

Appendix 9A: Characteristics of National Samples

Albania

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, very small schools - Grade 3, language not Albanian, and special curriculum
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), and urbanization (urban, rural) within public schools
- Implicit stratification by urbanization (urban, rural) within private school stratum
- Sampled two classrooms in large schools (measure of size > 100)

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Urban	88	1	85	0	0	2	0
Public - Rural	78	10	68	0	0	0	0
Private	14	0	14	0	0	0	0
Total	180	11	167	0	0	2	0

Armenia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), and special needs schools
- Within-school exclusions consisted of non-native language speakers

Sample Design

- Explicit stratification by region (10)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 60)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Aragatsotn	8	0	8	0	0	0	0
Ararat	14	0	14	0	0	0	0
Armavir	14	0	14	0	0	0	0
Gegharkunik	12	0	12	0	0	0	0
Kotayk	16	0	16	0	0	0	0
Lori	12	0	12	0	0	0	0
Shirak	12	0	12	0	0	0	0
Syunik & Vayots Dzor	10	0	10	0	0	0	0
Tavush	8	0	8	0	0	0	0
Yerevan	44	0	44	0	0	0	0
Total	150	0	150	0	0	0	0

Australia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), very remote schools, and special and non-mainstream schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by state or territory (8)
- Implicit stratification by school type (Catholic, government, independent), geographic location (metropolitan, provincial, remote), and socioeconomic index (low socioeconomic status, high socioeconomic status)
- Sampled one classroom per school. In tracked schools, classrooms were grouped according to the ability level of students prior to sampling and one classroom was sampled per class group.
- The TIMSS Grade 4 and Grade 8 samples were selected sequentially.
- The TIMSS sample at Grade 4 was selected by controlling the overlap with the PISA and the TIMSS Grade 8 samples using the Chowdhury approach
- Schools were oversampled at the state/territory level

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Australian Capital Territory	29	0	29	0	0	0	0
New South Wales	46	0	44	2	0	0	0
Northern Territory	14	0	14	0	0	0	0
Queensland	45	0	45	0	0	0	0
South Australia	41	0	41	0	0	0	0
Tasmania	31	0	30	0	0	1	0
Victoria	44	0	44	0	0	0	1
Western Australia	38	0	38	0	0	0	1
Total	288	0	285	2	0	1	2

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), very remote schools, and special and non-mainstream schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by state or territory (8)
- Implicit stratification by school type (Catholic, government, independent), geographic location (metropolitan, provincial, remote), and socioeconomic index (low socioeconomic status, high socioeconomic status)
- Sampled one classroom per school. In tracked schools, classrooms were grouped according to the ability level of students prior to sampling and one classroom was sampled per class group.
- The TIMSS Grade 4 and Grade 8 samples were selected sequentially.
- The TIMSS sample at Grade 8 was selected by controlling the overlap with the PISA sample using the Chowdhury approach
- Schools were oversampled at the state/territory level

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Australian Capital Territory	30	0	30	0	0	0	0
New South Wales	45	0	43	2	0	0	0
Northern Territory	14	1	13	0	0	0	1
Queensland	47	0	47	0	0	0	0
South Australia	39	0	39	0	0	0	1
Tasmania	29	1	28	0	0	0	1
Victoria	45	0	45	0	0	0	0
Western Australia	37	0	37	0	0	0	0
Total	286	2	282	2	0	0	3

Austria

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (area with more than 50,000 inhabitants, area with 50,000 inhabitants or less), achievement score (low, medium, high), and school size (small, large)
- Implicit stratification by region (9)
- Sampled two classrooms per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- Austria provided a bridge sample for their own national analyses only since they did not have a trend with TIMSS 2015
- 36.4 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Rural (no more than 50,000 inhabitants) - Low - Small	28	0	28	0	0	0	0
Rural (no more than 50,000 inhabitants) - Low - Large	12	0	12	0	0	0	0
Rural (no more than 50,000 inhabitants) - Medium - Small	38	2	36	0	0	0	0
Rural (no more than 50,000 inhabitants) - Medium - Large	12	0	12	0	0	0	0
Rural (no more than 50,000 inhabitants) - High - Small	32	0	31	0	0	1	0
Rural (no more than 50,000 inhabitants) - High - Large	10	0	10	0	0	0	0
Urban (more than 50,000 inhabitants) - Low - Small	9	0	9	0	0	0	0
Urban (more than 50,000 inhabitants) - Low - Large	17	0	17	0	0	0	0
Urban (more than 50,000 inhabitants) - Medium - Small	8	0	8	0	0	0	1
Urban (more than 50,000 inhabitants) - Medium - Large	12	0	12	0	0	0	0
Urban (more than 50,000 inhabitants) - High - Small	8	0	8	0	0	0	0
Urban (more than 50,000 inhabitants) - High - Large	10	0	10	0	0	0	0
Total	196	2	193	0	0	1	1

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Rural (no more than 50,000 inhabitants) - Low - Large	12	0	12	0	0	0	0
Rural (no more than 50,000 inhabitants) - Medium - Small	38	2	36	0	0	0	0
Rural (no more than 50,000 inhabitants) - Medium - Large	12	0	12	0	0	0	0
Rural (no more than 50,000 inhabitants) - High - Small	32	0	31	0	0	1	0
Rural (no more than 50,000 inhabitants) - High - Large	10	0	10	0	0	0	0
Urban (more than 50,000 inhabitants) - Low - Small	9	0	9	0	0	0	0
Urban (more than 50,000 inhabitants) - Low - Large	17	0	17	0	0	0	0
Urban (more than 50,000 inhabitants) - Medium - Small	8	0	8	0	0	0	1
Urban (more than 50,000 inhabitants) - Medium - Large	12	0	12	0	0	0	0
Urban (more than 50,000 inhabitants) - High - Small	8	0	8	0	0	0	0
Urban (more than 50,000 inhabitants) - High - Large	10	0	10	0	0	0	0
Total	196	2	193	0	0	1	1

Azerbaijan

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, language of instruction other than Azerbaijani or Russian, and private schools
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

Sample Design

- Explicit stratification by language (Azerbaijani only, Russian or Azerbaijani and Russian), urbanization (urban, rural) within Azerbaijani only strata, and city (Baku, other) within urban stratum
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 120) and in schools where class grouping is applied
- Class group option was used in bilingual schools

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Azerbaijani only - Urban - Baku	30	1	26	2	0	1	0
Azerbaijani only - Urban - Other cities	40	0	39	1	0	0	0
Azerbaijani only - Rural	80	0	78	0	0	2	0
Russian, Azerbaijani and Russian	50	0	43	5	0	2	0
Total	200	1	186	8	0	5	0

Bahrain

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in French
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), and by governorate (4) and gender (girls, boys) within public schools
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 155)
- No overlap between Grade 4 and Grade 8 samples
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Participating Schools						
	Total Sampled Schools	Ineligible Schools	Original Schools	1st Replacements	2nd Replacements	Refusal Schools	Excluded Schools
Public Muharraq - Girls	10	0	10	0	0	0	0
Public Muharraq - Boys	10	0	10	0	0	0	0
Public Capital - Girls	19	0	19	0	0	0	0
Public Capital - Boys	20	0	20	0	0	0	0
Public Northern - Girls	22	0	22	0	0	0	0
Public Northern - Boys	17	0	17	0	0	0	0
Public Southern - Girls	11	0	11	0	0	0	0
Public Southern - Boys	12	0	12	0	0	0	0
Private	64	0	64	0	0	0	0
Total	185	0	185	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in French
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), and by governorate (4) and gender (girls, boys) within public schools
- No implicit stratification
- Sampled two classrooms per school
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public Muharraq - Girls	6	0	6	0	0	0	0
Public Muharraq - Boys	6	0	6	0	0	0	0
Public Capital - Girls	8	0	8	0	0	0	0
Public Capital - Boys	8	0	8	0	0	0	0
Public Northern - Girls	8	0	8	0	0	0	0
Public Northern - Boys	9	0	9	0	0	0	0
Public Southern - Girls	7	0	7	0	0	0	0
Public Southern - Boys	10	0	10	0	0	0	0
Private	50	0	50	0	0	0	0
Total	112	0	112	0	0	0	0

Belgium (Flemish)

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), language other than Dutch, and special needs schools other than type 1, 3, 8, 9
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (6), school type (official, private) within Antwerpen region, and socioeconomic status (4). Special needs schools were grouped into one separate stratum.
- No implicit stratification
- Sampled two classrooms per school

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Antwerpen - Official - High SES	8	0	8	0	0	0	0
Antwerpen - Official - Medium SES	8	0	6	1	1	0	0
Antwerpen - Official - Low SES	8	0	7	1	0	0	0
Antwerpen - Private - High SES	8	0	5	1	2	0	0
Antwerpen - Private - Medium SES	8	0	3	0	3	2	0
Antwerpen - Private - Low SES	8	0	5	2	0	1	0
Brussels Hoofdstedelijk Gewest - Low and Medium SES	8	0	6	2	0	0	0
Limburg - High SES	8	0	5	2	0	1	0
Limburg - Medium SES	8	0	2	4	2	0	0

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Limburg - Low SES	8	0	4	1	2	1	0
Oost-Vlaanderen - High SES	8	0	7	1	0	0	0
Oost-Vlaanderen - Medium SES	8	0	6	1	1	0	0
Oost-Vlaanderen - Low SES	8	0	4	2	1	1	0
Vlaams-Brabant - High SES	8	0	5	2	1	0	0
Vlaams-Brabant - Medium SES	8	0	7	1	0	0	0
Vlaams-Brabant - Low SES	8	0	4	3	0	1	0
West-Vlaanderen - High SES	8	1	4	3	0	0	0
West-Vlaanderen - Medium SES	8	0	6	1	1	0	0
West-Vlaanderen - Low SES	8	0	5	3	0	0	0
Special Needs Schools	8	3	2	1	0	2	0
Total	160	4	101	32	14	9	0

Bosnia and Herzegovina

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and international schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (12) and urbanization (rural, urban) within 3 larger regions
- Implicit stratification by urbanization (urban, rural) within two other larger regions
- Sampled two classrooms per school
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- A census of schools was taken in two small regions
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Republika Srpska - Rural	10	0	10	0	0	0	0
Republika Srpska - Urban	36	0	36	0	0	0	0
Brcko District	8	0	8	0	0	0	0
Bosnian Podrinje Canton	6	0	6	0	0	0	0
Herzeg-Bosnia Canton	8	0	8	0	0	0	0
Herzegovina-Neretva Canton	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Sarajevo Canton	20	0	20	0	0	0	0
Central Bosnia Canton - Rural	8	0	8	0	0	0	0
Central Bosnia Canton - Urban	9	0	9	0	0	0	0
Tuzla Canton - Rural	12	0	12	0	0	0	0
Tuzla Canton - Urban	8	0	8	0	0	0	0
Una-Sana Canton	12	0	12	0	0	0	0
Zenica-Doboj Canton - Rural	8	0	8	0	0	0	0
Zenica-Doboj Canton - Urban	10	0	10	0	0	0	0
Posavina Canton	7	0	7	0	0	0	0
West Herzegovina Canton	8	0	8	0	0	0	0
Total	178	0	178	0	0	0	0

Bulgaria

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (elementary, basic, general) and urbanization (capital, large cities, other)
- Implicit stratification by score (4)
- Sampled two classrooms in large schools (measure of size > 80)
- The Field Test and Main Data Collection TIMSS samples were selected sequentially. The TIMSS Main Data Collection sample was selected by controlling for the overlap with the TIMSS Field Test and TALIS samples using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Elementary School - Capital and Large Cities	8	0	7	1	0	0	0
Elementary School - Other	8	0	8	0	0	0	0
Basic School - Capital	10	0	10	0	0	0	0
Basic School - Large Cities	30	0	28	1	1	0	0
Basic School - Other	36	0	35	1	0	0	0
General School - Capital	15	0	15	0	0	0	0
General School - Large Cities	20	0	19	1	0	0	0
General School - Other	24	0	24	0	0	0	0
Total	151	0	146	4	1	0	0

Canada

Fourth Grade

Coverage and Exclusions

- Coverage is 79.3 percent. Coverage in Canada is restricted to students from the provinces of Alberta, Manitoba, Newfoundland, Ontario, and Quebec.
- School-level exclusions consisted of very small schools (measure of size < 10 in Quebec, measure of size < 6 in Ontario, Alberta, and Newfoundland, measure of size < 4 in Manitoba), special needs schools, First Nation schools and federal schools. French schools, non-ministry schools and remote or hard to access schools (in Newfoundland). Home schools (in Alberta and Manitoba), not funded schools (in Manitoba). International schools and school boards with special status (in Quebec).
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by provinces (5). Within the province of Alberta, explicit stratification was done by school system (French, English), school type (public, private, separate), and by school size (small, large). Within the province of Ontario, explicit stratification was done by language (English, French), school type (private, Catholic, public), and by school size (small, large) within Catholic and public schools. Within Quebec and Manitoba, explicit stratification was done by language (French, English), school type (public, private), and school size (small with less than three classes, large with three or more classes).
- Implicit stratification by region (6) in English public and Catholic schools explicit strata within Ontario
- Sampled two classrooms in large schools (measure of size > 40 in Ontario and measure of size > 75 in Quebec). In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- All Alberta and Manitoba French schools were selected
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS sample and classes were randomly

assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.

- 60.3 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Newfoundland	100	2	91	0	0	7	0
Quebec - English - Public - Small	12	0	8	1	0	3	0
Quebec - English - Public - Large	14	0	13	1	0	0	0
Quebec - English - Private	8	0	6	0	0	2	0
Quebec - French - Public - Small	44	0	35	1	0	8	0
Quebec - French - Public - Large	84	0	70	4	0	10	0
Quebec - French - Private - Small	4	0	3	1	0	0	0
Quebec - French - Private - Large	6	0	5	0	0	1	0
Manitoba - English - Public - Small	78	1	76	0	0	1	0
Manitoba - English - Public - Large	58	0	55	0	0	3	0
Manitoba - English - Private	10	0	10	0	0	0	0
Manitoba - French - Public	19	0	17	0	0	2	0
Alberta - English - Public - Small	36	0	25	4	2	5	0
Alberta - English - Public - Large	68	1	46	5	3	13	2
Alberta - English - Private	7	0	2	3	0	2	1
Alberta - English - Separate - Small	16	1	11	1	1	2	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Alberta - English - Separate - Large	22	2	13	3	2	2	0
Alberta - French - Public	28	0	23	0	0	5	0
Ontario - English - Public - Small	24	1	23	0	0	0	0
Ontario - English - Public - Large	72	0	70	1	0	1	0
Ontario - English - Catholic - Small	18	0	18	0	0	0	0
Ontario - English - Catholic - Large	19	0	19	0	0	0	0
Ontario - Private	8	0	0	1	1	6	0
Ontario - French - Catholic & Public - Small	18	0	18	0	0	0	0
Ontario - French - Catholic & Public - Large	12	0	12	0	0	0	0
Total	785	8	669	26	9	73	3

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Newfoundland	4	0	4	0	0	0	0
Quebec - English - Public - Small	2	0	0	0	0	2	0
Quebec - English - Public - Large	2	0	2	0	0	0	0
Quebec - English - Private	2	0	2	0	0	0	0
Quebec - French - Public - Small	6	0	6	0	0	0	0
Quebec - French - Public - Large	12	0	11	0	0	1	0
Quebec - French - Private - Small	2	0	2	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Quebec - French - Private - Large	2	0	1	0	0	1	0
Manitoba - English - Public - Small	2	0	2	0	0	0	0
Manitoba - English - Public - Large	2	0	2	0	0	0	0
Manitoba - English - Private	2	0	2	0	0	0	0
Manitoba - French - Public	2	0	2	0	0	0	0
Alberta - English - Public - Small	4	0	1	1	0	2	0
Alberta - English - Public - Large	6	0	2	2	0	2	0
Alberta - English - Private	1	0	0	0	1	0	1
Alberta - English - Separate - Small	2	0	2	0	0	0	0
Alberta - English - Separate - Large	2	1	1	0	0	0	0
Alberta - French - Public	2	0	2	0	0	0	0
Ontario - English - Public - Small	6	0	6	0	0	0	0
Ontario - English - Public - Large	16	0	15	1	0	0	0
Ontario - English - Catholic - Small	4	0	4	0	0	0	0
Ontario - English - Catholic - Large	4	0	4	0	0	0	0
Ontario - Private	2	0	0	1	0	1	0
Ontario - French - Catholic & Public - Small	2	0	2	0	0	0	0
Ontario - French - Catholic & Public - Large	2	0	2	0	0	0	0
Total	93	1	77	5	1	9	1

Chile

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and geographically inaccessible schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/‘Grade 4 and Grade 8’ schools, school type (public, private subsidized, private), and urbanization (rural, urban)
- Implicit stratification by national assessment score level (4)
- Sampled one classroom per school
- The Field Test and Main Data Collection TIMSS samples were selected sequentially. The TIMSS Main Data Collection sample was selected by controlling for the overlap with the TIMSS Field Test, ICILS, and PISA samples using the Chowdhury approach.
- Private schools were oversampled
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Urban	8	1	7	0	0	0	0
Grade 4 - Rural	8	0	7	1	0	0	0
Grade 4 & Grade 8 - Public - Urban	40	0	37	3	0	0	0
Grade 4 & Grade 8 - Public - Rural	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Private Subsidized - Urban	71	1	61	8	1	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Private Subsidized - Rural	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private Paid	29	0	21	4	1	3	0
Total	174	2	151	16	2	3	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Urban	4	0	4	0	0	0	0
Grade 4 - Rural	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Public - Urban	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Public - Rural	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Private Subsidized - Urban	22	0	22	0	0	0	0
Grade 4 & Grade 8 - Private Subsidized - Rural	4	0	3	1	0	0	0
Grade 4 & Grade 8 - Private Paid	8	0	8	0	0	0	0
Total	58	0	57	1	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and geographically inaccessible schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8’/‘Grade 4 and Grade 8’ schools, school type (public, private subsidized, private), and urbanization (rural, urban)
- Implicit stratification by national assessment score level (4)
- Sampled one classroom per school
- The Field Test and Main Data Collection TIMSS samples were selected sequentially. The TIMSS Main Data Collection sample was selected by controlling for the overlap with the TIMSS Field Test, ICILS, and PISA samples using the Chowdhury approach.
- Private schools were oversampled
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	11	0	11	0	0	0	0
Grade 4 & Grade 8 - Public - Urban School	40	0	37	3	0	0	0
Grade 4 & Grade 8 - Public - Rural School	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Private-Subsidized - Urban School	71	2	60	8	1	0	0
Grade 4 & Grade 8 - Private-Subsidized - Rural School	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private	29	0	21	4	1	3	0
Total	169	2	147	15	2	3	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	6	0	4	2	0	0	0
Grade 4 & Grade 8 - Public - Urban School	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Public - Rural School	4	0	4	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Private-Subsidized - Urban School	22	0	22	0	0	0	0
Grade 4 & Grade 8 - Private-Subsidized - Rural School	4	0	3	1	0	0	0
Grade 4 & Grade 8 - Private	8	0	8	0	0	0	0
Total	56	0	53	3	0	0	0

Chinese Taipei

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and schools that do not follow the national curriculum
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (metropolitan area, city area, developing city area, rural and remote area), region (north, other), and school size (small, large)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 290 for eTIMSS, measure of size > 68 for bridge). In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 85.6 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Metropolitan Area - North	24	0	20	4	0	0	0
Metropolitan Area - Other	10	0	10	0	0	0	0
City Area - North	24	0	23	1	0	0	0
City Area - Other	22	0	22	0	0	0	0
Developing City Area - North	22	0	22	0	0	0	0
Developing City Area - Other - Large	20	0	20	0	0	0	0
Developing City Area - Other - Small	8	0	8	0	0	0	0
Rural and Remote Area - North - Large	6	0	5	1	0	0	0
Rural and Remote Area - North - Small	4	0	4	0	0	0	0
Rural and Remote Area - Other - Large	8	0	7	1	0	0	0
Rural and Remote Area - Other - Small	15	0	14	0	0	1	0
Total	163	0	155	7	0	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Metropolitan Area - North	10	0	8	2	0	0	0
Metropolitan Area - Other	4	0	4	0	0	0	0
City Area - North	10	0	9	1	0	0	0
City Area - Other	8	0	8	0	0	0	0
Developing City Area - North	8	0	8	0	0	0	0
Developing City Area - Other - Large	8	0	8	0	0	0	0
Developing City Area - Other - Small	4	0	4	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Rural and Remote Area - North - Large	4	0	4	0	0	0	0
Rural and Remote Area - North - Small	2	0	2	0	0	0	0
Rural and Remote Area - Other - Large	4	0	3	1	0	0	0
Rural and Remote Area - Other - Small	6	0	6	0	0	0	0
Total	68	0	64	4	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and schools that do not follow the national curriculum
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (metropolitan area, city area, developing city area, rural and remote area), region (north, other), and school size (small, large)
- Implicit stratification by performance (5)
- Sampled one classroom per school
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Rural and remote schools were oversampled.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample

of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.

- 98 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Metropolitan Area - North	23	0	22	1	0	0	0
Grade 8 - Metropolitan Area - Other	13	0	13	0	0	0	0
Grade 8 - City Area - North	24	0	23	0	0	1	0
Grade 8 - City Area - Other	24	0	24	0	0	0	0
Grade 8 - Developing City Area - North	18	1	17	0	0	0	0
Grade 8 - Developing City Area - Other	30	0	30	0	0	0	0
Grade 8 - Rural and Remote Area - North	19	0	18	1	0	0	0
Grade 8 - Rural and Remote Area - Other - Large	44	0	42	1	0	1	0
Grade 8 - Rural and Remote Area - Other - Small	11	0	11	0	0	0	0
Total	206	1	200	3	0	2	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Metropolitan Area - North	8	0	8	0	0	0	0
Grade 8 - Metropolitan Area - Other	4	0	4	0	0	0	0
Grade 8 - City Area - North	8	0	8	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - City Area - Other	8	0	8	0	0	0	0
Grade 8 - Developing City Area - North	6	0	6	0	0	0	0
Grade 8 - Developing City Area - Other	10	0	10	0	0	0	0
Grade 8 - Rural and Remote Area - North	3	0	3	0	0	0	0
Grade 8 - Rural and Remote Area - Other - Large	8	0	8	0	0	0	0
Grade 8 - Rural and Remote Area - Other - Small	2	0	2	0	0	0	0
Total	57	0	57	0	0	0	0

Croatia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), and private schools
- Within-school exclusions consisted of students with intellectual disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (mother/single building, satellite), and by grouped regions (6) and school size (small, large) within mother/single building strata
- Implicit stratification by urbanization (urban, rural)
- Sampled two classrooms whenever possible. In schools selected for both the eTIMSS and Bridge samples, two classrooms selected for eTIMSS and one classroom selected for Bridge sample whenever possible
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 48.6 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Mother/Single Building School - Central Croatia - Small	10	0	10	0	0	0	0
Mother/Single Building School - Central Croatia - Large	14	0	13	1	0	0	0
Mother/Single Building School - Eastern Croatia - Small	10	0	9	0	0	1	0
Mother/Single Building School - Eastern Croatia - Large	8	0	8	0	0	0	0
Mother/Single Building School - Northern Croatia - Small	8	0	8	0	0	0	0
Mother/Single Building School - Northern Croatia - Large	8	0	8	0	0	0	0
Mother/Single Building School - Western Croatia - Small	11	0	10	1	0	0	0
Mother/Single Building School - Western Croatia - Large	9	0	8	0	0	1	0
Mother/Single Building School - Southern Croatia - Small	8	0	7	0	0	1	0
Mother/Single Building School - Southern Croatia - Large	16	0	16	0	0	0	0
Mother/Single Building School - City of Zagreb - Small	9	0	9	0	0	0	0
Mother/Single Building School - City of Zagreb - Large	24	0	22	1	0	1	0
Satellite Schools	24	1	22	0	0	1	0
Total	159	1	150	3	0	5	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Mother/Single Building School - Central Croatia - Small	4	0	4	0	0	0	0
Mother/Single Building School - Central Croatia - Large	6	0	6	0	0	0	0
Mother/Single Building School - Eastern Croatia - Small	6	0	6	0	0	0	0
Mother/Single Building School - Eastern Croatia - Large	4	0	4	0	0	0	0
Mother/Single Building School - Northern Croatia - Small	4	0	4	0	0	0	0
Mother/Single Building School - Northern Croatia - Large	4	0	4	0	0	0	0
Mother/Single Building School - Western Croatia - Small	4	0	4	0	0	0	0
Mother/Single Building School - Western Croatia - Large	4	0	3	0	0	1	0
Mother/Single Building School - Southern Croatia - Small	4	0	4	0	0	0	0
Mother/Single Building School - Southern Croatia - Large	8	0	8	0	0	0	0
Mother/Single Building School - City of Zagreb - Small	4	0	4	0	0	0	0
Mother/Single Building School - City of Zagreb - Large	12	0	12	0	0	0	0
Satellite Schools	12	0	11	0	0	1	0
Total	76	0	74	0	0	2	0

Cyprus

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, Turkish Occupied Area, and language of instruction other than Greek or English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), curriculum (national curriculum, other), and district (4)
- Implicit stratification by urbanization (urban, rural)
- Sampled three classrooms whenever possible in large schools (measure of size > 65)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Private with other curriculum	12	1	10	1	0	0	0
Public and private with national curriculum - Famagusta-Larnaca	34	0	34	0	0	0	0
Public and private with national curriculum - Limassol	38	0	38	0	0	0	0
Public and private with national curriculum - Nicosia	52	0	52	0	0	0	0
Public and private with national curriculum - Paphos	16	0	16	0	0	0	0
Total	152	1	150	1	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), Turkish Occupied Area, and language of instruction other than Greek or English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), curriculum (national curriculum, other), and district (4)
- Implicit stratification by urbanization (urban, rural)
- Sampled three classrooms whenever possible in large schools (measure of size > 120)
- All Grade 8 schools were selected for the Main Data Collection
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Participating Schools						
	Total Sampled Schools	Ineligible Schools	Original Schools	1st Replacements	2nd Replacements	Refusal Schools	Excluded Schools
Private with other curriculum	24	1	23	0	0	0	0
Public and private with national curriculum - Famagusta-Larnaca	15	0	15	0	0	0	0
Public and private with national curriculum - Limassol	23	0	23	0	0	0	0
Public and private with national curriculum - Nicosia	28	0	28	0	0	0	0
Public and private with national curriculum - Paphos	9	0	9	0	0	0	0
Total	99	1	98	0	0	0	0

Czech Republic

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, and Polish language schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (14). One additional stratum created for schools with no Grade 4 students on the frame but expected to have some during the Main Data Collection.
- No implicit stratification
- Sampled two classrooms per school
- The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Praha	16	0	16	0	0	0	0
Stredočeský	20	0	20	0	0	0	0
Plzeňský	8	0	8	0	0	0	0
Karlovarský	7	0	7	0	0	0	1
Ústecký	12	0	12	0	0	0	0
Jihočeský	8	0	7	1	0	0	0
Liberecký	8	0	8	0	0	0	0
Královéhradecký	8	0	8	0	0	0	0
Pardubický	8	0	8	0	0	0	0
Vysocina	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Jihomoravský	15	0	15	0	0	0	1
Olomoucký	8	0	8	0	0	0	0
Moravskoslezský	16	0	16	0	0	0	0
Zlínský	8	0	8	0	0	0	0
Empty Schools	4	2	2	0	0	0	0
Total	154	2	151	1	0	0	2

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Praha	4	0	4	0	0	0	0
Stredočeský	6	1	5	0	0	0	0
Plzeňský	4	0	4	0	0	0	0
Karlovarský	4	0	4	0	0	0	0
Ústecký	4	0	4	0	0	0	0
Jihočeský	4	0	4	0	0	0	0
Liberecký	4	0	4	0	0	0	0
Královéhradecký	4	0	4	0	0	0	0
Pardubický	4	0	4	0	0	0	0
Vysocina	4	0	4	0	0	0	0
Jihomoravský	4	0	4	0	0	0	0
Olomoucký	4	0	4	0	0	0	0
Moravskoslezský	4	0	4	0	0	0	0
Zlínský	3	0	3	0	0	0	1
Empty Schools	2	0	2	0	0	0	0
Total	59	1	58	0	0	0	1

Denmark

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), and school size (small, large) within public schools
- No implicit stratification
- Sampled two classrooms in large schools that participate in eTIMSS or both eTIMSS and bridge (measure of size > 85). Sampled two classrooms in large schools that participate in bridge only (measure of size > 44).
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school stratum, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school and private school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 37.2 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Private	30	1	12	7	4	6	0
Public - Small	80	0	63	15	1	1	0
Public - Large	65	0	48	12	4	1	0
Total	175	1	123	34	9	8	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Private	10	0	6	2	1	1	0
Public - Small	28	0	17	7	4	0	0
Public - Large	24	0	17	4	3	0	0
Total	62	0	40	13	8	1	0

Egypt

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 20), Al-Azhar schools, special needs schools, and sports prep schools
- Within-school exclusions consisted of students with intellectual disabilities

Sample Design

- Explicit stratification by region (3), school type (4) and school gender (3).
- Implicit stratification by school shift (4) within governmental schools
- Sampled one classroom per school
- The Field Test and Main Data Collection school samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Capital - Governmental Schools - Girls	10	0	10	0	0	0	0
Capital - Governmental Schools - Boys	10	0	10	0	0	0	0
Capital - Governmental Schools - Mixed	8	0	8	0	0	0	0
North - Governmental Schools - Girls	11	0	11	0	0	0	1
North - Governmental Schools - Boys	12	0	12	0	0	0	0
North - Governmental Schools - Mixed	40	0	39	1	0	0	0
South - Governmental Schools - Girls	8	0	8	0	0	0	0
South - Governmental Schools - Boys	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
South - Governmental Schools - Mixed	30	0	30	0	0	0	0
Private Funded Schools (without fees)	11	0	11	0	0	0	1
Private Schools (with fees)	12	0	12	0	0	0	0
Private Language Schools	9	0	9	0	0	0	3
Total	169	0	168	1	0	0	5

England

Fifth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), and special schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (academy, all other state funded, independent), and attainment level (5)
- Implicit stratification by attainment level (7)
- Sampled two classrooms in large schools selected for eTIMSS (measure of size > 90) and in large schools selected for bridge (measure of size > 65)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample for Grade 5 was selected by controlling for the overlap with the Main Data Collection sample at Grade 8 and the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
All Other State-Funded - Low	14	0	12	0	0	2	0
All Other State-Funded - Low/Middle	22	0	21	0	0	1	0
All Other State-Funded - Middle/High	24	0	20	2	0	2	0
All Other State-Funded - High	20	0	17	1	0	2	0
All Other State-Funded - Middle and N.A.	24	0	21	0	0	3	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Academy - Low and Low/Middle	16	0	14	2	0	0	0
Academy - Middle and N.A.	8	0	8	0	0	0	0
Academy - Mid-dle/ High and High	14	0	11	2	0	1	0
Independent	8	0	5	3	0	0	0
Total	150	0	129	10	0	11	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
All Other State-Funded - Low	4	0	4	0	0	0	0
All Other State-Funded - Low/Middle	8	0	5	2	0	1	0
All Other State-Funded - Middle/High	8	0	7	0	0	1	0
All Other State-Funded - High	6	0	6	0	0	0	0
All Other State-Funded - Middle and N.A.	8	0	7	0	0	1	0
Academy - Low and Low/Middle	6	0	4	1	0	1	0
Academy - Middle and N.A.	4	0	3	0	0	1	0
Academy - Mid-dle/ High and High	4	0	4	0	0	0	0
Independent	4	0	2	0	1	1	0
Total	52	0	42	3	1	6	0

Ninth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 20), and special schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (academy, all other state funded, independent), and attainment level (5)
- Implicit stratification by attainment level (7)
- Sampled two classrooms in large schools selected for eTIMSS (measure of size > 245) and in large schools selected for bridge (measure of size > 200)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample for Grade 9 was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
All Other State Funded - Middle/High	12	0	9	3	0	0	0
All Other State Funded - High	8	0	8	0	0	0	0
All Other State Funded - Low and Low/Middle	10	0	8	1	0	1	0
All Other State Funded - Middle and N.A.	16	0	14	2	0	0	0
Academy - Mid-dle/High	26	0	24	0	0	2	0
Academy - High	22	0	18	1	0	3	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Academy - Low and Low/Middle	21	0	17	1	0	3	0
Academy - Middle and N.A.	26	0	22	0	0	4	0
Independent	10	0	5	3	0	2	0
Total	151	0	125	11	0	15	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
All Other State Funded - Middle/High	4	0	4	0	0	0	0
All Other State Funded - High	4	0	4	0	0	0	0
All Other State Funded - Low and Low/Middle	4	0	3	0	0	1	0
All Other State Funded - Middle and N.A.	4	0	3	1	0	0	0
Academy - Middle/High	8	0	5	3	0	0	0
Academy - High	8	0	7	0	0	1	0
Academy - Low and Low/Middle	6	0	6	0	0	0	0
Academy - Middle and N.A.	8	0	7	1	0	0	0
Independent	4	0	2	1	0	1	0
Total	50	0	41	6	0	3	0

Finland

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and language schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (Finnish, Swedish), and major region (4) and urbanization (urban/semi-urban, rural) within Finnish schools
- Implicit stratification by regional state administrative agency (6)
- Sampled two classrooms per school
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection was selected by controlling for the overlap with the Field Test sample and Main Data Collection Grade 8 sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Finnish Speaking - Helsinki/Uusimaa	42	1	40	1	0	0	0
Finnish Speaking - Southern - Urban and Semi-Urban	24	0	24	0	0	0	0
Finnish Speaking - Southern - Rural	8	0	8	0	0	0	0
Finnish Speaking - Western - Urban and Semi-Urban	31	0	31	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Finnish Speaking - Western - Rural	8	0	8	0	0	0	0
Finnish Speaking - Northern & Eastern - Urban and Semi-Urban	28	0	28	0	0	0	0
Finnish Speaking - Northern & Eastern - Rural	8	0	8	0	0	0	0
Swedish Speaking	10	0	10	0	0	0	0
Total	159	1	157	1	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Finnish Speaking - Helsinki/Uusimaa	18	0	17	1	0	0	0
Finnish Speaking - Southern - Urban and Semi-Urban	12	0	12	0	0	0	0
Finnish Speaking - Southern - Rural	4	1	3	0	0	0	0
Finnish Speaking - Western - Urban and Semi-Urban	14	0	14	0	0	0	0
Finnish Speaking - Western - Rural	4	0	4	0	0	0	0
Finnish Speaking - Northern & Eastern - Urban and Semi-Urban	12	0	12	0	0	0	0
Finnish Speaking - Northern & Eastern - Rural	4	0	4	0	0	0	0
Swedish Speaking	4	0	4	0	0	0	0
Total	72	1	70	1	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), special needs schools, and language schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (Finnish, Swedish), and major region (4) and urbanization (urban/semi-urban, rural) within Finnish schools
- Implicit stratification by regional state administrative agency (6)
- Sampled two classrooms per school
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- No bridge sample required at Grade 8 as they did not participate in TIMSS 2015

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Finnish Speaking - Helsinki/Uusimaa	39	0	39	0	0	0	0
Finnish Speaking - Southern - Urban and Semi-Urban	24	2	22	0	0	0	0
Finnish Speaking - Southern - Rural	9	0	9	0	0	0	0
Finnish Speaking - Western - Urban and Semi-Urban	30	1	29	0	0	0	0
Finnish Speaking - Western - Rural	8	0	8	0	0	0	0
Finnish Speaking - Northern & Eastern - Urban and Semi-Urban	28	1	27	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Finnish Speaking - Northern & Eastern - Rural	10	0	10	0	0	0	0
Swedish Speaking	10	0	10	0	0	0	0
Total	158	4	154	0	0	0	0

France

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, overseas territories, Mayotte, and private schools without a contract
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public – other, public – priority education zone, private)
- No implicit stratification
- Sampled two classrooms per school
- No overlap between Grade 4 and Grade 8 schools
- The Main Data Collection sample was selected by controlling for the overlap with the Field Test using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Other	108	1	107	0	0	0	0
Public - Priority Education Zone	24	0	24	0	0	0	0
Private	24	0	24	0	0	0	0
Total	156	1	155	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Other	42	1	40	0	0	1	0
Public - Priority Education Zone	10	0	10	0	0	0	0
Private	10	0	10	0	0	0	0
Total	62	1	60	0	0	1	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, overseas territories, Mayotte, and private schools without a contract
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public – other, public – priority education zone, private)
- No implicit stratification
- Sampled two classrooms per school
- No overlap between Grade 4 and Grade 8 schools
- The Main Data Collection sample was selected by controlling for the overlap with the Field Test using the Chowdhury approach.
- No bridge sample required at Grade 8 as they did not participate in TIMSS 2015

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public-Priority Education Zone	24	0	24	0	0	0	0
Public-Other	94	0	94	0	0	0	0
Private	32	0	32	0	0	0	0
Total	150	0	150	0	0	0	0

Georgia

Fourth Grade

Coverage and Exclusions

- Coverage is 92 percent. Coverage in Georgia is restricted to students taught in Georgian.
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/Grade 4 and Grade 8’ schools, region (Tbilisi, other), and Mathematics average score (low, high, N.A.)
- Implicit stratification by urbanization (town, village), and school type (public, private)
- Sampled two classrooms in large schools (measure of size > 70)
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 only	8	1	6	0	0	1	0
Grade 4 & Grade 8 - Missing Average Math Score	9	0	9	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - Low Average Math Score	7	0	7	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - High Average Math Score	48	0	45	3	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Other Region - Low Average Math Score	36	0	36	0	0	0	0
Grade 4 & Grade 8 - Other Region - High Average Math Score	50	0	48	0	0	2	0
Total	158	1	151	3	0	3	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 only	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Missing Average Math Score	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - Low Average Math Score	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - High Average Math Score	16	0	16	0	0	0	0
Grade 4 & Grade 8 - Other Region - Low Average Math Score	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Other Region - High Average Math Score	18	0	18	0	0	0	0
Total	58	0	58	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 91.3 percent. Coverage in Georgia is restricted to students taught in Georgian.
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools

- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8’/Grade 4 and Grade 8’ schools, region (Tbilisi, other), and Mathematics average score (low, high, N.A.)
- Implicit stratification by urbanization (town, village), and school type (public, private)
- Sampled two classrooms in large schools (measure of size > 95)
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Missing Achievement score	9	1	8	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - Low Achievement	7	0	7	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - High Achievement	48	0	38	3	0	7	0
Grade 4 & Grade 8 - Other - Low Achievement	36	0	36	0	0	0	0
Grade 4 & Grade 8 - Other - High Achievement	50	0	45	0	0	5	0
Total	158	1	142	3	0	12	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	4	0	3	0	0	1	0
Grade 4 & Grade 8 - Missing Achievement score	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - Low Achievement	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Tbilisi - High Achievement	16	0	12	0	0	4	0
Grade 4 & Grade 8 - Other - Low Achievement	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Other - High Achievement	18	0	18	0	0	0	0
Total	58	0	53	0	0	5	0

Germany

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (regular, special needs). Within regular school, explicit stratification by socioeconomic status estimated by the percentage of migrants (low, medium, high), and school size (small, large).
- No implicit stratification
- Sampled one classroom per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 44.9 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Regular Schools - Very low percentage of im-migrants	24	0	19	3	2	0	0
Regular Schools - Low percentage of immi-grants - Small	50	0	50	0	0	0	0
Regular Schools - Low percentage of immi-grants - Large	50	0	50	0	0	0	0
Regular Schools - Me-dium percentage of immigrants - Small	18	0	18	0	0	0	0
Regular Schools - Me-dium percentage of immigrants - Large	30	0	30	0	0	0	0
Regular Schools - High percentage of immi-grants - Small	10	1	9	0	0	0	0
Regular Schools - High percentage of immi-grants - Large	14	0	14	0	0	0	0
Special Needs Schools	10	2	8	0	0	0	0
Total	206	3	198	3	2	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Regular Schools - Very low percentage of im-migrants	10	0	10	0	0	0	0
Regular Schools - Low percentage of immi-grants - Small	20	0	18	2	0	0	0
Regular Schools - Low percentage of immi-grants - Large	18	0	18	0	0	0	0
Regular Schools - Me-dium percentage of immigrants - Small	6	0	6	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Regular Schools - Medium percentage of immigrants - Large	12	0	12	0	0	0	0
Regular Schools - High percentage of immigrants - Small	4	0	4	0	0	0	0
Regular Schools - High percentage of immigrants - Large	6	0	6	0	0	0	0
Special Needs Schools	2	0	2	0	0	0	0
Total	78	0	76	2	0	0	0

Hong Kong SAR

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, Japanese school, and remote school
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school finance type (5)
- No implicit stratification
- Sampled one classroom per school. One additional classroom selected in schools sampled for the bridge
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 97.9 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Aided	113	0	82	18	6	7	0
Direct Subsidy	10	0	7	2	0	1	0
Government	12	0	12	0	0	0	0
Private	12	0	6	1	1	4	0
Non-Local	12	0	2	2	0	8	0
Total	159	0	109	23	7	20	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Aided	46	0	32	8	2	4	0
Direct Subsidy	4	0	3	0	0	1	0
Government	4	0	4	0	0	0	0
Private	6	0	2	1	0	3	0
Non-Local	6	0	2	0	0	4	0
Total	66	0	43	9	2	12	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and Japanese school
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school finance type (4)
- Implicit stratification by other school characteristic (3)
- Sampled one classroom per school. One additional classroom selected in schools sampled for the bridge
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 100 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Aided	112	0	83	15	4	10	0
Direct Subsidy	22	0	16	3	0	3	0
Government	12	0	10	0	0	2	0
Private	12	0	3	2	0	7	0
Non-Local	158	0	112	20	4	22	0
Total	159	0	109	23	7	20	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Aided	45	0	31	8	1	5	0
Direct Subsidy	10	0	6	2	0	2	0
Government	4	0	4	0	0	0	0
Private	4	0	0	2	0	2	0
Non-Local	63	0	41	12	1	9	0
Total	66	0	43	9	2	12	0

Hungary

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in foreign language
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4 only’/‘Grade 4 and Grade 8’ schools, type of community (capital, county town, town, rural area) and national assessment score (low, medium, high) within ‘Grade 4 and Grade 8’ stratum
- No implicit stratification
- Sampled two classrooms per school
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap
- The Main Data Collection school samples for Grade 4 and Grade 8 were selected by controlling for the overlap with the Field test samples using the Chowdhury approach
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4	20	1	17	0	2	0	0
Grade 4 & Grade 8 - Capital - High Performance	13	0	10	2	1	0	0
Grade 4 & Grade 8 - Capital - Low or Medium Performance	10	0	9	1	0	0	0
Grade 4 & Grade 8 - County Town - High Performance	10	0	9	1	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - County Town - Low or Medium Performance	14	0	14	0	0	0	0
Grade 4 & Grade 8 - Town - Low Performance	14	0	13	0	1	0	0
Grade 4 & Grade 8 - Town - Medium Performance	26	0	25	0	1	0	0
Grade 4 & Grade 8 - Town - High Performance	8	0	6	1	0	1	0
Grade 4 & Grade 8 - Rural Area - Low Performance	16	0	16	0	0	0	0
Grade 4 & Grade 8 - Rural Area - Medium Performance	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Rural Area - High Performance	8	0	8	0	0	0	0
Total	151	1	139	5	5	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4	6	1	5	0	0	0	0
Grade 4 & Grade 8 - Capital - High Performance	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Capital - Low or Medium Performance	4	0	4	0	0	0	0
Grade 4 & Grade 8 - County Town - High Performance	4	0	4	0	0	0	0
Grade 4 & Grade 8 - County Town - Low or Medium Performance	4	0	4	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Town - Low Performance	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Town - Medium Performance	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Town - High Performance	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Rural Area - Low Performance	6	0	6	0	0	0	0
Grade 4 & Grade 8 - Rural Area - Medium Performance	4	1	3	0	0	0	0
Grade 4 & Grade 8 - Rural Area - High Performance	4	0	4	0	0	0	0
Total	52	2	50	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in foreign language
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8 only’/‘Grade 4 and Grade 8’ schools, type of community (capital, county town, town, rural area) and national assessment score (low, medium, high) within ‘Grade 4 and Grade 8’ stratum
- No implicit stratification

- Sampled two classrooms per school
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap
- The Main Data Collection school samples for Grade 4 and Grade 8 were selected by controlling for the overlap with the Field test samples using the Chowdhury approach
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	24	0	24	0	0	0	0
Grade 4 & Grade 8 - Capital - High	13	0	10	2	1	0	0
Grade 4 & Grade 8 - Capital - Low or Medium	10	0	9	1	0	0	0
Grade 4 & Grade 8 - County town - High	10	0	9	1	0	0	0
Grade 4 & Grade 8 - County town - Low or Medium	14	0	14	0	0	0	0
Grade 4 & Grade 8 - Town - Low	14	0	13	0	1	0	0
Grade 4 & Grade 8 - Town - Medium	26	0	25	0	1	0	0
Grade 4 & Grade 8 - Town - High	8	0	6	1	0	1	0
Grade 4 & Grade 8 - Rural area - Low	16	0	16	0	0	0	0
Grade 4 & Grade 8 - Rural area - Medium	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Rural area - High	8	0	8	0	0	0	0
Total	155	0	146	5	3	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Capital - High	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Capital - Low or Medium	4	1	3	0	0	0	0
Grade 4 & Grade 8 - County town - High	4	0	4	0	0	0	0
Grade 4 & Grade 8 - County town - Low or Medium	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Town - Low	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Town - Medium	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Town - High	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Rural area - Low	6	0	6	0	0	0	0
Grade 4 & Grade 8 - Rural area - Medium	4	1	3	0	0	0	0
Grade 4 & Grade 8 - Rural area - High	4	0	4	0	0	0	0
Total	54	2	52	0	0	0	0

Iran, Islamic Rep. of

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and geographically inaccessible schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), gender (mixed, girls, boys), and province or grouped provinces (7)
- No implicit stratification
- Sampled one classroom per school
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	24	0	24	0	0	0	0
Grade 4 & Grade 8 - Capital - High	13	0	10	2	1	0	0
Grade 4 & Grade 8 - Capital - Low or Medium	10	0	9	1	0	0	0
Grade 4 & Grade 8 - County town - High	10	0	9	1	0	0	0
Grade 4 & Grade 8 - County town - Low or Medium	14	0	14	0	0	0	0
Grade 4 & Grade 8 - Town - Low	14	0	13	0	1	0	0
Grade 4 & Grade 8 - Town - Medium	26	0	25	0	1	0	0
Grade 4 - Private	22	0	22	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Public - Boys - Esfahan	10	0	10	0	0	0	0
Grade 4 - Public - Boys - Fars	10	0	10	0	0	0	0
Grade 4 - Public - Boys - Khozestan	10	0	10	0	0	0	0
Grade 4 - Public - Boys - Tehran Province	10	0	10	0	0	0	0
Grade 4 - Public - Boys - Tehran City	10	0	10	0	0	0	0
Grade 4 - Public - Boys - Khorasan Razavi	10	0	10	0	0	0	0
Grade 4 - Public - Boys - Other Provinces	30	0	30	0	0	0	0
Grade 4 - Public - Girls - Esfahan	10	0	10	0	0	0	0
Grade 4 - Public - Girls - Fars	10	0	10	0	0	0	0
Grade 4 - Public - Girls - Khozestan	10	0	10	0	0	0	0
Grade 4 - Public - Girls - Tehran Province	10	0	10	0	0	0	0
Grade 4 - Public - Girls - Tehran City	10	0	10	0	0	0	0
Grade 4 - Public - Girls - Khorasan Razavi	10	0	10	0	0	0	0
Grade 4 - Public - Girls - Other Provinces	30	0	30	0	0	0	0
Grade 4 - Public - Mixed	22	0	22	0	0	0	0
Total	224	0	224	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and geographically inaccessible schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), gender (mixed, girls, boys), and province or grouped provinces (7)
- No implicit stratification
- Sampled one classroom per school
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Private	14	0	14	0	0	0	0
Grade 8 - Public - Boys - Esfahan	10	0	10	0	0	0	0
Grade 8 - Public - Boys - Fars	10	0	10	0	0	0	0
Grade 8 - Public - Boys - Khozestan	10	0	10	0	0	0	0
Grade 8 - Public - Boys - Tehran Province	10	0	10	0	0	0	0
Grade 8 - Public - Boys - Tehran City	10	0	10	0	0	0	0
Grade 8 - Public - Boys - Khorasan Razavi	10	0	10	0	0	0	0
Grade 8 - Public - Boys - Other Provinces	38	0	38	0	0	0	0
Grade 8 - Public - Girls - Esfahan	10	0	10	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Public - Girls - Fars	10	0	10	0	0	0	0
Grade 8 - Public - Girls - Khozestan	10	0	10	0	0	0	0
Grade 8 - Public - Girls - Tehran Province	10	0	10	0	0	0	0
Grade 8 - Public - Girls - Tehran City	10	0	10	0	0	0	0
Grade 8 - Public - Girls - Khorasan Razavi	10	0	10	0	0	0	0
Grade 8 - Public - Girls - Other Provinces	38	0	38	0	0	0	0
Grade 8 - Public - Mixed	10	0	10	0	0	0	0
Total	220	0	220	0	0	0	0

Ireland

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, and non-aided (private) schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school level socioeconomic status DEIS (urban band 1, urban band 2, rural), language of instruction (Gaelscoil, Gaeltacht, ordinary), and gender (boys, girls, mixed)
- Implicit stratification by location (cities, rural)
- Sampled two classrooms per school
- No overlap between Grade 4 and Grade 8 schools.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection school sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
All Irish Schools	10	0	10	0	0	0	0
Gaeltacht Schools	8	0	8	0	0	0	0
DEIS Urban Band 1 - Ordinary School	14	0	14	0	0	0	0
DEIS Urban Band 2 - Ordinary School	8	0	8	0	0	0	0
DEIS Rural - Ordinary School	8	0	8	0	0	0	0
Non-DEIS - Ordinary School - Boys	10	0	10	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Non-DEIS - Ordinary School - Girls	12	0	12	0	0	0	0
Non-DEIS - Ordinary School - Mixed	81	1	80	0	0	0	0
Total	151	1	150	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of island schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school sector (community/comprehensive, secondary, vocational), socioeconomic status (high, medium, low) and gender (boys, girls, mixed)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 150)
- No overlap between Grade 4 and Grade 8 schools.
- The Field Test and Main Data Collection samples were selected sequentially. The TIMSS Main Data Collection school sample was selected by controlling for the overlap with the TIMSS Field Test sample and the PISA Feasibility study sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Secondary - High SES - Girls	15	0	15	0	0	0	0
Secondary - High SES - Boys	14	0	14	0	0	0	0
Secondary - High SES - Mixed	14	0	14	0	0	0	0
Secondary - Medium SES - Girls	10	0	9	1	0	0	0
Secondary - Medium SES - Boys	9	0	9	0	0	0	0
Secondary - Medium SES - Mixed	8	0	7	0	0	1	0
Secondary - Low SES	10	0	10	0	0	0	0
Vocational - High SES	8	0	7	1	0	0	0
Vocational - Medium SES	17	0	17	0	0	0	0
Vocational - Low SES	19	0	18	0	0	1	0
Community/Comprehensive - High SES	8	0	7	0	0	1	0
Community/Comprehensive - Medium SES	10	0	10	0	0	0	0
Community/Comprehensive - Low SES	10	0	10	0	0	0	0
Total	152	0	147	2	0	3	0

Israel

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, ultra Orthodox schools, and schools teaching in English or French
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school sector (3), socioeconomic status (high, medium, low), subgroups within Arab sector (Arab, Druze, Bedouin), and school size (small, large)
- Implicit stratification by gender (male, female, mixed), and region (north, south, all)
- Sampled one classroom per school in schools that are selected to do eTIMSS or Bridge only and two classes in schools that are selected to do both assessments.
- The Field Test and Main Data Collection TIMSS samples were selected sequentially. The TIMSS Main Data Collection sample was selected by controlling for the overlap with the TIMSS Field Test sample and a national study (Mitzav) using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 91.2 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Hebrew-Secular - High SES	39	0	36	2	0	1	0
Hebrew-Secular - Medium SES	32	0	32	0	0	0	0
Hebrew-Secular - Low SES	11	0	10	0	0	1	0
Hebrew-Religious - High SES	10	0	9	1	0	0	0
Hebrew-Religious - Medium SES - Large	9	0	8	0	1	0	0
Hebrew-Religious - Medium SES - Small	4	0	2	1	0	1	0
Hebrew-Religious - Low SES	8	0	7	0	0	1	0
Arabic-Arabs - Medium SES	10	0	10	0	0	0	0
Arabic-Arabs - Low SES	18	0	18	0	0	0	0
Arabic-Druze	8	0	8	0	0	0	0
Arabic-Bedouin	12	0	12	0	0	0	0
Total	161	0	152	4	1	4	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Hebrew-Secular - High SES	14	0	12	1	0	1	0
Hebrew-Secular - Medium SES	12	0	11	1	0	0	0
Hebrew-Secular - Low SES	4	0	3	0	0	1	0
Hebrew-Religious - High SES	4	0	3	1	0	0	0
Hebrew-Religious - Medium SES - Large	4	0	4	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Hebrew-Religious - Medium SES - Small	2	0	2	0	0	0	0
Hebrew-Religious - Low SES	3	0	3	0	0	0	0
Arabic-Arabs - Medium SES	5	0	5	0	0	0	0
Arabic-Arabs - Low SES	11	0	11	0	0	0	0
Arabic-Druze	4	0	4	0	0	0	0
Arabic-Bedouin	8	0	8	0	0	0	0
Total	71	0	66	3	0	2	0

Italy

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, Slovenian, Ladin and German language schools
- Within-school exclusions consisted of students with functional disabilities

Sample Design

- Explicit stratification by ‘Grade 4 only’/‘Grade 4 and Grade 8’ schools, school type (private, public), region (center, islands, north east, north west, and south) within Grade 4 and Grade 8 public schools
- Implicit stratification by region (center, islands, north east, north west, and south) within Grade 4 only
- Sampled two classrooms in large schools (measure of size > 112)
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Public	16	0	14	2	0	0	0
Grade 4 - Private	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Public - Center	26	0	25	1	0	0	0
Grade 4 & Grade 8 - Public - Islands	20	0	20	0	0	0	0
Grade 4 & Grade 8 - Public - North East	24	0	22	2	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Public - North West	34	0	33	1	0	0	0
Grade 4 & Grade 8 - Public - South	24	0	24	0	0	0	0
Grade 4 & Grade 8 - Private	8	0	5	3	0	0	0
Total	162	0	153	9	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Public	6	0	6	0	0	0	0
Grade 4 - Private	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Public - Center	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Public - Islands	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Public - North East	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Public - North West	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Public - South	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private	4	0	3	1	0	0	0
Total	60	0	59	1	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, Slovenian, Ladin and German language schools
- Within-school exclusions consisted of students with functional disabilities

Sample Design

- Explicit stratification by ‘Grade 8 only’/‘Grade 4 and Grade 8’ schools, school type (private, public), region (center, islands, north east, north west, and south) within Grade 4 and Grade 8 public schools
- Implicit stratification by region (center, islands, north east, north west, and south) within Grade 8 only
- Sampled two classrooms in large schools (measure of size > 135)
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Public	14	0	13	1	0	0	0
Grade 8 - Private	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Public - Center	26	0	25	1	0	0	0
Grade 4 & Grade 8 - Public - Islands	20	0	20	0	0	0	0
Grade 4 & Grade 8 - Public - North East	24	0	22	2	0	0	0
Grade 4 & Grade 8 - Public - North West	34	0	33	1	0	0	0
Grade 4 & Grade 8 - Public - South	24	0	24	0	0	0	0
Grade 4 & Grade 8 - Private	8	0	8	0	0	0	0
Total	158	0	153	5	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Public	4	0	4	0	0	0	0
Grade 8 - Private	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Public - Center	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Public - Islands	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Public - North East	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Public - North West	12	0	12	0	0	0	0
Grade 4 & Grade 8 - Public - South	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private	4	0	4	0	0	0	0
Total	58	0	58	0	0	0	0

Japan

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school location (4)
- No implicit stratification
- Sampled one classroom per school
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Very Large City	39	0	33	4	1	1	0
Large City	22	0	17	0	4	1	0
Small City	74	0	61	11	1	1	0
Non-City Area	15	0	15	0	0	0	0
Total	150	0	126	15	6	3	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private) and school location (4)
- No implicit stratification
- Sampled one classroom per school
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Very large city	32	0	26	2	3	1	0
Public - Large city	20	0	16	1	3	0	0
Public - Small city	69	0	63	2	1	3	0
Public - Non-city area	14	0	13	1	0	0	0
Private or National school	15	0	7	3	1	4	0
Total	150	0	125	9	8	8	0

Jordan

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- No school-level exclusions
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

Sample Design

- Explicit stratification by school type (6) and achievement level (4)
- Implicit stratification by region (south, north, middle, all)
- Sampled one classroom per school
- The Field Test and Main Data Collection samples were selected simultaneously to avoid overlap.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Discovery - Low	8	1	7	0	0	0	0
Discovery - Medium	8	1	7	0	0	0	0
Discovery - High	8	0	8	0	0	0	0
Discovery - Very High	8	0	8	0	0	0	0
Madrasati - Low	8	0	8	0	0	0	0
Madrasati - Medium	8	0	8	0	0	0	0
Madrasati - High	8	0	8	0	0	0	0
Madrasati - Very High	8	0	8	0	0	0	0
Syria - Low	8	1	7	0	0	0	0
Syria - Medium	8	1	7	0	0	0	0
Syria - High	8	0	8	0	0	0	0
Syria - Very High	8	1	7	0	0	0	0
Public - Low	20	1	19	0	0	0	0
Public - Medium	24	2	22	0	0	0	0
Public - High	20	2	18	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Very High	24	1	23	0	0	0	0
UNRWA - Low	8	0	8	0	0	0	0
UNRWA - Medium	8	0	8	0	0	0	0
UNRWA - High	8	0	8	0	0	0	0
UNRWA - Very High	8	0	8	0	0	0	0
Private - Low	8	0	8	0	0	0	0
Private - Medium	8	1	7	0	0	0	0
Private - High	8	0	8	0	0	0	0
Private - Very High	8	1	7	0	0	0	0
Total	248	13	235	0	0	0	0

Kazakhstan

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, and Uzbek, Uighur, Tadjik only schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4 only’/‘Grade 4 and Grade 8’ schools, region (4), urbanization (urban, rural), and language (Kazakh, Russian)
- No implicit stratification
- Sampled two classrooms per school
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region A - Urban - Kazakh	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region A - Urban - Kazakh and Russian	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region A - Rural - Kazakh	20	0	20	0	0	0	0
Grade 4 & Grade 8 - Region A - Rural - Kazakh and Russian	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Region B - Urban - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region B - Urban - Kazakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region B - Rural - Kazakh or Kazakh and Russian	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region C - Urban - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region C - Urban - Kazakh and Russian	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region C - Rural - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region C - Rural - Kazakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region D - Urban - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region D - Urban - Kazakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region D - Rural - Kazakh or Kazakh and Russian	7	0	7	0	0	0	0
Grade 4 & Grade 8 - Urban - Russian	14	0	14	0	0	0	0
Grade 4 & Grade 8 - Rural - Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Other Languages	7	0	7	0	0	0	1
Total	168	0	168	0	0	0	1

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, and Uzbek, Uighur, Tadjik only schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8 only’/‘Grade 4 and Grade 8’ schools, region (4), urbanization (urban, rural), and language (Kazakh, Russian)
- No implicit stratification
- Sampled two classrooms per school
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region A - Urban - Kazakh	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region A - Urban - Kazakh and Russian	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region A - Rural - Ka-zakh	20	0	20	0	0	0	0
Grade 4 & Grade 8 - Region A - Rural - Ka-zakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region B - Urban - Kazakh	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Region B - Urban - Kazakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region B - Rural - Kazakh or Kazakh and Russian	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region C - Urban - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region C - Urban - Kazakh and Russian	10	0	10	0	0	0	0
Grade 4 & Grade 8 - Region C - Rural - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region C - Rural - Kazakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region D - Urban - Kazakh	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region D - Urban - Kazakh and Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Region D - Rural - Kazakh or Kazakh and Russian	7	0	7	0	0	0	0
Grade 4 & Grade 8 - Urban - Russian	14	0	14	0	0	0	0
Grade 4 & Grade 8 - Rural - Russian	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Other	7	0	7	0	0	0	1
Total	168	0	168	0	0	0	1

Korea, Rep. of

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and remote schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (3) and school size (small, large)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 190). In schools sampled for eTIMSS and bridge, one additional classroom was selected for the bridge
- No overlap between Grade 4 and Grade 8 school samples
- The Main Data Collection school sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 82.8 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Big City - Small	8	0	8	0	0	0	0
Big City - Large	52	0	52	0	0	0	0
Medium/Small City - Small	10	0	10	0	0	0	0
Medium/Small City - Large	56	0	56	0	0	0	0
Small Town or Village - Small	10	0	9	0	0	1	0
Small Town or Village - Large	16	0	16	0	0	0	0
Total	152	0	151	0	0	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Big City - Small	6	0	6	0	0	0	0
Big City - Large	22	0	22	0	0	0	0
Medium/Small City - Small	6	0	6	0	0	0	0
Medium/Small City - Large	22	0	22	0	0	0	0
Small Town or Village - Small	6	0	6	0	0	0	0
Small Town or Village - Large	6	0	6	0	0	0	0
Total	68	0	68	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), remote schools, and physical education middle schools

- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (3), school gender (girls, boys, mixed), and school size (small, large) within small town or village strata
- No implicit stratification
- Sampled one classroom per school. In schools sampled for eTIMSS and bridge, one additional classroom was selected for the bridge
- No overlap between Grade 4 and Grade 8 school samples
- The Main Data Collection school sample for TIMSS was selected by controlling for the overlap with the TIMSS Field Test, PISA, and ICILS samples using the Chowdhury approach
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 95.8 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Big City - Boy - Large	10	0	10	0	0	0	0
Big City - Girl - Large	10	0	10	0	0	0	0
Big City - Mixed - Large	46	0	46	0	0	0	0
Medium/Small City - Boy - Large	10	0	10	0	0	0	0
Medium/Small City - Girl - Large	10	0	10	0	0	0	0
Medium/Small City - Mixed - Large	48	0	48	0	0	0	0
Small Town or Village - Boy - Small	2	0	2	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Small Town or Village - Boy - Large	5	0	5	0	0	0	0
Small Town or Village - Girl - Small	2	0	2	0	0	0	0
Small Town or Village - Girl - Large	7	0	7	0	0	0	0
Small Town or Village - Mixed - Small	6	0	6	0	0	0	0
Small Town or Village - Mixed - Large	12	0	12	0	0	0	0
Total	168	0	168	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Big City - Boy - Large	4	0	4	0	0	0	0
Big City - Girl - Large	4	0	4	0	0	0	0
Big City - Mixed - Large	16	0	16	0	0	0	0
Medium/Small City - Boy - Large	4	0	4	0	0	0	0
Medium/Small City - Girl - Large	4	0	4	0	0	0	0
Medium/Small City - Mixed - Large	18	0	18	0	0	0	0
Small Town or Village - Boy - Small	2	0	2	0	0	0	0
Small Town or Village - Boy - Large	2	0	2	0	0	0	0
Small Town or Village - Girl - Small	2	0	2	0	0	0	0
Small Town or Village - Girl - Large	2	0	2	0	0	0	0
Small Town or Village - Mixed - Small	4	1	3	0	0	0	0
Small Town or Village - Mixed - Large	4	0	4	0	0	0	0
Total	66	1	65	0	0	0	0

Kosovo

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of Bosnian schools, and Serbian schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (urban, rural) and shifts (one, two or more)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 49)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Rural - One Shift	16	0	16	0	0	0	0
Rural - Two or more Shifts	58	0	58	0	0	0	0
Urban - One Shift	7	0	7	0	0	0	1
Urban - Two or more Shifts	66	2	64	0	0	0	2
Total	147	2	145	0	0	0	3

Kuwait

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and minority language schools
- Within-school exclusions consisted of students with intellectual disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4 only’/‘Grade 4 and Grade 8’ schools, school type (public, private), region (6), and gender (male, female) within public Grade 4 only schools and language (3) within private Grade 4 and Grade 8 schools
- No implicit stratification
- Sampled one classroom per school
- The Grade 4 and Grade 8 samples were selected with maximum overlap

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Private	26	2	24	0	0	0	0
Grade 4 - Public - Ahmedi - Female	12	0	12	0	0	0	0
Grade 4 - Public - Ahmedi - Male	10	0	10	0	0	0	0
Grade 4 - Public - Asima - Female	8	0	8	0	0	0	0
Grade 4 - Public - Asima - Male	8	0	8	0	0	0	0
Grade 4 - Public - Farwaniya - Female	10	0	10	0	0	0	0
Grade 4 - Public - Farwaniya - Male	8	0	8	0	0	0	0
Grade 4 - Public - Hawally - Female	8	0	8	0	0	0	0
Grade 4 - Public - Hawally - Male	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Public - Jahraa - Female	10	0	10	0	0	0	0
Grade 4 - Public - Jahraa - Male	8	0	8	0	0	0	0
Grade 4 - Public - Mubarak Al-Kabeer - Female	8	0	8	0	0	0	0
Grade 4 - Public - Mubarak Al-Kabeer - Male	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private - Pakistani and Indian Schools	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private - English, American, and Bilingual Schools	29	0	25	1	0	3	1
Total	169	2	163	1	0	3	1

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and minority language schools
- No within-school exclusions

Sample Design

- Explicit stratification by ‘Grade 8 only’/‘Grade 4 and Grade 8’ schools, school type (public, private), region (6), and gender (male, female) within public Grade 4 only schools and language (3) within private Grade 4 and Grade 8 schools
- No implicit stratification
- Sampled one classroom per school
- The Grade 4 and Grade 8 samples were selected with maximum overlap

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Private	32	2	30	0	0	0	0
Grade 8 - Public - Ahmedi - Female	14	0	14	0	0	0	0
Grade 8 - Public - Ahmedi - Male	12	1	11	0	0	0	0
Grade 8 - Public - Asima - Female	10	0	10	0	0	0	0
Grade 8 - Public - Asima - Male	10	0	10	0	0	0	0
Grade 8 - Public - Farwaniya - Female	12	0	12	0	0	0	0
Grade 8 - Public - Farwaniya - Male	10	0	10	0	0	0	0
Grade 8 - Public - Hawally - Female	10	0	10	0	0	0	0
Grade 8 - Public - Hawally - Male	10	1	9	0	0	0	0
Grade 8 - Public - Jahraa - Female	10	0	10	0	0	0	0
Grade 8 - Public - Jahraa - Male	10	0	10	0	0	0	0
Grade 8 - Public - Mubarak Al-Kabeer - Female	8	0	8	0	0	0	0
Grade 8 - Public - Mubarak Al-Kabeer - Male	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private - Pakistani and Indian Schools	8	0	8	0	0	0	0
Grade 4 & Grade 8 - Private - English, American, and Bilingual Schools	12	0	11	0	0	1	2
Total	176	4	171	0	0	1	2

Latvia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, other Language schools, and distance learning schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (Riga, city, town and rural area), language (Latvian, Russian), and school type (basic-beginners, secondary) within town and rural area Latvian schools
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 85) and in schools where class grouping was applied
- Class group option was used in bilingual schools

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Riga - Latvian	26	0	25	1	0	0	0
Riga - Russian	24	0	22	1	0	1	0
Other Cities - Latvian	20	0	20	0	0	0	0
Other Cities - Russian	12	0	11	1	0	0	0
Town-Rural - Latvian - Basic/Beginners	30	0	23	5	2	0	0
Town-Rural - Latvian - Secondary	36	0	34	2	0	0	0
Town-Rural - Russian	8	0	7	0	0	1	0
Total	156	0	142	10	2	2	0

Lebanon

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 8)
- No within-school exclusions

Sample Design

- Explicit stratification by regions or grouped regions (6), school type (public, private), and school size (small, large)
- No implicit stratification
- Sampled one classroom per school
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Census of schools in Beirut and Mont Liban large public school strata
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Bekaa Baalbak Hermel - Public - Small	8	1	7	0	0	0	0
Bekaa Baalbak Hermel - Public - Large	8	0	8	0	0	0	0
Bekaa Baalbak Hermel - Private - Small	8	0	7	1	0	0	0
Bekaa Baalbak Hermel - Private - Large	8	0	7	1	0	0	0
Nord Aakaar - Public - Small	10	0	10	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Nord Aakaar - Public - Large	8	0	8	0	0	0	0
Nord Aakaar - Private - Small	8	0	7	1	0	0	0
Nord Aakaar - Private - Large	14	0	12	1	0	1	0
Sud Nabatyeh - Public - Small	8	0	8	0	0	0	0
Sud Nabatyeh - Public - Large	8	0	8	0	0	0	0
Sud Nabatyeh - Private - Small	8	0	8	0	0	0	0
Sud Nabatyeh - Private - Large	12	0	9	1	0	2	0
Beirut - Public - Small	8	1	7	0	0	0	0
Beirut - Public - Large	8	0	8	0	0	0	0
Beirut - Private - Small	8	0	7	0	0	1	0
Beirut - Private - Large	8	0	4	1	0	3	0
Mont Liban - Public - Small	8	0	8	0	0	0	0
Mont Liban - Public - Large	8	0	8	0	0	0	0
Mont Liban - Private - Small	8	0	7	1	0	0	0
Mont Liban - Private - Large	8	0	6	1	0	1	0
Mont Liban Suburb - Public - Small	8	0	8	0	0	0	0
Mont Liban Suburb - Public - Large	8	0	8	0	0	0	0
Mont Liban Suburb - Private - Small	8	0	5	2	0	1	0
Mont Liban Suburb - Private - Large	22	0	14	2	3	3	0
Total	218	2	189	12	3	12	0

Lithuania

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, schools with students taught in a language other than Lithuanian, Polish, or Russian, and schools providing remote studying
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/Grade 4 and Grade 8’ schools, and language (5)
- Implicit stratification by urbanization (4), and school type (4)
- Sampled two classrooms in large schools (more than 4 classes)
- Grade 4 and Grade 8 school samples were selected simultaneously with minimum overlap.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Lithuanian only	31	0	31	0	0	0	0
Grade 4 - Other	11	0	11	0	0	0	1
Grade 4 & Grade 8 - Lithuanian only	112	0	112	0	0	0	0
Grade 4 & Grade 8 - Russian	14	0	14	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Polish	26	0	26	0	0	0	0
Grade 4 & Grade 8 - Lithuanian and Russian and/or Polish	13	0	13	0	0	0	0
Total	207	0	207	0	0	0	1

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Lithuanian only	12	0	12	0	0	0	0
Grade 4 - Other	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Lithuanian only	46	0	46	0	0	0	0
Grade 4 & Grade 8 - Russian	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Polish	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Lithuanian and Russian and/or Polish	4	0	4	0	0	0	0
Total	74	0	74	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, schools with students taught in a language other than Lithuanian, Polish, or Russian, and schools providing remote studying
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8’/Grade 4 and Grade 8’ schools, and language (5)
- Implicit stratification by urbanization (4), and school type (4)
- Sampled two classrooms in large schools (more than 4 classes)
- Grade 4 and Grade 8 school samples were selected simultaneously with minimum overlap.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Lithuanian only	14	0	14	0	0	0	0
Grade 8 - Other	6	0	6	0	0	0	0
Grade 4 & Grade 8 - Lithuanian only	122	0	121	0	0	1	0
Grade 4 & Grade 8 - Russian	14	0	14	0	0	0	0
Grade 4 & Grade 8 - Polish	26	0	26	0	0	0	0
Grade 4 & Grade 8 - Lithuanian and Russian and/or Polish	13	0	13	0	0	0	0
Total	195	0	194	0	0	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Lithuanian only	8	0	8	0	0	0	0
Grade 8 - Other	2	0	2	0	0	0	0
Grade 4 & Grade 8 - Lithuanian only	50	0	50	0	0	0	0
Grade 4 & Grade 8 - Russian	4	0	4	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 & Grade 8 - Polish	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Lithuanian and Russian and/or Polish	4	0	4	0	0	0	0
Total	72	0	72	0	0	0	0

Malaysia

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 15), special needs schools, schools located at remote area, and schools that do not follow the national curriculum
- Within-school exclusions consisted of students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (6), score level (3) within Ministry of Education daily school strata and urbanization (rural, urban) within all Ministry of Education strata
- No implicit stratification
- Sampled two classrooms in Ministry of Education daily schools
- The Field Test and Main Data Collection samples were selected sequentially. The TIMSS Main Data Collection sample was selected by controlling for the overlap with the TIMSS Field Test and PISA samples using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
MOE Daily School - High to mid-High - Urban	9	0	9	0	0	0	0
MOE Daily School - Intermediate or N.A. - Urban	31	0	30	1	0	0	0
MOE Daily School - High to intermediate - Rural	19	0	19	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
MOE Daily School - Mid-Low to Very Low - Rural	31	0	31	0	0	0	0
MOE Daily School - Mid-Low to Very Low - Urban	24	0	24	0	0	0	0
MOE Fully Residential School - Rural	11	0	11	0	0	0	0
MOE Fully Residential School - Urban	10	0	10	0	0	0	0
MOE Religious School - Rural	10	0	9	1	0	0	0
MOE Religious School - Urban	10	0	10	0	0	0	0
MARA Junior Science College	8	0	8	0	0	0	0
Non-MOE Religious School	8	0	8	0	0	0	0
Private School	6	0	6	0	0	0	1
Total	177	0	175	2	0	0	1

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
MOE Daily School - High to mid-High - Urban	2	0	2	0	0	0	0
MOE Daily School - Intermediate or N.A. - Urban	8	0	8	0	0	0	0
MOE Daily School - High to intermediate - Rural	6	0	6	0	0	0	0
MOE Daily School - Mid-Low to Very Low - Rural	8	0	8	0	0	0	0
MOE Daily School - Mid-Low to Very Low - Urban	6	0	6	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
MOE Fully Residential School - Rural	2	0	2	0	0	0	0
MOE Fully Residential School - Urban	2	0	2	0	0	0	0
MOE Religious School - Rural	2	0	2	0	0	0	0
MOE Religious School - Urban	2	0	2	0	0	0	0
MARA Junior Science College	2	0	2	0	0	0	0
Non-MOE Religious School	2	0	2	0	0	0	0
Private School	2	0	2	0	0	0	0
Total	44	0	44	0	0	0	0

Malta

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and language schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (church, independent, state)
- No implicit stratification
- Sampled all classrooms
- Classes were used as variance estimation strata and half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Church	25	0	25	0	0	0	0
Independent	11	0	11	0	0	0	0
State	63	1	62	0	0	0	0
Total	99	1	98	0	0	0	0

Montenegro

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 2), and language of instruction not Montenegrin
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (north, central, south)
- Implicit stratification by urbanization (rural, urban)
- Sampled three classrooms in large schools (measure of size > 80) and two classrooms elsewhere
- All schools at Grade 4 were selected
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
North	66	0	66	0	0	0	0
Central	48	0	48	0	0	0	0
South	26	0	26	0	0	0	0
Total	140	0	140	0	0	0	0

Morocco

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6)
- No within-school exclusions

Sample Design

- Explicit stratification by school type (private, public) and region (12)
- Implicit stratification by urbanization (urban, rural) within public sector
- Sampled two classrooms in public schools from the region of Oued eddhab Lagouira where all schools were taken
- No overlap between Grade 4 and Grade 8 samples
- Schools at the regional level were oversampled. Census in the region of Oued eddhab Lagouira.
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Private - Casablanca-Settat	8	0	8	0	0	0	0
Private - All other re-gions	16	1	15	0	0	0	0
Public - Tanger-Tetouan-Al Hoceima	20	0	20	0	0	0	0
Public - Oriental	20	0	20	0	0	0	0
Public - Fes-Meknes	20	0	20	0	0	0	0
Public - Rabat-Sale-Kenitra	20	0	20	0	0	0	0
Public - Beni Mellal-Khenifra	20	0	20	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Casablanca-Settat	20	0	20	0	0	0	0
Public - Marrakech-Safi	20	0	20	0	0	0	0
Public - Draa-Tafilalet	20	0	20	0	0	0	0
Public - Souss-Massa	20	0	20	0	0	0	0
Public - Guelmim-Oued Noun	20	0	20	0	0	0	0
Public - Laayoune-Sakia El Hamra	20	0	20	0	0	0	0
Public - Eddakhla-Oued Eddahab	21	0	21	0	0	0	0
Total	265	1	264	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6)
- No within-school exclusions

Sample Design

- Explicit stratification by school type (private, public) and region (12)
- Implicit stratification by urbanization (urban, rural) within public sector
- Sampled two classrooms in public schools from the region of Oued eddahab Lagouira where all schools were taken
- No overlap between Grade 4 and Grade 8 samples
- Schools at the regional level were oversampled. Census in the region of Oued eddahab Lagouira.
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Private - Casablanca-Settat	8	0	8	0	0	0	0
Private - All other re-gions	12	0	12	0	0	0	0
Public - Tanger Te-touan Al Hoceima	20	0	20	0	0	0	0
Public - Oriental	20	1	19	0	0	0	0
Public - Fes Meknes	20	0	20	0	0	0	0
Public - Rabat Sale Kenitra	20	1	19	0	0	0	0
Public - Beni Mellal Khenifra	20	0	20	0	0	0	0
Public - Casablanca Settat	24	0	24	0	0	0	0
Public - Marrakech Safi	20	0	20	0	0	0	0
Public - Draa Tafilalet	20	0	20	0	0	0	0
Public - Souss Massa	20	0	20	0	0	0	0
Public - Guelmim Oued Noun	20	0	20	0	0	0	0
Public - Laayoune Sa-kia El Hamra	20	0	20	0	0	0	0
Public - Eddakhla Oued Eddahab	9	0	9	0	0	0	0
Total	253	2	251	0	0	0	0

Netherlands

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by socioeconomic status (low, medium, high)
- No implicit stratification
- Sampled all classrooms
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
High Mean SES	99	1	40	23	10	25	0
Medium Mean SES	44	1	25	5	3	10	0
Low Mean SES	8	0	6	0	0	2	0
Total	151	2	71	28	13	37	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
High Mean SES	32	0	20	6	2	4	0
Medium Mean SES	14	0	6	3	1	4	0
Low Mean SES	4	0	1	1	1	1	0
Total	50	0	27	10	4	9	0

New Zealand

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), correspondence schools, Maori-medium Level 1 immersion schools, and mostly students in Level 1-2 immersion units schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- No explicit stratification
- Implicit stratification by school type (state, independent), socioeconomic status (4) and urbanization (major urban centers, smaller urban centers) within state schools
- Sampled two classrooms per school
- The sample at Grade 4 was selected by controlling for the overlap with Grade 8 Field Test and Main Data Collection samples using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
None	163	2	138	18	4	1	1
Total	163	2	138	18	4	1	1

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), correspondence schools, Maori-medium Level 1 immersion schools, and mostly students in Level 1-2 immersion units schools

- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (state, independent), and socioeconomic status (4), and urbanization (major urban centers, smaller urban centers) within state schools. One additional stratum created for newly created schools
- Implicit stratification by school gender (coeducational, boys, girls)
- Sampled two classrooms per school
- Class group option was used in schools by ability level (advanced, other).

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Independent school	8	0	6	1	0	1	0
State - Low SES school -Major urban centers	12	0	10	2	0	0	0
State - Low SES school -Smaller centers	8	0	4	2	0	2	0
State - Moderately low SES school - Major urban centers	23	0	18	1	0	4	1
State - Moderately low SES school - Smaller centers	12	0	9	1	1	1	0
State - Moderately high SES school - Major urban centers	40	0	31	4	0	5	0
State - Moderately high SES school - Smaller centers	16	0	11	4	0	1	0
State - High SES school	30	0	25	2	0	3	0
New School	3	1	1	0	1	0	1
Total	152	1	115	17	2	17	2

North Macedonia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and Turkish language schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (urban, rural, mixed) and language (Macedonian, Albanian, mixed)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 70) and in schools with more than one language of instruction
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Urban - Macedonian	40	0	40	0	0	0	0
Urban - Albanian	8	0	8	0	0	0	0
Urban - Mixed	10	0	10	0	0	0	0
Rural - Macedonian	16	0	14	2	0	0	0
Rural - Albanian	22	0	20	2	0	0	0
Rural - Mixed	10	0	10	0	0	0	0
Mixed - Macedonian	30	0	30	0	0	0	0
Mixed - Albanian or Mixed	14	0	14	0	0	0	0
Total	150	0	146	4	0	0	0

Northern Ireland

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (5), and deprivation group (9)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 90), and in schools with composite classes.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Belfast - Lower Deprivation	8	0	5	0	1	2	0
Belfast - Highest Deprivation	14	0	8	0	3	3	0
Western - Lower Deprivation	10	0	6	4	0	0	0
Western - Moderate to high Deprivation	10	0	5	2	0	3	0
Western - Highest Deprivation	8	0	6	1	0	1	0
North Eastern - Lowest Deprivation	10	0	8	1	1	0	0
North Eastern - Low to moderate Deprivation	10	0	6	4	0	0	0
North Eastern - Higher Deprivation	14	0	7	5	1	1	0
South Eastern - Lowest Deprivation	12	0	6	3	2	1	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
South Eastern - Low to moderate Deprivation	12	0	10	0	1	1	0
South Eastern - Higher Deprivation	10	0	7	1	0	2	0
Southern - Lower Deprivation	14	0	6	2	3	3	0
Southern - Moderate Deprivation	10	0	8	0	1	1	0
Southern - Higher Deprivation	14	0	7	1	2	4	0
Total	156	0	95	24	15	22	0

Norway

Fifth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, immigrant schools, Sami schools, and international schools
- Within-school exclusions consisted of students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 5’/Grade 5 and Grade 9’ schools, city (Oslo, other), and municipality size (small, medium, large)
- Implicit stratification by national numeracy test score (4)
- Sampled two classrooms per school
- Grade 5 and Grade 9 school samples were selected simultaneously with minimum overlap.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples
- Additional replacement schools were used for eTIMSS in the case that schools did not have adequate technology infrastructure

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 - Oslo	22	0	16	3	1	2	0
Grade 5 - Other - Small Municipalities	8	0	7	0	0	1	0
Grade 5 - Other - Medium Municipalities	36	0	21	7	4	4	0
Grade 5 - Other - Large Municipalities	68	0	52	11	2	3	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 & Grade 9 - Oslo	7	0	6	0	0	1	0
Grade 5 & Grade 9 - Other - Small Municipalities	8	0	6	1	0	1	0
Grade 5 & Grade 9 - Other - Medium Municipalities	8	0	5	1	0	2	0
Grade 5 & Grade 9 - Other - Large Municipalities	10	0	6	0	1	3	0
Total	167	0	119	23	8	17	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 - Oslo	4	0	4	0	0	0	0
Grade 5 - Other - Small Municipalities	4	0	4	0	0	0	0
Grade 5 - Other - Medium Municipalities	12	0	12	0	0	0	0
Grade 5 - Other - Large Municipalities	20	0	20	0	0	0	0
Grade 5 & Grade 9 - Oslo	4	1	3	0	0	0	0
Grade 5 & Grade 9 - Other - Small Municipalities	4	0	4	0	0	0	0
Grade 5 & Grade 9 - Other - Medium Municipalities	4	0	4	0	0	0	0
Grade 5 & Grade 9 - Other - Large Municipalities	4	0	4	0	0	0	0
Total	56	1	55	0	0	0	0

Ninth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, immigrant schools, and international schools
- Within-school exclusions consisted of students with functional disabilities

Sample Design

- Explicit stratification by ‘Grade 9’/‘Grade 5 and Grade 9’ schools, city (Oslo, other), and municipality size (small, medium, large)
- Implicit stratification by national numeracy test score (4)
- Sampled two classrooms per school
- Grade 5 and Grade 9 school samples were selected simultaneously with minimum overlap.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples
- Additional replacement schools were used for eTIMSS in the case that schools did not have adequate technology infrastructure

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 9 - Oslo	20	0	20	0	0	0	0
Grade 9 - Other - Small municipalities	8	0	5	3	0	0	0
Grade 9 - Other - Medium municipalities	36	0	24	7	1	4	0
Grade 9 - Other - Large municipalities	62	0	48	11	1	2	0
Grade 5 & Grade 9 - Oslo	9	0	9	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 & Grade 9 - Other - Small municipalities	10	0	10	0	0	0	0
Grade 5 & Grade 9 - Other - Medium municipalities	8	0	7	1	0	0	0
Grade 5 & Grade 9 - Other - Large municipalities	13	1	9	1	0	2	0
Total	166	1	132	23	2	8	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 9 - Oslo	4	0	4	0	0	0	0
Grade 9 - Other - Small municipalities	4	0	4	0	0	0	0
Grade 9 - Other - Medium municipalities	12	0	11	0	0	1	0
Grade 9 - Other - Large municipalities	18	0	16	1	0	1	0
Grade 5 & Grade 9 - Oslo	4	0	4	0	0	0	0
Grade 5 & Grade 9 - Other - Small municipalities	4	0	4	0	0	0	0
Grade 5 & Grade 9 - Other - Medium municipalities	4	0	4	0	0	0	0
Grade 5 & Grade 9 - Other - Large municipalities	4	0	3	0	0	1	0
Total	54	0	50	1	0	3	0

Oman

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 7), special needs schools, and evening schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by governorates (11) and school type (private, international)
- No implicit stratification
- Sampled two classrooms in census stratum (Musandam Governorate) and in large schools (measure of size > 250)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Grade 4 and Grade 8 Field Test samples using the Chowdhury approach.
- Census of schools in Musandam Governorate
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Muscat Governorate	20	0	20	0	0	0	0
Ash Sharqiyah North Governorate	19	0	19	0	0	0	0
Ash Sharqiyah South Governorate	20	0	20	0	0	0	0
Ad Dakhliyah Governorate	20	0	20	0	0	0	0
Adh Dhahirah Governorate	20	0	20	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Al Batinah North Governorate	26	0	26	0	0	0	0
Al Batinah South Governorate	19	0	19	0	0	0	0
Al Buraimi Governorate	8	0	8	0	0	0	0
Musandam Governorate	8	0	8	0	0	0	0
Dhofar Governorate	20	0	20	0	0	0	0
Al Wusta Governorate	8	0	8	0	0	0	0
Private Schools	20	0	18	1	1	0	0
International Schools	20	0	20	0	0	0	0
Total	228	0	226	1	1	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 7), special needs schools, and evening schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by governorates (11) and school type (private, international)
- Implicit stratification by gender (3)
- Sampled two classrooms in large schools (measure of size > 250)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for minimum overlap with the Grade 4 and Grade 8 Field Test samples and maximum overlap with the Grade 4 Main Data Collection sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Muscat Governorate	23	0	23	0	0	0	0
Ash Sharqiyah North Governorate	20	0	20	0	0	0	0
Ash Sharqiyah South Governorate	20	0	20	0	0	0	0
Ad Dakhliyah Governorate	20	0	20	0	0	0	0
Adh Dhahirah Governorate	20	0	20	0	0	0	0
Al Batinah North Governorate	22	0	22	0	0	0	1
Al Batinah South Governorate	20	0	20	0	0	0	0
Al Buraimi Governorate	8	0	8	0	0	0	0
Musandam Governorate	8	0	8	0	0	0	0
Dhofar Governorate	19	0	19	0	0	0	1
Al Wusta Governorate	8	0	8	0	0	0	0
Private Schools	20	0	15	5	0	0	0
International Schools	20	0	20	0	0	0	0
Total	228	0	223	5	0	0	2

Pakistan

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), and language of instruction other than English, Urdu or Sindhi
- No within-school exclusions

Sample Design

- Explicit stratification by school type (public, private), region (Khyber Pakhtunkhwa, Punjab, Sindh, other small regions) within public schools and region (Punjab, other regions) within private schools
- Implicit stratification by region (5), urbanization (urban, rural) and gender (boys, girls) within public schools, and by regions (6) within private schools
- Sampled two classrooms per school
- Private schools were sampled with equal probability as no measure of size was available

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Smaller Re-gions	20	0	15	1	4	0	0
Public - Khyber Pakhtunkhwa	24	0	22	0	1	1	0
Public - Punjab	50	0	50	0	0	0	0
Public - Sindh	22	0	16	4	0	2	0
Private - Punjab	26	7	13	3	3	0	0
Private - All Other Re-gions	8	1	5	1	1	0	0
Total	150	8	121	9	9	3	0

Philippines

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 12), special needs schools, and schools in community with armed conflict
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), socioeconomic index (high, medium, low), geographic location (urban, rural), and unknown
- No implicit stratification
- Sampled one classroom per school

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - High SES - Urban	30	0	30	0	0	0	0
Public - High SES - Rural	45	0	45	0	0	0	1
Public - Medium SES - Urban	34	0	34	0	0	0	0
Public - Medium SES - Rural	20	0	20	0	0	0	0
Public - Low SES - Urban	14	0	14	0	0	0	0
Public - Low SES - Rural	8	0	8	0	0	0	0
Private - High SES	8	1	7	0	0	0	0
Private - Medium SES	8	0	8	0	0	0	0
Private - Low SES	8	0	8	0	0	0	0
Unknown - No available data	8	2	6	0	0	0	0
Total	183	3	180	0	0	0	1

Poland

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and schools with language of instruction other than Polish
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by urbanization (4)
- No implicit stratification
- Sampled two classrooms whenever possible

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Village	54	1	51	2	0	0	0
Town (Up to 20 Thousand Inhabitants)	26	0	26	0	0	0	0
City (20 to 100 Thousand Inhabitants)	30	0	30	0	0	0	0
City (Above 100 Thousand Inhabitants)	40	0	36	4	0	0	0
Total	150	1	143	6	0	0	0

Portugal

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and non Portuguese instruction language or not following national curriculum
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private), NUTS 2 region within public schools (8), and school size (2) within private schools
- Implicit stratification by NUTS 3 region within public schools (25) and NUTS 2 region within private schools (8)
- Sampled two classrooms in large schools (measure of size > 110). In schools sampled for eTIMSS and bridge, one additional classroom sampled for the bridge
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 87.8 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Alentejo	12	0	10	2	0	0	0
Public - Algarve	10	0	9	1	0	0	0
Public - Centro	30	0	26	3	1	0	0
Public - Lisboa	38	0	33	4	1	0	0
Public - Norte - Porto	24	0	22	2	0	0	0
Public - Norte - Other	26	0	26	0	0	0	0
Public - R. A. Açores	8	0	7	1	0	0	0
Public - R. A. Madeira	8	0	7	1	0	0	0
Private - Small	16	1	10	4	1	0	0
Private - Large	10	0	8	2	0	0	0
Total	182	1	158	20	3	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Alentejo	6	0	6	0	0	0	0
Public - Algarve	4	0	3	1	0	0	0
Public - Centro	16	0	15	1	0	0	0
Public - Lisboa	20	0	16	3	1	0	0
Public - Norte - Porto	12	0	12	0	0	0	0
Public - Norte - Other	12	0	12	0	0	0	0
Public - R. A. Açores	4	0	4	0	0	0	0
Public - R. A. Madeira	4	0	4	0	0	0	0
Private - Small	8	0	7	1	0	0	0
Private - Large	4	0	4	0	0	0	0
Total	90	0	83	6	1	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), and non Portuguese instruction language or not following national curriculum
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private) and NUTS 2 region (8) within public schools
- Implicit stratification by NUTS 3 region within public schools (25) and grouped NUTS 2 region within private schools (5)
- Sampled two classrooms in large schools (measure of size > 190)
- The Main Data Collection Grade 8 sample was selected by controlling for the overlap with the Field Test and Grade 4 Main Data Collection samples using the Chowdhury approach.
- No bridge sample required at Grade 8 as they did not participate in TIMSS 2015

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Alentejo	10	0	9	1	0	0	0
Public - Algarve	8	0	8	0	0	0	0
Public - Centro	24	0	22	2	0	0	0
Public - Lisboa	36	0	35	1	0	0	0
Public - Porto	22	0	21	1	0	0	0
Public - Norte	24	0	23	1	0	0	0
Public - R.A. Açores	8	0	5	1	0	2	0
Public - R.A. Madeira	8	0	8	0	0	0	0
Private	18	0	18	0	0	0	0
Total	158	0	149	7	0	2	0

Qatar

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and instruction not in English or Arabic
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4 only’/‘Grade 4 and Grade 8’, gender (3) within Grade 4 only stratum
- Implicit stratification by gender (3) within Grade 4 and 8 schools, and school type (4)
- Sampled one classroom per school. In schools sampled for eTIMSS and bridge, one additional classroom selected for the bridge
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 98.5 % of students in the bridge sample were in schools selected for the eTIMSS sample
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Boys	42	0	42	0	0	0	0
Grade 4 - Girls	46	0	46	0	0	0	0
Grade 4 - Mixed	58	0	58	0	0	0	0
Grade 4 & Grade 8	96	0	96	0	0	0	0
Total	242	0	242	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Boys	11	0	11	0	0	0	0
Grade 4 - Girls	11	0	11	0	0	0	0
Grade 4 - Mixed	9	0	9	0	0	0	0
Grade 4 & Grade 8	32	0	32	0	0	0	0
Total	63	0	63	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and instruction not in English or Arabic
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

Sample Design

- Explicit stratification by ‘Grade 8 only’/‘Grade 4 and Grade 8’
- Implicit stratification by gender (3), and school type (4)
- Sampled two classrooms in large schools (measure of size >100) selected for eTIMSS only and in schools selected for eTIMSS and bridge

- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 98.6 % of students in the bridge sample were in schools selected for the eTIMSS sample
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	57	0	57	0	0	0	0
Grade 4 & Grade 8	95	0	95	0	0	0	0
Total	152	0	152	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	33	0	33	0	0	0	0
Grade 4 & Grade 8	30	0	30	0	0	0	0
Total	63	0	63	0	0	0	0

Romania

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, and schools with different curriculum
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

Sample Design

- Explicit stratification by urbanization (rural, urban) and regions (5)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 100)

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Rural - Bucharest-Ilfov	8	0	8	0	0	0	0
Rural - North	32	0	28	3	1	0	0
Rural - Center	12	0	10	1	1	0	0
Rural - South	36	0	35	1	0	0	0
Rural - West	8	0	8	0	0	0	0
Urban - Bucharest-Ilfov	16	0	16	0	0	0	0
Urban - North	28	0	28	0	0	0	0
Urban - Center	12	0	11	1	0	0	0
Urban - South	34	0	34	0	0	0	0
Urban - West	12	0	11	1	0	0	0
Total	198	0	189	7	2	0	0

Russian Federation

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (43).
- No implicit stratification
- Sampled one classroom per school
- No overlap control between Grade 4 and Grade 8 samples.
- The Main Data Collection sample was selected by controlling for the overlap with the Moscow benchmarking sample using the Chowdhury approach
- An extra sampling stage (regions) was required prior to sampling schools. 43 regions out of 85 were selected with probability proportional to the region size. 14 bigger regions were selected with certainty. Each certainty region make up an explicit stratum. The other sampled regions make up one other large explicit stratum for variance purposes. In this latter stratum of sampled regions, a sample of schools is selected within each region.
- Within regions, schools were selected with probability proportional to (school) size systematic sampling. Schools were sorted (serpentine) by location (up to 7 levels) before being sorted by school size.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples
- Special treatment is required for variance calculation due to the first sampling stage (region). Within each explicit stratum made up from a certainty region, schools are paired together as in the standard procedure. In the larger explicit stratum composed of sampled regions, regions are paired for variance calculation purposes.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Sankt-Petersburg*	6	0	6	0	0	0	0
City of Moscow*	12	0	11	0	0	1	0
Moscow region*	10	0	10	0	0	0	0
Nizhni Novgorod re-gion*	4	0	4	0	0	0	0
Samara region*	4	0	4	0	0	0	0
Republic of Tatarstan*	6	0	6	0	0	0	0
Republic of Bashkortostan*	6	0	6	0	0	0	0
Krasnodar territory*	8	0	8	0	0	0	0
Rostov region*	6	0	6	0	0	0	0
Chelyabinsk region*	4	0	4	0	0	0	0
Sverdlovsk region*	6	0	6	0	0	0	0
Kemerovo region*	4	0	4	0	0	0	0
Krasnoyarsk territory*	4	0	4	0	0	0	0
Republic of Dagestan*	6	0	6	0	0	0	0
Pskov region	4	0	4	0	0	0	0
Republic of Komi	4	0	4	0	0	0	0
Vologda region	4	0	4	0	0	0	0
Voronezh region	4	0	4	0	0	0	0
Belgorod region	4	0	4	0	0	0	0
Tula region	4	0	4	0	0	0	0
Yaroslavl region	4	0	4	0	0	0	0
Ryazan region	4	0	4	0	0	0	0
Tambov region	4	0	4	0	0	0	0
Kostroma region	4	0	4	0	0	0	0
Penza region	4	0	4	0	0	0	0
Chuvashi Republic	4	0	4	0	0	0	0
Orenburg region	4	0	4	0	0	0	0
Saratov region	4	0	4	0	0	0	0
Perm territory	4	0	4	0	0	0	0
Volgograd region	4	0	4	0	0	0	0
Astrakhan region	4	0	4	0	0	0	0
Kurgan region	4	0	4	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Khanty-Mansijsk autonomous district	4	0	4	0	0	0	0
Novosibirsk region	4	0	4	0	0	0	0
Irkutsk region	4	0	4	0	0	0	0
Altai territory	4	0	4	0	0	0	0
Zabaikalsk territory	4	0	4	0	0	0	0
Tomsk region	4	0	4	0	0	0	0
Sakhalin region	4	0	4	0	0	0	0
Khabarovsk territory	4	0	4	0	0	0	0
Primorsky territory	4	0	3	0	0	1	0
Stavropol territory	4	0	4	0	0	0	0
Kabardino-Balkarian Republic	4	0	4	0	0	0	0
Total	202	0	200	0	0	2	0

* Certainty regions

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Sankt-Petersburg*	2	0	2	0	0	0	0
City of Moscow*	4	0	4	0	0	0	0
Moscow region*	4	0	4	0	0	0	0
Nizhni Novgorod region*	2	0	2	0	0	0	0
Samara region*	2	0	2	0	0	0	0
Republic of Tatarstan*	2	0	2	0	0	0	0
Republic of Bashkortostan*	2	0	2	0	0	0	0
Krasnodar territory*	4	0	4	0	0	0	0
Rostov region*	2	0	2	0	0	0	0
Chelyabinsk region*	2	0	2	0	0	0	0
Sverdlovsk region*	2	0	2	0	0	0	0
Kemerovo region*	2	0	2	0	0	0	0
Krasnoyarsk territory*	2	0	2	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Republic of Dagestan*	2	0	2	0	0	0	0
Pskov region	2	0	2	0	0	0	0
Republic of Komi	2	0	2	0	0	0	0
Vologda region	2	0	2	0	0	0	0
Voronezh region	2	0	2	0	0	0	0
Belgorod region	2	0	2	0	0	0	0
Tula region	2	0	2	0	0	0	0
Yaroslavl region	2	0	2	0	0	0	0
Ryazan region	2	0	2	0	0	0	0
Tambov region	2	0	2	0	0	0	0
Kostroma region	2	0	2	0	0	0	0
Penza region	2	0	2	0	0	0	0
Chuvashi Republic	2	0	2	0	0	0	0
Orenburg region	2	0	2	0	0	0	0
Saratov region	2	0	2	0	0	0	0
Perm territory	2	0	2	0	0	0	0
Volgograd region	2	0	2	0	0	0	0
Astrakhan region	2	0	2	0	0	0	0
Kurgan region	2	0	2	0	0	0	0
Khanty-Mansijsk autonomous district	2	0	2	0	0	0	0
Novosibirsk region	2	0	2	0	0	0	0
Irkutsk region	2	0	2	0	0	0	0
Altai territory	2	0	2	0	0	0	0
Zabaikalsk territory	2	0	2	0	0	0	0
Tomsk region	2	0	2	0	0	0	0
Sakhalin region	2	0	2	0	0	0	0
Khabarovsk territory	2	0	2	0	0	0	0
Primorsky territory	2	0	2	0	0	0	0
Stavropol territory	2	0	2	0	0	0	0
Kabardino-Balkarian Republic	2	0	2	0	0	0	0
Total	92	0	92	0	0	0	0

* Certainty regions

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (43).
- No implicit stratification
- Sampled one classroom per school
- No overlap control between Grade 4 and Grade 8 samples.
- An extra sampling stage (regions) was required prior to sampling schools. 43 regions out of 85 were selected with probability proportional to the region size. 14 bigger regions were selected with certainty. Each certainty region make up an explicit stratum. The other sampled regions make up one other large explicit stratum for variance purposes. In this latter stratum of sampled regions, a sample of schools is selected within each region.
- Within regions, schools were selected with probability proportional to (school) size systematic sampling. Schools were sorted (serpentine) by location (up to 7 levels) before being sorted by school size.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples
- Special treatment is required for variance calculation due to the first sampling stage (region). Within each explicit stratum made up from a certainty region, schools are paired together as in the standard procedure. In the larger explicit stratum composed of sampled regions, regions are paired for variance calculation purposes.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Sankt-Petersburg*	6	0	6	0	0	0	0
City of Moscow*	12	0	11	1	0	0	0
Moscow region*	10	0	10	0	0	0	0
Perm territory*	4	0	4	0	0	0	0
Nizhni Novgorod re-gion*	4	0	4	0	0	0	0
Republic of Tatarstan*	6	0	6	0	0	0	0
Republic of Bashkortostan*	6	0	6	0	0	0	0
Krasnodar territory*	8	0	8	0	0	0	0
Rostov region*	6	0	6	0	0	0	0
Chelyabinsk region*	6	0	6	0	0	0	0
Sverdlovsk region*	6	0	6	0	0	0	0
Krasnoyarsk territory*	4	0	4	0	0	0	0
Republic of Dagestan*	6	0	6	0	0	0	0
Pskov region	4	0	4	0	0	0	0
Republic of Komi	4	0	4	0	0	0	0
Vologda region	4	0	4	0	0	0	0
Voronezh region	4	0	4	0	0	0	0
Vladimir region	4	0	4	0	0	0	0
Tver region	4	0	4	0	0	0	0
Yaroslavl region	4	0	4	0	0	0	0
Ryazan region	4	0	4	0	0	0	0
Ivanovo region	4	0	4	0	0	0	0
Republic of Marij El	4	0	4	0	0	0	0
Penza region	4	0	4	0	0	0	0
Chuvashi Republic	4	0	4	0	0	0	0
Orenburg region	4	0	4	0	0	0	0
Saratov region	4	0	4	0	0	0	0
Volgograd region	4	0	4	0	0	0	0
Astrakhan region	4	0	4	0	0	0	0
Kurgan region	4	0	4	0	0	0	0
Khanty-Mansijsk autonomous district	4	0	4	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Novosibirsk region	4	0	4	0	0	0	0
Kemerovo region	4	0	4	0	0	0	0
Irkutsk region	4	0	4	0	0	0	0
Altai territory	4	0	4	0	0	0	0
Zabaikalsk territory	4	0	4	0	0	0	0
Tomsk region	4	0	4	0	0	0	0
Sakhalin region	4	0	4	0	0	0	0
Republic of Sakha	4	0	4	0	0	0	0
Primorsky territory	4	0	4	0	0	0	0
Chechen Republic	4	0	4	0	0	0	0
Kabardino-Balkarian Republic	4	0	4	0	0	0	0
Total	204	0	203	1	0	0	0

* Certainty regions

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Sankt-Petersburg*	2	0	2	0	0	0	0
City of Moscow*	4	0	4	0	0	0	0
Moscow region*	4	0	4	0	0	0	0
Perm territory*	2	0	2	0	0	0	0
Nizhni Novgorod re-gion*	2	0	2	0	0	0	0
Samara region*	2	0	2	0	0	0	0
Republic of Tatarstan*	2	0	2	0	0	0	0
Republic of Bashkortostan*	2	0	2	0	0	0	0
Krasnodar territory*	4	0	4	0	0	0	0
Rostov region*	2	0	2	0	0	0	0
Chelyabinsk region*	2	0	2	0	0	0	0
Sverdlovsk region*	2	0	2	0	0	0	0
Krasnoyarsk territory*	2	0	2	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Republic of Dagestan*	2	0	2	0	0	0	0
Pskov region	2	0	2	0	0	0	0
Republic of Komi	2	0	2	0	0	0	0
Vologda region	2	0	2	0	0	0	0
Voronezh region	2	0	2	0	0	0	0
Vladimir region	2	0	2	0	0	0	0
Tver region	2	0	2	0	0	0	0
Yaroslavl region	2	0	2	0	0	0	0
Ryazan region	2	0	2	0	0	0	0
Ivanovo region	2	0	2	0	0	0	0
Republic of Marij El	2	0	2	0	0	0	0
Penza region	2	0	2	0	0	0	0
Chuvashi Republic	2	0	2	0	0	0	0
Orenburg region	2	0	2	0	0	0	0
Saratov region	2	0	2	0	0	0	0
Volgograd region	2	0	2	0	0	0	0
Astrakhan region	2	0	2	0	0	0	0
Kurgan region	2	0	2	0	0	0	0
Khanty-Mansijsk autonomous district	2	0	2	0	0	0	0
Novosibirsk region	2	0	2	0	0	0	0
Kemerovo region	2	0	2	0	0	0	0
Irkutsk region	2	0	2	0	0	0	0
Altai territory	2	0	2	0	0	0	0
Zabaikalsk territory	2	0	2	0	0	0	0
Tomsk region	2	0	2	0	0	0	0
Sakhalin region	2	0	2	0	0	0	0
Republic of Sakha	2	0	2	0	0	0	0
Primorsky territory	2	0	2	0	0	0	0
Chechen Republic	2	0	2	0	0	0	0
Kabardino-Balkarian Republic	2	0	2	0	0	0	0
Total	92	0	92	0	0	0	0

* Certainty regions

Saudi Arabia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), special needs schools, schools using different language other than Arabic or English, and schools in Jizan, Najran and part of Asir
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private, international/foreign) and gender (boys, girls)
- No implicit stratification
- Sampled one classroom per school
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Girls	84	0	82	0	2	0	0
Public - Boys	80	0	78	1	0	1	0
Private - Girls	14	0	13	1	0	0	0
Private - Boys	16	0	16	0	0	0	0
International/Foreign - Girls	14	1	12	1	0	0	0
International/Foreign - Boys	14	0	14	0	0	0	0
Total	222	1	215	3	2	1	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), special needs schools, schools using different language other than Arabic or English, and schools in Jizan, Najran and part of Asir
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private, international/foreign) and gender (boys, girls)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 215)
- No overlap between Grade 4 and Grade 8 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public - Girls	78	0	78	0	0	0	0
Public - Boys	74	1	73	0	0	0	0
Private - Girls	16	1	15	0	0	0	0
Private - Boys	16	0	16	0	0	0	0
International or Foreign - Girls	14	1	12	0	1	0	0
International or Foreign - Boys	14	0	14	0	0	0	0
Total	212	3	208	0	1	0	0

Serbia

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, and schools with students taught in language other than Serbian
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (Belgrade, Vojvodina, Central Serbia), urbanization (urban, rural), and school hierarchy (main school, branch department) within Central Serbia rural schools
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 100)

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Belgrade - Urban	30	0	30	0	0	0	0
Belgrade - Rural	10	0	10	0	0	0	0
Vojvodina - Urban	28	0	28	0	0	0	0
Vojvodina - Rural	16	0	16	0	0	0	0
Central Serbia - Urban	47	0	45	2	0	0	1
Central Serbia - Rural - Main School	15	0	14	0	1	0	1
Central Serbia - Rural - Branch Department	20	1	16	2	1	0	2
Total	166	1	159	4	2	0	4

Singapore

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and private schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- No explicit stratification
- No implicit stratification
- Sampled two classrooms per school
- No overlap between Grade 4 and Grade 8 schools.
- Census of all schools. Within schools, two classrooms were sampled with probability proportional to the size of the classroom. Within selected classrooms, 19 students were randomly sampled for eTIMSS. The remaining students were assigned to the bridge sample.
- 100 % of students in the bridge sample were in schools selected for the eTIMSS sample
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
None	187	0	187	0	0	0	0
Total	187	0	187	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
None	56	0	56	0	0	0	0
Total	56	0	56	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and private schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- No explicit stratification
- No implicit stratification
- Sampled two classrooms per school
- No overlap between Grade 4 and Grade 8 schools.
- Census of all schools. Within schools, two classrooms were sampled with probability proportional to the size of the classroom. Within selected classrooms, 19 students were randomly sampled for eTIMSS. The remaining students were assigned to the bridge sample.
- 100 % of students in the bridge sample were in schools selected for the eTIMSS sample
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
None	153	0	153	0	0	0	0
Total	153	0	153	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
None	56	0	55	0	0	1	0
Total	56	0	55	0	0	1	0

Slovak Republic

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, instruction language other than Slovak or Hungarian, and alternative schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (Slovak, Hungarian), national testing score (4), and school size (small, large) within Slovak schools
- No implicit stratification
- Sampled two classrooms per school. In schools sampled for eTIMSS and bridge, one additional classroom sampled for the bridge.
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 34.5 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Slovak - Low Average Math Score - Small	8	0	7	1	0	0	0
Slovak - Low Average Math Score - Large	3	0	2	0	1	0	0
Slovak - Medium Average Math Score - Small	30	0	29	1	0	0	0
Slovak - Medium Average Math Score - Large	10	0	10	0	0	0	0
Slovak - High Average Math Score - Small	42	0	41	1	0	0	1
Slovak - High Average Math Score - Large	43	0	43	0	0	0	0
Slovak - Missing Score - Small	12	0	11	0	0	1	0
Hungarian	10	0	10	0	0	0	0
Total	158	0	153	3	1	1	1

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Slovak - Low Average Math Score - Small	4	0	4	0	0	0	0
Slovak - Low Average Math Score - Large	2	0	1	0	1	0	0
Slovak - Medium Average Math Score - Small	14	0	14	0	0	0	0
Slovak - Medium Average Math Score - Large	4	0	4	0	0	0	0
Slovak - High Average Math Score - Small	18	0	18	0	0	0	0
Slovak - High Average Math Score - Large	18	0	18	0	0	0	0
Slovak - Missing Score - Small	6	0	6	0	0	0	0
Hungarian	4	0	4	0	0	0	0
Total	70	0	69	0	1	0	0

South Africa

Fifth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- No within-school exclusions

Sample Design

- Explicit stratification by school type (independent, public) and province (9) within public schools
- Implicit stratification by performance level (1st quintile, 2nd quintile, 3rd quintile, 4th and 5th quintiles, missing) within public schools and province (Gauteng, Western Cape, Eastern Cape, Limpopo, all other provinces) within independent schools
- Sampled one classroom per school
- No overlap between Grade 5 and Grade 9 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Independent	30	0	26	3	1	0	0
Public - Eastern Cape	30	2	28	0	0	0	0
Public - Free State	30	0	29	1	0	0	0
Public - Kwazulu-Natal	30	0	25	3	1	1	0
Public - Limpopo	30	0	30	0	0	0	0
Public - Mpumalanga	30	0	29	1	0	0	0
Public - North West	30	0	30	0	0	0	0
Public - Northern Cape	30	0	30	0	0	0	0
Public - Gauteng	30	0	30	0	0	0	0
Public - Western Cape	30	0	29	1	0	0	0
Total	300	2	286	9	2	1	0

Ninth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 11), and special needs schools
- Within-school exclusions consisted of non-native language speakers

Sample Design

- Explicit stratification by school type (independent, public) and province (9) within public schools. Independent schools were stratified by province (Gauteng, Western Cape, all other provinces).
- Implicit stratification by performance level (1st quintile, 2nd quintile, 3rd quintile, 4th and 5th quintiles, missing within public schools) and province (Eastern Cape, Limpopo) within independent schools from all other provinces stratum
- Sampled one classroom per school
- No overlap between Grade 5 and Grade 9 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Independent - Western Cape	8	0	7	1	0	0	0
Independent - Gauteng	16	0	14	1	1	0	0
Independent - All Other provinces	10	1	9	0	0	0	0
Public - Eastern Cape	30	2	28	0	0	0	0
Public - Free State	30	0	30	0	0	0	0
Public - Kwazulu-Natal	34	0	34	0	0	0	0
Public - Limpopo	30	0	30	0	0	0	0
Public - Mpumalanga	30	0	30	0	0	0	0
Public - North West	30	0	29	0	0	1	0
Public - Northern Cape	30	0	30	0	0	0	0
Public - Western Cape	142	1	141	0	0	0	0
Public - Gauteng	134	0	134	0	0	0	0
Total	524	4	516	2	1	1	0

Spain

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, international schools outside Madrid, and geographically inaccessible or campus schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by region (9) and school type (public, private). Within Madrid, explicit stratification was done by school funding (publicly funded, non publicly funded) within private schools, bilingual status (bilingual, not bilingual) within publicly funded private schools and public schools
- Implicit stratification by region within the other regions strata (12) and school type (public, private) within Ceuta and Melilla strata
- Sampled one classroom per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment. In schools selected for the bridge only, two classrooms sampled in large schools (measure of size > 45).
- The Field Test and Main Data Collection TIMSS samples were selected sequentially. The TIMSS Main Data Collection sample was selected by controlling for the overlap with the TIMSS Field Test sample using the Chowdhury approach.
- Oversampled in Asturias, Castile and Leon, Catalonia, La Rioja, Ceuta, Melilla and Madrid in order to get better estimates. A census of schools was taken in the autonomous cities of Ceuta and Melilla.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.

- 53 % of students in the bridge sample were in schools selected for the eTIMSS sample
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Asturias - Public	30	0	30	0	0	0	0
Asturias - Private	20	0	20	0	0	0	0
Castile and Leon - Public	30	0	28	1	1	0	0
Castile and Leon - Private	20	0	19	1	0	0	0
Catalonia - Public	30	0	30	0	0	0	0
Catalonia - Private	20	0	19	1	0	0	0
La Rioja - Public	30	0	30	0	0	0	0
La Rioja - Private	20	0	20	0	0	0	0
Ceuta	21	0	21	0	0	0	0
Melilla	16	0	16	0	0	0	0
Other larger regions - Public	58	0	55	1	1	1	0
Other larger regions - Private	22	0	22	0	0	0	0
Other smaller regions - Public	12	0	11	1	0	0	0
Other smaller regions - Private	6	0	6	0	0	0	0
Madrid - Public Bilingual	40	0	40	0	0	0	0
Madrid - Public Non Bilingual	40	0	40	0	0	0	0
Madrid - Private Bilingual (Pub. Funded)	39	0	39	0	0	0	0
Madrid - Private Non Bilingual (Pub. Funded)	40	0	40	0	0	0	0
Madrid - Private	8	0	8	0	0	0	0
Total	502	0	494	5	2	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Asturias - Public	2	0	2	0	0	0	0
Asturias - Private	2	0	2	0	0	0	0
Castile and Leon - Public	2	0	2	0	0	0	0
Castile and Leon - Private	2	0	2	0	0	0	0
Catalonia - Public	6	0	6	0	0	0	0
Catalonia - Private	4	0	3	1	0	0	0
La Rioja - Public	2	0	2	0	0	0	0
La Rioja - Private	2	0	2	0	0	0	0
Ceuta	2	0	2	0	0	0	0
Melilla	2	0	2	0	0	0	0
Other larger regions - Public	20	0	19	0	0	1	0
Other larger regions - Private	8	0	8	0	0	0	0
Other smaller regions - Public	4	0	4	0	0	0	0
Other smaller regions - Private	2	0	2	0	0	0	0
Madrid - Public Bilingual	2	0	2	0	0	0	0
Madrid - Public Non Bilingual	2	0	2	0	0	0	0
Madrid - Private Bilingual (Pub. Funded)	2	0	2	0	0	0	0
Madrid - Private Non Bilingual (Pub. Funded)	2	0	2	0	0	0	0
Madrid - Private	2	0	2	0	0	0	0
Total	70	0	68	1	0	1	0

Sweden

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, special schools, and international schools
- Within-school exclusions consisted of students with functional disabilities

Sample Design

- Explicit stratification by average achievement for the grade (low, medium, high, missing) and school type (public, private)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 45)
- The Field Test and Main Data Collection samples were selected sequentially.
- The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample and the Main Data Collection sample at Grade 8 using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Achievement not available - Public	97	3	94	0	0	0	0
Low Average Achievement - Public	8	0	7	0	1	0	0
Medium Average Achievement - Public	10	1	9	0	0	0	0
High Average Achievement - Public	16	0	16	0	0	0	0
High Average Achievement - Private	11	1	10	0	0	0	0
Other - Private	8	0	8	0	0	0	0
Total	150	5	144	0	1	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Achievement not available - Public	32	0	31	1	0	0	0
Low Average Achievement - Public	4	0	4	0	0	0	0
Medium Average Achievement - Public	4	0	4	0	0	0	0
High Average Achievement - Public	4	0	4	0	0	0	0
High Average Achievement - Private	4	0	4	0	0	0	0
Other - Private	4	0	3	1	0	0	0
Total	52	0	50	2	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, special schools, and international schools
- Within-school exclusions consisted of students with functional disabilities

Sample Design

- Explicit stratification by average achievement for the grade (low, medium, high, missing) and school type (public, private)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 100)
- The Field Test and Main Data Collection samples were selected sequentially.
- The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Separate samples of schools for eTIMSS and bridge were selected so there was no overlap between the samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Missing - Public	8	0	8	0	0	0	0
Low - Public	20	1	19	0	0	0	0
Medium - Public	48	0	47	0	0	1	0
High - Public	46	1	45	0	0	0	0
High - Private	23	0	22	1	0	0	0
Other - Private	8	0	8	0	0	0	0
Total	153	2	149	1	0	1	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Missing - Public	4	0	4	0	0	0	0
Low - Public	8	0	8	0	0	0	0
Medium - Public	16	0	15	0	1	0	0
High - Public	14	1	13	0	0	0	0
High - Private	8	0	8	0	0	0	0
Other - Private	4	1	3	0	0	0	0
Total	54	2	51	0	1	0	0

Turkey

Fifth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special needs schools, international schools, and schools abroad
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 5 only’/‘Grade 5 and Grade 8’, school type (public, private), region (13), and school size (small, large) within Grade 5 and 8 schools
- No implicit stratification
- Sampled one classroom per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- Grade 5 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- No bridge sample required at Grade 5 as they participated in TIMSS 2015 at the 4th Grade

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 only	8	0	7	1	0	0	0
Grade 5 & Grade 8 - Private - Large	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Private - Small	6	0	6	0	0	0	0
Grade 5 & Grade 8 - Public - TR1-Istanbul	24	0	24	0	0	0	0
Grade 5 & Grade 8 - Public - TR2-West Marmara - Large	4	0	4	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 & Grade 8 - Public - TR2-West Marmara - Small	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TR3-Aegean - Large	10	0	10	0	0	0	0
Grade 5 & Grade 8 - Public - TR3-Aegean - Small	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TR4-East Marmara	14	0	14	0	0	0	0
Grade 5 & Grade 8 - Public - TR5-West Anatolia	14	0	14	0	0	0	0
Grade 5 & Grade 8 - Public - TR6- Mediterranean - Large	14	0	14	0	0	0	0
Grade 5 & Grade 8 - Public - TR6- Mediterranean - Small	6	0	6	0	0	0	0
Grade 5 & Grade 8 - Public - TR7-Central Anatolia - Large	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TR7-Central Anatolia - Small	3	0	3	0	0	0	0
Grade 5 & Grade 8 - Public - TR8-West Black Sea - Large	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TR8-West Black Sea - Small	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TR9-East Black Sea - Large	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TR9-East Black Sea - Small	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TRA-Northeast Anatolia - Large	4	0	4	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 5 & Grade 8 - Public - TRA-Northeast Anatolia - Small	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TRB-Centraleast Anatolia - Large	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TRB-Centraleast Anatolia - Small	4	0	4	0	0	0	0
Grade 5 & Grade 8 - Public - TRC-Southeast Anatolia - Large	16	0	16	0	0	0	0
Grade 5 & Grade 8 - Public - TRC-Southeast Anatolia - Small	6	1	5	0	0	0	0
Grade 5 & Grade 8 - Public - Rural Regions	8	0	8	0	0	0	0
Total	181	1	179	1	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special needs schools, international schools, and schools abroad
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8 only’/‘Grade 5 and Grade 8’, school type (public, private), region (13), and school size (small, large) within Grade 5 and 8 schools
- No implicit stratification
- Sampled one classroom per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment

- Grade 5 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 69.7 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	8	0	8	0	0	0	0
Gr5 and Gr8 - Private - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Private - Small	6	0	6	0	0	0	0
Gr5 and Gr8 - Public - TR1-Istanbul - Large	24	0	24	0	0	0	0
Gr5 and Gr8 - Public - TR2-West Marmara - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR2-West Marmara - Small	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR3-Aegean - Large	10	0	10	0	0	0	0
Gr5 and Gr8 - Public - TR3-Aegean - Small	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR4-East Marmara	14	0	14	0	0	0	0
Gr5 and Gr8 - Public - TR5-West Anatolia	14	0	14	0	0	0	0
Gr5 and Gr8 - Public - TR6-Mediterranean - Large	14	0	14	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Gr5 and Gr8 - Public - TR6-Mediterranean - Small	6	0	6	0	0	0	0
Gr5 and Gr8 - Public - TR7-Central Anatolia - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR7-Central Anatolia - Small	3	0	3	0	0	0	0
Gr5 and Gr8 - Public - TR8-West Black Sea - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR8-West Black Sea - Small	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR9-East Black Sea - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR9-East Black Sea - Small	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TRA-Northeast Anatolia - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TRA-Northeast Anatolia - Small	4	0	3	1	0	0	0
Gr5 and Gr8 - Public - TRB-Centraleast Anato-lia - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TRB-Centraleast Anato-lia - Small	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TRC-Southeast Anatolia - Large	16	0	16	0	0	0	0
Gr5 and Gr8 - Public - TRC-Southeast Anatolia - Small	6	0	6	0	0	0	0
Gr5 and Gr8 - Public - Rural Regions	8	0	8	0	0	0	0
Total	181	0	180	1	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	4	0	4	0	0	0	0
Gr5 and Gr8 - Private - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Private - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR1-Istanbul - Large	8	0	8	0	0	0	0
Gr5 and Gr8 - Public - TR2-West Marmara - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR2-West Marmara - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR3-Aegean - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR3-Aegean - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR4-East Marmara	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR5-West Anatolia	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR6-Mediterranean - Large	4	0	4	0	0	0	0
Gr5 and Gr8 - Public - TR6-Mediterranean - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR7-Central Anatolia - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR7-Central Anatolia - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR8-West Black Sea - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR8-West Black Sea - Small	2	0	2	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Gr5 and Gr8 - Public - TR9-East Black Sea - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TR9-East Black Sea - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TRA-Northeast Anatolia - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TRA-Northeast Anatolia - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TRB-Centraleast Anato-lia - Large	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TRB-Centraleast Anato-lia - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - TRC-Southeast Anatolia - Large	6	0	6	0	0	0	0
Gr5 and Gr8 - Public - TRC-Southeast Anatolia - Small	2	0	2	0	0	0	0
Gr5 and Gr8 - Public - Rural Regions	4	0	4	0	0	0	0
Total	72	0	72	0	0	0	0

United Arab Emirates

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of instruction language other than English or Arabic, and very small schools (measure of size < 10 in Abu Dhabi and < 5 in other emirates but Dubai)
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/Grade 4 and Grade 8’ schools, emirate (Dubai, Abu Dhabi, all other emirates), school type (public, private), as well as by the main curriculum taught (UK/US/CAD/AUS/International, other) within private schools in all emirates with the exception of Dubai
- Implicit stratification by school size (small, large), as well as region (Abu Dhabi, Al Ain, Al Dhafra) within large private schools of Abu Dhabi, language of test (Arabic, English, French) within Dubai, emirate (Sharjah, other emirates) within public schools, and curriculum (Ministry of Education, UK/US/CAD, other) within private schools in the rest of the emirates
- Sampled two classrooms per school. In schools sampled for eTIMSS and bridge, one additional classroom was sampled for the bridge
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. In areas other than Dubai, the Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The United Arab Emirates was divided into three areas: Abu Dhabi, Dubai, and the rest of the emirates. All schools were sampled in Dubai. All public schools as well as all private schools with UK/US/CAD/AUS/International/SABIS curriculum were sampled in the other emirates.
- The bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.

- 98.9 % of students in the bridge sample were in schools selected for the eTIMSS sample
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Dubai - Grade 4 - Public	24	3	21	0	0	0	0
Dubai - Grade 4 - Private	47	0	47	0	0	0	0
Dubai - Grade 4 & Grade 8 - Public	4	1	3	0	0	0	0
Dubai - Grade 4 & Grade 8 - Private	130	2	128	0	0	0	0
Abu Dhabi - Grade 4 - Public - ADEC schools	67	1	66	0	0	0	0
Abu Dhabi - Grade 4 - Private - UK/US/CAD/AUS/Int	23	0	23	0	0	0	0
Abu Dhabi - Grade 4 - Private - Other curriculum	6	1	5	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Public - ADEC schools	22	0	22	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Ministry of Education	20	0	20	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - UK/US/CAD/AUS/Int	87	0	87	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Others	24	0	24	0	0	0	0
Other - Grade 4 - Public - Ministry of Education	80	1	79	0	0	0	0
Other - Grade 4 - Private - UK/US/AUS/International/SABIS	13	0	13	0	0	0	0
Other - Grade 4 - Private - Other Curriculum	8	0	8	0	0	0	0

School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Other - Grade 4 & Grade 8 - Public - Ministry of Education	22	0	22	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Ministry of Education	20	0	20	0	0	0	0
Other - Grade 4 & Grade 8 - Private - UK/US/AUS/International/SABIS	60	0	60	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Other Curriculum	40	0	40	0	0	0	0
Total	697	9	688	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Dubai - Grade 4 - Public	4	0	4	0	0	0	0
Dubai - Grade 4 - Private	5	0	5	0	0	0	0
Dubai - Grade 4 & Grade 8 - Public	2	1	1	0	0	0	0
Dubai - Grade 4 & Grade 8 - Private	14	0	13	0	0	1	0
Abu Dhabi - Grade 4 - Public - ADEC schools	8	0	8	0	0	0	0
Abu Dhabi - Grade 4 - Private - UK/US/CAD/AUS/Int	4	0	4	0	0	0	0
Abu Dhabi - Grade 4 - Private - Other curriculum	1	0	1	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Public - ADEC schools	4	0	4	0	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Abu Dhabi - Grade 4 & Grade 8 - Private - Ministry of Education	6	0	6	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - UK/US/CAD/AUS/Int	8	0	8	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Others	4	0	4	0	0	0	0
Other - Grade 4 - Public - Ministry of Education	10	0	10	0	0	0	0
Other - Grade 4 - Private - UK/US/AUS/International/SABIS	4	0	4	0	0	0	0
Other - Grade 4 - Private - Other Curriculum	4	0	4	0	0	0	0
Other - Grade 4 & Grade 8 - Public - Ministry of Education	4	0	4	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Ministry of Education	3	0	3	0	0	0	0
Other - Grade 4 & Grade 8 - Private - UK/US/AUS/International/SABIS	8	0	8	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Other Curriculum	8	0	7	0	0	1	0
Total	101	1	98	0	0	2	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of instruction language other than English or Arabic, special needs schools, and very small schools (measure of size < 10 in Abu Dhabi and < 5 in other emirates but Dubai)
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8’/Grade 4 and Grade 8’ schools, emirate (Dubai, Abu Dhabi, all other emirates), school type (public, private), as well as by the main curriculum taught (UK/US/CAD/AUS/International, other) within private schools in all emirates with the exception of Dubai
- Implicit stratification by school size (small, large), as well as region (Abu Dhabi, Al Ain, Al Dhafra) within large private schools of Abu Dhabi, language of test (Arabic, English, French) within Dubai, emirate (Sharjah, other emirates) within public schools, and curriculum (Ministry of Education, UK/US/CAD, other) within private schools in the rest of the emirates
- Sampled two classrooms per school. In schools sampled for eTIMSS and bridge, one additional classroom was sampled for the bridge
- Grade 4 and Grade 8 school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. In areas other than Dubai, the Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- The United Arab Emirates was divided into three areas: Abu Dhabi, Dubai, and the rest of the emirates. All schools were sampled in Dubai. All public schools as well as all private schools with UK/US/CAD/AUS/International/SABIS curriculum were sampled in the other emirates.
- The bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 98 % of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Dubai - Grade 8 - Public	23	3	20	0	0	0	0
Dubai - Grade 8 - Private	7	0	7	0	0	0	0
Dubai - Grade 4 & Grade 8 - Public	4	1	3	0	0	0	0
Dubai - Grade 4 & Grade 8 - Private	137	4	133	0	0	0	0
Abu Dhabi - Grade 8 - Public	72	0	72	0	0	0	0
Abu Dhabi - Grade 8 - Private	4	0	4	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Public - ADEC schools	23	0	23	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Ministry of Education	20	0	20	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - UK/US/CAD/AUS/Int	87	0	87	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Others	24	0	24	0	0	0	0
Other - Grade 8 - Public	83	0	83	0	0	0	0
Other - Grade 8 - Private	7	0	7	0	0	0	0
Other - Grade 4 & Grade 8 - Public - Ministry of Education	21	0	21	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Ministry of Education	20	0	20	0	0	0	0
Other - Grade 4 & Grade 8 - Private - UK/US/AUS/Int./SABIS	59	0	59	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Others	40	0	40	0	0	0	0
Total	631	8	623	0	0	0	0

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Dubai - Grade 8 - Public	4	3	1	0	0	0	0
Dubai - Grade 8 - Private	2	0	2	0	0	0	0
Dubai - Grade 4 & Grade 8 - Public	2	1	1	0	0	0	0
Dubai - Grade 4 & Grade 8 - Private	14	0	13	0	0	1	0
Abu Dhabi - Grade 8 - Public	10	0	10	0	0	0	0
Abu Dhabi - Grade 8 - Private	4	0	4	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Public - ADEC schools	2	0	2	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Ministry of Education	6	0	6	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - UK/US/CAD/AUS/Int	8	0	8	0	0	0	0
Abu Dhabi - Grade 4 & Grade 8 - Private - Others	4	0	4	0	0	0	0
Other - Grade 8 - Public	11	0	11	0	0	0	0
Other - Grade 8 - Private	3	0	3	0	0	0	0
Other - Grade 4 & Grade 8 - Public - Ministry of Education	3	0	3	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Ministry of Education	4	0	4	0	0	0	0
Other - Grade 4 & Grade 8 - Private - UK/US/AUS/Int./SABIS	8	0	8	0	0	0	0
Other - Grade 4 & Grade 8 - Private - Others	8	0	8	0	0	0	0
Total	93	4	88	0	0	1	0

United States

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- No school-level exclusions
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by poverty level (high, low), school type (public, private), census region of public school (Northeast, Midwest, South, West), and type of private school (Roman Catholic, other private)
- Implicit stratification by urbanization (city, suburb, town, rural), ethnicity status (above 15% non-White students in a school, below 15% non-White students in a school), and state (52)
- Sampled two classrooms per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- No overlap between Grade 4 and Grade 8 samples.
- The TIMSS Main Data Collection sample was selected by controlling for the overlap with the national NAEP sample using the Chowdhury approach
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.
- 90.7% of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
High poverty - Public - Census Region 1	20	0	13	0	1	6	0
High poverty - Public - Census Region 2	26	0	18	3	0	5	0
High poverty - Public - Census Region 3	65	0	59	5	0	1	0
High poverty - Public - Census Region 4	42	0	29	7	2	4	0
Low poverty - Private - Non Catholic	13	2	5	1	0	5	0
Low poverty - Private - Catholic	8	0	4	1	0	3	0
Low poverty - Public - Census Region 1	29	0	21	5	0	3	0
Low poverty - Public - Census Region 2	36	0	27	4	3	2	0
Low poverty - Public - Census Region 3	56	0	49	3	0	4	1
Low poverty - Public - Census Region 4	32	0	24	2	1	5	1
Total	327	2	249	31	7	38	2

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
High poverty - Public - Census Region 1	6	0	5	0	0	1	0
High poverty - Public - Census Region 2	6	0	6	0	0	0	0
High poverty - Public - Census Region 3	16	0	13	3	0	0	0
High poverty - Public - Census Region 4	10	0	5	4	0	1	0
Low poverty - Private - Non Catholic	4	1	1	1	1	0	0
Low poverty - Private - Catholic	4	0	2	1	0	1	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Low poverty - Public - Census Region 1	8	0	5	2	0	1	0
Low poverty - Public - Census Region 2	10	0	8	2	0	0	0
Low poverty - Public - Census Region 3	14	0	12	0	0	2	0
Low poverty - Public - Census Region 4	8	0	8	0	0	0	0
Total	86	1	65	13	1	6	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- No school-level exclusions
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by poverty level (high, low), school type (public, private), census region of public school (Northeast, Midwest, South, West), and type of private school (Roman Catholic, other private)
- Implicit stratification by urbanization (city, suburb, town, rural), ethnicity status (above 15% non-White students in a school, below 15% non-White students in a school), and state (52)
- Sampled two classrooms per school. In schools sampled for eTIMSS and bridge, one classroom sampled per assessment
- No overlap between Grade 4 and Grade 8 samples.
- The TIMSS Main Data Collection sample was selected by controlling for the overlap with the national NAEP sample using the Chowdhury approach
- The bridge sample was obtained using a combination of strategies. In the large school strata, the bridge sample was selected as a subset of the eTIMSS school sample and classes were randomly assigned to either the eTIMSS or bridge samples. In the small school strata, a

distinct sample of schools was selected for the bridge sample. During data collection, schools with only one class selected for both the eTIMSS and bridge samples were randomly assigned to administer either the eTIMSS or bridge assessment, and school weights were adjusted accordingly during the weighting process.

- 91.6% of students in the bridge sample were in schools selected for the eTIMSS sample

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - High - Public - Census region 1	17	1	6	2	0	8	0
Grade 8 - High - Public - Census region 2	22	0	17	2	0	3	0
Grade 8 - High - Public - Census region 3	59	1	50	4	2	2	0
Grade 8 - High - Public - Census region 4	39	0	27	2	1	9	0
Grade 8 - Low - Private - Non Catholic	13	1	5	1	2	4	0
Grade 8 - Low - Private - Catholic	8	0	5	1	0	2	0
Grade 8 - Low - Public - Census region 1	29	0	17	7	2	3	1
Grade 8 - Low - Public - Census region 2	42	0	25	5	3	9	0
Grade 8 - Low - Public - Census region 3	61	0	53	3	1	4	0
Grade 8 - Low - Public - Census region 4	34	0	26	3	1	4	0
Total	324	3	231	30	12	48	1

Bridge Sample School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - High - Public - Census region 1	6	0	3	0	0	3	0
Grade 8 - High - Public - Census region 2	6	0	4	2	0	0	0
Grade 8 - High - Public - Census region 3	14	0	13	1	0	0	0

Bridge Sample School Participation Status (continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - High - Public - Census region 4	9	0	6	0	0	3	0
Grade 8 - Low - Private - Non Catholic	4	1	1	0	0	2	0
Grade 8 - Low - Private - Catholic	4	0	3	1	0	0	0
Grade 8 - Low - Public - Census region 1	8	0	5	1	0	2	0
Grade 8 - Low - Public - Census region 2	10	0	5	1	1	3	0
Grade 8 - Low - Public - Census region 3	14	0	13	0	0	1	0
Grade 8 - Low - Public - Census region 4	8	0	5	0	0	3	0
Total	83	1	58	6	1	17	0

Ontario, Canada

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), special needs schools, and remote and hard to access school
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (English, French), school type (private, Catholic, public), and by school size (small, large) within Catholic and public schools
- Implicit stratification by regional office (Thunder Bay, Sudbury-North Bay, London, Barrie, Ottawa, Toronto and Area)
- Sampled two classrooms in large schools (measure of size > 40)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
English - Public - Small	24	1	23	0	0	0	0
English - Public - Large	72	0	70	1	0	1	0
English - Catholic - Small	18	0	18	0	0	0	0
English - Catholic - Large	19	0	19	0	0	0	0
Private	8	0	0	1	1	6	0
French - Catholic & Public - Small	18	0	18	0	0	0	0
French - Catholic & Public - Large	12	0	12	0	0	0	0
Total	171	1	160	2	1	7	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (French, English), school type (public, Catholic, private), and by school size (small, large) within French Catholic and public schools
- Implicit stratification by regional office (Thunder Bay, Sudbury-North Bay, London, Barrie, Ottawa, Toronto and Area)
- Sampled two classrooms in large schools (measure of size > 100)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
English - Public	94	2	86	0	1	5	0
English - Catholic	40	0	40	0	0	0	0
French - Large - Catholic & Public	16	0	15	0	0	1	0
French - Small - Catholic & Public	14	0	14	0	0	0	0
Private	8	0	2	0	0	6	0
Total	172	2	157	0	1	12	0

Quebec, Canada

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special school, First Nation schools/federal schools, international schools, and school boards with special status
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (French, English), school type (public, private), and school size (small, large)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 75)
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Class group option was used within schools with regular and enriched programs

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
English - Public - Small	12	0	8	1	0	3	0
English - Public - Large	14	0	13	1	0	0	0
English - Private	8	0	6	0	0	2	0
French - Public - Small	44	0	35	1	0	8	0
French - Public - Large	84	0	70	4	0	10	0
French - Private - Small	4	0	3	1	0	0	0
French - Private - Large	6	0	5	0	0	1	0
Total	172	0	140	8	0	24	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special school, First Nation schools/federal schools, international schools, and school boards with special status
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by language (French, English), school type (public, private), and school size (small, large) within French public schools
- Implicit stratification by Mathematics average score (4) and available programs (regular program, with enriched program)
- Sampled two classrooms in schools with regular and enriched programs
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- Class group option was used within schools with regular and enriched programs

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
English - Public	23	0	17	0	0	6	1
English - Private	8	2	4	0	0	2	0
French - Private	28	1	19	1	0	7	0
French - Large - Public	62	0	46	1	0	15	0
French - Small - Public	44	1	33	3	0	7	0
Total	165	4	119	5	0	37	1

Moscow City, Russian Fed.

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/‘Grade 4 and Grade 8’ schools and school type (state, private) within ‘Grade 4 and Grade 8’ schools
- Implicit stratification by school size (up to 1,000 students, from 1,000 to 3,000 students, over 3,000 students) within ‘Grade 4 and Grade 8’ state schools
- Sampled two classrooms in large schools (measure of size > 300)
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4	4	0	4	0	0	0	0
Grade 4 & Grade 8 - State	140	1	138	0	1	0	0
Grade 4 & Grade 8 - Private	8	0	6	1	0	1	0
Total	152	1	148	1	1	1	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8’/Grade 4 and Grade 8’ schools and school type (state, private) within ‘Grade 4 and Grade 8’ schools
- Implicit stratification by school size (up to 1,000 students, from 1,000 to 3,000 students, over 3,000 students) within ‘Grade 4 and Grade 8’ state schools
- Sampled two classrooms in large schools (measure of size > 260)
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8	4	0	3	0	1	0	0
Grade 4 & Grade 8 - State	140	1	138	0	1	0	0
Grade 4 & Grade 8 - Private	8	0	6	1	0	1	0
Total	152	1	147	1	2	1	0

Gauteng, RSA

Ninth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 11), and special needs schools
- Within-school exclusions consisted of non-native language speakers

Sample Design

- Explicit stratification by school type (independent, public)
- Implicit stratification by performance level (1st quintile, 2nd quintile, 3rd quintile, 4th quintile, 5th quintiles, missing) within public schools
- Sampled one classroom per school
- No overlap control between Grade 5 and Grade 9 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Independent	16	0	14	1	1	0	0
Public	134	0	134	0	0	0	0
Total	150	0	148	1	1	0	0

Western Cape, RSA

Ninth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 11), and special needs schools
- Within-school exclusions consisted of non-native language speakers

Sample Design

- Explicit stratification by school type (independent, public)
- Implicit stratification by performance level (1st quintile, 2nd quintile, 3rd quintile, 4th quintile, 5th quintiles, missing) within public schools
- Sampled one classroom per school
- No overlap control between Grade 5 and Grade 9 samples

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Independent	8	0	7	1	0	0	0
Public	142	1	141	0	0	0	0
Total	150	1	148	1	0	0	0

Madrid, Spain

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), and special needs schools
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private publicly funded, private) and bilingual status (bilingual, not bilingual) within public schools and private publicly funded schools
- No implicit stratification
- Sampled one classroom per school
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Public Bilingual	40	0	40	0	0	0	0
Public Non Bilingual	40	0	40	0	0	0	0
Private Bilingual (Pub. Funded)	39	0	39	0	0	0	0
Private Non Bilingual (Pub. Funded)	40	0	40	0	0	0	0
Private	8	0	8	0	0	0	0
Total	167	0	167	0	0	0	0

Abu Dhabi, UAE

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), and instruction language other than English or Arabic
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/Grade 4 and Grade 8’ schools and school type (public, private) and main curriculum (UK/US/CAD/AUS/International, Ministry of Education, other) within private schools
- Implicit stratification by school size (small, large) and region (Abu Dhabi, Al Ain, Al Dhafra) within large private schools
- Sampled two classrooms whenever possible
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- All public schools and all private schools with UK/US/CAD/AUS/International main curriculum were sampled
- In census strata, schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Public - ADEC schools	67	1	66	0	0	0	0
Grade 4 - Private - UK/US/CAD/AUS/International Curriculum	23	0	23	0	0	0	0
Grade 4 - Private - Other Curriculum	6	1	5	0	0	0	0
Grade 4 & Grade 8 - Public - ADEC schools	22	0	22	0	0	0	0
Grade 4 & Grade 8 - Private - Ministry of Education	20	0	20	0	0	0	0
Grade 4 & Grade 8 - Private - UK/US/CAD/AUS/International Curriculum	87	0	87	0	0	0	0
Grade 4 & Grade 8 - Private - Other Curriculum	24	0	24	0	0	0	0
Total	249	2	247	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), and instruction language other than English or Arabic
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by school type (public, private) and main curriculum (UK/US/CAD/AUS/International, Ministry of Education, other) within private schools
- Implicit stratification by school size (small, large) and region (Abu Dhabi, Al Ain, Al Dhafra) within large private schools

- Sampled two classrooms whenever possible
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially. The Main Data Collection sample was selected by controlling for the overlap with the Field Test sample using the Chowdhury approach.
- All public schools and all private schools with UK/US/CAD/AUS/International main curriculum were sampled

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Public	72	0	72	0	0	0	0
Grade 8 - Private	4	0	4	0	0	0	0
Grade 4 & Grade 8 - Public - ADEC schools	23	0	23	0	0	0	0
Grade 4 & Grade 8 - Private - Ministry of Education	20	0	20	0	0	0	0
Grade 4 & Grade 8 - Private - UK/US/CAD/AUS/Int	87	0	87	0	0	0	0
Grade 4 & Grade 8 - Private - Others	24	0	24	0	0	0	0
Total	230	0	230	0	0	0	0

Dubai, UAE

Fourth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of instruction language other than English or Arabic
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 4’/Grade 4 and Grade 8’ schools and school type (public, private)
- Implicit stratification by school size (small, large) and language of test (Arabic, English, French)
- Sampled two classrooms whenever possible
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially
- Census of all schools
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 4 - Public	24	3	21	0	0	0	0
Grade 4 - Private	47	0	47	0	0	0	0
Grade 4 & Grade 8 - Public	4	1	3	0	0	0	0
Grade 4 & Grade 8 - Private	130	2	128	0	0	0	0
Total	205	6	199	0	0	0	0

Eighth Grade

Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of instruction language other than English or Arabic
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

Sample Design

- Explicit stratification by ‘Grade 8’/Grade 4 and Grade 8’ schools and school type (public, private)
- Implicit stratification by school size (small, large) and language of test (Arabic, English, French)
- Sampled two classrooms whenever possible
- Grade 4 and Grade 8 samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially
- Census of all schools
- Schools or classes were used as variance estimation strata and classes or half classes were used to build jackknife replicates

School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1st Replacements	2nd Replacements		
Grade 8 - Public	23	3	20	0	0	0	0
Grade 8 - Private	7	0	7	0	0	0	0
Grade 4 & Grade 8 - Public	4	1	3	0	0	0	0
Grade 4 & Grade 8 - Private	137	4	133	0	0	0	0
Total	171	8	163	0	0	0	0