

# Appendix C

## Population Coverage and Sample Participation Rates

## Appendix C.1: Information About the Students Assessed in PIRLS 2011

Reported by National Research Coordinators, except for average age at time of testing

Country	Country's Name for Fourth Year of Formal Schooling*	Average Age at Time of Testing	Information About Age of Entry, Promotion, and Retention
Australia	Year 4	10.0	Varies by state, but children generally must begin school by age 6. Most children actually begin school at the minimum age of 4.5–5, and the age of entry policy has been revised within the past ten years. Policy on promotion and retention varies by state but, generally, there is automatic promotion for Grades 1–8.
Austria	Grade 4	10.3	Children must begin school in the September following their 6th birthday, but parents can request early admission for children who turn 6 by March 1st of the following year. Automatic promotion for Grade 1, but there is retention in Grades 2–4 for students failing one or more compulsory subjects.
Azerbaijan	Grade 4	10.2	Children must be 6 years old by the end of September to begin school on September 15 of that year, but children the Ministry of Education identifies as talented who are born before the end of November can begin school in September of the year they turn 6. Promotion is automatic for Grades 1–4, but is dependent on academic progress for Grades 5–8.
Belgium (French)	Grade 4	10.1	Children must begin school in the September of the calendar year of their 6th birthday. Students can be retained one additional year in Grades 1–2, Grades 3–6, and Grades 7–8.
Bulgaria	Grade 4	10.7	Children begin school the calendar year of their 7th birthday, but they may begin at age 6 at parent or guardian discretion. There is automatic promotion for Grades 1–4, with remedial summer courses instead of retention. There are two chances to pass a supplementary exam before retention for Grades 5–8.
Canada	Grade 4	9.9	Varies by province
Chinese Taipei	Grade 4	10.2	Children must be 6 years old before September 1st to begin school in the September of the same calendar year. There is automatic promotion for Grades 1–8.
Colombia	Grade 4	10.4	Children must be at least 6 years old to begin school, although some students start school somewhat older. Schools define promotion and retention policies.
Croatia	Grade 4	10.7	The age of entry policy, which has changed within the past ten years, says that all children must begin school by 7 years old. Although children must be at least 6 years old by the end of March to begin the following September, children typically begin school at age 7. Student promotion is dependent on meeting minimum standards in Grades 1–8.
Czech Republic	Grade 4	10.4	Compulsory schooling begins at the beginning of the school year (September 1st) following the child's 6th birthday unless granted a postponement, which an increasing number of parents are seeking. Promotion is dependent on academic progress in all compulsory subjects, but is automatic for students who have repeated a year.
Denmark	Grade 4	10.9	Children begin preprimary education the year they turn 6 and primary education the following year. Delaying entry by a year requires municipal board approval, but parents can have their child begin a year early. This policy has changed within the past ten years. There is automatic promotion in Grades 1–8, though in special cases students may be promoted or retained based on individual assessments, with parental consent.
England	Year 5	10.3	Children begin school the term (typically September, January, or April) of their 5th birthday. Many local authorities make provision for all children to begin in the September of the school year in which they will turn 5 and some have changed the discretionary time so that children can begin at a younger age, although all of this is subject to parental discretion. There is no policy on promotion and retention.
Finland	Grade 4	10.8	Children begin school the autumn of the year of their 7th birthday, although it is possible to enter school either one year earlier or one year later than the official policy, following discussions with an expert (e.g., school psychologist). There is automatic promotion for Grades 1–8, with retention only in extreme situations.
France	CM1 = Cours Moyen 1ère année - Average Course 1st year, or 'Second year of the 3rd Cycle' (Deepenings Cycle)	10.0	Children must start school at the beginning of the school year (September) in the calendar year of their 6th birthday, although parents and/or teachers can request that children start early. Promotion and retention are based on academic progress. Aside from exceptional circumstances, students can only be retained once during primary school.
Georgia	Grade 4	10.0	Compulsory schooling begins at age 6 according to the Law on General Education, which has been updated within the past ten years. Promotion is automatic for Grades 1–4, and dependent on academic progress for Grades 5–8.

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

\* The PIRLS target population is the grade that represents four years of schooling counting from the first year of ISCED Level 1. However, IEA has a policy that students do not fall under the minimum average age of 9.5 years old at the time of testing, so England, Malta, New Zealand, and Trinidad and Tobago assessed students in their fifth year of formal schooling.

Country	Country's Name for Fourth Year of Formal Schooling*	Average Age at Time of Testing	Information About Age of Entry, Promotion, and Retention
Germany	Grade 4	10.4	Compulsory schooling begins the year a child turns 6. Children must be at least 6 years old before a statutory qualifying date (which varies by state; in most states the date falls between June 30th and September 30th) to begin on August 1st. The official policy grants parents the right to request early admission or postponed enrollment, but the school administration has the final decision. The policy on age of entry has been revised within the past ten years. There is automatic promotion in Grade 1, and promotion policies differ between states for later grades.
Hong Kong SAR	Primary 4	10.1	Children begin school the September after they turn 5 years, 8 months old. Representatives of the Education Bureau may prescribe a maximum rate of repetition.
Hungary	Grade 4	10.7	Children begin school during the calendar year they turn 6, if their birthday is before May 31st; however, children may begin during the calendar year of their 6th, 7th, or 8th birthday at parental request. Promotion is automatic in Grades 1–3, and dependent on academic progress for Grades 4–8.
Indonesia	Grade 4	10.4	Children must be 7 years old by the end of June to begin on July 12th, although parents have some choice in starting children at age 6. Promotion is dependent on academic progress for Grades 1–8.
Iran, Islamic Rep. Of	Grade 4	10.2	Children must be 6 years old by September 22nd to begin school September 23rd, although there are few private schools that allow registration at 6.5 years. Students with failing grades in June must take a cumulative exam in September to determine promotion or retention.
Ireland	Fourth class	10.3	The Education (Welfare) Act of 2000 requires children to attend primary schools from the time that they are 6 years old but not before they are 4. In practice, nearly half of 4-year-olds and almost all 5-year-olds are enrolled in infant classes in primary schools. Children only are allowed to repeat a year for educational reasons and in exceptional circumstances.
Israel	Grade 4	10.1	The official policy is that children begin school the calendar year of their 6th birthday, but parents have the final say if they feel their children are not ready to begin. There is retention only in exceptional cases.
Italy	Grade 4	9.7	Children begin school the calendar year of their 6th birthday, but parents can enroll children who will turn 6 years old by April 30th of the following calendar year in the calendar year of their 5th birthday. The age of entry policy has been revised within the past ten years. Promotion is dependent on academic progress for Grades 1–8.
Lithuania	Grade 4	10.7	Children must begin school by the calendar year of their 7th birthday, but parents can enroll children one year early if the child satisfies the requirements of the Ministry of Education and Science. The age of entry policy has been revised within the past ten years. There is no national policy on promotion and retention; decisions are made at the school level.
Malta	Year 5	9.8	Children begin school in late September of the calendar year of their 5th birthday. Students repeat a class only in exceptional circumstances in primary school and on the basis of their academic performance and other factors in exceptional circumstances in secondary school. Students can be retained only once during each education cycle.
Morocco	Grade 4	10.5	Children must be at least 5 years, 6 months old by the beginning of September to begin school, and parents rarely postpone the start. Promotion depends on academic progress for both primary and secondary grades.
Netherlands	Grade 6	10.2	Children must begin kindergarten on the first school day of the month after their 5th birthday. Most children begin kindergarten when they turn 4 and primary education at age 6, although some children begin primary education a year later at age 7. Promotion and retention are decided by the school, dependent on academic progress.
New Zealand	Year 5	10.1	Children must be enrolled in school by their 6th birthday but have the right to begin school at age 5, and nearly all children begin school on or soon after their 5th birthday. There is automatic promotion, with retention only in very special circumstances with school and parental input.
Northern Ireland	Year 6	10.4	Children must be 4 years old by July 1st to begin school in September. The majority of children start and continue with their age group, but some transfer to post-primary a year late or early.
Norway	Grade 4 (4. trinn)	9.7	Children must begin school the calendar year of their 6th birthday. There is automatic promotion for all grades.
Oman	Grade 4	9.9	Children begin school the year of their 6th birthday. Children must be at least 5 years, 9 months old at the start of the academic year (beginning of September), but parents can enroll their children in private schools where the official entry age is 5 years, 5 months. The age of entry policy has been revised within the past ten years. Promotion is automatic for Grades 1–4 and dependent on academic progress for Grades 5–8.
Poland	Grade 3 of primary school	9.9	Children must begin school the calendar year of their 7th birthday, but parents can postpone the beginning of school for medical or psychological reasons. The age of entry policy has been revised within the past ten years. Parental consent is required for retention in Grades 1–6, and promotion is dependent upon academic progress in higher grades.

Country	Country's Name for Fourth Year of Formal Schooling*	Average Age at Time of Testing	Information About Age of Entry, Promotion, and Retention
Portugal	Grade 4	10.0	Children must begin school the year of their 6th birthday if they turn 6 years old by September 15th. Parents can enroll children who turn 6 years old by the end of December, depending on school availability. The age of entry policy has been revised within the past ten years. Promotion is automatic for Grade 1, and dependent on academic progress for Grades 2–8.
Qatar	Grade 4	10.0	Children must begin school in the September of the calendar year of their 6th birthday, but parents can enroll their children in private schools where the official entry age is 5 years, 5 months. Promotion is dependent on academic progress for Grades 1–8.
Romania	Grade 4	10.9	According to the law of education, which has been revised within the past ten years, children must begin school at age 6, although parents can postpone enrollment for one year. Promotion is automatic for Grade 1, and dependent on academic progress for Grades 2–8.
Russian Federation	Grade 4	10.8	Children must be at least 6 years, 6 months old by the end of August to begin school in September but typically begin at age 7. Promotion is automatic for Grade 1 and dependent on academic progress for Grades 2–8.
Saudi Arabia	Grade 4	10.0	Children must begin school the calendar year of their 6th birthday. There is no policy on promotion and retention.
Singapore	Primary 4	10.4	According to the Compulsory Education Act, children must begin school the calendar year of their 7th birthday, although parents may seek a deferral of registration based on medical grounds. There is automatic promotion for Grades 1–4; retention is at principal's discretion for Grade 5 and dependent on academic progress for Grades 6–8.
Slovak Republic	Grade 4	10.4	Children must begin school in September if they turn 6 years old by August 31st. Children may begin school early or after an approved delay, based on psychological tests and professional recommendations. Promotion is dependent on academic progress. Students failing 1–2 required subjects must pass a makeup exam; students failing more than 2 are retained.
Slovenia	Grade 4	9.9	Children must begin school the calendar year of their 6th birthday, but some children who are 6 years old in January enter school in the September of the calendar year before they turn 6. The age of entry policy has been revised within the past ten years. Generally, there is automatic promotion for Grades 1–8, except for students with learning difficulties.
Spain	Primary Education Year Four	9.8	Children must begin school the calendar year of their 6th birthday. Almost every child begins kindergarten at the age of 3 even though it is not compulsory. Students can be retained for 1 year during Grades 1–6, but students with special needs can be retained twice. Students that do not reach the goals in Grades 7 and 8 can be retained in both grades.
Sweden	Grade 4	10.7	Children begin school in the fall of the calendar year of their 7th birthday but can begin the year they turn 6 or 8 years old for special reasons. There is automatic promotion for all grades.
Trinidad and Tobago	Standard 3	10.3	Children must begin school in September of the calendar year of their 5th birthday. Children may begin at age 4, at parent and preprimary teacher discretion, or at an older age, based on socio-economic position. Promotion is dependent on academic progress for Grades 1–6, with automatic promotion for Grades 7–8.
United Arab Emirates	Basic Stage, Cycle 1, Level 1	9.8	Children can begin school when they are 5.5 years old. Parents or guardians can decide when children begin school, but it must be by age 8. The age of entry policy has been revised within the past ten years. Students in Grades 1–5 are subject to remedial instruction for promotion, and promotion in Grades 6–8 is dependent on academic achievement.
United States	Grade 4	10.2	Varies by state, but children commonly begin kindergarten at age 5 (by parental choice) and typically begin primary school at age 6 (by law).

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

**Sixth Grade Participants**

Botswana	Standard 6	12.8	Children must be 6 years old by the end of June to begin school in the January of the same calendar year, but children from remote areas may begin school later than age 6. There is up to 12.5% retention in each class and accelerated progression is possible after parent consultation.
Honduras	Grade 6	12.7	Children must be 7 years old by the end of January to begin school the following February, but about 30% of children typically begin primary school at age 6, per principals' decisions. Promotion is dependent on academic progress on exams prepared and administered by teachers.
Kuwait	Grade 6	11.9	Children must be 6 years old by March 15th to begin school that calendar year, but typically begin primary school at age 5.5 or 6. The policy does not allow for parental discretion. Promotion is automatic for Grades 1–3, and dependent on academic progress for Grades 4–8.
Morocco	Grade 6	12.7	Children must be at least 5 years, 6 months old by the beginning of September to begin school, and parents rarely postpone the start. Promotion depends on academic progress for both primary and secondary grades.

Country	Country's Name for Fourth Year of Formal Schooling*	Average Age at Time of Testing	Information About Age of Entry, Promotion, and Retention
<b>Benchmarking Participants<sup>◊</sup></b>			
Alberta, Canada	Grade 4	9.9	The law requires all children who are 6 years old by September 1 to attend school, although school boards may set their own age requirements for entering school, and many allow children to enter Grade 1 if they are 6 years old by March 1 of the following year. Parental discretion or choice is allowed. School principals make promotion decisions in line with school policies.
Ontario, Canada	Grade 4	9.8	Children must attend school in September if they turn 6 years old by September 1 but also have the right to attend school in September if they will turn 6 by December 31 of that calendar year. Parents may choose to enroll their children in junior kindergarten at age 4 or senior kindergarten at age 5. School principals make promotion decisions, appealable to the school board.
Quebec, Canada	Grade 4	10.1	Children must be 6 years old by September 30th to begin school in the September of that calendar year. School boards determine promotion and the Ministry sets rules for obtaining diplomas.
Maltese - Malta	Year 5	9.8	Children begin school in late September of the calendar year of their 5th birthday. Students repeat a class only in exceptional circumstances in primary school and on the basis of their academic performance and other factors in exceptional circumstances in secondary school. Students can be retained only once during each education cycle.
Eng/Afr (5) - RSA	Grade 5	11.4	Children must be 6 years old by June 30th of the year in which they enroll and children are encouraged to begin at age 7. The age of entry policy has been revised within the past ten years. In principle, students should progress with their age cohort. The norm for repetition is one year per school phase where necessary.
Andalusia, Spain	Grade 4	9.9	Children begin in the September of the year of their 6th birthday and only children considered advanced during preprimary education begin one year early. There is automatic promotion after Grades 1, 3, and 5; teachers may retain students once after Grades 2, 4, or 6 and at any point in Grades 7–8.
Abu Dhabi, UAE	Grade 4	9.7	Children must be 6 years old by October 1st of the school year in which they enroll. Parents sometimes place students in private schools that accept younger students, then transfer them to the public system. The age of entry policy has changed within the past ten years. There is automatic promotion in Grades 1–5, except in special cases and with parental consent. Promotion is dependent on academic progress in Grades 6–8.
Dubai, UAE	Grade 4	9.8	Children can begin school the calendar year of their 5th birthday. The policy on promotion and retention varies by school type.
Florida, US	Grade 4	10.4	Florida law (Section 1003.21 (1) (a)) specifies that children who are 6 or who will be 6 by February 1st of that school year are required to attend school. If a child enters public school at age 6 without completing kindergarten, they will be placed in kindergarten. Children who have attained the age of 5 on or before September 1 of the school year are eligible for admission to public kindergarten during that school year based on rules prescribed by the school board. Statewide, students are retained after Grade 3 if they do not pass the state reading assessment. Otherwise, policies for promotion and retention are determined by districts, based on academic performance.

<sup>◊</sup> Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

Country	Country's Name for Fourth Year of Formal Schooling*	Average Age at Time of Testing	Information About Age of Entry, Promotion, and Retention
Botswana	Standard 4	10.6	Children must be 6 years old by the end of June to begin school in the January of the same calendar year, but children from remote areas may begin school later than age 6. There is up to 12.5% retention in each class and accelerated progression is possible after parent consultation.
Colombia	Grade 4	10.4	Children must be at least 6 years old to begin school, although some students start school somewhat older. Schools define promotion and retention policies.
South Africa	Grade 4	10.5	Children must be 6 years old by June 30th of the year in which they enroll and children are encouraged to begin at age 7. The age of entry policy has been revised within the past ten years. In principle, students should progress with their age cohort. The norm for repetition is one year per school phase where necessary.

Country	International Target Population		Exclusions from National Target Population		
	Coverage	Notes on Coverage	School-level Exclusions	Within-sample Exclusions	Overall Exclusions
Australia	100%		2.1%	2.3%	4.4%
Austria	100%		1.3%	3.8%	5.1%
<sup>2 a</sup> Azerbaijan	100%		2.3%	4.9%	7.2%
<sup>2</sup> Belgium (French)	100%		3.5%	2.1%	5.6%
Bulgaria	100%		1.2%	1.3%	2.5%
<sup>2</sup> Canada	100%		4.1%	5.8%	9.9%
Chinese Taipei	100%		0.1%	1.4%	1.4%
Colombia	100%		1.2%	0.3%	1.5%
<sup>2</sup> Croatia	100%		2.9%	5.0%	7.9%
Czech Republic	100%		4.1%	0.9%	5.1%
<sup>2</sup> Denmark	100%		1.6%	5.8%	7.3%
England	100%		1.7%	0.8%	2.4%
Finland	100%		1.6%	1.5%	3.1%
France	100%		4.9%	0.3%	5.2%
<sup>1 a</sup> Georgia	92%	Students taught in Georgian	1.4%	3.5%	4.9%
Germany	100%		0.9%	1.0%	1.9%
<sup>3</sup> Hong Kong SAR	100%		9.1%	2.7%	11.8%
Hungary	100%		2.2%	2.0%	4.2%
Indonesia	100%		2.4%	0.0%	2.5%
Iran, Islamic Rep. Of	100%		4.4%	0.1%	4.5%
Ireland	100%		1.6%	0.9%	2.5%
<sup>3</sup> Israel	100%		18.5%	6.0%	24.6%
Italy	100%		0.0%	3.7%	3.7%
<sup>1 2</sup> Lithuania	93%	Students taught in Lithuanian	1.9%	3.7%	5.6%
Malta	100%		0.0%	3.6%	3.6%
Morocco	100%		2.0%	0.0%	2.0%
Netherlands	100%		3.7%	0.0%	3.7%
New Zealand	100%		1.3%	2.0%	3.3%
Northern Ireland	100%		2.6%	0.9%	3.5%
Norway	100%		0.9%	3.3%	4.2%
Oman	100%		0.8%	0.7%	1.5%
Poland	100%		2.3%	1.5%	3.8%
Portugal	100%		1.4%	1.1%	2.5%
<sup>2</sup> Qatar	100%		4.3%	1.9%	6.2%
Romania	100%		1.1%	2.9%	4.0%
Russian Federation	100%		2.9%	2.4%	5.3%
Saudi Arabia	100%		1.4%	0.2%	1.6%
<sup>2</sup> Singapore	100%		5.9%	0.4%	6.3%
Slovak Republic	100%		3.8%	0.8%	4.6%
Slovenia	100%		2.3%	0.3%	2.6%
Spain	100%		1.6%	3.7%	5.4%
Sweden	100%		1.9%	2.2%	4.1%
Trinidad and Tobago	100%		0.9%	0.0%	0.9%
United Arab Emirates	100%		1.4%	1.8%	3.3%
<sup>2</sup> United States	100%		0.0%	7.2%	7.2%

<sup>1</sup> National Target Population does not include all of the International Target Population.

<sup>2</sup> National Defined Population covers 90% to 95% of National Target Population.

<sup>3</sup> National Defined Population covers less than 90% of National Target Population.

a Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.

**Appendix C.2: Coverage of PIRLS 2011 Target Population (Continued)**

Country	International Target Population		Exclusions from National Target Population		
	Coverage	Notes on Coverage	School-level Exclusions	Within-sample Exclusions	Overall Exclusions
<b>Sixth Grade Participants</b>					
Botswana	100%		0.1%	0.2%	0.3%
<sup>0</sup> Honduras	100%		3.8%	0.7%	4.5%
<sup>1</sup> Kuwait	78%	Students in public schools	0.3%	0.2%	0.5%
Morocco	100%		2.0%	0.0%	2.0%
<b>Benchmarking Participants<sup>0</sup></b>					
<sup>2</sup> Alberta, Canada	100%		1.5%	5.4%	6.8%
<sup>2</sup> Ontario, Canada	100%		1.0%	7.0%	7.9%
Quebec, Canada	100%		2.7%	1.0%	3.7%
Maltese - Malta	100%		0.0%	4.1%	4.1%
Eng/Afr (5) - RSA	100%	Students taught in Afrikaans and/or English schools	1.9%	0.0%	1.9%
Andalusia, Spain	100%		1.6%	3.5%	5.1%
Abu Dhabi, UAE	100%		1.4%	1.3%	2.7%
Dubai, UAE	100%		0.4%	4.7%	5.1%
<sup>1 3</sup> Florida, US	89%	Students in public schools	0.0%	12.9%	12.9%

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

<sup>0</sup> Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

Country	International Target Population		Exclusions from National Target Population		
	Coverage	Notes on Coverage	School-level Exclusions	Within-sample Exclusions	Overall Exclusions
Botswana	100%		0.1%	0.1%	0.2%
Colombia	100%		1.2%	0.3%	1.5%
South Africa	100%		2.1%	0.9%	3.0%

Country	Number of Schools in Original Sample	Number of Eligible Schools in Original Sample	Number of Schools in Original Sample that Participated	Number of Replacement Schools that Participated	Total Number of Schools that Participated
Australia	290	284	275	5	280
Austria	160	158	158	0	158
Azerbaijan	170	169	142	27	169
Belgium (French)	150	150	115	12	127
Bulgaria	150	147	142	5	147
Canada	1,142	1,125	1,106	5	1,111
Chinese Taipei	150	150	150	0	150
Colombia	157	152	131	19	150
Croatia	152	152	150	2	152
Czech Republic	180	178	161	16	177
Denmark	240	236	207	25	232
England	150	148	109	20	129
Finland	150	146	141	4	145
France	175	175	170	4	174
Georgia	180	177	172	1	173
Germany	200	199	190	7	197
Hong Kong SAR	154	150	130	2	132
Hungary	150	150	146	3	149
Indonesia	158	158	158	0	158
Iran, Islamic Rep. Of	250	244	244	0	244
Ireland	152	151	148	3	151
Israel	153	153	150	2	152
Italy	205	205	166	36	202
Lithuania	160	154	145	9	154
Malta	99	96	96	0	96
Morocco	289	287	284	0	284
Netherlands	151	151	97	41	138
New Zealand	201	199	180	12	192
Northern Ireland	160	160	100	36	136
Norway	150	145	85	35	120
Oman	338	333	327	0	327
Poland	150	150	150	0	150
Portugal	150	150	133	15	148
Qatar	175	167	166	0	166
Romania	150	148	147	1	148
Russian Federation	202	202	202	0	202
Saudi Arabia	175	171	163	8	171
Singapore	176	176	176	0	176
Slovak Republic	200	198	187	10	197
Slovenia	202	201	193	2	195
Spain	314	314	308	4	312
Sweden	161	153	148	4	152
Trinidad and Tobago	150	150	149	0	149
United Arab Emirates	478	460	458	0	458
United States	450	437	349	21	370

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011



**Appendix C.3: School Sample Sizes (Continued)**

Country	Number of Schools in Original Sample	Number of Eligible Schools in Original Sample	Number of Schools in Original Sample that Participated	Number of Replacement Schools that Participated	Total Number of Schools that Participated
<b>Sixth Grade Participants</b>					
Botswana	150	149	149	0	149
Honduras	152	147	133	14	147
Kuwait	150	150	133	0	133
Morocco	289	281	278	0	278
<b>Benchmarking Participants<sup>◇</sup></b>					
Alberta, Canada	150	147	143	2	145
Ontario, Canada	200	191	188	1	189
Quebec, Canada	200	197	189	1	190
Maltese - Malta	99	95	95	0	95
Eng/Afr (5) - RSA	100	92	90	2	92
Andalusia, Spain	150	150	149	0	149
Abu Dhabi, UAE	168	165	164	0	164
Dubai, UAE	152	139	138	0	138
Florida, US	81	80	77	0	77

<sup>◇</sup> Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

Country	Number of Schools in Original Sample	Number of Eligible Schools in Original Sample	Number of Schools in Original Sample that Participated	Number of Replacement Schools that Participated	Total Number of Schools that Participated
Botswana	150	149	149	0	149
Colombia	157	152	131	19	150
South Africa	345	342	336	5	341

Country	Within-school Student Participation (Weighted Percentage)	Number of Sampled Students in Participating Schools	Number of Students Withdrawn from Class/School	Number of Students Excluded	Number of Eligible Students	Number of Students Absent	Number of Students Assessed
Australia	95%	6,709	103	122	6,484	358	6,126
Austria	98%	4,976	25	175	4,776	106	4,670
Azerbaijan	100%	5,098	206	0	4,892	11	4,881
Belgium (French)	97%	3,910	13	63	3,834	107	3,727
Bulgaria	95%	5,725	120	59	5,546	285	5,261
Canada	96%	25,707	292	1,057	24,358	1,152	23,206
Chinese Taipei	99%	4,376	18	35	4,323	30	4,293
Colombia	97%	4,309	201	18	4,090	124	3,966
Croatia	95%	5,097	27	245	4,825	238	4,587
Czech Republic	94%	4,895	28	35	4,832	276	4,556
Denmark	97%	4,994	50	185	4,759	165	4,594
England	94%	4,243	52	27	4,164	237	3,927
Finland	96%	4,914	23	53	4,838	198	4,640
France	98%	4,638	73	15	4,550	112	4,438
Georgia	98%	4,958	23	56	4,879	83	4,796
Germany	96%	4,229	37	21	4,171	171	4,000
Hong Kong SAR	94%	4,189	21	63	4,105	230	3,875
Hungary	97%	5,488	40	67	5,381	177	5,204
Indonesia	97%	5,049	115	1	4,933	142	4,791
Iran, Islamic Rep. Of	99%	5,932	98	5	5,829	71	5,758
Ireland	95%	4,849	24	43	4,782	258	4,524
Israel	94%	4,579	16	91	4,472	286	4,186
Italy	96%	4,529	26	153	4,350	161	4,189
Lithuania	94%	5,140	37	131	4,972	311	4,661
Malta	95%	3,958	24	142	3,792	194	3,598
Morocco	96%	8,381	271	0	8,110	305	7,805
Netherlands	97%	4,179	51	1	4,127	132	3,995
New Zealand	94%	6,192	127	77	5,988	344	5,644
Northern Ireland	93%	3,942	27	49	3,866	280	3,586
Norway	86%	3,921	21	122	3,778	588	3,190
Oman	98%	10,840	129	75	10,636	242	10,394
Poland	96%	5,316	15	71	5,230	225	5,005
Portugal	95%	4,428	18	64	4,346	261	4,085
Qatar	99%	4,394	178	70	4,146	26	4,120
Romania	97%	4,879	91	12	4,776	111	4,665
Russian Federation	98%	4,693	30	89	4,574	113	4,461
Saudi Arabia	98%	4,625	42	4	4,579	72	4,507
Singapore	96%	6,687	33	3	6,651	284	6,367
Slovak Republic	97%	5,933	45	46	5,842	212	5,630
Slovenia	97%	4,674	13	14	4,647	135	4,512
Spain	97%	9,223	43	305	8,875	295	8,580
Sweden	92%	5,209	75	84	5,050	428	4,622
Trinidad and Tobago	96%	4,190	67	0	4,123	175	3,948
United Arab Emirates	97%	15,372	134	113	15,125	507	14,618
United States	96%	14,253	169	830	13,254	528	12,726

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

Students attending a sampled class at the time the sample was chosen but leaving the class before the assessment was administered were classified as “withdrawn.”

Students with a disability or language barrier that prevented them from participating in the assessment were classified as “excluded.”

Students not present when the assessment was administered, and not subsequently assessed in a make-up session, were classified as “absent.”

**Appendix C.4: Student Sample Sizes (Continued)**

Country	Within-school Student Participation (Weighted Percentage)	Number of Sampled Students in Participating Schools	Number of Students Withdrawn from Class/School	Number of Students Excluded	Number of Eligible Students	Number of Students Absent	Number of Students Assessed
<b>Sixth Grade Participants</b>							
Botswana	99%	4,298	39	8	4,251	54	4,197
Honduras	97%	4,186	117	0	4,069	176	3,893
Kuwait	82%	4,085	0	0	4,085	722	3,363
Morocco	95%	7,705	106	0	7,599	416	7,183
<b>Benchmarking Participants<sup>◊</sup></b>							
Alberta, Canada	95%	4,292	73	229	3,990	201	3,789
Ontario, Canada	96%	4,932	69	145	4,718	157	4,561
Quebec, Canada	96%	4,529	33	50	4,446	202	4,244
Maltese - Malta	94%	3,942	22	143	3,777	229	3,548
Eng/Afr (5) - RSA	94%	3,801	68	0	3,733	218	3,515
Andalusia, Spain	97%	4,652	29	142	4,481	148	4,333
Abu Dhabi, UAE	97%	4,308	13	29	4,266	120	4,146
Dubai, UAE	96%	6,497	70	74	6,353	292	6,061
Florida, US	95%	3,052	43	269	2,740	142	2,598

<sup>◊</sup> Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

Country	Within-school Student Participation (Weighted Percentage)	Number of Sampled Students in Participating Schools	Number of Students Withdrawn from Class/School	Number of Students Excluded	Number of Eligible Students	Number of Students Absent	Number of Students Assessed
Botswana	99%	4,501	41	6	4,454	61	4,393
Colombia	97%	4,309	198	18	4,093	129	3,964
South Africa	95%	16,970	283	165	16,522	778	15,744

Country	School Participation		Class Participation	Student Participation	Overall Participation	
	Before Replacement	After Replacement			Before Replacement	After Replacement
Australia	96%	98%	100%	95%	91%	93%
Austria	100%	100%	100%	98%	98%	98%
Azerbaijan	84%	100%	100%	100%	84%	100%
† Belgium (French)	77%	85%	99%	97%	74%	82%
Bulgaria	97%	100%	100%	95%	92%	95%
Canada	98%	98%	100%	96%	94%	94%
Chinese Taipei	100%	100%	100%	99%	99%	99%
Colombia	89%	99%	100%	97%	86%	95%
Croatia	99%	100%	100%	95%	94%	95%
Czech Republic	90%	99%	100%	94%	85%	94%
Denmark	87%	98%	100%	97%	84%	95%
† England	73%	87%	100%	94%	69%	82%
Finland	97%	99%	100%	96%	93%	95%
France	98%	100%	100%	98%	96%	97%
Georgia	97%	98%	100%	98%	95%	96%
Germany	96%	99%	100%	96%	92%	95%
Hong Kong SAR	86%	88%	100%	94%	81%	83%
Hungary	98%	99%	100%	97%	94%	96%
Indonesia	100%	100%	100%	97%	97%	97%
Iran, Islamic Rep. Of	100%	100%	100%	99%	99%	99%
Ireland	98%	100%	100%	95%	93%	95%
Israel	98%	99%	100%	94%	92%	93%
Italy	81%	98%	100%	96%	78%	95%
Lithuania	94%	100%	100%	94%	89%	94%
Malta	100%	100%	100%	95%	95%	95%
Morocco	99%	99%	100%	96%	95%	95%
† Netherlands	68%	92%	100%	97%	66%	89%
New Zealand	93%	99%	100%	94%	87%	93%
† Northern Ireland	62%	85%	100%	93%	58%	79%
‡ Norway	57%	83%	100%	86%	49%	71%
Oman	98%	98%	100%	98%	96%	96%
Poland	100%	100%	100%	96%	96%	96%
Portugal	87%	99%	100%	95%	83%	93%
Qatar	100%	100%	100%	99%	99%	99%
Romania	99%	100%	100%	97%	96%	97%
Russian Federation	100%	100%	100%	98%	98%	98%
Saudi Arabia	95%	100%	100%	98%	94%	98%
Singapore	100%	100%	100%	96%	96%	96%
Slovak Republic	95%	99%	100%	97%	92%	96%
Slovenia	96%	97%	100%	97%	94%	95%
Spain	96%	99%	100%	97%	93%	96%
Sweden	97%	99%	100%	92%	88%	91%
Trinidad and Tobago	99%	99%	100%	96%	95%	95%
United Arab Emirates	100%	100%	100%	97%	97%	97%
United States	80%	85%	100%	96%	77%	81%

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

PIRLS guidelines for sampling participation: The minimum acceptable participation rates were 85% of both schools and students, or a combined rate (the product of school and student participation) of 75%. Participants not meeting these guidelines were annotated as follows:

† Met guidelines for sample participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation rates after replacement schools were included.

‡ Did not satisfy guidelines for sample participation rates.

**Appendix C.5: Participation Rates (Weighted) (Continued)**

Country	School Participation		Class Participation	Student Participation	Overall Participation	
	Before Replacement	After Replacement			Before Replacement	After Replacement
<b>Sixth Grade Participants</b>						
Botswana	100%	100%	100%	99%	99%	99%
Honduras	91%	100%	100%	97%	88%	97%
‡ Kuwait	88%	88%	99%	82%	72%	72%
Morocco	99%	99%	100%	95%	94%	94%
<b>Benchmarking Participants<sup>◊</sup></b>						
Alberta, Canada	97%	99%	100%	95%	93%	94%
Ontario, Canada	99%	99%	100%	96%	95%	95%
Quebec, Canada	95%	96%	100%	96%	90%	92%
Maltese - Malta	100%	100%	100%	94%	94%	94%
Eng/Afr (5) - RSA	98%	100%	100%	94%	92%	94%
Andalusia, Spain	99%	99%	100%	97%	96%	96%
Abu Dhabi, UAE	99%	99%	100%	97%	96%	96%
Dubai, UAE	99%	99%	100%	96%	94%	94%
Florida, US	96%	96%	99%	95%	91%	91%

<sup>◊</sup> Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

Country	School Participation		Class Participation	Student Participation	Overall Participation	
	Before Replacement	After Replacement			Before Replacement	After Replacement
Botswana	100%	100%	100%	99%	99%	99%
Colombia	89%	99%	100%	97%	86%	96%
South Africa	98%	99%	100%	95%	93%	95%

Country	Years of Formal Schooling*			Average Age at Time of Testing			Overall Exclusion Rates			Overall Participation Rates (After Replacement)		
	2011	2006	2001	2011	2006	2001	2011	2006	2001	2011	2006	2001
Austria	4	4		10.3	10.3		5.1%	5.1%		98%	97%	
Belgium (French)	4	4		10.1	9.9		5.6%	3.9%		82%	95%	
Bulgaria	4	4	4	10.7	10.9	10.9	2.5%	6.4%	2.7%	95%	94%	93%
Chinese Taipei	4	4		10.2	10.1		1.4%	2.9%		99%	99%	
Colombia	4		4	10.4		10.5	1.5%		3.3%	95%		94%
Czech Republic	4		4	10.4		10.5	5.1%		5.0%	94%		90%
Denmark	4	4		10.9	10.9		7.3%	6.2%		95%	96%	
England	5	5	5	10.3	10.3	10.2	2.4%	2.4%	5.7%	82%	92%	82%
France	4	4	4	10.0	10.0	10.1	5.2%	3.8%	5.3%	97%	95%	94%
<sup>a</sup> Georgia	4	4		10.0	10.1		4.9%	7.3%		96%	98%	
Germany	4	4	4	10.4	10.5	10.5	1.9%	0.7%	1.8%	95%	92%	86%
Hong Kong SAR	4	4	4	10.1	10.0	10.2	11.8%	3.9%	2.8%	83%	97%	97%
Hungary	4	4	4	10.7	10.7	10.7	4.2%	3.7%	2.1%	96%	97%	95%
Indonesia	4	4		10.4	10.4		2.5%	3.2%		97%	98%	
Iran, Islamic Rep. of	4	4	4	10.2	10.2	10.4	4.5%	3.8%	0.5%	99%	99%	98%
Italy	4	4	4	9.7	9.7	9.8	3.7%	5.3%	2.9%	95%	97%	98%
Lithuania	4	4	4	10.7	10.7	10.9	5.6%	5.1%	3.8%	94%	92%	83%
Morocco	4	4	4	10.5	10.8	11.2	2.0%	1.1%	1.0%	95%	94%	69%
Netherlands	4	4	4	10.2	10.3	10.3	3.7%	3.6%	3.7%	89%	90%	87%
New Zealand	4.5 – 5.5	4.5 – 5.5	4.5 – 5.5	10.1	10.0	10.1	3.3%	5.3%	3.2%	93%	95%	96%
Norway	4	4	4	9.7	9.8	10.0	4.2%	3.8%	2.8%	71%	71%	82%
Poland	4	4		9.9	9.9		3.8%	5.1%		96%	95%	
Romania	4	4	4	10.9	10.9	11.1	4.0%	2.4%	4.5%	97%	97%	93%
Russian Federation	4	3 or 4	3 or 4	10.8	10.8	10.3	5.3%	5.9%	6.6%	98%	97%	97%
Singapore	4	4	4	10.4	10.4	10.1	6.3%	0.9%	0.1%	96%	95%	98%
Slovak Republic	4	4	4	10.4	10.4	10.3	4.6%	3.6%	2.0%	96%	94%	96%
Slovenia	4	3 or 4	3	9.9	9.9	9.8	2.6%	0.8%	0.3%	94%	93%	94%
Spain	4	4		9.8	9.9		5.4%	5.3%		96%	97%	
Sweden	4	4	4	10.7	10.9	10.8	4.1%	3.9%	5.0%	91%	96%	92%
Trinidad and Tobago	5	5		10.3	10.1		0.9%	0.7%		95%	94%	
United States	4	4	4	10.2	10.1	10.2	7.2%	5.9%	5.3%	81%	82%	83%

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2011

Benchmarking Participants<sup>‡</sup>

Alberta, Canada	4	4		9.9	9.9		6.8%	7.1%		94%	96%	
Ontario, Canada	4	4	4	9.8	9.8	9.9	7.9%	8.3%	6.6%	95%	87%	92%
Quebec, Canada	4	4	4	10.1	10.1	10.2	3.7%	3.6%	3.3%	92%	81%	89%
<sup>b</sup> Eng/Afr (5) - RSA	5	5		11.4	11.9		1.9%	4.3%		94%	88%	

<sup>‡</sup> Republic of South Africa (RSA) tested 5th grade students receiving instruction in English (ENG) or Afrikaans (AFR).

\* Represents years of schooling counting from the first year of ISCED Level 1

<sup>a</sup> Schools in South Ossetia and Abkhazia were excluded due to lack of access and absence of official statistics. Abkhazia refugee schools in other territories of Georgia were included in the sample frame.<sup>b</sup> Information from 2006 is for the entire country of South Africa.



