.5)		21 (0.5)		44 (0.6)	

▲ Percent in 2006 significantly higher ▼ Percent in 2006 significantly lower

Based on principals' responses to questions about how many of the students in their schools can do the following when they begin the first year of formal schooling: recognize most of the letters of the alphabet, write letters of the alphabet, read some words, write some words, and read sentences. Average is computed across the five items based on a 4-point scale: Less than 25% = 1, 25–50% = 2, 51–75% = 3, and More than 75% = 4. More than 75% indicates an average response score of greater than 3.25 through 4. 51–75% indicates an average of greater than 2.5 through 3.25. 25–50% indicates an average of 1.75 through 2.5. Less than 25% indicates an average of 1 to less than 1.75.

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

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.

A dash (–) indicates comparable data are not available.

A diamond (0) indicates the country did not participate in the 2001 assessment.

NOTE: The International Average does not include the results from the Canadian provinces.

Trend Note: The primary education systems of the Russian Federation and Slovenia underwent structural changes. Data for Canada, Ontario include only public schools.

¹ Primary schools in Luxembourg do not have principals.

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

How Much Is Reading Emphasized in the School Curriculum?

In most countries, the Ministry of Education (or the government department responsible for education) is responsible for developing a national curriculum, and monitoring its implementation. Typically, the curriculum is prescribed for a range of grades, or grade by grade, and covers reading either as a separate subject or as part of a language arts curriculum. A substantial portion of each country's chapter of the *PIRLS 2006 Encyclopedia* is devoted to describing the reading curriculum that covers reading instruction in the fourth grade. In addition, PIRLS asked each country to indicate to what extent curricular emphasis is placed on various reading purposes and processes. School principals reported the emphasis placed on the prescribed reading curriculum within the school, and the grade-by-grade emphases on specific reading skills and strategies in the school's primary grades.

Exhibit 5.5 presents basic information about the reading curriculum within each country or province. Nearly all countries have a national curriculum that covers reading instruction at the fourth grade. Canada, Germany, and the United States define curricula at a regional level—according to province (Canada), Laender (Germany), or state (United States). In Belgium, the Flemish and French linguistic and cultural communities have their own governments that are responsible for education, each with its own document that defines minimum attainment targets for reading. However, within each community, different networks of schools have the authority to develop their own curricula. In Luxembourg, while the reading curriculum is developed by the Ministry of Education for all schools, the local town and city councils are responsible for the administration of the schools. In Qatar, the Ministry of Education developed a reading curriculum in 1995 that is followed by public and private schools under its jurisdiction. Separate Qatar curriculum standards were developed in 2005 specifically for the small number of independent schools, but individual schools may choose to what extent they adhere to these standards.

Between PIRLS 2001 and PIRLS 2006, the reading curriculum around the world seems to have been in considerable flux. During that time period,

25 countries and 3 provinces either introduced a new curriculum or were in the curriculum revision process (or both). Most of the PIRLS 2006 participants considered the reading curriculum to be part of the language arts curriculum. Those with reading as a separate curriculum area included the Canadian province of Ontario, the Netherlands, the Russian Federation, and Sweden. In the United States, the structure of the reading curriculum varied by state. There was substantial variation across participants in the grade-to-grade structure of the reading curriculum, depending on the structure of the primary school system.

Exhibit 5.6 shows principals' reports about the emphasis schools place on the reading curriculum. Four fifths of students, on average internationally, were taught in schools that had informal initiatives to encourage students to read. Nearly half of the fourth-grade students were in schools with school-based programs for teachers to improve reading instruction, and the same percentage were in schools with guidelines that coordinated reading instruction among teachers within a grade, or across grades.

Reading, writing, and oral language are the most prominent literacy skills included in language arts curricula. The greatest percentages of students were in schools that placed comparatively more emphasis on reading than on other school subject areas. Almost three fourths of the fourth-grade students, on average internationally, were in schools that placed more emphasis on reading compared to other areas. More than 90 percent of students were in such schools in all five Canadian provinces, Iceland, Latvia, New Zealand, Norway, and the United States.

To obtain some information about the alignment of the PIRLS 2006 assessment with their reading curricula, PIRLS asked the participants about the curricular emphases placed on the reading purposes and processes that provided the foundation for the assessment. As shown in Exhibit 5.7, the purposes specified in the *PIRLS 2006 Framework and Assessment Specifications*—reading for literary experience and to acquire information—received major emphasis in 25 of the participants' reading curricula. Countries with a major emphasis on reading for literary experience but less emphasis

Exhibit 5.5 Structural Characteristics of Reading Curricula for Primary/Elementary Grades

PIRLS 2006
4th Grade

Countries	National Curriculum	Grade to Grade Structure	Year Introduced	Under Revision	Reading as a Separate Curriculum Area
Austria	●	1-2, 3, 4	2003	●	○
Belgium (Flemish)	○	1, 2, 3, 4, 5, 6	1989	○	○
Belgium (French)	○	1-2, 3-6	1999	○	○
Bulgaria	●	1-4	2002	○	○
Canada, Alberta	○	1-9	2000	○	○
Canada, British Columbia	○	1-7	1996	●	○
Canada, Nova Scotia	○	1-3, 4-6, 7-9, 10-12	1997	○	○
Canada, Ontario	○	1-8	2006	○	●
Canada, Quebec	○	1-2, 3-4, 5-6	2001	●	○
Chinese Taipei	●	1-3, 4-6, 7-9	2003	○	○
Denmark	●	1-2, 3-4, 5-6	2003	●	○
England	●	1-2, 3-6	1988	○	○
France	●	1-2, 3-5	2002	●	○
Georgia	○	1,2,3,4,5,6	1997	●	○
Germany	○	1-6	2006	○	○
Hong Kong SAR	●	1-6	2000	○	○
Hungary	●	1-4, 5-6, 7-8	2003	○	○
Iceland	●	1-4, 5-7,8-10; Enabling objectives for each grade	1999	●	○
Indonesia	●	1-3, 4-6	2004	●	○
Iran, Islamic Rep. of	●	1-5	2000	○	○
Israel	●	1, 2, 3, 4, 5, 6	2003	●	○
Italy	●	1, 2-3, 4-5	2004	●	○
Kuwait	●	1-5	1992	○	○
Latvia	●	1-3, 4-6, 7-9	2004	○	○
Lithuania	●	1-2, 3-4	2003	●	○
Luxembourg	●	1-2, 3-6	1989	●	○
Macedonia, Rep. of	●	1-4, 5-8	1996	○	○
Moldova, Rep. of	●	1-4	1996	●	○
Morocco	-	-	-	-	-
Netherlands	●	1-8	2006	○	●
New Zealand	●	1-13	1996	●	○
Norway	●	1-4, 5-7	2006	○	○
Poland	○	0, 1, 2, 3	1999	○	○
Qatar	○	1-6	1995	○	○
Romania	●	1-4	1998	●	○
Russian Federation	●	1-4	2004	●	●
Scotland	○	1-3, 4-7	1991	●	○
Singapore	●	1-6	2001	●	○
Slovak Republic	●	1-4, 5-9	1997	●	○
Slovenia	●	1-3, 4-6, 7-9	1998	○	○
South Africa	●	1-3, 4-6, 7-9	2002	○	○
Spain	●	1-2, 3-4, 5-6	1993	●	○
Sweden	●	1-5	1994	○	●
Trinidad and Tobago	●	1-4, 5-6	1999	○	○
United States	○	Varies by state	-	○	●

● Yes
○ No

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by National Research Coordinators.

The Netherlands does not have a national reading curriculum that covers reading in the fourth grade. The Ministry of Education imposes a number of attainment targets students should reach before they enter secondary school at age 12. Freedom of education,

guaranteed under article 23 of the Constitution, allows schools to determine their own educational content and how to attain these targets.

A dash (-) indicates comparable data are not available.

Exhibit 5.6 **Emphasis on Reading Curriculum in the Schools**PIRLS 2006
4th Grade

Countries	Percentage of Students Whose Schools Have Various Policies and Procedures				Percentage of Students Whose Schools Place More Emphasis on Various Literacy Skills Compared with Other Areas		
	Written Statement of the Reading Curriculum to Be Taught in the School	Informal Initiatives to Encourage Students to Read	School-Based Programs for Teachers to Improve Reading Instruction	Guidelines on How to Coordinate Reading Instruction Across Teachers	Reading	Writing (Not Handwriting)	Speaking / Listening (Oral Language)
Austria	7 (2.1)	88 (2.7)	50 (4.2)	29 (3.5)	65 (4.0)	20 (3.3)	35 (4.1)
Belgium (Flemish)	32 (4.4)	88 (2.7)	31 (3.9)	64 (4.0)	50 (4.2)	13 (3.3)	13 (3.0)
Belgium (French)	r 21 (3.8)	83 (3.2)	35 (4.3)	48 (4.7)	78 (3.9)	22 (3.9)	24 (3.8)
Bulgaria	10 (2.6)	52 (4.9)	31 (4.5)	47 (4.5)	75 (3.8)	65 (4.6)	54 (4.6)
Canada, Alberta	23 (3.5)	97 (1.5)	80 (3.6)	53 (4.4)	91 (2.7)	81 (3.5)	50 (4.4)
Canada, British Columbia	34 (4.2)	99 (1.0)	82 (3.5)	50 (4.7)	92 (2.4)	68 (3.9)	45 (4.5)
Canada, Nova Scotia	29 (3.8)	87 (2.0)	86 (2.3)	56 (3.8)	95 (1.8)	76 (3.2)	68 (3.3)
Canada, Ontario	29 (4.5)	94 (2.5)	94 (2.4)	59 (4.5)	92 (2.9)	74 (4.2)	60 (4.7)
Canada, Quebec	18 (2.6)	91 (2.5)	58 (4.0)	46 (4.5)	90 (2.4)	56 (4.9)	25 (4.2)
Chinese Taipei	66 (4.1)	95 (2.0)	66 (3.7)	42 (4.0)	46 (4.3)	14 (2.8)	19 (3.2)
Denmark	26 (4.2)	57 (4.2)	78 (3.4)	44 (4.7)	84 (3.2)	34 (4.3)	46 (4.7)
England	r 62 (4.6)	r 96 (1.8)	r 73 (4.3)	r 63 (4.0)	r 73 (4.3)	r 63 (4.8)	r 46 (4.8)
France	54 (4.1)	81 (3.7)	30 (3.9)	49 (4.4)	69 (4.1)	36 (4.2)	37 (4.2)
Georgia	37 (4.1)	75 (3.9)	49 (4.2)	44 (4.9)	59 (4.7)	41 (5.0)	48 (5.1)
Germany	31 (2.6)	87 (2.4)	32 (2.9)	20 (2.2)	53 (3.8)	27 (3.7)	38 (3.7)
Hong Kong SAR	66 (3.8)	100 (0.0)	62 (4.3)	52 (4.2)	87 (3.1)	68 (4.3)	56 (4.7)
Hungary	51 (4.7)	82 (3.1)	62 (4.2)	60 (4.0)	71 (3.8)	37 (4.6)	64 (4.1)
Iceland	65 (0.3)	94 (0.1)	62 (0.3)	63 (0.3)	93 (0.3)	37 (0.3)	42 (0.3)
Indonesia	34 (4.3)	72 (3.4)	83 (3.0)	70 (3.4)	83 (3.2)	68 (4.0)	56 (4.2)
Iran, Islamic Rep. of	37 (3.7)	58 (3.5)	43 (4.0)	36 (3.6)	51 (3.9)	42 (3.3)	63 (3.6)
Israel	69 (4.5)	84 (2.8)	69 (3.9)	81 (3.6)	83 (3.2)	66 (4.1)	53 (4.4)
Italy	51 (3.8)	77 (3.4)	19 (3.3)	30 (3.9)	57 (4.4)	27 (4.1)	43 (4.5)
Kuwait	53 (4.6)	72 (4.0)	51 (4.5)	57 (4.3)	73 (3.6)	65 (3.9)	54 (4.2)
Latvia	10 (2.3)	80 (3.4)	21 (3.7)	43 (4.6)	94 (2.0)	75 (3.7)	80 (3.5)
Lithuania	4 (1.6)	64 (3.5)	4 (1.5)	27 (3.8)	51 (4.1)	44 (4.3)	32 (4.0)
¹ Luxembourg	--	--	--	--	--	--	--
Macedonia, Rep. of	r 23 (4.2)	r 72 (4.2)	r 34 (4.3)	r 61 (4.2)	r 65 (3.7)	r 41 (4.4)	r 45 (4.4)
Moldova, Rep. of	18 (3.1)	67 (4.1)	33 (4.2)	30 (4.3)	87 (2.8)	30 (4.3)	75 (3.9)
Morocco	r 17 (3.6)	r 34 (5.4)	r 14 (3.5)	r 23 (4.3)	r 88 (3.4)	r 56 (4.8)	r 58 (5.0)
Netherlands	r 32 (4.8)	r 68 (4.7)	r 46 (5.3)	r 46 (4.6)	r 84 (3.7)	r 16 (3.6)	r 28 (4.7)
New Zealand	89 (2.1)	84 (2.8)	86 (2.4)	72 (3.3)	90 (2.2)	78 (2.8)	62 (3.5)
Norway	46 (5.0)	82 (4.0)	62 (5.3)	62 (5.2)	92 (2.6)	64 (5.1)	59 (4.7)
Poland	7 (2.1)	90 (2.5)	14 (2.7)	32 (4.0)	59 (4.4)	29 (4.0)	23 (3.5)
Qatar	55 (0.2)	85 (0.2)	67 (0.2)	46 (0.2)	73 (0.2)	73 (0.2)	66 (0.2)
Romania	23 (4.3)	57 (4.4)	30 (3.7)	25 (4.1)	65 (4.4)	55 (4.6)	53 (4.6)
Russian Federation	4 (1.3)	76 (3.0)	32 (2.8)	90 (1.7)	54 (3.3)	31 (3.2)	41 (4.1)
Scotland	r 90 (2.7)	r 96 (1.8)	r 69 (5.0)	r 64 (5.1)	r 84 (3.4)	r 72 (4.5)	r 49 (4.9)
Singapore	60 (0.0)	97 (0.0)	77 (0.0)	60 (0.0)	80 (0.0)	48 (0.0)	69 (0.0)
Slovak Republic	15 (2.9)	89 (2.4)	51 (4.1)	15 (3.1)	53 (4.0)	19 (3.5)	40 (4.0)
Slovenia	19 (3.3)	100 (0.0)	26 (3.8)	39 (3.9)	58 (4.4)	36 (3.8)	47 (4.5)
South Africa	39 (2.8)	69 (3.1)	57 (2.8)	51 (2.8)	64 (2.5)	55 (3.0)	62 (2.7)
Spain	62 (4.2)	85 (2.9)	39 (4.0)	55 (4.3)	80 (3.7)	61 (4.7)	38 (4.0)
Sweden	67 (4.6)	91 (2.9)	79 (3.4)	46 (4.5)	86 (3.1)	42 (5.4)	48 (4.9)
Trinidad and Tobago	49 (4.1)	83 (3.2)	66 (4.4)	50 (4.4)	81 (3.7)	30 (3.9)	47 (4.5)
United States	73 (3.9)	95 (1.5)	87 (2.6)	76 (4.1)	91 (2.0)	57 (3.5)	31 (3.4)
International Avg.	40 (0.6)	80 (0.5)	49 (0.6)	49 (0.6)	73 (0.6)	45 (0.6)	47 (0.6)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by schools.

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

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.

A dash (–) indicates comparable data are not available.

NOTE: The International Average does not include the results from the Canadian provinces.

1 Primary schools in Luxembourg do not have principals.



Exhibit 5.7 **Emphasis on Purposes for Reading in the Reading Curriculum**

PIRLS 2006
4th Grade

Countries	To Improve Reading	For Literary Experience	To Acquire Information	For Social Awareness / Civic Duty	For Enjoyment
Austria	●	●	●	●	●
Belgium (Flemish)	●	●	●	◐	◐
Belgium (French)	○	○	●	◐	●
Bulgaria	●	●	●	●	●
Canada, Alberta	◐	●	●	◐	●
Canada, British Columbia	●	●	●	◐	●
Canada, Nova Scotia	●	●	●	●	●
Canada, Ontario	◐	◐	◐	◐	◐
Canada, Quebec	●	●	●	○	●
Chinese Taipei	●	●	●	◐	◐
Denmark	●	◐	◐	○	●
England	●	●	●	○	●
France	●	●	●	◐	○
Georgia	○	◐	◐	○	○
Germany	●	●	●	◐	●
Hong Kong SAR	●	●	●	◐	●
Hungary	●	◐	○	○	◐
Iceland	●	●	●	●	●
Indonesia	●	●	●	◐	●
Iran, Islamic Rep. of	●	◐	◐	●	◐
Israel	◐	●	●	◐	◐
Italy	◐	●	●	◐	◐
Kuwait	●	●	○	◐	◐
Latvia	●	●	●	◐	○
Lithuania	●	●	◐	◐	●
Luxembourg	●	●	●	●	●
Macedonia, Rep. of	●	●	◐	◐	●
Moldova, Rep. of	●	◐	◐	◐	◐
Morocco	-	-	-	-	-
Netherlands	●	◐	●	○	◐
New Zealand	◐	◐	◐	○	◐
Norway	●	●	●	◐	●
Poland	◐	○	●	◐	◐
Qatar	◐	○	◐	○	◐
Romania	●	◐	◐	◐	●
Russian Federation	●	●	◐	◐	◐
Scotland	●	●	●	○	●
Singapore	●	●	●	●	●
Slovak Republic	●	●	◐	○	●
Slovenia	◐	◐	◐	◐	○
South Africa	●	●	●	●	●
Spain	●	◐	●	●	●
Sweden	○	●	●	●	●
Trinidad and Tobago	●	●	●	●	●
United States	●	●	●	○	●

- Major Emphasis
- ◐ Some Emphasis
- Little or No Emphasis

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by National Research Coordinators.
A dash (-) indicates comparable data are not available.

on reading to acquire information included Kuwait, Lithuania, Macedonia, the Russian Federation, and the Slovak Republic. Countries with a major emphasis on reading to acquire information but less emphasis on reading for literary experience included Belgium (French), the Netherlands, Poland, and Spain. Not surprisingly, many of the participants emphasized reading in order to improve reading. Twenty-six participants reported a major emphasis on reading for enjoyment in the reading curriculum, while only 11 reported a major emphasis on reading for social awareness or civic duty.

The corresponding information about the reading processes assessed by PIRLS is found in Exhibit 5.8. Participants were asked to provide relatively detailed information about the extent to which their curriculum emphasized various aspects of the four broad reading processes assessed by PIRLS 2006: 1) focus on and retrieve explicitly stated information, 2) make straightforward inferences, 3) interpret and integrate ideas and information, and 4) examine and evaluate content, language, and textual elements.

More than two thirds of participants reported placing major emphasis in the reading curriculum on the processes related to focusing on and retrieving information, including identifying specific ideas, searching for definitions of words or phrases, and finding the topic sentence or main idea in a text. Of the straightforward inferencing processes, summarizing the main point was most widely reported as a major emphasis (27 participants), followed by evaluating cause and effect (18 participants), determining the referent of a pronoun (12 participants), and identifying generalizations (11 participants).

The most highly emphasized process within the category of interpreting and integrating ideas and information was discerning the overall message or theme, which received a major emphasis in more than two thirds of curricula. Interpreting a real-world application of information from the text and describing the relationship between two characters received a major emphasis in 17 and 16 of the reading curricula, respectively. Inferring mood or tone in a story, or comparing and contrasting information from a text received major emphasis in less than one third of the curricula.

Considering that these curricula are for fourth-grade students in transition from learning to read to reading to learn, processes requiring students to examine and evaluate content, language, and textual elements received the least emphasis across the four categories. Less than one third of the participants reported placing a major emphasis on evaluating the likelihood that story events could really happen, judging completeness or clarity of information in a text, or determining an author's perspective. Countries reporting little or no emphasis on any of the examining and evaluating processes included Denmark, Georgia, Hungary, Iceland, Indonesia, Kuwait, Lithuania, Luxembourg, Macedonia, Qatar, the Slovak Republic, and South Africa. This also was the case for the Canadian province of Quebec.

Exhibit 5.9 shows principals' reports of the grade by which certain reading skills or strategies were emphasized for at least half of the students in the school. In nearly all countries and provinces, knowing letters of the alphabet and letter-sound relationships, and reading words, isolated sentences, or connected text were emphasized for at least half the students by first grade. By second grade, a number of participants emphasized identifying the main idea of the text, explaining or supporting understanding of a text, and comparing text with personal experience. By third grade, most participants emphasized making predictions about a story's plot sequence or story resolution, comparing different texts, and making generalizations and inferences based on text. Often, describing the style and structure of a text was emphasized by fourth grade. All reading comprehension skills or strategies queried were emphasized for at least half the students by third grade in England, Israel, Latvia, New Zealand, the Russian Federation, Scotland, and the United States, as well as three of the Canadian provinces, Alberta, Nova Scotia, and Ontario.

Exhibit 5.8 Emphasis on Processes of Comprehension in the Reading Curriculum

PIRLS 2006
4th Grade

Countries	Focus on and Retrieve Explicitly Stated Information			Make Straightforward Inferences			
	Identifying Specific Ideas	Searching for Definitions of Words or Phrases	Finding Topic Sentence or Main Idea	Evaluating Cause / Effect	Determining Referent of a Pronoun	Identifying Generalizations	Summarizing Main Point
Austria	●	●	●	●	●	●	●
Belgium (Flemish)	◉	●	●	◉	◉	◉	●
Belgium (French)	●	●	●	◉	●	○	●
Bulgaria	●	◉	●	●	◉	●	●
Canada, Alberta	●	●	●	●	◉	●	●
Canada, British Columbia	●	◉	●	●	◉	●	●
Canada, Nova Scotia	●	●	●	●	●	●	●
Canada, Ontario	●	●	●	◉	◉	●	●
Canada, Quebec	◉	◉	◉	○	◉	◉	○
Chinese Taipei	◉	◉	●	◉	◉	●	◉
Denmark	◉	○	●	○	○	○	●
England	●	◉	●	●	○	●	●
France	●	●	●	◉	●	◉	●
Georgia	○	◉	◉	○	◉	◉	◉
Germany	●	●	●	○	○	○	◉
Hong Kong SAR	●	●	◉	●	◉	◉	◉
Hungary	●	●	◉	○	◉	◉	●
Iceland	◉	●	◉	○	◉	○	◉
Indonesia	●	●	●	◉	◉	◉	◉
Iran, Islamic Rep. of	◉	◉	◉	◉	◉	◉	●
Israel	○	◉	●	●	●	◉	◉
Italy	●	●	●	◉	◉	◉	●
Kuwait	○	◉	◉	○	●	◉	◉
Latvia	●	●	●	●	●	◉	●
Lithuania	●	◉	◉	○	◉	◉	○
Luxembourg	●	●	●	◉	○	○	●
Macedonia, Rep. of	●	●	●	◉	◉	◉	●
Moldova, Rep. of	◉	●	●	◉	●	◉	●
Morocco	-	-	-	-	-	-	-
Netherlands	◉	●	●	●	●	◉	◉
New Zealand	●	◉	◉	◉	◉	◉	◉
Norway	●	●	●	●	◉	●	●
Poland	●	●	●	●	○	◉	◉
Qatar	●	◉	◉	◉	◉	○	◉
Romania	●	●	●	●	◉	◉	●
Russian Federation	◉	●	●	●	◉	●	●
Scotland	●	●	●	◉	●	◉	●
Singapore	●	○	◉	○	○	●	●
Slovak Republic	●	●	●	◉	○	◉	●
Slovenia	●	◉	◉	●	●	◉	◉
South Africa	◉	○	◉	◉	○	○	◉
Spain	●	◉	●	●	◉	◉	●
Sweden	◉	○	◉	●	○	◉	●
Trinidad and Tobago	●	●	●	●	●	◉	●
United States	-	-	-	-	-	-	-

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

- Major Emphasis
- ◉ Some Emphasis
- Little or No Emphasis

Background data provided by National Research Coordinators.
A dash (-) indicates comparable data are not available.

Exhibit 5.8 **Emphasis on Processes of Comprehension in the Reading Curriculum (Continued)**

PIRLS 2006
4th Grade

Countries	Interpret and Integrate Ideas and Information					Examine and Evaluate Content, Language, and Textual Elements		
	Discerning Overall Message or Theme	Describing Relationship Between Two Characters	Comparing and Contrasting Text Information	Inferring Story's Mood or Tone	Interpreting a Real-World Application of Text Information	Evaluating Likelihood that Events Described Could Really Happen	Judging Completeness or Clarity of Information in Text	Determining an Author's Perspective
Austria	●	●	●	●	●	●	●	●
Belgium (Flemish)	●	○	○	○	○	○	●	○
Belgium (French)	●	○	○	○	●	○	○	○
Bulgaria	●	●	●	○	●	○	●	○
Canada, Alberta	●	●	●	●	●	●	●	●
Canada, British Columbia	●	○	●	○	○	○	●	●
Canada, Nova Scotia	●	●	●	●	●	●	●	●
Canada, Ontario	●	●	●	●	●	○	●	●
Canada, Quebec	○	○	○	○	○	○	○	○
Chinese Taipei	○	○	●	●	●	●	●	●
Denmark	○	○	○	○	○	○	○	○
England	●	●	●	●	●	○	●	○
France	●	○	○	○	○	●	○	○
Georgia	○	○	○	○	○	○	○	○
Germany	●	○	○	○	○	○	○	○
Hong Kong SAR	●	●	○	○	●	○	●	●
Hungary	●	○	○	●	○	○	○	○
Iceland	○	○	○	○	○	○	○	○
Indonesia	○	○	○	○	○	○	○	○
Iran, Islamic Rep. of	●	●	○	○	○	○	○	○
Israel	●	●	–	○	○	○	○	●
Italy	●	●	○	○	○	○	○	○
Kuwait	○	●	○	○	●	○	○	○
Latvia	●	○	○	●	○	○	○	○
Lithuania	○	○	○	●	○	○	○	○
Luxembourg	●	○	○	●	●	○	○	○
Macedonia, Rep. of	●	○	○	○	○	○	○	○
Moldova, Rep. of	○	○	○	○	●	○	○	○
Morocco	–	–	–	–	–	–	–	–
Netherlands	○	○	○	○	○	●	○	○
New Zealand	○	○	○	○	○	○	○	○
Norway	●	○	●	●	○	●	○	○
Poland	○	○	○	○	●	○	○	○
Qatar	○	○	○	○	○	○	○	○
Romania	●	●	○	○	○	●	●	○
Russian Federation	●	●	○	●	○	○	○	●
Scotland	●	●	●	●	○	●	●	●
Singapore	○	○	○	○	●	○	○	○
Slovak Republic	●	○	○	○	○	○	○	○
Slovenia	●	●	●	○	○	●	○	○
South Africa	○	○	○	○	○	○	○	○
Spain	●	○	○	●	●	○	○	○
Sweden	●	○	○	○	●	●	●	○
Trinidad and Tobago	●	●	○	●	●	●	○	●
United States	–	–	–	–	–	–	–	–

- Major Emphasis
- Some Emphasis
- Little or No Emphasis

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Exhibit 5.9 Schools' Grade-by-Grade Emphases on Reading Comprehension Skills or Strategies
PIRLS 2006
 4th Grade

Countries	Grade by Which Skill or Strategy Is Emphasized for at Least 50% of the Students					
	Knowing Letters of the Alphabet	Knowing Letter-Sound Relationships	Reading Words	Reading Isolated Sentences	Reading Connected Text	Identifying the Main Idea of Text
Austria	1	1	1	1	1	2
Belgium (Flemish)	1	1	1	1	1	2
Belgium (French)	r	1	1	1	1	2
Bulgaria	1	1	1	1	1	2
Canada, Alberta	1	1	1	1	1	2
Canada, British Columbia	1	1	1	1	1	2
Canada, Nova Scotia	1	1	1	1	1	2
Canada, Ontario	1	1	1	1	1	2
Canada, Quebec	1	1	1	1	1	2
Chinese Taipei	1	1	1	1	2	3
Denmark	1	1	1	1	1	2
England	r	1	1	1	1	1
France	1	1	1	1	1	2
Georgia	1	1	1	1	1	2
Germany	1	1	1	1	1	2
Hong Kong SAR	–	–	–	–	–	–
Hungary	1	1	1	1	1	2
Iceland	1	1	1	1	1	2
Indonesia	1	1	1	1	2	3
Iran, Islamic Rep. of	1	1	1	1	2	3
Israel	1	1	1	1	1	2
Italy	1	1	1	1	1	2
Kuwait	–	–	–	–	–	–
Latvia	1	1	1	1	1	2
Lithuania	1	1	1	1	1	2
¹ Luxembourg	–	–	–	–	–	–
Macedonia, Rep. of	r	1	1	1	1	2
Moldova, Rep. of	1	1	1	1	1	2
Morocco	r	1	1	1	2	3
Netherlands	r	1	1	1	1	2
New Zealand	1	1	1	1	1	1
Norway	1	1	1	2	2	3
Poland	1	1	1	2	2	2
Qatar	r	1	1	1	2	3
Romania	1	1	1	1	1	2
Russian Federation	1	1	1	1	1	2
Scotland	r	1	1	1	1	1
Singapore	1	1	1	1	1	2
Slovak Republic	1	1	1	1	1	2
Slovenia	1	1	2	2	2	2
South Africa	1	1	1	2	2	3
Spain	1	1	1	1	1	2
Sweden	1	1	1	1	1	2
Trinidad and Tobago	1	1	1	1	2	2
United States	1	1	1	1	1	2
International Avg.	1	1	1	1	1	2

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

N = Not by Grade 4

Background data provided by schools.

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.

A dash (–) indicates comparable data are not available.

1 Primary schools in Luxembourg do not have principals.



Exhibit 5.9 Schools' Grade-by-Grade Emphases on Reading Comprehension Skills or Strategies (Continued)
PIRLS 2006
 4th Grade

Countries	Grade by Which Skill or Strategy Is Emphasized for at Least 50% of the Students					
	Explaining or Supporting Understanding of Text	Comparing Text with Personal Experience	Making Predictions About What Will Happen Next in Text	Comparing Different Texts	Making Generalizations and Inferences Based on Text	Describing Style and Structure of Text
Austria	2	2	3	3	3	4
Belgium (Flemish)	2	3	2	3	4	4
Belgium (French)	2	2	2	3	3	4
Bulgaria	2	3	3	3	3	4
Canada, Alberta	2	1	1	2	2	3
Canada, British Columbia	2	2	1	3	2	4
Canada, Nova Scotia	2	2	1	2	2	3
Canada, Ontario	2	1	1	2	2	3
Canada, Quebec	2	2	2	3	3	4
Chinese Taipei	3	3	4	4	4	N
Denmark	2	2	3	3	4	4
England	1	1	1	2	2	2
France	3	3	3	3	4	4
Georgia	2	3	3	3	3	4
Germany	2	2	2	3	3	4
Hong Kong SAR	–	–	–	–	–	–
Hungary	2	2	3	3	3	4
Iceland	2	3	3	4	4	N
Indonesia	3	4	4	4	4	4
Iran, Islamic Rep. of	3	4	4	4	4	4
Israel	2	2	2	3	3	3
Italy	2	2	3	3	3	4
Kuwait	–	–	–	–	–	–
Latvia	1	1	2	2	2	3
Lithuania	2	2	3	3	3	4
¹ Luxembourg	–	–	–	–	–	–
Macedonia, Rep. of	2	3	3	3	3	4
Moldova, Rep. of	2	2	3	3	3	4
Morocco	4	4	N	N	N	N
Netherlands	2	2	2	3	4	4
New Zealand	1	1	1	2	2	3
Norway	3	3	3	4	4	N
Poland	2	2	3	3	3	4
Qatar	3	3	4	4	4	4
Romania	2	2	3	3	3	4
Russian Federation	2	2	2	2	2	3
Scotland	2	2	2	2	3	3
Singapore	2	2	1	3	3	4
Slovak Republic	2	2	3	3	3	4
Slovenia	3	2	3	3	3	4
South Africa	4	4	4	4	4	N
Spain	2	2	2	3	3	4
Sweden	2	2	2	3	3	4
Trinidad and Tobago	2	2	2	4	3	4
United States	2	2	1	2	2	3
International Avg.	2	2	3	3	3	4

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

How Much Instructional Time Is Devoted to Reading?

Exhibit 5.10 shows the participants' reports of the number of hours specified for instruction per week overall, and the percent of the total that is designated for language and reading instruction. This is considered the intended time for instruction, which is typically established at the national level by the country's Ministry of Education, and, in some cases, represents minimum requirements. In addition, the exhibit shows principals' reports of the actual or implemented instructional time spent in schools overall, as well as teachers' reports of the percent of classroom instructional time spent separately for language and reading.

Four fifths of the participants specified a weekly number of hours for instruction across subject areas. On average across these participants, the total intended instructional time was 22 hours per week. Typically, the total instructional time implemented in the classroom matched closely, or exceeded the intended instructional time. Countries where principals reported at least 30 hours of instructional time per week included Italy, Indonesia, and the United States.

Not all participants had official policies about the percentage of the total amount of time to be devoted to language or reading instruction. The percentage of total instructional time devoted to language ranged from 16 to 50 percent. For the few countries specifying instructional time for reading, it ranged from 10 percent in Trinidad and Tobago to 60 percent in Indonesia. There is some overlap across reporting categories, because in several countries reading was included as part of language instruction or was taught across the curriculum.

Teachers' reports of the percentage of total instructional time spent on language and reading indicate that more time was spent on language instruction than reading. On average internationally, 30 percent of total instructional time was spent on language and 20 percent on reading. Interestingly, the percent of time spent on reading instruction in the classroom often was less than the intended percent of total instructional time specified at the national level.

Exhibit 5.11 presents teachers' reports of the number of hours weekly spent teaching reading, either formally or integrated as part of reading for other subjects. For each category of hours—*more than 6*, *more than 3 up to and including 6*, and *up to and including 3*—the exhibit presents the percentage of students receiving that amount of weekly reading instruction in 2006, together with average reading achievement for those students. In addition, for countries that participated in PIRLS 2001, the exhibit presents the difference in the percent of students from 2001 and indicates if the difference was statistically significant. Countries are ordered according to the highest percentage of students receiving *more than 6 hours* of reading instruction each week.

Internationally on average, about one fourth of the students were taught reading for more than 6 hours per week. In the United States, approximately two thirds of students were taught reading for more than 6 hours weekly. The percentage of students taught reading for more than 6 hours a week increased from 2001 in Hungary, Moldova, Bulgaria, France, Macedonia, and the Netherlands. Countries where two thirds or more of students were taught reading for 3 hours or less per week included Slovenia, South Africa, Indonesia, England, Germany, Hong Kong SAR, Austria, and Chinese Taipei. In Iran and Latvia, the percentage of students taught reading for 3 hours or less increased since 2001 by 38 and 30 percentage points, respectively. The PIRLS 2006 results show little, if any, relationship between amount of instructional time and reading achievement. This is a frequent research finding, because there are many complex factors involved. For example, additional instruction often is provided to low-achieving students for remediation, and also, instructional time is not always spent in effective, productive ways.

As shown in Exhibit 5.12, on average internationally 77 percent of students were in classrooms where teachers reported explicitly spending time on formal reading instruction. More than 90 percent of students in Belgium (Flemish), Hungary, Luxembourg, Moldova, the Netherlands, New Zealand, the Russian Federation, Slovak Republic, Trinidad and Tobago,

and the United States received formal reading instruction each week. In comparison, teachers reported that more than half the students in Germany, Poland, and Slovenia did not receive any formal reading instruction. On average internationally, teachers spent 2.5 hours weekly on formal reading instruction. Teachers in Kuwait, Moldova, Qatar, and United States averaged more than 4 hours per week, whereas those in Chinese Taipei averaged only 1 hour per week. However, principals in Chinese Taipei did report that most students entered school with beginning literacy skills (see Exhibit 5.4).

As shown in Exhibit 5.13, teachers reported that more than half the fourth-grade students received daily instruction in reading. On average internationally, another one third were taught reading 3 to 4 days each week. Countries where one fifth or more of the students were taught reading fewer than 3 days a week included Belgium (Flemish), Chinese Taipei, Georgia, Hong Kong SAR, Singapore, Slovenia, and South Africa.

Teachers' time spent on instruction is only a portion of the time spent with students in the classroom. Exhibit 5.14 contains teachers' reports of the percentage of time spent on instructional activities as well as other classroom duties. About four fifths of the time spent in the classroom was dedicated to teaching the class as a whole or working with individuals or small groups of students. On average, the remaining time was shared equally among administrative or other duties and disciplinary responsibilities. Participating entities where teachers spent 10 percent or more of their in-class time maintaining discipline included the Canadian province of Quebec, Iceland, Indonesia, Iran, Kuwait, South Africa, and Trinidad and Tobago.

Exhibit 5.10 Intended and Implemented Weekly Instructional Time for Language and Reading (Formal and Integrated)

PIRLS 2006
4th Grade

Countries	Intended			Implemented		
	Total Hours of Instructional Time per Week	Percent of Total Instructional Time		Average Hours of Instructional Time per Week	Percent of Total Instructional Time	
		Language	Reading		Language	Reading
Italy	30	25	25	30 (0.3)	26 (0.6)	16 (0.9)
Israel	30	22	33	r 29 (0.3)	r 23 (0.8)	s 16 (1.2)
Qatar	27	45	35	28 (0.0)	x x	x x
Iceland	27	22	♦	r 23 (0.0)	s 30 (0.1)	s 15 (0.1)
Hong Kong SAR	27	19	♦	26 (0.3)	22 (0.6)	r 11 (0.7)
South Africa	27	25	♦	r 28 (0.2)	s 19 (0.7)	s 11 (0.6)
Kuwait	26	26	♦	25 (0.3)	s 29 (1.1)	s 19 (1.4)
France	26	26	30	24 (0.2)	r 38 (1.0)	r 23 (1.3)
Trinidad and Tobago	25	50	10	26 (0.2)	s 35 (1.6)	r 29 (1.7)
Spain	25	16	♦	24 (0.2)	r 23 (0.6)	r 18 (1.1)
Canada, Quebec	25	28	♦	24 (0.1)	r 37 (1.1)	r 19 (1.1)
Canada, Nova Scotia	25	37	♦	25 (0.1)	s 37 (1.1)	r 24 (1.2)
Canada, Alberta	25	25	♦	27 (0.2)	r 31 (1.1)	r 19 (0.8)
Luxembourg	25	46	♦	--	--	--
Singapore	25	27	♦	25 (0.0)	27 (0.5)	16 (0.7)
England	24	♦	♦	r 25 (0.3)	s 28 (0.8)	r 13 (0.9)
Belgium (Flemish)	23	♦	♦	23 (0.1)	31 (0.8)	15 (1.0)
Scotland	23	20	♦	r 25 (0.1)	s 27 (0.9)	s 16 (1.0)
Bulgaria	23	30	♦	20 (0.4)	s 33 (1.0)	s 29 (1.6)
Norway	22	27	22	20 (0.4)	s 36 (1.4)	s 30 (2.8)
Austria	21	32	♦	21 (0.1)	38 (0.8)	14 (0.5)
Chinese Taipei	20	25	♦	24 (0.4)	22 (0.6)	r 9 (0.6)
Latvia	20	♦	♦	20 (0.3)	r 29 (1.0)	r 20 (1.1)
Germany	20	32	♦	22 (0.2)	r 32 (1.1)	r 13 (0.7)
Indonesia	19	20	60	31 (0.4)	r 17 (0.6)	11 (0.8)
Slovak Republic	19	36	16	20 (0.2)	33 (0.4)	r 28 (1.0)
Hungary	19	♦	♦	20 (0.3)	r 36 (0.9)	r 32 (1.6)
Russian Federation	19	42	30	r 19 (0.2)	r 39 (0.8)	r 29 (0.9)
Slovenia	18	30	12	19 (0.2)	27 (0.9)	16 (1.0)
Moldova, Rep. of	18	25	♦	22 (0.4)	r 31 (1.0)	r 27 (1.3)
Iran, Islamic Rep. of	18	46	♦	21 (0.2)	r 28 (0.8)	r 22 (1.2)
Romania	18	24	♦	19 (0.2)	r 32 (0.7)	r 32 (1.5)
Lithuania	17	35	♦	20 (0.2)	r 30 (0.6)	r 28 (1.3)
Macedonia, Rep. of	17	23	11	r 20 (0.6)	s 28 (1.2)	s 20 (1.8)
Denmark	17	27	♦	22 (0.3)	24 (0.5)	r 21 (1.3)
Georgia	16	30	20	20 (0.3)	r 36 (1.1)	r 24 (1.6)
Poland	15	♦	♦	20 (0.4)	35 (1.0)	19 (1.0)
Belgium (French)	♦	♦	♦	r 23 (0.2)	r 39 (0.8)	r 20 (1.1)
Canada, British Columbia	♦	♦	♦	25 (0.2)	x x	s 24 (1.5)
Canada, Ontario	♦	♦	♦	25 (0.3)	r 34 (1.3)	23 (1.4)
Netherlands	♦	♦	♦	r 26 (0.2)	r 32 (0.9)	r 15 (0.9)
New Zealand	♦	♦	♦	24 (0.1)	r 37 (0.8)	23 (0.7)
Sweden	♦	♦	♦	r 24 (0.4)	s 27 (1.0)	s 17 (1.1)
United States	♦	♦	♦	30 (0.3)	s 31 (1.1)	r 29 (1.1)
Morocco	--	--	--	s 28 (0.3)	s 24 (0.8)	s 14 (1.2)
International Avg.	22	30	25	23 (0.0)	30 (0.1)	20 (0.2)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

National Research Coordinators provided the intended instructional time per week and the proportion of time intended for language and reading.

Total hours of implemented instruction per week is based on principals' reports of the number of hours spent on instruction per day multiplied by the number of days per week the school is open for instruction. The percents of total instructional time for language and reading are based on teachers' reports of time spent weekly on language and reading instruction, respectively, divided by the principals' reports of total instructional time per week.

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

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.

A dash (–) indicates comparable data are not available.

A black diamond (♦) indicates instructional time is not specified.

NOTE: The International Average does not include the results from the Canadian provinces.

Exhibit 5.11 Number of Hours Reading Is Taught Weekly (Formal and Integrated) with Trends

PIRLS 2006
4th Grade

Countries	More than 6			More than 3 Up to and Including 6			Up to and Including 3		
	2006 Percent of Students	Average Achievement	Difference in Percent from 2001	2006 Percent of Students	Average Achievement	Difference in Percent from 2001	2006 Percent of Students	Average Achievement	Difference in Percent from 2001
United States	68 (3.4)	538 (4.1)	3 (6.0)	22 (3.0)	546 (5.4)	-6 (5.2)	10 (2.7)	540 (8.2)	4 (3.5)
Hungary	56 (4.5)	551 (4.1)	25 (5.7) ▲	31 (4.3)	550 (7.4)	-20 (5.7) ▼	13 (3.0)	555 (7.2)	-5 (4.6)
Romania	54 (4.1)	494 (6.1)	-10 (5.8)	26 (3.6)	493 (9.5)	1 (5.2)	20 (3.7)	473 (12.0)	9 (4.7)
Moldova, Rep. of	50 (3.8)	503 (4.5)	23 (5.3) ▲	30 (4.0)	499 (6.6)	-12 (6.0) ▼	20 (3.6)	487 (7.0)	-11 (5.2) ▼
Bulgaria	46 (4.4)	551 (6.4)	15 (5.6) ▲	33 (4.2)	543 (9.6)	-23 (5.7) ▼	21 (3.3)	548 (8.7)	7 (4.4)
Trinidad and Tobago	46 (4.6)	428 (8.7)	◊ ◊	32 (4.3)	449 (8.8)	◊ ◊	22 (3.3)	441 (12.6)	◊ ◊
Norway	44 (4.5)	498 (3.9)	11 (6.5)	30 (3.9)	499 (5.3)	-4 (5.9)	25 (4.2)	498 (5.4)	-6 (6.2)
Canada, Nova Scotia	42 (3.5)	545 (3.1)	◊ ◊	34 (3.7)	538 (4.3)	◊ ◊	24 (3.0)	543 (5.6)	◊ ◊
Canada, British Columbia	r 40 (4.0)	551 (5.4)	◊ ◊	36 (4.4)	561 (4.9)	◊ ◊	24 (3.7)	564 (6.4)	◊ ◊
Canada, Ontario	39 (5.1)	557 (4.4)	4 (7.1)	34 (5.0)	552 (3.9)	-12 (6.8)	27 (5.0)	551 (6.3)	8 (6.4)
Lithuania	39 (3.3)	537 (3.0)	-7 (5.5)	31 (3.1)	538 (3.3)	-2 (5.2)	30 (3.2)	537 (3.4)	8 (4.9)
Qatar	s 38 (0.3)	345 (2.4)	◊ ◊	31 (0.2)	346 (2.9)	◊ ◊	32 (0.3)	361 (3.0)	◊ ◊
Slovak Republic	37 (3.1)	534 (4.2)	1 (4.8)	43 (3.6)	531 (4.6)	-9 (5.5)	21 (3.0)	526 (8.9)	7 (4.2)
Georgia	33 (3.9)	467 (6.0)	◊ ◊	28 (3.9)	475 (6.3)	◊ ◊	39 (4.1)	472 (4.8)	◊ ◊
Canada, Alberta	30 (3.4)	553 (3.1)	◊ ◊	40 (3.4)	562 (4.8)	◊ ◊	30 (3.7)	563 (4.6)	◊ ◊
New Zealand	29 (2.7)	526 (4.3)	2 (4.9)	56 (3.0)	537 (3.1)	1 (5.4)	15 (2.1)	538 (6.1)	-3 (4.1)
France	29 (3.8)	523 (4.6)	18 (4.7) ▲	48 (4.1)	519 (3.1)	8 (6.2)	23 (3.1)	530 (4.7)	-26 (6.1) ▼
Russian Federation	28 (3.2)	563 (6.9)	-1 (4.7)	60 (2.9)	567 (4.6)	1 (4.5)	12 (2.1)	558 (6.7)	0 (3.1)
Kuwait	r 27 (3.7)	329 (9.2)	◊ ◊	32 (4.5)	331 (9.1)	◊ ◊	41 (4.5)	332 (7.3)	◊ ◊
Iran, Islamic Rep. of	27 (3.2)	423 (7.5)	-43 (5.4) ▼	35 (3.8)	425 (8.0)	5 (5.8)	38 (3.8)	413 (5.5)	38 (3.8) ▲
Denmark	25 (3.8)	545 (5.2)	◊ ◊	31 (3.7)	548 (4.1)	◊ ◊	43 (3.9)	548 (3.3)	◊ ◊
Belgium (French)	r 25 (3.3)	504 (6.9)	◊ ◊	36 (3.2)	501 (4.2)	◊ ◊	39 (3.6)	497 (4.3)	◊ ◊
Israel	r 24 (4.5)	545 (8.2)	-4 (6.1)	24 (4.7)	532 (13.9)	-11 (6.4)	52 (4.7)	492 (8.0)	15 (6.4) ▲
Spain	24 (3.4)	521 (5.0)	◊ ◊	24 (3.6)	507 (5.8)	◊ ◊	52 (4.3)	512 (4.0)	◊ ◊
Latvia	22 (3.7)	546 (4.3)	-7 (5.5)	27 (4.3)	535 (4.2)	-23 (6.6) ▼	50 (4.4)	540 (3.7)	30 (5.9) ▲
Canada, Quebec	20 (3.8)	533 (5.7)	-14 (5.9) ▼	43 (4.9)	529 (3.9)	2 (6.8)	37 (4.6)	541 (4.0)	12 (6.3)
Italy	19 (3.1)	551 (6.7)	0 (4.3)	30 (3.7)	550 (4.9)	-6 (5.2)	51 (3.8)	553 (4.1)	6 (5.4)
Sweden	18 (3.1)	548 (3.7)	2 (4.1)	27 (4.0)	550 (4.0)	-5 (5.0)	55 (4.1)	549 (3.1)	3 (5.3)
Singapore	17 (2.1)	558 (8.1)	-8 (3.9) ▼	19 (2.1)	561 (7.0)	2 (3.2)	64 (2.7)	558 (3.9)	5 (4.6)
Macedonia, Rep. of	17 (3.0)	429 (13.4)	17 (3.0) ▲	33 (4.0)	432 (11.0)	33 (4.0) ▲	50 (4.4)	460 (7.8)	-50 (4.4) ▼
Luxembourg	16 (0.1)	556 (2.1)	◊ ◊	39 (0.2)	556 (1.5)	◊ ◊	46 (0.2)	560 (1.7)	◊ ◊
Slovenia	14 (2.4)	512 (5.4)	1 (3.9)	16 (2.2)	520 (4.4)	-10 (4.4) ▼	69 (3.1)	523 (2.5)	9 (5.4)
Morocco	r 14 (3.0)	323 (20.7)	-13 (5.7) ▼	31 (4.3)	318 (15.1)	9 (6.0)	56 (4.6)	323 (7.6)	4 (7.1)
Poland	13 (2.7)	509 (8.1)	◊ ◊	40 (3.9)	523 (3.3)	◊ ◊	47 (4.3)	518 (3.7)	◊ ◊
Netherlands	13 (3.3)	535 (5.8)	8 (3.8) ▲	42 (4.1)	547 (2.4)	-4 (6.4)	45 (4.3)	549 (2.7)	-4 (6.5)
Belgium (Flemish)	12 (2.7)	542 (5.9)	◊ ◊	26 (4.0)	546 (4.6)	◊ ◊	61 (4.5)	547 (2.3)	◊ ◊
Scotland	r 12 (3.1)	533 (10.1)	-2 (4.6)	43 (4.7)	530 (4.2)	3 (6.8)	45 (4.9)	524 (5.4)	-1 (6.8)
Iceland	r 10 (0.2)	511 (3.4)	1 (0.3)	30 (0.4)	509 (2.2)	-12 (0.5) ▼	59 (0.4)	511 (1.9)	11 (0.6) ▲
South Africa	r 10 (1.9)	302 (20.9)	◊ ◊	18 (2.7)	288 (16.1)	◊ ◊	72 (2.7)	303 (8.4)	◊ ◊
Indonesia	8 (2.5)	397 (11.0)	◊ ◊	23 (3.0)	404 (9.1)	◊ ◊	69 (3.7)	409 (5.3)	◊ ◊
England	8 (2.3)	522 (12.2)	-5 (3.9)	25 (4.0)	544 (6.7)	-9 (5.9)	67 (4.3)	544 (4.2)	14 (6.0) ▲
Germany	r 6 (1.7)	547 (6.4)	-5 (3.0)	23 (2.8)	537 (5.6)	-5 (4.3)	71 (3.2)	551 (2.9)	11 (4.6) ▲
Hong Kong SAR	r 5 (2.0)	567 (6.7)	2 (2.6)	22 (3.6)	572 (6.4)	1 (5.4)	74 (4.1)	563 (3.1)	-2 (5.8)
Austria	4 (1.3)	531 (8.5)	◊ ◊	28 (3.4)	545 (4.1)	◊ ◊	67 (3.3)	536 (2.6)	◊ ◊
Chinese Taipei	r 3 (1.6)	541 (12.9)	◊ ◊	8 (2.6)	537 (6.2)	◊ ◊	89 (2.9)	535 (2.5)	◊ ◊
International Avg.	25 (0.5)	500 (1.3)		31 (0.6)	501 (1.1)		44 (0.6)	500 (0.9)	

▲ Percent in 2006 significantly higher

▼ Percent in 2006 significantly lower

Background data provided by teachers.

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

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.

A diamond (◊) indicates the country did not participate in the 2001 assessment.

NOTE: The International Average does not include the results from the Canadian provinces.

Trend Note: The primary education systems of the Russian Federation and Slovenia underwent structural changes. Data for Canada, Ontario include only public schools.



Exhibit 5.12 Teachers Spend Time for Formal Reading Instruction

PIRLS 2006
4th Grade

Countries	Time Explicitly for Formal Reading Instruction				Average Hours per Week Spent on Formal Reading Instruction
	Yes		No		
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Austria	73 (2.9)	539 (2.7)	27 (2.9)	535 (4.0)	1.6 (0.06)
Belgium (Flemish)	91 (2.0)	548 (2.1)	9 (2.0)	536 (5.5)	1.4 (0.08)
Belgium (French)	65 (4.1)	498 (3.7)	35 (4.1)	507 (4.7)	r 1.8 (0.11)
Bulgaria	89 (2.9)	547 (4.4)	11 (2.9)	543 (19.6)	2.7 (0.11)
Canada, Alberta	69 (3.9)	561 (2.7)	31 (3.9)	558 (5.4)	2.9 (0.21)
Canada, British Columbia	r 83 (3.0)	557 (3.3)	17 (3.0)	562 (7.7)	s 3.1 (0.19)
Canada, Nova Scotia	87 (2.7)	543 (2.4)	13 (2.7)	536 (6.7)	r 3.0 (0.19)
Canada, Ontario	82 (4.1)	555 (3.0)	18 (4.1)	557 (7.0)	3.1 (0.27)
Canada, Quebec	73 (4.0)	531 (3.2)	27 (4.0)	539 (5.0)	r 2.2 (0.25)
Chinese Taipei	75 (3.6)	536 (2.4)	25 (3.6)	535 (3.4)	r 1.0 (0.06)
Denmark	61 (3.7)	550 (3.3)	39 (3.7)	544 (4.0)	s 1.7 (0.15)
England	80 (3.6)	542 (3.7)	20 (3.6)	540 (11.2)	r 1.8 (0.08)
France	88 (2.5)	524 (2.4)	12 (2.5)	506 (6.9)	r 2.1 (0.11)
Georgia	84 (3.2)	472 (3.7)	16 (3.2)	468 (8.5)	3.1 (0.17)
Germany	43 (3.5)	548 (3.8)	57 (3.5)	549 (2.3)	s 1.4 (0.07)
Hong Kong SAR	73 (4.0)	567 (2.7)	27 (4.0)	555 (5.1)	1.7 (0.14)
Hungary	99 (0.8)	551 (3.1)	1 (0.8)	~ ~	2.9 (0.20)
Iceland	r 75 (0.3)	512 (1.7)	25 (0.3)	502 (2.7)	r 1.8 (0.01)
Indonesia	73 (3.7)	400 (5.4)	27 (3.7)	419 (7.2)	2.6 (0.23)
Iran, Islamic Rep. of	84 (2.7)	421 (3.9)	16 (2.7)	418 (10.2)	3.4 (0.12)
Israel	69 (3.9)	506 (6.2)	31 (3.9)	519 (11.0)	s 1.8 (0.12)
Italy	79 (3.2)	553 (3.3)	21 (3.2)	547 (5.7)	2.4 (0.13)
Kuwait	r 71 (3.6)	333 (5.8)	29 (3.6)	324 (9.0)	s 4.4 (0.32)
Latvia	61 (3.4)	540 (3.5)	39 (3.4)	543 (3.6)	r 2.2 (0.12)
Lithuania	68 (3.4)	537 (2.0)	32 (3.4)	539 (3.4)	r 3.0 (0.20)
Luxembourg	100 (0.0)	557 (1.1)	0 (0.0)	~ ~	1.4 (0.00)
Macedonia, Rep. of	64 (3.6)	432 (6.5)	36 (3.6)	465 (8.5)	r 2.5 (0.19)
Moldova, Rep. of	93 (1.6)	498 (3.3)	7 (1.6)	506 (11.1)	5.0 (0.28)
Morocco	88 (2.7)	325 (6.8)	12 (2.7)	295 (14.1)	2.2 (0.06)
Netherlands	96 (1.6)	546 (1.7)	4 (1.6)	551 (12.5)	r 1.5 (0.05)
New Zealand	96 (0.8)	535 (2.0)	4 (0.8)	513 (11.4)	3.2 (0.09)
Norway	68 (3.7)	497 (3.4)	32 (3.7)	501 (3.6)	r 2.7 (0.20)
Poland	49 (4.2)	515 (3.2)	51 (4.2)	523 (3.6)	r 2.6 (0.20)
Qatar	s 79 (0.3)	350 (1.5)	21 (0.3)	360 (3.4)	s 4.6 (0.02)
Romania	77 (3.3)	487 (5.8)	23 (3.3)	489 (9.2)	3.2 (0.21)
Russian Federation	94 (1.6)	566 (3.3)	6 (1.6)	540 (17.8)	3.1 (0.05)
Scotland	r 87 (3.2)	527 (3.1)	13 (3.2)	525 (8.9)	r 2.5 (0.17)
Singapore	62 (3.1)	554 (3.4)	38 (3.1)	564 (4.5)	2.0 (0.17)
Slovak Republic	94 (1.5)	531 (2.9)	6 (1.5)	532 (9.7)	3.0 (0.03)
Slovenia	42 (3.2)	521 (3.6)	58 (3.2)	522 (2.5)	r 1.9 (0.19)
South Africa	70 (2.8)	305 (8.8)	30 (2.8)	304 (11.0)	r 1.9 (0.13)
Spain	68 (3.6)	516 (3.4)	32 (3.6)	504 (4.7)	r 2.0 (0.15)
Sweden	79 (3.5)	548 (2.8)	21 (3.5)	548 (3.9)	r 1.6 (0.09)
Trinidad and Tobago	92 (2.1)	436 (5.5)	8 (2.1)	427 (16.8)	3.7 (0.21)
United States	94 (2.0)	539 (3.9)	6 (2.0)	551 (8.5)	r 4.8 (0.19)
International Avg.	77 (0.5)	500 (0.7)	23 (0.5)	496 (1.5)	2.5 (0.02)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by teachers.

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

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.

A tilde (~) indicates insufficient data to report achievement.

NOTE: The International Average does not include the results from the Canadian provinces.



Exhibit 5.13 Frequency of Reading Instruction During the Week

PIRLS 2006
4th Grade

Countries	Every Day		3–4 Days a Week		Fewer than 3 Days a Week	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
Austria	58 (3.6)	538 (2.7)	35 (3.5)	539 (3.5)	7 (1.8)	532 (7.4)
Belgium (Flemish)	46 (4.3)	548 (3.1)	28 (3.8)	546 (2.9)	26 (3.5)	545 (3.2)
Belgium (French)	58 (3.7)	502 (4.0)	28 (3.4)	500 (4.7)	15 (2.6)	492 (5.4)
Bulgaria	66 (3.6)	555 (5.5)	32 (3.5)	532 (7.1)	2 (1.0)	~ ~
Canada, Alberta	77 (3.7)	561 (2.3)	18 (3.3)	558 (6.9)	5 (1.9)	554 (16.5)
Canada, British Columbia	r 74 (3.6)	557 (3.5)	20 (3.1)	573 (4.3)	6 (2.1)	550 (15.8)
Canada, Nova Scotia	92 (1.9)	543 (2.5)	6 (1.7)	542 (15.1)	2 (0.9)	~ ~
Canada, Ontario	80 (4.0)	554 (2.8)	16 (3.4)	561 (9.1)	5 (2.3)	544 (6.7)
Canada, Quebec	57 (4.9)	536 (3.8)	30 (4.5)	525 (5.1)	14 (3.5)	540 (3.9)
Chinese Taipei	19 (3.2)	536 (4.8)	27 (3.8)	539 (4.3)	54 (4.2)	535 (2.6)
Denmark	30 (3.9)	551 (4.3)	59 (4.3)	545 (3.3)	11 (2.3)	544 (6.4)
England	69 (4.3)	539 (3.7)	23 (3.8)	555 (8.6)	9 (2.6)	517 (6.6)
France	80 (2.8)	521 (2.4)	15 (2.5)	523 (5.7)	5 (1.6)	526 (8.3)
Georgia	43 (4.7)	470 (4.9)	35 (4.0)	472 (5.4)	22 (3.2)	469 (7.7)
Germany	57 (3.4)	547 (2.7)	25 (2.9)	545 (4.0)	17 (2.9)	554 (3.9)
Hong Kong SAR	24 (3.7)	568 (6.0)	39 (3.9)	565 (4.1)	36 (4.1)	561 (4.1)
Hungary	65 (3.8)	555 (4.2)	35 (3.8)	543 (5.0)	0 (0.0)	~ ~
Iceland	40 (0.4)	510 (2.1)	41 (0.4)	510 (1.8)	19 (0.3)	510 (3.1)
Indonesia	48 (4.4)	406 (5.8)	38 (4.6)	403 (7.0)	14 (2.7)	405 (10.4)
Iran, Islamic Rep. of	41 (3.8)	420 (6.5)	47 (3.8)	423 (5.0)	12 (2.5)	418 (9.6)
Israel	49 (4.3)	511 (7.3)	38 (4.7)	508 (10.5)	14 (2.8)	527 (11.4)
Italy	48 (3.7)	548 (5.0)	38 (3.6)	556 (3.7)	14 (2.6)	553 (6.6)
Kuwait	r 92 (2.3)	331 (5.0)	4 (1.6)	318 (26.5)	4 (1.9)	344 (22.9)
Latvia	54 (4.1)	544 (3.1)	42 (3.9)	536 (3.8)	3 (1.3)	553 (11.1)
Lithuania	65 (3.2)	535 (2.1)	29 (3.3)	544 (3.5)	5 (1.6)	539 (5.6)
Luxembourg	29 (0.2)	557 (1.9)	53 (0.2)	558 (1.3)	18 (0.1)	555 (2.3)
Macedonia, Rep. of	64 (3.9)	455 (6.2)	24 (3.4)	433 (10.5)	12 (2.7)	396 (19.5)
Moldova, Rep. of	58 (4.2)	502 (4.1)	39 (4.2)	493 (5.3)	3 (1.3)	512 (5.7)
Morocco	39 (4.1)	336 (10.8)	60 (4.1)	313 (7.2)	1 (0.0)	~ ~
Netherlands	62 (4.6)	544 (2.3)	36 (4.6)	550 (2.5)	2 (1.0)	~ ~
New Zealand	58 (3.4)	532 (2.8)	40 (3.4)	536 (3.6)	2 (0.8)	~ ~
Norway	73 (4.3)	497 (2.5)	24 (4.1)	503 (5.6)	3 (1.7)	489 (12.9)
Poland	64 (3.8)	519 (3.0)	28 (3.5)	522 (4.3)	8 (2.5)	507 (5.7)
Qatar	s 56 (0.3)	350 (2.0)	30 (0.3)	351 (2.7)	14 (0.2)	364 (4.1)
Romania	80 (3.3)	492 (5.2)	17 (3.2)	475 (10.4)	3 (1.5)	506 (22.7)
Russian Federation	87 (2.6)	565 (3.3)	12 (2.6)	560 (12.5)	0 (0.3)	~ ~
Scotland	44 (3.7)	528 (4.4)	50 (3.7)	527 (4.2)	5 (2.2)	519 (12.9)
Singapore	36 (3.0)	550 (5.6)	41 (3.2)	562 (4.2)	22 (2.4)	566 (5.9)
Slovak Republic	46 (3.5)	537 (3.6)	51 (3.6)	528 (3.9)	3 (1.3)	493 (28.4)
Slovenia	51 (3.4)	523 (2.9)	29 (3.1)	520 (3.8)	20 (2.5)	519 (3.8)
South Africa	30 (2.6)	328 (13.3)	39 (3.4)	288 (12.1)	31 (2.8)	294 (9.5)
Spain	57 (4.0)	510 (4.6)	26 (3.5)	512 (5.0)	17 (3.2)	520 (6.3)
Sweden	65 (3.4)	549 (2.6)	26 (3.5)	546 (4.4)	9 (2.2)	553 (7.3)
Trinidad and Tobago	82 (3.6)	435 (6.3)	18 (3.6)	452 (12.0)	0 (0.0)	~ ~
United States	93 (1.6)	538 (3.6)	7 (1.5)	540 (11.5)	0 (0.0)	~ ~
International Avg.	56 (0.6)	502 (0.8)	33 (0.5)	499 (1.2)	12 (0.3)	497 (1.9)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by teachers.

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

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.

A tilde (~) indicates insufficient data to report achievement.

NOTE: The International Average does not include the results from the Canadian provinces.



Exhibit 5.14 Teachers' Time Spent on Classroom Activities

PIRLS 2006
4th Grade

Countries	Percent of Time Spent in Class with Students				
	Teaching the Class as a Whole	Working with Individual Students or Small Groups	Administrative Duties	Maintaining Discipline	Other Duties
Austria	58 (1.2)	25 (1.1)	5 (0.2)	7 (0.4)	5 (0.3)
Belgium (Flemish)	55 (1.6)	26 (1.0)	5 (0.3)	7 (0.4)	7 (0.7)
Belgium (French)	61 (1.2)	22 (1.1)	5 (0.3)	7 (0.4)	5 (0.4)
Bulgaria	59 (1.2)	24 (0.9)	5 (0.3)	7 (0.5)	6 (0.5)
Canada, Alberta	55 (1.6)	26 (1.2)	6 (0.3)	8 (0.6)	5 (0.4)
Canada, British Columbia	r 56 (1.8)	r 25 (1.5)	r 5 (0.3)	r 8 (0.6)	r 5 (0.5)
Canada, Nova Scotia	55 (1.4)	27 (1.1)	5 (0.3)	8 (0.6)	5 (0.4)
Canada, Ontario	49 (1.3)	28 (1.3)	7 (0.4)	9 (0.7)	7 (0.4)
Canada, Quebec	50 (1.8)	24 (1.5)	6 (0.4)	12 (0.9)	8 (0.7)
Chinese Taipei	72 (1.0)	13 (0.6)	4 (0.3)	6 (0.3)	5 (0.4)
Denmark	46 (1.4)	33 (1.5)	6 (0.3)	9 (0.7)	5 (0.5)
England	r 53 (1.2)	r 30 (1.3)	r 5 (0.3)	r 6 (0.5)	r 6 (0.5)
France	65 (1.2)	20 (0.9)	3 (0.2)	7 (0.6)	4 (0.5)
Georgia	60 (1.6)	18 (0.9)	8 (0.4)	7 (0.4)	7 (0.4)
Germany	57 (1.5)	24 (1.3)	6 (0.3)	6 (0.4)	6 (0.4)
Hong Kong SAR	64 (1.8)	7 (0.5)	12 (1.3)	6 (0.5)	11 (0.9)
Hungary	56 (1.3)	32 (1.3)	3 (0.2)	5 (0.4)	4 (0.3)
Iceland	r 42 (0.2)	r 28 (0.2)	r 7 (0.0)	r 13 (0.1)	r 11 (0.1)
Indonesia	55 (1.4)	18 (0.8)	8 (0.5)	10 (0.5)	8 (0.4)
Iran, Islamic Rep. of	52 (1.4)	20 (0.9)	7 (0.3)	11 (0.5)	10 (0.5)
Israel	r 57 (1.6)	r 24 (1.4)	r 6 (0.3)	r 8 (0.6)	r 5 (0.4)
Italy	68 (1.1)	17 (0.8)	3 (0.2)	7 (0.5)	5 (0.5)
Kuwait	s 55 (2.5)	s 18 (1.4)	s 6 (0.8)	s 11 (1.1)	s 10 (1.0)
Latvia	60 (1.4)	22 (0.9)	6 (0.3)	7 (0.5)	5 (0.4)
Lithuania	63 (1.3)	26 (1.1)	3 (0.2)	4 (0.3)	4 (0.4)
Luxembourg	62 (0.1)	21 (0.1)	4 (0.0)	5 (0.0)	8 (0.0)
Macedonia, Rep. of	r 55 (1.5)	r 25 (1.3)	r 6 (0.3)	r 8 (0.5)	r 6 (0.4)
Moldova, Rep. of	49 (1.6)	27 (1.2)	8 (0.7)	7 (0.6)	9 (0.8)
Morocco	s 60 (1.8)	s 22 (1.5)	s 5 (0.6)	s 7 (0.7)	s 6 (0.8)
Netherlands	r 49 (1.6)	r 29 (1.5)	r 6 (0.4)	r 6 (0.5)	r 9 (0.6)
New Zealand	39 (0.9)	41 (1.0)	7 (0.4)	8 (0.3)	6 (0.3)
Norway	54 (1.6)	30 (1.6)	4 (0.4)	7 (0.6)	5 (0.4)
Poland	64 (1.0)	21 (0.8)	4 (0.2)	5 (0.4)	5 (0.3)
Qatar	x x	x x	x x	x x	x x
Romania	55 (1.3)	30 (1.1)	4 (0.3)	5 (0.3)	5 (0.4)
Russian Federation	64 (1.1)	24 (1.0)	4 (0.2)	4 (0.2)	4 (0.4)
Scotland	r 44 (1.4)	r 40 (1.2)	r 5 (0.3)	r 7 (0.6)	r 5 (0.5)
Singapore	60 (0.8)	16 (0.5)	9 (0.4)	9 (0.3)	6 (0.3)
Slovak Republic	64 (1.0)	21 (0.8)	5 (0.2)	6 (0.4)	4 (0.3)
Slovenia	67 (1.1)	20 (0.9)	5 (0.4)	6 (0.3)	2 (0.3)
South Africa	48 (1.1)	23 (0.9)	10 (0.5)	11 (0.5)	8 (0.4)
Spain	61 (1.4)	20 (1.2)	6 (0.7)	8 (0.5)	5 (0.5)
Sweden	59 (1.9)	24 (1.4)	4 (0.3)	8 (0.6)	5 (0.5)
Trinidad and Tobago	63 (1.1)	16 (0.8)	5 (0.2)	10 (0.6)	6 (0.3)
United States	55 (1.6)	25 (1.4)	7 (0.4)	9 (0.5)	5 (0.3)
International Avg.	57 (0.2)	24 (0.2)	6 (0.1)	7 (0.1)	6 (0.1)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by teachers.

- (1) Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

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.

NOTE: The International Average does not include the results from the Canadian provinces.

How Are Classes Organized for Reading Instruction?

Teachers employ a variety of approaches in organizing their classrooms for reading instruction. Often, the decision of how to organize students is based on the students' level of ability and class size. Exhibit 5.15 presents teachers' reports of how they grouped their fourth-grade students for reading instruction or reading activities. The most popular approach, used for 78 percent of the students, on average internationally, was to employ a variety of strategies for organizing students. The next most common approach was to teach reading as a whole-class activity. On average internationally, about one third of students were taught reading in classes that were always or almost always organized as an entire class. More than two thirds of students in Bulgaria, Kuwait, and Romania were taught reading as a whole-class activity.

In general, teachers reported that creating either same-ability or mixed-ability groups of students to teach reading was relatively rare. However, in New Zealand and Scotland, more than half the students were in classes where same-ability groups were always or almost always created for reading instruction. In Iran and Qatar, more than one third of students were always or almost always taught reading instruction in mixed-ability groups. Similarly, in most countries, teachers reported always or almost always using individualized instruction for only small percentages of students. However, individualized instruction for reading was used often for more than one third of the students in Kuwait and Morocco, and almost half the students in Qatar.

Exhibit 5.16 presents trends in class size for reading and language instruction. Countries are ordered by average class size in PIRLS 2006 from smallest to largest. The difference is shown from PIRLS 2001 for trend participants, with an indication as to whether or not the difference was statistically significant. Average class sizes in 2006 and 2001 are displayed graphically. The exhibit also shows the percentages of fourth-grade students in classes from 1–20 students, 21–30 students, and 31 or more students. For each category of class size, the percentage of students in 2006 is shown together

Exhibit 5.15 Organization of Students for Reading Instruction

PIRLS 2006
4th Grade

Countries	Percentage of Students Whose Teachers Reported Always or Almost Always						
	Teaching Reading as a Whole-Class Activity	Creating Same-Ability Groups	Creating Mixed-Ability Groups	Using Individualized Instruction for Reading	Having Students Work Independently on an Assigned Plan or Goal	Having Students Work Independently on a Goal They Choose Themselves	Using a Variety of Organizational Approaches*
Austria	16 (2.3)	1 (0.6)	1 (0.6)	3 (1.1)	10 (2.1)	5 (1.5)	74 (3.1)
Belgium (Flemish)	7 (2.0)	2 (0.9)	7 (1.8)	1 (0.6)	5 (1.2)	1 (0.5)	80 (2.6)
Belgium (French)	37 (3.4)	1 (0.7)	2 (0.6)	3 (1.2)	7 (2.1)	2 (0.9)	55 (3.4)
Bulgaria	75 (3.6)	4 (1.7)	6 (1.9)	25 (2.9)	16 (2.7)	1 (0.5)	94 (1.9)
Canada, Alberta	18 (3.3)	6 (1.8)	6 (1.7)	4 (1.3)	4 (1.6)	3 (1.3)	70 (3.4)
Canada, British Columbia	r 24 (3.8)	r 6 (1.9)	r 4 (1.7)	r 1 (0.7)	r 5 (2.1)	r 1 (0.9)	r 65 (4.1)
Canada, Nova Scotia	10 (2.4)	2 (1.0)	3 (1.0)	4 (1.7)	3 (1.2)	1 (0.7)	67 (3.7)
Canada, Ontario	18 (3.6)	5 (1.4)	5 (1.1)	5 (2.2)	5 (2.0)	0 (0.0)	72 (3.9)
Canada, Quebec	35 (4.5)	3 (1.5)	2 (0.7)	0 (0.2)	2 (1.3)	0 (0.2)	68 (3.8)
Chinese Taipei	50 (4.1)	1 (0.7)	16 (2.9)	2 (1.2)	14 (2.6)	10 (2.5)	82 (3.0)
Denmark	11 (2.3)	4 (1.2)	0 (0.3)	14 (2.2)	6 (2.2)	1 (0.5)	62 (4.1)
England	6 (2.0)	27 (4.5)	0 (0.4)	4 (1.7)	3 (0.7)	0 (0.0)	66 (4.1)
France	25 (3.5)	4 (1.1)	4 (1.5)	2 (1.0)	5 (1.4)	0 (0.2)	66 (3.2)
Georgia	63 (3.9)	5 (1.9)	5 (2.1)	32 (4.2)	16 (2.9)	20 (3.5)	92 (2.0)
Germany	22 (3.0)	2 (0.7)	1 (0.7)	2 (0.8)	10 (2.3)	5 (1.5)	68 (3.5)
Hong Kong SAR	34 (3.8)	0 (0.0)	6 (2.0)	2 (1.1)	5 (1.9)	3 (1.6)	55 (4.3)
Hungary	5 (1.7)	7 (2.2)	5 (1.6)	16 (3.2)	3 (1.4)	1 (0.9)	90 (2.2)
Iceland	17 (0.3)	6 (0.3)	4 (0.1)	32 (0.3)	22 (0.3)	7 (0.3)	79 (0.3)
Indonesia	43 (3.8)	6 (2.0)	8 (2.1)	27 (4.0)	36 (4.3)	18 (2.8)	97 (1.3)
Iran, Islamic Rep. of	59 (3.4)	1 (0.7)	38 (3.6)	10 (2.3)	21 (3.3)	4 (1.2)	90 (2.3)
Israel	21 (3.0)	4 (1.7)	9 (2.6)	1 (1.0)	14 (3.2)	3 (1.5)	80 (3.4)
Italy	63 (3.4)	0 (0.3)	10 (2.2)	3 (1.3)	30 (3.0)	5 (1.7)	90 (2.3)
Kuwait	69 (3.7)	r 11 (2.8)	--	35 (3.8)	18 (3.3)	8 (2.5)	87 (2.8)
Latvia	48 (4.2)	2 (0.9)	8 (2.3)	4 (1.6)	3 (1.2)	1 (1.0)	90 (2.6)
Lithuania	35 (3.0)	2 (0.9)	5 (1.5)	4 (1.4)	9 (2.2)	3 (1.2)	89 (2.0)
Luxembourg	31 (0.2)	1 (0.0)	4 (0.1)	0 (0.0)	7 (0.1)	0 (0.0)	58 (0.2)
Macedonia, Rep. of	49 (4.4)	9 (2.7)	7 (2.3)	26 (3.5)	16 (3.1)	14 (3.1)	93 (2.1)
Moldova, Rep. of	62 (3.9)	12 (2.9)	15 (3.2)	29 (4.4)	33 (3.8)	19 (3.6)	99 (1.0)
Morocco	61 (3.9)	8 (2.4)	10 (2.6)	35 (4.2)	14 (3.1)	3 (1.4)	82 (3.2)
Netherlands	8 (2.0)	6 (1.3)	r 3 (1.3)	5 (1.4)	12 (2.9)	2 (1.0)	64 (4.2)
New Zealand	2 (0.6)	61 (2.7)	1 (0.6)	8 (1.5)	6 (1.4)	1 (0.3)	62 (2.9)
Norway	12 (2.2)	6 (1.7)	2 (1.3)	4 (2.2)	5 (2.0)	0 (0.0)	71 (4.0)
Poland	38 (4.3)	3 (1.3)	5 (1.4)	12 (2.4)	12 (2.3)	9 (2.4)	94 (1.8)
Qatar	s 51 (0.3)	s 34 (0.3)	s 43 (0.3)	s 49 (0.3)	s 23 (0.2)	s 8 (0.1)	s 96 (0.1)
Romania	72 (3.4)	6 (1.9)	4 (1.5)	22 (2.8)	27 (3.8)	2 (0.7)	92 (2.2)
Russian Federation	63 (4.1)	4 (1.5)	3 (0.9)	11 (2.5)	6 (1.8)	2 (0.9)	90 (2.0)
Scotland	r 6 (2.7)	r 54 (4.5)	1 (0.6)	r 5 (2.3)	9 (3.1)	r 0 (0.0)	70 (4.6)
Singapore	29 (2.6)	3 (0.9)	7 (1.4)	1 (0.7)	5 (1.2)	2 (0.8)	62 (2.7)
Slovak Republic	40 (3.6)	1 (0.7)	3 (1.1)	14 (2.3)	15 (2.7)	1 (0.5)	87 (2.7)
Slovenia	11 (1.9)	1 (0.5)	8 (1.6)	3 (0.9)	4 (1.5)	0 (0.4)	71 (2.7)
South Africa	--	--	--	--	--	--	--
Spain	62 (3.6)	0 (0.0)	2 (1.0)	6 (2.1)	10 (2.5)	2 (0.9)	76 (3.7)
Sweden	22 (3.2)	3 (1.2)	0 (0.3)	3 (1.1)	14 (2.7)	6 (1.6)	59 (3.8)
Trinidad and Tobago	29 (3.2)	3 (1.0)	14 (3.1)	7 (2.0)	7 (2.2)	4 (1.6)	69 (4.0)
United States	25 (3.3)	13 (2.4)	7 (1.9)	7 (2.2)	8 (2.1)	2 (1.0)	73 (3.1)
International Avg.	35 (0.5)	8 (0.3)	7 (0.3)	12 (0.4)	12 (0.4)	5 (0.2)	78 (0.5)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by teachers.

* Using a Variety of Organizational Approaches is based on the proportion of teachers who responded at least Often to at least two of the approaches.

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

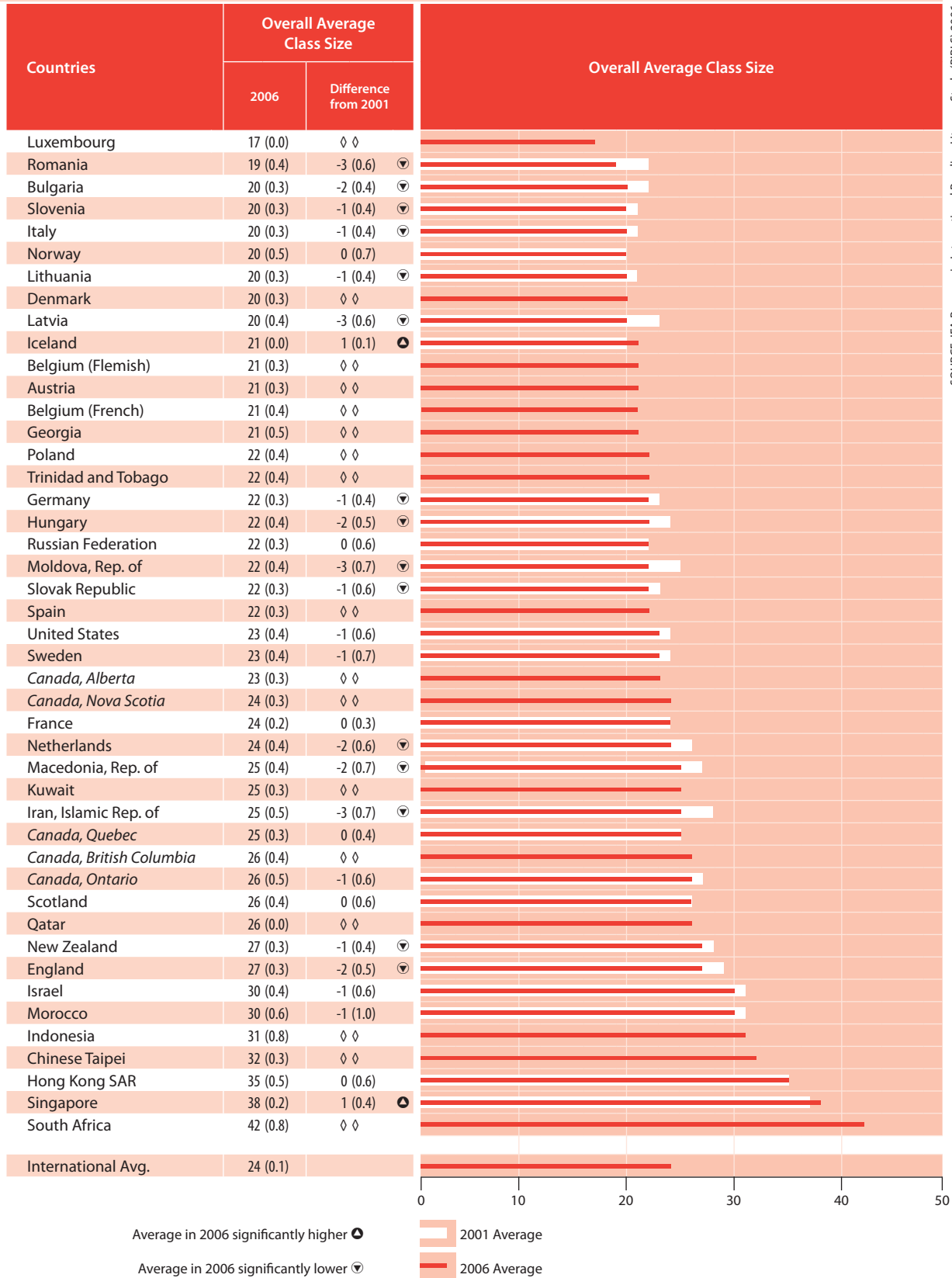
An "r" indicates data are available for 70–84% of the students. An "s" indicates data are available for 50–69% of the students. An "x" indicates data are available for less than 50% of the students.

A dash (–) indicates comparable data are not available.

NOTE: The International Average does not include the results from the Canadian provinces.

Exhibit 5.16 Class Size for Reading and Language Instruction with Trends*

PIRLS 2006
4th Grade



SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by teachers.

* Results are for entire classes, which included some multi-grade classrooms. To take the possibility of multi-grade classrooms into consideration, PIRLS also asked teachers to report the number of 4th-grade students. There was little difference in most countries

between the size of the entire classes and just the 4th graders. Across countries, the average number of fourth graders in a class and the average class size were both 24.

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

Exhibit 5.16 Class Size for Reading and Language Instruction with Trends (Continued)

PIRLS 2006
4th Grade

Countries	1-20 Students			21-30 Students			31 or More Students		
	2006 Percent of Students	Average Achievement	Difference in Percent from 2001	2006 Percent of Students	Average Achievement	Difference in Percent from 2001	2006 Percent of Students	Average Achievement	Difference in Percent from 2001
Luxembourg	92 (0.1)	557 (1.2)	0 0	6 (0.1)	554 (2.8)	0 0	1 (0.0)	~ ~	0 0
Romania	57 (3.3)	474 (6.7)	23 (4.3) ▲	41 (3.4)	508 (7.0)	-13 (5.0) ▼	2 (1.1)	~ ~	-9 (3.0) ▼
Bulgaria	59 (4.0)	541 (5.5)	22 (5.1) ▲	41 (4.0)	556 (6.7)	-21 (5.2) ▼	0 (0.0)	~ ~	-1 (1.2)
Slovenia	57 (3.4)	519 (2.5)	14 (5.1) ▲	42 (3.4)	525 (3.1)	-16 (5.1) ▼	1 (0.9)	~ ~	1 (0.9)
Italy	53 (3.8)	548 (4.0)	3 (5.2)	47 (3.8)	555 (3.7)	-3 (5.2)	0 (0.0)	~ ~	0 (0.4)
Norway	56 (4.4)	496 (4.1)	6 (6.1)	42 (4.1)	500 (3.3)	-7 (6.0)	2 (1.5)	~ ~	2 (1.7)
Lithuania	40 (3.0)	526 (2.7)	6 (4.3)	60 (3.0)	545 (2.0)	-4 (4.4)	0 (0.0)	~ ~	-1 (1.0)
Denmark	51 (3.9)	541 (3.4)	0 0	49 (4.0)	553 (3.5)	0 0	0 (0.5)	~ ~	0 0
Latvia	51 (3.0)	531 (3.6)	19 (4.4) ▲	45 (3.0)	550 (2.8)	-13 (4.9) ▼	4 (1.5)	564 (11.8)	-7 (3.0) ▼
Iceland	48 (0.4)	509 (1.9)	-2 (0.5) ▼	49 (0.4)	511 (1.8)	-1 (0.5)	3 (0.1)	504 (10.6)	3 (0.1) ▲
Belgium (Flemish)	47 (3.9)	546 (2.7)	0 0	52 (3.9)	548 (2.6)	0 0	0 (0.3)	~ ~	0 0
Austria	42 (3.5)	542 (3.2)	0 0	58 (3.5)	536 (2.8)	0 0	0 (0.0)	~ ~	0 0
Belgium (French)	39 (3.8)	496 (5.5)	0 0	59 (3.7)	502 (3.3)	0 0	2 (1.3)	~ ~	0 0
Georgia	51 (3.1)	467 (4.9)	0 0	29 (3.3)	464 (4.1)	0 0	20 (2.9)	489 (6.2)	0 0
Poland	38 (3.6)	512 (3.9)	0 0	60 (3.7)	524 (3.2)	0 0	2 (0.8)	~ ~	0 0
Trinidad and Tobago	41 (3.1)	407 (9.8)	0 0	53 (3.4)	456 (6.0)	0 0	7 (2.0)	485 (14.4)	0 0
Germany	33 (2.8)	541 (4.1)	2 (4.1)	67 (2.8)	553 (2.5)	1 (4.1)	0 (0.1)	~ ~	-2 (0.9) ▼
Hungary	38 (3.6)	529 (5.6)	12 (4.8) ▲	58 (3.8)	563 (3.5)	-6 (5.6)	4 (1.7)	568 (5.7)	-6 (3.3)
Russian Federation	35 (2.3)	542 (4.9)	-2 (4.2)	62 (2.5)	577 (4.0)	7 (4.5)	2 (1.1)	~ ~	-5 (2.2) ▼
Moldova, Rep. of	35 (3.5)	495 (5.9)	13 (5.3) ▲	55 (3.8)	499 (4.2)	-5 (6.2)	10 (2.4)	513 (8.3)	-8 (4.1) ▼
Slovak Republic	34 (2.9)	520 (5.4)	3 (4.3)	59 (3.3)	534 (3.6)	2 (5.3)	7 (1.8)	553 (3.9)	-5 (3.4)
Spain	32 (3.6)	498 (6.2)	0 0	68 (3.6)	519 (2.8)	0 0	0 (0.0)	~ ~	0 0
United States	26 (3.4)	535 (6.4)	3 (5.4)	68 (3.7)	541 (3.9)	1 (5.4)	5 (1.6)	540 (10.7)	-3 (2.9)
Sweden	33 (3.5)	542 (3.8)	8 (4.5)	61 (4.1)	553 (2.9)	-5 (5.2)	6 (2.3)	545 (8.5)	-2 (3.3)
Canada, Alberta	24 (2.5)	558 (4.2)	0 0	74 (2.7)	561 (3.0)	0 0	3 (1.2)	542 (22.9)	0 0
Canada, Nova Scotia	19 (2.3)	536 (6.1)	0 0	79 (2.5)	544 (2.5)	0 0	2 (0.9)	~ ~	0 0
France	14 (1.9)	505 (4.8)	-3 (3.1)	85 (2.2)	524 (2.6)	3 (3.4)	1 (1.0)	~ ~	0 (1.4)
Netherlands	18 (3.3)	527 (4.1)	4 (4.2)	71 (3.8)	551 (2.0)	5 (5.5)	11 (2.6)	551 (5.1)	-10 (4.9) ▼
Macedonia, Rep. of	24 (3.3)	430 (10.6)	9 (4.3) ▲	58 (4.0)	454 (7.4)	0 (5.7)	17 (3.0)	427 (14.8)	-9 (4.8)
Kuwait	5 (1.8)	315 (23.7)	0 0	91 (2.5)	331 (4.4)	0 0	4 (1.8)	345 (15.5)	0 0
Iran, Islamic Rep. of	28 (2.8)	401 (6.8)	5 (4.4)	44 (3.7)	422 (5.3)	5 (6.0)	28 (3.4)	439 (7.9)	-10 (5.0) ▼
Canada, Quebec	7 (1.7)	528 (9.1)	3 (2.4)	91 (2.1)	535 (3.1)	-3 (3.0)	2 (1.3)	~ ~	0 (1.8)
Canada, British Columbia	10 (2.4)	570 (6.9)	0 0	83 (3.2)	558 (3.3)	0 0	7 (2.3)	556 (11.8)	0 0
Canada, Ontario	6 (1.9)	539 (6.1)	2 (2.3)	85 (3.4)	554 (3.2)	-3 (4.5)	9 (3.1)	563 (7.2)	1 (4.1)
Scotland	11 (2.6)	525 (10.7)	0 (3.9)	71 (4.3)	528 (3.3)	0 (6.0)	18 (3.8)	524 (7.2)	0 (5.2)
Qatar	12 (0.2)	352 (5.3)	0 0	68 (0.3)	354 (1.5)	0 0	20 (0.2)	344 (3.1)	0 0
New Zealand	10 (1.2)	508 (8.4)	1 (2.6)	71 (2.5)	535 (2.6)	2 (4.7)	19 (2.4)	539 (4.4)	-3 (4.2)
England	8 (1.6)	566 (17.1)	-1 (2.8)	71 (3.8)	536 (3.7)	23 (5.8) ▲	21 (3.5)	548 (6.3)	-22 (5.8) ▼
Israel	6 (1.9)	497 (23.2)	2 (2.4)	49 (4.1)	527 (6.4)	7 (6.1)	45 (4.0)	499 (8.3)	-9 (5.9)
Morocco	15 (2.8)	318 (15.8)	-1 (4.2)	35 (3.9)	338 (10.5)	4 (6.5)	50 (3.8)	318 (7.7)	-3 (6.7)
Indonesia	19 (2.3)	391 (8.1)	0 0	32 (3.8)	408 (7.2)	0 0	49 (3.7)	408 (6.3)	0 0
Chinese Taipei	3 (0.7)	504 (6.8)	0 0	22 (2.9)	530 (4.6)	0 0	75 (2.8)	539 (2.4)	0 0
Hong Kong SAR	1 (0.6)	~ ~	1 (0.6)	18 (3.3)	544 (6.1)	5 (5.2)	81 (3.3)	568 (2.6)	-6 (5.2)
Singapore	3 (0.9)	583 (11.0)	2 (1.1) ▲	1 (0.5)	~ ~	-5 (1.6) ▼	96 (1.1)	558 (3.0)	2 (2.0)
South Africa	3 (0.8)	244 (31.8)	0 0	16 (2.4)	355 (21.7)	0 0	81 (2.4)	292 (6.3)	0 0
International Avg.	32 (0.5)	489 (1.6)		51 (0.5)	504 (0.9)		17 (0.3)	486 (1.7)	

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

- ▲ Percent in 2006 significantly higher
- ▼ Percent in 2006 significantly lower

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.

A tilde (~) indicates insufficient data to report achievement.

A diamond (0) indicates the country did not participate in the 2001 assessment.

NOTE: The International Average does not include the results from the Canadian provinces.

Trend Note: The primary education systems of the Russian Federation and Slovenia underwent structural changes. Data for Canada, Ontario include only public schools.

with the average reading achievement for those students. In addition, for countries and provinces that participated in PIRLS 2001, the exhibit includes the change in the percent of students, and indicates whether the change was statistically significant.

Across the PIRLS 2006 participants, the average class size for fourth-grade reading instruction was 24 students. The range in average class size varied from 17 students in Luxembourg to 42 in South Africa. Among the trend participants, more than half had a reduction in average class size between one and three students since 2001. Only Iceland and Singapore had small, but statistically significant, class size increases from 2001 to 2006, both with an average increase of one student. About half the students, internationally on average, were in classes with between 21 and 30 students, and about one third were in classes of 20 students or fewer. Countries where more than half the students were in classes with 20 students or fewer included Luxembourg, Romania, Bulgaria, Slovenia, Italy, Norway, Denmark, Latvia, and Georgia. On average internationally, 17 percent of students were in classes of 31 or more students. However, Israel, Morocco, and Indonesia had approximately half of their students in classes this large. The following countries had most of their students in classes of 31 or more: Chinese Taipei (75%), Hong Kong SAR (81%), Singapore (96%), and South Africa (81%).

The reduction in average class size between PIRLS 2001 and PIRLS 2006 was reflected in changes for the three ranges of class size, with students moving from larger to smaller classes. There was an increase in the percentage of Singaporean fourth graders in classes with 1–20 students, as well as increases in several Eastern European countries, including Romania, Bulgaria, Slovenia, Latvia, Hungary, Moldova, and Macedonia. Iceland was the only country with a decrease, but it was small and nearly half of the students were still in small classes in 2006. Most of the increases in percentages of students in classes of 1 to 20 were accompanied by commensurate decreases in the percentages of students in larger classes (with 21–30 students, 31 or more students, or both). In England, the increase in the percentage of students in classes with 21 to 30 students was accompanied by a decrease in the percentage of students in classes with 31 or more students.

How Do Schools Help Students with Reading Difficulties?

Countries differ in their policies and approaches to diagnostic screening and provisions for students with reading difficulties, as explained in more detail in the *PIRLS 2006 Encyclopedia*. Exhibit 5.17 presents teachers' reports of the percent of students needing and receiving remedial reading instruction. On average internationally, teachers estimated that about one tenth of the students were likely to have experienced difficulty understanding the spoken language of the test. Teachers' estimates were 20 percent or higher in Indonesia, Iran, Kuwait, Morocco, and South Africa. Internationally on average, teachers reported that 17 percent of their students were in need of remedial reading instruction. However, the percentage of students needing remedial reading instruction exceeded the percentage who received remedial instruction in nearly every country.

Exhibit 5.18 shows teachers' reports of the availability of specialists either in the regular classroom or in a separate remedial reading classroom. On average internationally, 41 percent of students did not have access to any type of specialist. However, internationally on average, about 40 percent of students were in classrooms where a remedial reading specialist was either sometimes or always available. Also, an equivalent percent had access, either sometimes or always, to another type of specialist, such as a learning specialist or speech therapist.

Exhibit 5.17 Students In Class Needing Special Instruction

PIRLS 2006
4th Grade

Countries	Percent Experiencing Difficulties Understanding Spoken Language of the Test	Percent Needing Remedial Instruction in Reading	Percent Receiving Remedial Instruction When Needed	Percent Receiving Enrichment Reading Instruction
Austria	7 (0.7)	15 (0.9)	12 (0.7)	6 (1.0)
Belgium (Flemish)	6 (0.8)	18 (0.9)	14 (0.8)	16 (2.0)
Belgium (French)	5 (0.6)	17 (1.0)	8 (0.9)	3 (0.7)
Bulgaria	10 (1.5)	17 (1.0)	15 (1.0)	22 (2.3)
Canada, Alberta	5 (1.0)	19 (1.0)	14 (0.9)	4 (0.8)
Canada, British Columbia	5 (0.7)	20 (1.1)	15 (0.9)	3 (0.9)
Canada, Nova Scotia	1 (0.3)	20 (0.8)	17 (0.8)	2 (0.5)
Canada, Ontario	4 (0.7)	20 (1.4)	13 (1.0)	4 (1.2)
Canada, Quebec	3 (1.0)	22 (1.4)	14 (1.1)	1 (0.3)
Chinese Taipei	7 (0.6)	12 (0.8)	3 (0.6)	2 (0.7)
Denmark	7 (1.0)	16 (0.6)	12 (0.7)	0 (0.0)
England	3 (0.6)	18 (1.0)	15 (1.0)	2 (0.6)
France	2 (0.2)	13 (0.8)	3 (0.4)	1 (0.3)
Georgia	5 (1.4)	17 (1.6)	r 12 (1.1)	r 22 (2.6)
Germany	5 (0.6)	21 (1.4)	13 (1.6)	4 (0.9)
Hong Kong SAR	4 (0.8)	8 (1.0)	3 (0.6)	1 (0.5)
Hungary	r 11 (1.4)	20 (1.0)	16 (1.0)	3 (0.9)
Iceland	3 (0.1)	17 (0.1)	15 (0.1)	4 (0.2)
Indonesia	21 (1.7)	21 (1.5)	18 (1.4)	48 (3.1)
Iran, Islamic Rep. of	20 (0.9)	18 (0.9)	12 (0.8)	13 (2.2)
Israel	12 (1.2)	18 (0.9)	10 (0.6)	r 6 (1.0)
Italy	10 (1.0)	14 (0.7)	r 10 (0.6)	8 (1.2)
Kuwait	30 (4.9)	r 26 (1.4)	s 17 (1.4)	r 16 (2.8)
Latvia	9 (1.2)	17 (1.2)	r 7 (0.8)	14 (2.3)
Lithuania	9 (0.8)	9 (0.6)	7 (0.6)	5 (1.3)
Luxembourg	14 (0.1)	13 (0.1)	6 (0.0)	2 (0.0)
Macedonia, Rep. of	r 8 (0.7)	r 15 (1.0)	s 15 (1.0)	25 (1.8)
Moldova, Rep. of	13 (1.3)	17 (1.2)	r 12 (1.0)	36 (1.7)
Morocco	27 (1.6)	31 (1.3)	r 15 (1.3)	4 (1.3)
Netherlands	5 (0.5)	17 (0.7)	16 (0.7)	10 (1.4)
New Zealand	3 (0.5)	10 (0.4)	7 (0.3)	4 (0.7)
Norway	4 (0.7)	15 (1.0)	11 (1.0)	2 (0.7)
Poland	14 (1.3)	23 (1.3)	19 (1.2)	5 (1.7)
Qatar	13 (0.1)	20 (0.1)	s 12 (0.1)	r 17 (0.1)
Romania	10 (1.0)	20 (1.1)	15 (1.1)	10 (1.6)
Russian Federation	6 (1.0)	15 (1.0)	8 (0.9)	5 (1.2)
Scotland	2 (0.4)	13 (1.0)	10 (0.9)	1 (0.6)
Singapore	6 (0.7)	9 (0.7)	5 (0.7)	11 (1.8)
Slovak Republic	4 (0.6)	17 (1.1)	8 (0.9)	31 (1.9)
Slovenia	10 (0.7)	16 (0.6)	14 (0.7)	11 (1.3)
South Africa	r 20 (1.8)	26 (1.5)	r 15 (1.3)	7 (1.2)
Spain	4 (0.8)	17 (1.0)	14 (1.0)	2 (0.7)
Sweden	3 (0.6)	13 (0.8)	9 (0.6)	7 (1.8)
Trinidad and Tobago	10 (1.5)	26 (1.6)	14 (1.2)	11 (2.1)
United States	4 (0.6)	24 (1.0)	18 (1.2)	8 (1.0)
International Avg.	9 (0.2)	17 (0.2)	12 (0.1)	10 (0.2)

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

Background data provided by teachers.

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

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.

NOTE: The International Average does not include the results from the Canadian provinces.



Exhibit 5.18 Availability of Specialists

PIRLS 2006
4th Grade

Countries	Percentage of Students in Classrooms with						
	Remedial Reading Specialist Available*			Other Specialist(s) Available			No Access to Any Specialist
	Always	Sometimes	Never	Always	Sometimes	Never	
Austria	2 (1.1)	21 (2.6)	77 (2.7)	2 (0.8)	44 (3.3)	53 (3.3)	45 (3.3)
Belgium (Flemish)	18 (3.1)	61 (4.4)	20 (3.4)	7 (2.0)	37 (3.9)	56 (4.1)	15 (3.0)
Belgium (French)	3 (1.3)	14 (2.4)	82 (2.8)	17 (2.4)	53 (4.2)	30 (4.0)	24 (3.8)
Bulgaria	4 (1.4)	7 (2.3)	89 (2.7)	7 (2.1)	24 (3.4)	69 (3.6)	62 (3.7)
Canada, Alberta	13 (2.7)	44 (4.0)	42 (3.7)	5 (1.7)	70 (3.9)	26 (3.6)	15 (2.7)
Canada, British Columbia	r 23 (3.3)	58 (4.0)	19 (3.3)	r 9 (2.7)	77 (3.9)	14 (3.3)	r 3 (1.6)
Canada, Nova Scotia	25 (3.1)	61 (3.4)	14 (2.6)	9 (2.2)	80 (3.3)	11 (2.6)	3 (1.1)
Canada, Ontario	17 (3.9)	41 (4.9)	42 (5.1)	7 (2.9)	63 (5.3)	30 (4.6)	17 (3.4)
Canada, Quebec	5 (1.6)	40 (4.5)	56 (4.8)	15 (3.0)	69 (4.3)	16 (3.3)	7 (2.0)
Chinese Taipei	7 (2.1)	21 (3.6)	73 (3.8)	2 (1.2)	12 (2.6)	86 (2.7)	69 (3.9)
Denmark	30 (3.2)	65 (3.1)	5 (1.7)	5 (2.1)	53 (3.9)	42 (3.6)	4 (1.5)
England	24 (3.7)	60 (4.5)	16 (3.0)	2 (1.1)	62 (3.8)	36 (3.9)	8 (1.9)
France	6 (1.4)	33 (3.2)	61 (3.5)	r 1 (0.6)	12 (2.7)	87 (2.8)	50 (3.7)
Georgia	6 (1.9)	23 (3.7)	70 (4.1)	3 (1.2)	40 (4.4)	58 (4.5)	50 (4.9)
Germany	5 (1.6)	35 (3.4)	59 (3.6)	3 (1.1)	11 (2.2)	86 (2.4)	58 (3.7)
Hong Kong SAR	2 (1.1)	4 (1.3)	94 (1.7)	1 (0.9)	6 (2.1)	93 (2.3)	89 (2.7)
Hungary	8 (2.2)	15 (3.0)	77 (3.4)	22 (3.6)	43 (3.6)	35 (3.8)	29 (3.8)
Iceland	35 (0.4)	59 (0.4)	6 (0.1)	7 (0.2)	40 (0.4)	53 (0.4)	5 (0.1)
Indonesia	15 (2.6)	23 (3.5)	62 (3.7)	2 (0.9)	10 (2.8)	89 (3.0)	63 (3.9)
Iran, Islamic Rep. of	4 (1.5)	13 (2.6)	83 (3.2)	0 (0.0)	6 (1.9)	94 (1.9)	82 (3.5)
Israel	36 (4.0)	41 (4.0)	24 (3.4)	3 (1.6)	29 (3.9)	68 (3.9)	22 (3.3)
Italy	0 (0.0)	5 (1.7)	95 (1.7)	2 (1.0)	6 (1.9)	92 (2.2)	89 (2.7)
Kuwait	3 (1.4)	7 (2.3)	90 (2.7)	5 (1.9)	18 (2.9)	77 (3.3)	r 73 (3.7)
Latvia	13 (2.7)	16 (2.8)	71 (3.3)	39 (4.0)	41 (4.4)	20 (3.4)	16 (3.1)
Lithuania	7 (1.7)	16 (2.1)	77 (2.7)	44 (3.1)	45 (3.3)	11 (2.0)	10 (1.8)
Luxembourg	11 (0.1)	21 (0.1)	68 (0.2)	3 (0.1)	10 (0.1)	87 (0.1)	62 (0.2)
Macedonia, Rep. of	5 (1.7)	9 (2.5)	86 (3.0)	12 (2.8)	48 (4.0)	41 (3.8)	37 (4.0)
Moldova, Rep. of	5 (1.5)	8 (2.3)	87 (2.6)	3 (1.1)	13 (2.8)	84 (3.0)	74 (3.6)
Morocco	1 (0.1)	6 (1.7)	93 (1.7)	1 (0.9)	1 (0.8)	98 (1.2)	91 (2.1)
Netherlands	29 (4.0)	57 (4.5)	14 (3.0)	1 (0.0)	35 (4.3)	64 (4.4)	12 (2.9)
New Zealand	27 (2.4)	40 (3.1)	33 (2.7)	11 (1.8)	60 (3.2)	28 (2.9)	16 (2.2)
Norway	7 (2.5)	42 (4.4)	51 (4.1)	3 (1.4)	51 (5.1)	46 (4.8)	30 (4.3)
Poland	26 (3.6)	26 (3.1)	48 (3.6)	23 (3.4)	61 (4.1)	15 (2.8)	8 (1.8)
Qatar	s 6 (0.1)	7 (0.2)	86 (0.2)	s 12 (0.2)	14 (0.2)	74 (0.3)	s 71 (0.3)
Romania	3 (1.1)	13 (2.4)	84 (2.6)	4 (1.4)	22 (3.2)	74 (3.4)	66 (3.8)
Russian Federation	15 (2.3)	22 (2.5)	63 (3.3)	27 (3.1)	49 (3.4)	24 (2.9)	24 (3.2)
Scotland	18 (3.2)	36 (4.5)	46 (4.4)	r 10 (3.2)	72 (4.1)	18 (3.2)	8 (2.5)
Singapore	7 (1.5)	14 (1.7)	79 (2.0)	5 (1.3)	18 (2.5)	77 (2.5)	69 (2.5)
Slovak Republic	5 (1.4)	19 (2.8)	76 (2.9)	12 (2.4)	50 (3.9)	38 (3.5)	37 (3.5)
Slovenia	18 (2.5)	56 (3.2)	27 (2.9)	15 (2.5)	52 (3.2)	32 (3.3)	10 (1.8)
South Africa	10 (1.7)	13 (1.9)	77 (2.5)	4 (1.3)	10 (1.8)	86 (2.1)	74 (2.6)
Spain	27 (3.5)	59 (4.1)	14 (3.0)	19 (2.7)	51 (3.9)	31 (3.6)	r 6 (2.0)
Sweden	8 (2.0)	80 (3.0)	13 (2.6)	4 (1.5)	53 (4.0)	43 (4.0)	9 (2.0)
Trinidad and Tobago	5 (1.9)	10 (2.4)	85 (2.9)	1 (0.9)	6 (1.8)	93 (2.0)	82 (2.9)
United States	34 (4.2)	37 (4.2)	29 (2.9)	27 (2.9)	60 (3.4)	13 (2.3)	8 (1.9)
International Avg.	12 (0.4)	28 (0.5)	60 (0.5)	9 (0.3)	33 (0.5)	58 (0.5)	41 (0.5)

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Background data provided by teachers.

* Remedial Reading Specialist Available indicates that a specialist was available either in the classroom or in a remedial reading classroom.

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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.

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