

PIRLS 2011

Characteristics of National Samples

Australia

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of non-mainstream schools (e.g. special education schools), very small schools (MOS < 5), remote schools, and schools that burned down in Victorian bush fires.

Within-school exclusions consisted of intellectually and physically disabled students, and English as a second language (ESL) students.

Sample Design

Explicit stratification by states/territories.

Implicit stratification by geographic location (metropolitan, provincial, and remote), SEIFA performance index (10), and school type (Catholic, government, and independent).

Sampled two classrooms per school and all of the indigenous students found in sampled schools.

Schools were oversampled to allow for better estimates at the state/territory level.

Student non-response adjustment cells for the indigenous students were built at the explicit stratum level (with no modification to the variance calculation method).

All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 1: Allocation of School Sample in Australia, Fourth Grade

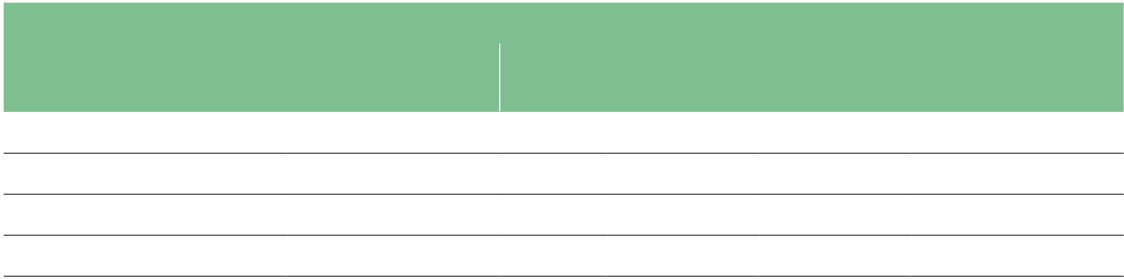


Exhibit 4: Allocation of School Sample in Belgium (French), Fourth Grade

E c S a a	T a S a e d S c	l e b e S c	P a c a S c			R e b

Exhibit 5: Allocation of School Sample in Botswana, Sixth Grade

E c S a a	T a e d S a Sc	l e b e S c	P a c a S c			R e f a S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
Central North	25	1	24	0	0	0	0
Central South	28	0	28	0	0	0	0
North	14	0	14	0	0	0	0
South	24	0	24	0	0	0	0
South Central	43	0	43	0	0	0	0
West	16	0	16	0	0	0	0
Total	150	1	149	0	0	0	0

B . . .

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of special education schools and very small schools (MOS < 5).

No within-school exclusions.

Sample Design

Explicit strati cation by school type.

Implicit strati cation by location (capital, large city, and “other”) and region (28).

Sampled two classrooms per school.

Exhibit 6: Allocation of School Sample in Bulgaria, Fourth Grade

E c S a a	T a e d S a Sc	l e b e S c	P a c a S c			R e f a S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
Basic	83	2	77	4	0	0	0
Elementary	13	0	13	0	0	0	0
General	54	1	52	1	0	0	0
Total	150	3	142	5	0	0	0


C 
Fourth Grade
Coverage and Exclusions

Exhibit 7: Allocation of School Sample in Canada, Fourth Grade

E c S a a	T a e d S a Sc	l e b e S c	P a c a S c			R e f S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
British Columbia – English	131	0	128	1	0	2	0
British Columbia – French	19	0	19	0	0	0	0
Manitoba	6	0	6	0	0	0	0
New Brunswick – French	73	0	73	0	0	0	0
Newfoundland	153	1	151	0	0	1	0
Saskatchewan	6	0	6	0	0	0	0
Nova Scotia – English51	33	0	33	0	0	0	0
Nova Scotia – English52	16	0	16	0	0	0	0
Nova Scotia – English53	26	0	26	0	0	0	0
Nova Scotia – English54	50	0	50	0	0	0	0
Nova Scotia – English55	27	0	27	0	0	0	0
Nova Scotia – English58	17	0	17	0	0	0	0
Nova Scotia – English59	18	0	0	0	0		

Sample Design

Explicit stratification by school MOS (known and unknown), urban/rural status, and private/public status.

Implicit stratification by states or performance level (42).

Sampled one classroom per school.

In the first four explicit strata, triplets of schools were sampled (SRS) instead of schools being sampled individually. Within each triplet, a school was sampled among the eligible schools. Weights were derived accordingly (note that the notion of replacements did not apply for these strata).

School sample overlap between prePIRLS and PIRLS: 1) Samples were drawn all at once; 2) All sampled schools for prePIRLS were asked to participate in PIRLS; and 3) All sampled students for prePIRLS also were asked to take PIRLS.

Exhibit 9: Allocation of School Sample in Colombia, Fourth Grade

Eligible Schools	Total Sampled Schools	Eligible Schools	Participating Schools			Refused Schools	Excluded Schools
			Original Schools	1 st Replacement	2 nd Replacement		
Schools with no MOS – Urban – Public	2	0	2	0	0	0	0
Schools with no MOS – Rural – Private	2	0	2	0	0	0	0
Schools with no MOS – Rural – Public	2	0	1	0	0	1	0
Schools with MOS – Urban – Private	28	1	24	3	0	0	0
Schools with MOS – Urban – Public	78	2	67	7	2	0	0
Schools with MOS – Rural – Private	2	0	1	0	1	0	0
Schools with MOS – Rural – Public	43	2	34	3	3	1	0
Total	157	5	131	13	6	2	0

Croatia

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of very small schools (MOS < 6), hospital schools, schools for minority groups (language and writing, and models A and B), schools in which the majority of the classes are composed of solely Roma children, and private elementary schools.

Within-school exclusions consisted of students with special needs and special program teaching.

Sample Design

Explicit stratification by school type.

Implicit stratification by region (Središnja, Istocna, Sjeverna, Zapadna, Južna, and Zagreb) or area (21).

Sampled two classrooms in large schools in the “One Building School” stratum (MOS > 90) and sampled two classrooms in each sampled school in the “Multiple Building School” and “Minority School” strata.

Satellite schools of mother schools were treated as classrooms of the mother school for purposes of sampling.

School sample overlap between TIMSS (Grade 4) and PIRLS: 1) Samples were drawn all at once; 2) All sampled schools for PIRLS also participated in TIMSS; and 3) All sampled students for PIRLS also were asked to take TIMSS.

Exhibit 10: Allocation of School Sample in Croatia, Fourth Grade



C

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of special education schools, Polish language schools, and very small schools (MOS < 3 in Grade 4).

Within-school exclusions consisted of students with special educational needs.

Sample Design

Explicit stratification by extended education status.

Implicit stratification by region (14).

Sampled two classrooms in the “extended education of languages” stratum. All variance estimates from this stratum were derived using schools as variance strata.

Oversampling in the “extended education of languages” stratum.

School sample overlap between TIMSS (Grade 4) and PIRLS: 1) Samples were drawn all at once; 2) All sampled schools for PIRLS also were sampled for TIMSS; and 3) All sampled students for PIRLS also were asked to take TIMSS.

Exhibit 11: Allocation of School Sample in Czech Republic, Fourth Grade

E c S a a	T a e d S a e d S c	l e b e S c	P a c a S c			R e f a S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
No Extended Education	130	2	114	9	4	1	0
Extended Education of Languages	50	0	47	1	2	0	0
Total	180	2	161	10	6	1	0

D

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of very small schools (MOS < 5), special education schools, out-of-school, and residential institutions.

Within-school exclusions consisted of students with special educational needs.

Sample Design

Explicit stratification by public/private status.

No implicit stratification.

Sampled one classroom per school in most schools.

School sample overlap between TIMSS (Grade 4) and PIRLS: 1) Samples were drawn all at once; and 2) No school sample overlap between PIRLS and TIMSS.

Exhibit 12: Allocation of School Sample in Denmark, Fourth Grade

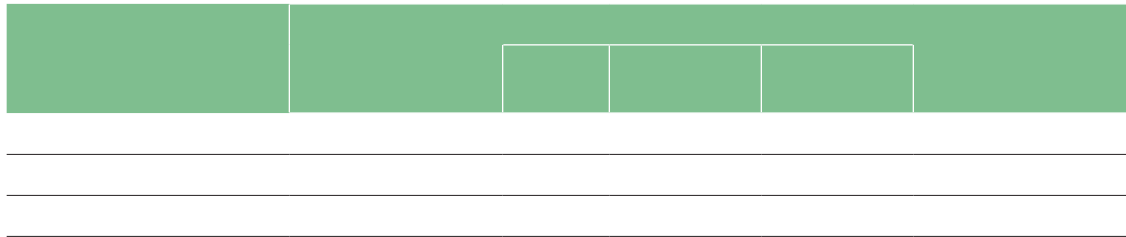


Exhibit 14: Allocation of School Sample in Finland, Fourth Grade



Exhibit 15: Allocation of School Sample in France, Fourth Grade

E c S a a	T a e d Sc	l e b e Sc	P a c a Sc			Ref Sc	E c d e d Sc
			O a Sc	1 Re a c e e	2 d Re a c e e		
Large Schools	120	0	119	1	0	0	0
Small Schools	55	0	51	3	0	1	0
Total	175	0	170	4	0	1	0

G

Fourth Grade

Coverage and Exclusions

Coverage is 91 percent. Coverage in Georgia was restricted to students whose language of instruction is Georgian (91% of the international target population).

School-level exclusions consisted of special needs schools and very small schools (MOS < 4). Schools from South Ossetia also were excluded along with schools from Abkhazia (no physical access, and no official statistics). However, Abkhazia refugee schools functioning in other territories of Georgia were part of the sample frame. As a result, exclusion rates are biased downward.

Within-school exclusions consisted of specialized schools for disabled students.

Sample Design

Explicit stratification by region and “Grade 4” / “Grade 4 & Grade 8” school type.

Implicit stratification by state/private status, and highland/town/village status.

Sampled two classrooms in large schools (MOS > 50).

School sample overlap between TIMSS (Grade 4), PIRLS, and TIMSS (Grade 8): 1) Samples were drawn all at once; 2) All sampled schools in the “Grade 4 & Grade 8” stratum were asked to participate in all studies; and 3) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 16: Allocation of School Sample in Georgia, Fourth Grade

E c S a a	T a e d Sc	l e b e Sc	P a c a Sc			Ref Sc	E c ded Sc
			O a Sc	1 Re ace e	2 d Re ace e		
Grade 4 only	2	0	2	0	0	0	0
Grade 4 & Grade 8 – qvemo qarTli	14	1	13	0	0	0	0
Grade 4 & Grade 8 – aWara	20	0	19	1	0	0	0
Grade 4 & Grade 8 – afxazeTi – ItoIvilebi	2	0	2	0	0	0	0
Grade 4 & Grade 8 – guria	6	0	6	0	0	0	0
Grade 4 & Grade 8 – imereTi	28	0	25	0	0	3	0
Grade 4 & Grade 8 – kaxeTi	14	0	13	0	0	1	0
Grade 4 & Grade 8 – mcxeTa-mTianeTi	5	0	5	0	0	0	0
Grade 4 & Grade 8 – raWa-leGxumi da qvemo svaneTi	2	0	2	0	0	0	0
Grade 4 & Grade 8 – samcxe-javaxeTi	5	0	5	0	0	0	0
Grade 4 & Grade 8 – Sida qarTli	14	0	14	0	0	0	0
Grade 4 & Grade 8 – Tbilisi	50	2	48	0	0	0	0
Grade 4 & Grade 8 – samegrelo-zemo svaneTi	18	0	18	0	0	0	0
Total	180	3	172	1	0	4	0

GI

Fourth Grade

Coverage and Exclusion (2012)

Sampled one classroom per school.
School sample overlap between

Implicit stratification by school type (municipal, official, urban, rural, and semi-public), geographic area (18), and urban/private status.

Sampled two classrooms per school in large schools (MOS > 125).

The school measure of size (MOS) was given by the number of Grade 4 students found in schools (Grade 4 and Grade 6 students all attended the same schools).

School sample overlap between TIMSS (Grade 6), PIRLS, and TIMSS (Grade 9): 1) Samples were drawn all at once; 2) All sampled schools in the "Grade 6 & Grade 9" stratum were asked to participate in TIMSS at Grade 9 (a subset of these schools was also asked to participate in both PIRLS and TIMSS at Grade 6); and 3) All sampled students in PIRLS (Grade 5) and TIMSS (Grade 6) were also in TIMSS (Grade 9).

H... K...

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of non-native language speaker schools, schools with different curriculum, international schools, special schools, and schools expected to be closing before data collection.

Within-school exclusions consisted of non-native language speakers under inclusive education scheme.

Sample Design

Explicit stratification by school type and session (am/pm/day).

Implicit stratification by school gender (boys, co-educational, or girls).

Sampled one classroom per school.

School sample overlap between TIMSS (Grade 4) and PISA (Grade 4) sample is 100 percent.

Hungary

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of special schools for students with special educational needs, very small schools (MOS < 5 in both Grade 4 and Grade 8), and students taught in a foreign language.

Within-school exclusions consisted of students with special educational needs.

Sample Design

Explicit stratification by type of community and “Grade 4” / “Grade 4 & Grade 8” school type.

Implicit stratification by geographic region (Del-Alfold, Del-Dunantul, Kozep-Dunantul, Kozep-Magyarország, Nyugat-Dunantul, Eszak-Alfold, and Eszak-Magyarország).

Sampled two classrooms per school.

School sample

Exhibit 22:

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of non-aided first level educational institutions (private schools), and students in special schools (students with special educational needs).

Within-school exclusions consisted of students with special educational needs.

Sample Design

Explicit stratification by school size.

Implicit stratification by school-level socio-economic status (DEIS1, DEIS2, rural, and “other”), language status (Irish, Gaeltacht, and English), and school gender (boys, co-educational, or girls).

Sampled two classrooms per school.

The school sample for PIRLS was selected by controlling for the overlap between three studies using the Chowdhury approach (samples drawn sequentially). The PIRLS sample of schools was selected by minimizing the overlap with the samples from the previous PIRLS field test and the samples were drawn for a national study. Note that these two previous samples were drawn independently from each other.

All sampled students from schools selected for PIRLS were asked to participate in TIMSS at Grade 4.

Exhibit 25: Allocation of School Sample in Ireland, Fourth Grade *kwygr*





Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of Ultra Orthodox schools, special education schools, very small schools (MOS < 5), and schools where instruction is in English or French.

Within-school exclusions consisted of classes for students with special educational needs in regular schools and students with special educational needs learning in regular classes.

Sample Design

Explicit stratification by “Grade 4” / “Grade 4 & Grade 8” school status, and school orientation.

Implicit stratification by socio-economic status (SES) (high, medium, and low), school gender (boys, co-educational, or girls), and geographic region (North and South).

Sampled two classrooms in large schools (MOS > 130).

There was one census stratum (“Grade 4 & Grade 8 – Arabic Druze”). All variance estimates for this stratum were derived using schools as variance strata.

School sample overlap between PIRLS and TIMSS (Grade 8): 1) Samples were drawn all at once; and 2) Only two of the sampled schools in the “Grade 4 and Grade 8” stratum also were asked to participate in TIMSS at Grade 8 and PIRLS.

Exhibit 26: Allocation of School Sample between Studies in Israel^m

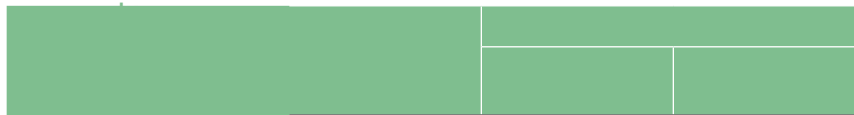


Exhibit 27: Allocation of School Sample in Israel, Fourth Grade

E c S a a	T a e d Sc	l e b e Sc	P a c a Sc			R e f Sc	E c d e d Sc
			O a Sc	1 Re a c e e	2 d Re a c e e		
Grade 4 only – Hebrew Secular	64	0	64	0	0	0	0
Grade 4 only – Hebrew Religious	27	0	27	0	0	0	0
Grade 4 only – Arabic Arab	26	0	25	0	0	1	0
Grade 4 only – Arabic Druze	4	0	4	0	0	0	0
Grade 4 only – Arabic Bedouin	8	0	8	0	0	0	0
Grade 4 & Grade 8 – Hebrew Secular	6	0	6	0	0	0	0
Grade 4 & Grade 8 – Hebrew Religious	8	0	6	0	2	0	0
Grade 4 & Grade 8 – Arabic Arab	5	0	5	0	0	0	0
Grade 4 & Grade 8 – Arabic Druze	2	0	2	0	0	0	0
Grade 4 & Grade 8 – Arabic Bedouin	3	0	3	0	0	0	0
Total	153	0	150	0	2	1	0

L

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of students taught in Slovenian and very small schools (MOS < 5).

Within-school exclusions consisted of intellectually and functionally disabled students, and non-native language speakers.

Sample Design

Explicit stratification by geographic area, and “Grade 4” / “Grade 4 & Grade 8” school type.

Implicit stratification by public/private status, and by region or province (104).

Sampled two classrooms in large schools (MOS > 150).

Oversampling as follows: 40 schools selected per region to allow comparison between the five main regions (Northeast, Northwest, Central, South, and Southern Islands) plus additional sampling for sub-regions (Trento & Bolzano, and Valle D'Aosta).

School sample overlap between TIMSS (Grade 4), PIRLS, and TIMSS (Grade 8): 1) Samples were drawn all at once; 2) All sampled schools in the "Grade 4 & Grade 8" stratum were asked to participate in all studies; and 3) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 28: Allocation of School Sample between Studies in Italy

E c S a a	T a Sa ed Sc	A ca f Sc		
		T PIRLS G ade 4	T TIMSS G ade 4	T TIMSS G ade 8
Grade 4 only	106	106	106	0
Grade 4 & Grade 8	99	99	99	99
Grade 8 only	105	0	0	105
Total	310	205	205	204

Exhibit 29: Allocation of School Sample in Italy, Fourth Grade

E c S a a	T a Sa ed Sc	l e b e Sc	P a c a Sc			Ref a Sc	E c d e d Sc
			O a Sc	1 Re ace e	2 d Re ace e		
Grade 4 only – Central	21	0	20	0	1	0	0
Grade 4 only – Northeast, without Trento & Bolzano	14	0	8	3	2	1	0
Grade 4 only – Northwest, without Valle D'Aosta	19						

Census of all students. All variance estimates were derived using classrooms as variance strata.

Exhibit 33: Allocation of School Sample in Malta (English), Fourth Grade

E c S a a	T a S a e d S c	l e b e S c	P a c a S c			R e f a S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
Malta	99	3	96	0	0	0	0
Total	99	3	96	0	0	0	0

M

Fourth Grade

Coverage and Exclusions

Coverage (m)

“

“

Exhibit 34: Allocation of School Sample in Morocco, Fourth Grade

E c S a a	T a e d Sc	l e b e Sc	P a c a Sc			R e f Sc	E c d e d Sc
			O a Sc	1 Re a c e e	2 d Re a c e e		
Private	39	0	38	0	0	1	0
Public – Region 1	25	0	25	0	0	0	0
Public – Region 2	25	0	25	0	0	0	0
Public – Region 3	25	1	24	0	0	0	0
Public – Region 4	25	1	24	0	0	0	0
Public – Region 5	25	0	25	0	0	0	0
Public – Region 6	25	0	25	0	0	0	0
Public – Region 7	25	0	25	0	0	0	0
Public – Region 8	25	0	24	0	0	1	0
Public – Region 9	25	0	25	0	0	0	0
Public – Region 10							

The school measure of size (MOS) was given by the number of Grade 4 students found in schools (Grade 4 and Grade 6 students all attending the same schools).

Oversampling to allow for reliable estimates at the regional level.

All sampled schools for PIRLS at Grade 4 also were asked to participate in PIRLS at Grade 6.

	Oversampled	1 st Grade	2 nd Grade	Refused	Excluded
Private	39	1	38	0	0
Public – Region 1	25	0	25	0	0
Public – Region 2	25	0	25	0	0
Public – Region 3	25	2	23	0	0
Public – Region 4	25	2	23	0	0
Public – Region 5	25	0	25	0	0
Public – Region 6	25	0	24	0	1
Public – Region 7	25	0	24	0	1
Public – Region 8	25	2	22	0	1
Public – Region 9	25	1	24	0	0
Public – Region 10	25	0	25	0	0
Total	289	8	278	0	3

N

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of schools for special education, and very small schools (MOS < 7).

Within-school exclusions consisted of non-native language speakers (less than one year of instruction in Dutch).

Sample Design

Explicit stratification by socio-economic level (SES). The SES levels differ between the PIRLS and TIMSS studies. Because sample overlap was controlled, distinct SES levels were maintained.

Implicit stratification by urbanization (very high, high, moderate, low, and very low), and school size (large and small).

Sampled all classrooms in selected schools.

Given that school nonresponse was mainly found in large schools, the nonresponse adjustment was conducted with

English-medium schools or in Maori-medium Level 1 immersion schools, and students in Level 1 Pacifica language immersion units (e.g. Samoan).

Sample Design

Explicit stratification by language of instruction, “Grade 4” / “Grade 4 & Grade 8” school type, and school size.

Implicit stratification by

Exhibit 41: Allocation of School Sample in Norway, Fourth Grade

E c S a a	T a Sa ed Sc	l e b e Sc	P a c a S c			Ref Sc

E c S a a	T a e d Sc	l e b e Sc	P a c a Sc			Ref Sc	E c ded Sc
			O a Sc	1 Re ace e	2 d Re ace e		
Grade 4 & Grade 8 – Public – Al Wusta	15	0	15	0	0	0	0
Grade 4 & Grade 8 – Public – Ash Sharqiyah North	18	3	15	0	0	0	0
Grade 4 & Grade 8 – Public – Ash Sharqiyah South	12	0	12	0	0	0	0
Grade 4 & Grade 8 – Public – Dhofar governorates	10	0	10	0	0	0	0
Grade 4 & Grade 8 – Public – Musandam governorates	3	0	3	0	0	0	0
Grade 4 & Grade 8 – Public – Muscat governorates	8	0	8	0	0	0	0
Total	338	5	327	0	0	6	0

P

Fourth Grade (Standard 3)

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of very small schools (MOS < 5) and special schools.

Within-school exclusions consisted of special needs students in regular classrooms.

Sample Design

Explicit stratification by urbanization.

Implicit stratification by districts (voivodship) (16).

Sampled two classrooms per school.

School sample overlap between TIMSS (Grade 4) and PIRLS: 1) Samples were drawn all at once; 2) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.



Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of schools that provide instruction in languages other than English and Arabic.

No within-school exclusions.

Private (from the “Grade 4 & Grade 8” explicit stratum in the co-educational schools) and community schools were not part of previous cycles.

Sample Design

Explicit stratification by “Grade 4” / “Grade 4 & Grade 8” school types.

Implicit stratification by school gender (boys, co-educational, or girls) and school type (community, independent, and private).

Sampled two classrooms per school in large schools (MOS > 150).

Census of all schools. Variance estimates were computed using schools as variance strata for schools where at least two classrooms or all classrooms were sampled.

School sample overlap between TIMSS (Grade 4), PIRLS, and TIMSS (Grade 8): 1) Samples were drawn all at once; 2) All sampled schools in the “Grade 4 & Grade 8” stratum were asked to participate in all studies; 3) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 47: Allocation of School Sample between Studies in Qatar

E c S a a	T a S a e d S c h o o l	A c a f S c h o o l		
		T PIRLS G a d e 4	T TIMSS G a d e 4	T TIMSS G a d e 8
Grade 4 only	113	113	113	0
Grade 4 & Grade 8	62	62	62	62
Grade 8 only	51	0	0	51
Total	226	175	175	113

Exhibit 48: Allocation of School Sample in Qatar, Fourth Grade

E c S a a	T a						

Exhibit 50: Allocation of School Sample in Romania, Fourth Grade





Sampled one classroom per

E c S a a	T a e d S a e d S c	l e b e S c	P a c a S c			R e f S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
Moscow obl*	10	0	10	0	0	0	0
Sverdlovsk obl*	6	0	6	0	0	0	0
Tomsk obl	4	0	4	0	0	0	0
Chelyabinsk obl*	6	0	6	0	0	0	0
Volgograd obl	4	0	4	0	0	0	0
Lipetsk obl	4	0	4	0	0	0	0
Bashkortostan*	8	0	8	0	0	0	0
Voronezh obl	4	0	4	0	0	0	0
Zabaykalski kr	4	0	4	0	0	0	0
Krasnodar kr*	8	0	8	0	0	0	0
Moscow*	12	0	12	0	0	0	0
Orenburg obl	4	0	4	0	0	0	0
Total	202	0	202	0	0	0	0

* Certainty Regions

Fourth Grade

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of very small schools (MOS < 6).

No within-school exclusions.

Sample Design

Explicit stratification by school type and school gender.

Implicit stratification by school location (Center, East, South, West, and North), public/private status, and school gender (boys or girls).

Sampled two classrooms in large schools (MOS > 150).

Oversampling of “religious schools” to allow for better estimates at that level.

School sample overlap between TIMSS (Grade 4) and PIRLS: 1) Samples were drawn all at once; and 2) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

ere were two census strata and some certainty schools outside these two strata. Variance estimates were calculated using schools as variance strata for these certainty schools.

Oversampling to allow for better estimates at the regional level.

School sample overlap between TIMSS (Grade 4), PIRLS, and TIMSS (Grade 8): 1) Samples were drawn all at once; 2) Most sampled schools in the “Grade 4 & Grade 8” stratum were asked to participate in all studies; and 3) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 56: Allocation of School Sample between Studies in Slovenia

E c S a a	T a Sa ed Sc ☒	A ca f Sc ☒		
		T PIRLS G ade 4	T TIMSS G ade 4	T TIMSS G ade 8
Grade 4 only	2020			

E c S a a	T a S a e d S c	l e b e S c	P a c a S c		R e f S c	E c d e d S c
			O a S c			

Exhibit 58: Allocation of School Sample between Studies in Spain

E c S a a	T a Sa ed Sc	A ca f Sc	
		T PIRLS G ade 4	T TIMSS G ade 4
Andalusia	150	150	30
Canary Islands	49	49	7
Other	115	115	115
Total	314	314	152

Exhibit 59: Allocation of School Sample in Spain, Fourth Grade

E c S a a							

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of very small schools (MOS < 5), international schools, and special schools for disabled students.

Within-school exclusions consisted of students with special needs.

Sample Design

Explicit stratification by immigrant status, and new school status since school listing.

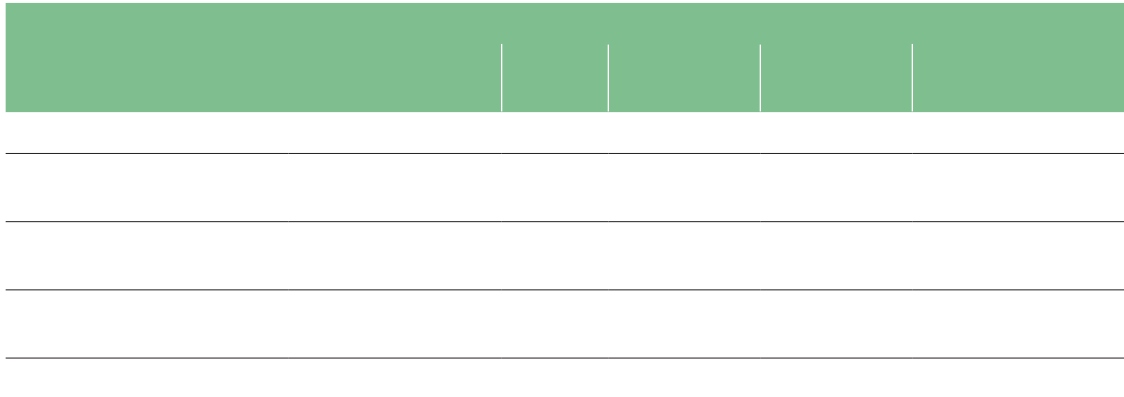
Implicit stratification by “Grade 4” / “Grade 4 & Grade 8” school type and school grade point average (7).

Oversampling to allow for better estimates at the immigrant status level. More classrooms were sampled in “higher percentage of immigrants” strata.

School sample overlap between PIRLS and TIMSS at Grade 4:

- 1) Samples were drawn all at once; and 2) All sampled students for TIMSS also were asked to take PIRLS.

Exhibit 60: Allocation of School Sample in Sweden, Fourth Grade



Within-school exclusions consisted of students with functional disabilities.

Sample Design

Explicit stratification by educational zones and “Grade 4” / “Grade 4 & Grade 8” school type.

Implicit stratification by school type (public, private, and “other”), curricula, school gender (boys, co-educational, or girls), and assessment language (English, Arabic, or both).

Census of all schools in Dubai, in the West region of Abu Dhabi, and in the educational zone of Umm-Al Quwain (with two sampled classrooms per school). Classes within these schools were used to build jackknife replicates for various analyses.

Exhibit 63: Allocation of School Sample in the United Arab Emirates, Fourth Grade

E c S a a	T a e d Sc	l e b e Sc	P a c a Sc			R e f Sc	E c d e d Sc
			O a Sc	1 Re a c e e	2 d Re a c e e		
Dubai Grade 4 only	43	0	40	0	0	0	3
Dubai Grade 4 & Grade 8	109	0	98	0	0	1	10
Grade 4 only – Abu Dhabi	35	0	35	0	0	0	0
Grade 4 only – Al Ain	23	1	22	0	0	0	0
Grade 4 only – West Region	15	2	13	0	0	0	0
Grade 4 & Grade 8 – Abu Dhabi	55	0	54	0	0	1	0
Grade 4 and Grade 8 – Al Ain	29	0	29	0	0	0	0
Grade 4 & Grade 8 – West Region	11	0	11	0	0	0	0
Grade 4 only – Sharjah	30	0	30	0	0	0	0
Grade 4 only – Ajman	8	0	8	0	0	0	0
Grade 4 only – Fujairah	10	0	10	0	0	0	0
Grade 4 only – Ras Al Kaimah	14	0	14	0	0	0	0
Grade 4 only – Umm-Al Quwain	9	1	8	0	0	0	0
Grade 4 & Grade 8 – Sharjah	51	0	51	0	0	0	0
Grade 4 & Grade 8 – Ajman	16	1	15	0	0	0	0
Grade 4 & Grade 8 – Fujairah	7	0	7	0	0	0	0
Grade 4 & Grade 8 – Ras Al Kaimah	10	0	10	0	0	0	0
Grade 4 & Grade 8 – Umm-Al Quwain	3	0	3	0	0	0	0
Total							

Exhibit 66:

Exhibit 67: Allocation of School Sample between Studies in Ontario2q

ere were some certainty-selected schools, but there were too few to use special estimation variance procedures.

Oversampling of the “English” strata.

School sample overlap between TIMSS (Grade 4), PIRLS, and TIMSS (Grade 8): 1) Samples were drawn all at once; 2) All sampled schools in the “Grade 4 & Grade 8” stratum were asked to participate in all studies; and 3) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 69: Allocation of School Sample between Studies in Québec

E c S a a	T a Sa Sc	A c a f Sc		
		T PIRLS G ade 4	T TIMSS G ade 4	T TIMSS G ade 8
Grade 4 only	184	184	184	0
Grade 4 & Grade 8	16	16	16	16
Grade 8 only	184	0	0	184
Total	384	200	200	200

Exhibit 70: Allocation of School Sample in Québec, Fourth Grade

E c S a a	T a Sa Sc	l e b e Sc	P a c a Sc			Ref Sc	E c d e d Sc
			O a Sc	1 Re ace e	2 d Re ace e		
Grade 4 only – French	114	0	108	1	0	5	0
Grade 4 only – English	70	2	65	0	0	2	1
Grade 4 & Grade 8 – French	6	0	6	0	0	0	0
Grade 4 & Grade 8 – English	10	0	10	0	0	0	0
Total	200	2	189	1	0	7	1

M M

Fourth Grade (Maltese —Year 5)

Coverage and Exclusions

Coverage is 100 percent.

No school-level exclusions.

No within-school exclusions.

Sample Design

No explicit stratification.

Implicit stratification by Malta/Gozo location, and school type (church, independent, and state).

Census of all students. All variance estimates were derived using classrooms as variance strata.

Exhibit 71: Allocation of School Sample in Malta (Maltese), Fourth Grade

E c S a a	T a						

Exhibit 72: Allocation of School Sample between Studies in South Africa

E c S a a	T a S a e d S c	A c a f S c	
		T e P I R L S G a d e 4	T P I R L S G a d e 5
Grade 4 only	14	14	0
Grade 4 & Grade 5 – Afrikaans or English	93	93	93
Grade 4 and Grade 5 – Others	238	238	0
Grade 5 only	7	0	7
Total	352	345	100

Exhibit 73: Allocation of School Sample in South Africa, Fifth Grade

E c S a a	T a S a e d S c	l e b e S c	P a c a S c			R e f S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
Grade 5 only – English	7	1	6	0	0	0	0
Grade 4 & Grade 5 – Afrikaans & English	21	0	21	0	0	0	0
Grade 4 & Grade 5 – Afrikaans	30	2	28	0	0	0	0
Grade 4 & Grade 5 – English	42	5	35	2	0	0	0
Total	100	8	90	2	0	0	0

A

Fourth Grade

Coverage and Exclusions

Coverage is 100 percent.

School-level exclusions consisted of very small schools (MOS < 4), international schools, and special education schools.

No within-school exclusions.

Sample Design

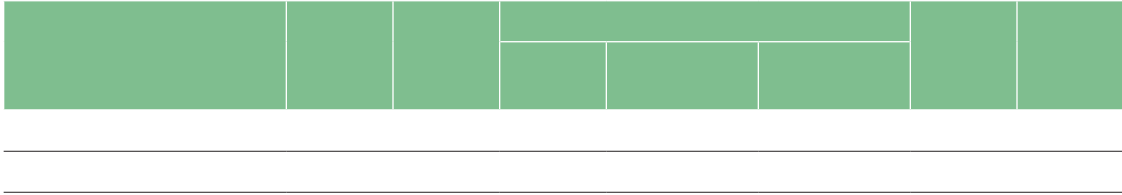
No explicit stratification.

Implicit stratification by school type (public/private).

Sampled two classrooms per school in larger schools (MOS > 55).

150 schools were sampled for PIRLS (these included 30 schools already sampled for TIMSS in the national sample for Spain). All sampled schools for Andalusia were used to produce the national estimates for Spain.

Exhibit 74: Allocation of School Sample in Andalusia, Fourth Grade



School sample overlap between TIMSS (Grade 4), PIRLS, and TIMSS (Grade 8): 1) Samples were drawn all at once; 2) All sampled schools in the “Grade 4 & Grade 8” stratum were asked to participate in all studies; and 3) All sampled students for PIRLS also were asked to take TIMSS at Grade 4.

Exhibit 75: Allocation of School Sample between Studies in Abu Dhabi

E c S a a	T a S a S c	A c a f S c		
		T PIRLS G a d e 4	T TIMSS G a d e 4	T TIMSS G a d e 8
Grade 4 only	73	73	73	0
Grade 4 & Grade 8	95	95	95	95
Grade 8 only	75	0	0	75
Total	243	168	168	170

Exhibit 76: Allocation of School Sample in Abu Dhabi, Fourth Grade

E c S a a	T a S a S c	l e b e S c	P a c a S c			R e f S c	E c d e d S c
			O a S c	1 R e a c e e	2 d R e a c e e		
Grade 4 only – Abu Dhabi	35	0	35	0	0	0	0
Grade 4 only – Al Ain	23	1	22	0	0	0	0
Grade 4 only – West region	15	2	13	0	0	0	0
Grade 4 & Grade 8 – Abu Dhabi	55	0	54	0	0	1	0
Grade 4 & Grade 8 – Al Ain	29	0	29	0	0	0	0
Grade 4 & Grade 8 – West region	11	0	11	0	0	0	0
Total	168	3	164	0	0	1	0



Fourth Grade

Fourth Grade

Coverage and Exclusions

Coverage is 89 percent. Coverage in this state was restricted to students in public schools (89% of the