

## CHAPTER 9

# TIMSS 2023 Sampling Implementation

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### Introduction

To report results that are generalizable to populations of fourth- and eighth-grade students, TIMSS 2023 involved extensive work to ensure representative samples of schools and students were drawn in all participating countries. While developing a national sampling plan for each participating country involved a collaborative effort, implementing the sampling plan was ultimately the responsibility of the National Research Coordinator (NRC). NRCs were supported in this endeavor by the TIMSS Sampling Team, composed of sampling experts from RTI International and the Sampling Unit at IEA Hamburg. The Sampling Team conducted the school sampling for nearly all countries and trained NRCs in using the Windows Within-School Sampling Software (WinW3S) provided by IEA Hamburg to implement within-school sampling activities.

As an essential part of their sampling activities, NRCs were responsible for providing detailed documentation describing their national sampling plans (sampling data and school sampling frames) and working with the Sampling Team to ensure proper planning, documentation, and implementation. The documentation for each TIMSS 2023 participant was reviewed and completed by the Sampling Team. It included detailed information on coverage and exclusion levels, stratification variables, sample selection, participation rates, and variance estimates. The TIMSS & PIRLS International Study Center, the Sampling Team, and the TIMSS 2023 Sampling Referee, Jill DeMatteis of Westat, Inc., used this information to evaluate the quality of the samples.

[Chapter 3](#) of this publication describes the international target population and sampling design aspects guiding national sample selection for TIMSS assessment cycles, including the procedures and guidelines for developing, implementing, and documenting national sampling plans and calculating sampling weights for use in the analysis.

This chapter documents the major characteristics of the national samples for TIMSS 2023. Appendix 9A provides more detailed descriptions of the sample design for each country, including details of population coverage and exclusions, stratification variables, and schools' sample size allocations.

## TIMSS 2023 Target Populations

According to the sample design described in [Chapter 3](#), the international target populations for the TIMSS 2023 fourth- and eighth-grade assessments were defined as follows:

- **Fourth-grade:** All students enrolled in the grade that represents four years of schooling counting from the first year of ISCED Level 1, providing the mean age at the time of testing is at least 9.5 years.
- **Eighth-grade:** All students enrolled in the grade that represents eight years of schooling counting from the first year of ISCED Level 1, providing the mean age at the time of testing is at least 13.5 years.

Countries opted to assess either one or both student populations. Exhibits 9.1 and 9.2 present the grades identified as the target grades for sampling by each country and include the number of years of formal schooling that the grades represent and the average age of students in the target grades at the time of testing.

### ↓ [Exhibit 9.1: TIMSS 2023 National Grade Definition – Grade 4](#)

### ↓ [Exhibit 9.2: TIMSS 2023 National Grade Definition – Grade 8](#)

As shown in Exhibits 9.1 and 9.2, for most countries, the target grades turned out to be the grades with four and eight years of schooling, i.e., fourth and eighth grades, respectively. However, in some countries, children begin primary school at an early age, and these countries assessed students in the fifth or ninth years of schooling. To meet the minimum average age requirement, England and New Zealand administered the TIMSS fourth-grade assessment in the fifth year of schooling and the eighth-grade assessment in the ninth year of schooling.

Some countries chose to assess a higher grade for other reasons. Norway assessed its fifth and ninth grades to obtain better comparisons with Denmark, Finland, and Sweden based on students' age. South Africa assessed students in their fifth and ninth years of schooling to maintain a better match between their curricula and the demands of the TIMSS assessments and to maintain trend measurements. Türkiye chose to administer the fourth-grade assessment to students in their fifth year of schooling. TIMSS 2023 results are annotated for countries that chose to assess a higher grade by including the grade assessed in parentheses after the country name.

## Coverage and Exclusions of the TIMSS 2023 National Samples

Exhibits 9.3 and 9.4 summarize population coverage and exclusions for the TIMSS 2023 target populations.

### ↓ [Exhibit 9.3: Coverage of TIMSS 2023 Target Population – Grade 4](#)

### ↓ [Exhibit 9.4: Coverage of TIMSS 2023 Target Population – Grade 8](#)

## Coverage

National coverage of the international target population was generally comprehensive, with some exceptions. At the fourth grade, exceptions included Bosnia & Herzegovina, Canada, and Georgia. These participants chose a national target population that did not completely include the international desired target population. At the eighth grade, all countries except Georgia sampled from 100% of their international desired population. For the exceptions where coverage was below 100%, the TIMSS 2023 results are annotated with a “1” footnote to alert readers to potential limitations on comparability.

## School-Level and Student-Level Exclusions

Certain types of schools and students could be excluded within the national target population based on pre-established criteria. For the most part, school-level exclusions comprised schools for students with disabilities and very small or remote schools. Occasionally, schools were excluded for other reasons, as documented in Appendix 9A.

Student-level exclusions, also referred to as within-school exclusions or within-sample exclusions, generally consisted of students with disabilities or students who could not be assessed in the language of the test within sampled schools. Many participants’ overall percentage of excluded students (combining school and student levels) was 5% or less after rounding. Results for participants with an overall exclusion rate of more than 5% after rounding are annotated in the TIMSS 2023 results. At the fourth grade, Albania, Armenia, Belgium (Flemish), Belgium (French), Brazil, Chile, Cyprus, Czech Republic, England, France, Italy, Kazakhstan, Kosovo, Lithuania, Montenegro, New Zealand, Norway (5), Poland, Romania, Serbia, Spain, Sweden, United States, and the benchmarking participant Quebec had exclusions accounting for between 5–10% of the desired population after rounding and are annotated with a “2” in the TIMSS 2023 results. Canada, Saudi Arabia, Singapore, Türkiye (5), and the benchmarking participant Ontario had exclusions exceeding 10% and are annotated with a “3.” At the eighth grade, Austria, Czech Republic, England, Lithuania, Norway (9), Saudi Arabia, and Sweden had exclusions accounting for between 5–10% of the national target population after rounding and are annotated with a “2” in the TIMSS 2023 results. Israel, Singapore, and Türkiye had exclusions exceeding 10% and are annotated with a “3.”

Compared to previous TIMSS cycles, the increasing number of countries with exclusion rates exceeding 5% in TIMSS 2023 appears to be related to the integration of special needs students in mainstream schools, a rise in migration and refugees, and the impact of natural disasters and other major disruptions of instruction. This trend is a cause for concern, especially regarding the comparability of covered populations over time.

Türkiye’s higher rate of exclusions was due to the inaccessibility of many schools following the earthquake that occurred in 2023 around the time of data collection. At the fifth grade, 17.6% of exclusions were due to the earthquake, and at the eighth grade, 16.5% were due to the earthquake.

## Target Population Sizes of the TIMSS 2023 National Samples

Exhibits 9.5 and 9.6 show the number of schools and students in each participant's target population (after school-level exclusions) and sample, as well as an estimate of the student population size based on the sample data.

↓ **Exhibit 9.5: TIMSS 2023 Target Population and Sample Sizes – Grade 4**

↓ **Exhibit 9.6: TIMSS 2023 Target Population and Sample Sizes – Grade 8**

The target population figures are derived from the sampling frame used to select the TIMSS 2023 samples and did not account for the portion of the population excluded within sampled schools, nor did it account for changes in the population between the date when the information in the sampling frame was collected and the date of the TIMSS 2023 data collection—usually a two-year interval. The sample figures are based on the number of sampled schools and students participating in the assessments. The student population sizes estimated from the sample were computed using sampling weights. A comparison of the two estimates of population size can be seen as a validity check on the sampling procedure. In general, the population sizes estimated from the samples closely matched the corresponding population sizes from the sampling frames.

## TIMSS 2023 Stratification Variables

TIMSS 2023 NRCs consulted with the Sampling Team to identify relevant stratification variables to include in their sampling plans. Exhibits 9.7 and 9.8 list the explicit and implicit stratification variables used by the countries participating in the fourth grade and eighth grade, respectively. The numbers in parentheses represent the number of levels for each stratification variable.

↓ **Exhibit 9.7: TIMSS 2023 Stratification Variables – Grade 4**

↓ **Exhibit 9.8: TIMSS 2023 Stratification Variables – Grade 8**

## Meeting TIMSS Standards for Sampling Participation

TIMSS 2023 participants understood that the goal for sampling participation was 100% for all sampled schools, classrooms, and students. Guidelines for reporting achievement data for participating countries and benchmarking systems that secured less than full participation were modeled after IEA's previous TIMSS assessment cycles. As summarized below in Exhibit 9.9, countries were assigned to one of three categories based on their sampling participation. One of the main goals for quality data in TIMSS 2023 was to have as many countries as possible achieve Category 1 status. Countries in Category 1 were considered to have met all TIMSS 2023 sampling requirements and acceptable participation rates. Countries in Category 2 met the participation requirements only after including replacement schools. Countries that

failed to meet the participation requirements even with replacement schools were assigned to Category 3.

### Exhibit 9.9: TIMSS 2023 Categories of Sampling Participation

<b>Category 1</b>	<p><b>Acceptable sampling participation rate <u>without</u> the use of replacement schools.</b></p> <p>In order to be placed in this category, a country needs to have:</p> <ul style="list-style-type: none"> <li>• An <b>unweighted</b> school response rate <b>without</b> replacement of at least 85% (after rounding to the nearest whole percent) AND an <b>unweighted</b> class response rate of at least 95% (after rounding) AND an <b>unweighted</b> student response rate of at least 85% (after rounding)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• A <b>weighted</b> school response rate <b>without</b> replacement of at least 85% (after rounding to the nearest whole percent) AND a <b>weighted</b> class response rate of at least 95% (after rounding) AND a <b>weighted</b> student response rate of at least 85% (after rounding)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• The product of the <b>weighted</b> school response rate <b>without</b> replacement, the <b>weighted</b> class response rate, and the <b>weighted</b> student response rate of at least 75% (after rounding to the nearest whole percent)</li> </ul> <p>Countries in this category appear in the international report without annotation.</p>
<b>Category 2</b>	<p><b>Acceptable sampling participation rate only <u>with</u> the use of replacement schools.</b></p> <p>A country is placed in this category if:</p> <ul style="list-style-type: none"> <li>• It failed to meet the requirements for Category 1 but had a <b>weighted</b> school response rate <b>without</b> replacement of at least 50% (after rounding to the nearest percent)</li> </ul> <p>AND HAD EITHER</p> <ul style="list-style-type: none"> <li>• A <b>weighted</b> school response rate <b>with</b> replacement of at least 85% (after rounding to the nearest whole percent) AND a <b>weighted</b> class response rate of at least 95% (after rounding) AND a <b>weighted</b> student response rate of at least 85% (after rounding)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• The product of the <b>weighted</b> school response rate <b>with</b> replacement, the <b>weighted</b> class response rate, and the <b>weighted</b> student response rate of at least 75% (after rounding to the nearest whole percent)</li> </ul> <p>Countries in this category are annotated with † in the international report.</p>
<b>Category 3</b>	<p><b>Unacceptable sampling response rate even when replacement schools are included.</b></p> <p>Countries that could provide documentation to show that they complied with all other TIMSS sampling procedures and requirements but did not meet the requirements for Category 1 or Category 2 are placed in Category 3.</p> <p>Countries in this category with a school participation rate <b>without</b> replacement of at least 50% are annotated with ‡ if they nearly met the requirements for Category 2 or with ≡ if they failed to meet requirements for Category 2.</p> <p>Finally, if none of these conditions are met, countries appear in a separate panel of the achievement exhibits in the international report, in a separate section of the report, or excluded from the report, depending on the severity.</p>



## Participation Rates for the TIMSS 2023 National Samples

The school, classroom, student, and overall participation rates in the TIMSS 2023 fourth- and eighth-grade assessments are presented in Exhibits 9.10 and 9.11 (weighted) and Exhibits 9.12 and 9.13 (unweighted).

↓ **Exhibit 9.10: TIMSS 2023 Participation Rates (Weighted) – Grade 4**

↓ **Exhibit 9.11: TIMSS 2023 Participation Rates (Weighted) – Grade 8**

↓ **Exhibit 9.12: TIMSS 2023 Participation Rates (Unweighted) – Grade 4**

↓ **Exhibit 9.13: TIMSS 2023 Participation Rates (Unweighted) – Grade 8**

Almost all TIMSS participants met the participation requirements and were classified as Category 1. At the fourth grade, Belgium (Flemish), Chile, Denmark, Hong Kong SAR, Netherlands, New Zealand, and the United States achieved the minimum acceptable participation rates only after including replacement schools. Therefore, their results are annotated with the dagger symbol (†) in the TIMSS 2023 achievement results (Category 2). Despite their efforts to secure full participation, Albania and Romania did not meet the required sampling participation rate even with the use of replacement schools and are annotated with the triple-dagger symbol (≡) in the achievement results.

At the eighth grade, Chile, Hong Kong SAR, Japan, and Türkiye achieved the minimum acceptable participation rates only after including replacement schools. Therefore, their results are annotated with the dagger symbol (†) in the TIMSS 2023 achievement results (Category 2). New Zealand, Romania, and the United States did not meet the required sampling participation rate even with the use of replacement schools and were annotated with the triple-dagger symbol (≡) in the achievement results. New Zealand did not meet the minimum requirement of 50% school participation without replacement, so their results are reported in a separate panel of the TIMSS 2023 achievement exhibits and are excluded from exhibits reporting TIMSS 2023 context results.

## Achieved Sample Sizes for the TIMSS 2023 National Samples

Exhibits 9.14 through 9.17 show the achieved sample sizes in terms of schools and students for each of the participants in the TIMSS 2023 fourth- and eighth-grade assessments, respectively. Countries were expected to achieve minimum sample sizes of 150 schools and 4,000 participating students per grade. Most countries met these targets. Some countries with fewer than 150 schools or 4,000 students may have relatively small populations.

↓ **Exhibit 9.14: TIMSS 2023 School Sample Sizes – Grade 4**

↓ **Exhibit 9.15: TIMSS 2023 School Sample Sizes – Grade 8**

↓ **Exhibit 9.16: TIMSS 2023 Student Sample Sizes – Grade 4**

↓ **Exhibit 9.17: TIMSS 2023 Student Sample Sizes – Grade 8**

## TIMSS 2023 Trends in Student Populations

Because one of the goals of TIMSS is to measure changes in students' mathematics and science achievement across assessment cycles, it is important to track any changes over time in population composition and coverage so that comparisons across cycles are based on comparable populations. Exhibits 9.18 and 9.19 present, for each country, trends across the TIMSS cycles since 1995 (TIMSS 1999 did not include the fourth grade) in four characteristics of the TIMSS assessment populations: number of years of formal schooling, average student age, percent of students in the national target population excluded from the assessment, and overall participation rates after using replacements. Most countries and benchmarking participants have very similar characteristics across the assessment cycles. However, there have been changes in some countries in the age and grade structure of the assessed populations, the target population coverage, or the exclusion rate.

↓ **Exhibit 9.18: Trends in Student Populations – Grade 4**

↓ **Exhibit 9.19: Trends in Student Populations – Grade 8**

National coverage of the international target population generally has not changed in TIMSS 2023 compared to previous TIMSS assessments, with just a few exceptions. At the fourth grade, Bosnia & Herzegovina assessed students in regions other than Republika Srpska and West Herzegovina Canton in 2023, so there is no 2023 trend with 2019. Türkiye could not cover parts of the regions affected by the 2023 earthquake. Because of this, Türkiye had very high increases in exclusion rates in 2023 compared to TIMSS 2019 at the fourth and eighth grades, so there are no 2023 trend comparisons with prior cycles.

As stated above, many countries are experiencing a slight, yet steady, increase in exclusion rates over TIMSS cycles. This appears to be related to the integration of special needs students in mainstream schools, as well as a rise in migration and refugees, as well as major disruptions of instruction. Czech Republic's increased exclusions in 2023 resulted from more non-native language speakers, in large part due to the influx of Ukrainian refugees. Other countries also reported increased exclusions in TIMSS 2023 for this reason as well.

At the fourth grade, the student exclusion rate was higher in 2023 than in 2019 at the fourth grade by more than 1.5% in Albania, Armenia, Belgium (Flemish), Canada, Chile, Cyprus, Czech Republic, Denmark, Italy, Lithuania, Montenegro, New Zealand, Poland, Serbia, and Türkiye (5), and the Canadian benchmarking participants Ontario and Quebec. At the eighth grade, those with increases of more than 1.5% in their exclusions since 2019 included England, Israel, Lithuania, Malaysia, Norway (9), Romania, and Türkiye.

## Appendix 9A: Characteristics of TIMSS 2023 National Samples

### Albania

#### 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 students taught in languages other than Albanian
- 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), urbanization (urban, rural) within public schools, and school size (large, small) within public urban schools
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 100) and one classroom otherwise

##### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - Urban - Large Schools	72	0	41	0	0	31	0
Public - Urban - Small schools	34	0	21	0	0	13	0
Public - Rural	72	0	32	0	0	40	0
Private	22	0	14	0	0	8	0
<b>Total</b>	<b>200</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>92</b>	<b>0</b>



## 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 students with intellectual disabilities, students with functional disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by region (10)
- Implicit stratification by subregion (35)
- Sampled two classrooms in large schools (measure of size > 65) and one classroom otherwise
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Aragatsotn	8	0	7	1	0	0	0
Ararat	14	0	14	0	0	0	0
Armavir	14	0	14	0	0	0	0
Gegharkunik	12	0	11	0	1	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
Syuniq & Vayoc Dzor	8	0	7	1	0	0	0
Tavush	8	0	8	0	0	0	0
Yerevan	46	0	45	0	0	1	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>146</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>

## Australia

### 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 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 state or territory (8)
- Implicit stratification by school type (Catholic, government, independent), geographic location (major cities, regional, remote), and socioeconomic index (5 quintiles)
- Sampled one classroom per school
- The fourth grade and eighth grade samples were selected separately
- The Main Data Collection fourth grade sample was selected using the Chowdhury approach to minimize the overlap with the Australian National Assessment Program Science Literacy Year 6 school sample and the TIMSS fourth grade Field Test sample
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Australian Capital Territory	30	0	30	0	0	0	0
New South Wales	45	0	44	0	0	1	0
Northern Territory	14	0	12	0	0	2	0
Queensland	46	0	45	1	0	0	0
South Australia	39	0	38	0	0	1	0
Tasmania	29	0	29	0	0	0	0
Victoria	45	0	45	0	0	0	0
Western Australia	40	0	38	1	0	1	0
<b>Total</b>	<b>288</b>	<b>0</b>	<b>281</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage and Exclusions
- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, 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 state or territory (8)
- Implicit stratification by school type (Catholic, government, independent), geographic location (major cities, regional, remote), and socioeconomic status (5 quintiles)
- Sampled one classroom per school except in tracked schools, where classrooms were grouped according to the ability level of students prior to sampling and sampled one classroom per class group
- The fourth grade and eighth grade samples were selected separately
- The Main Data Collection eighth grade sample was selected using the Chowdhury approach to minimize the overlap with the Australian National Assessment Program Science Literacy Year school sample and the TIMSS eighth grade Field Test sample
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Australian Capital Territory	31	0	30	0	0	1	0
New South Wales	45	0	43	0	0	2	0
Northern Territory	15	0	13	0	0	2	0
Queensland	46	1	40	0	1	4	0
South Australia	40	0	39	0	0	1	0
Tasmania	30	0	25	1	0	4	0
Victoria	45	0	44	1	0	0	0
Western Australia	40	0	39	0	0	1	0
<b>Total</b>	<b>292</b>	<b>1</b>	<b>273</b>	<b>2</b>	<b>1</b>	<b>15</b>	<b>0</b>

## Austria

### Eighth 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 languages other than German
- 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 (general secondary-AHS, general compulsory-APS, miscellaneous), urbanization (urban, rural), socioeconomic status (high, low)
- Implicit stratification by region (9)
- Sampled two classrooms in large schools (measure of size > 40) and one classroom otherwise
- The Main Data Collection sample was selected simultaneously with ICILS Main Survey sample to minimize overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
AHS with Low ISF	40	0	39	0	0	1	0
AHS with High ISF	14	0	14	0	0	0	0
Rural APS with Low ISF	28	0	28	0	0	0	0
Rural APS with High ISF	10	0	10	0	0	0	0
Urban APS with Low ISF	36	0	36	0	0	0	0
Urban APS with High ISF	24	0	24	0	0	0	0
Miscellaneous School Type	7	1	6	0	0	0	3
<b>Total</b>	<b>159</b>	<b>1</b>	<b>157</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>

## 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, and schools with students taught in languages other than Azerbaijani or Russian
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by grade, language (Azerbaijani only, Azerbaijani and Russian), urbanization (urban (main cities), urban (other regions), rural (main cities), rural (other regions)) within the grade 4 and grade 8 stratum
- Implicit stratification by urbanization (urban (main cities), urban (other regions), rural (main cities), rural (other regions)) within the grade 4 only - Azerbaijani Only stratum and grade 4 and grade 8 - Azerbaijani and Russian stratum
- Sampled two classrooms in large schools (measure of size > 150) and one classroom otherwise
- Class group option was used in bilingual schools
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Azerbaijani Only	10	0	10	0	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Urban (Main Cities)	34	0	32	2	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Urban (Other Regions)	20	0	19	1	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Rural (Main Cities)	14	0	14	0	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Rural (Other Regions)	72	0	66	5	0	1	0
Grade 4 and Grade 8 - Azerbaijani and Russian	50	0	49	1	0	0	0
<b>Total</b>	<b>200</b>	<b>0</b>	<b>190</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>0</b>

### 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 students taught in languages other than Azerbaijani or Russian
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

### Sample design

- Explicit stratification by grade, language (Azerbaijani only, Azerbaijani and Russian), urbanization (urban (main cities), urban (other regions), rural (main cities), rural (other regions)) within grade 4 and grade 8 stratum
- Implicit stratification by language (Azerbaijani only, Azerbaijani and Russian) and urbanization (urban (main cities), urban (other regions), rural (main cities), rural (other regions)) within the grade 8 only stratum, urbanization (4) within grade 4 and grade 8 - Azerbaijani and Russian stratum
- Sampled two classrooms in large schools (measure of size > 100) and one classroom otherwise
- Class group option was used in bilingual schools
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	10	0	9	1	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Urban (Main Cities)	34	1	31	2	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Urban (Other Regions)	22	0	20	2	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Rural (Main Cities)	12	0	12	0	0	0	0
Grade 4 and Grade 8 - Azerbaijani Only - Rural (Other Regions)	72	0	67	5	0	0	0
Grade 4 and Grade 8 - Azerbaijani and Russian	48	0	47	1	0	0	0
<b>Total</b>	<b>198</b>	<b>1</b>	<b>186</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>



## Bahrain

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in languages other than English and 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), school operations regions (4), and gender (girls, boys) within public schools
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 165) and one classroom otherwise
- A census of all fourth grade schools was selected for the Main Data Collection

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public Region 1 - Boys	15	0	15	0	0	0	0
Public Region 1 - Girls	19	0	19	0	0	0	0
Public Region 2 - Boys	18	0	18	0	0	0	0
Public Region 2 - Girls	18	0	18	0	0	0	0
Public Region 3 - Boys	14	0	14	0	0	0	0
Public Region 3 - Girls	14	0	14	0	0	0	0
Public Region 4 - Boys	12	0	12	0	0	0	0
Public Region 4 - Girls	72	0	66	5	0	1	0
Private	67	0	67	0	0	0	0
<b>Total</b>	<b>187</b>	<b>0</b>	<b>187</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in languages other than English and 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), school operations regions (4), and gender (girls, boys) within public schools
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 90) and one classroom otherwise
- A census of all eighth grade schools was selected for the Main Data Collection

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public Region 1 - Boys	15	0	15	0	0	0	0
Public Region 1 - Girls	7	0	7	0	0	0	0
Public Region 2 - Boys	6	0	6	0	0	0	0
Public Region 2 - Girls	6	0	6	0	0	0	0
Public Region 3 - Boys	11	0	11	0	0	0	0
Public Region 3 - Girls	9	0	9	0	0	0	0
Public Region 4 - Boys	8	0	8	0	0	0	0
Public Region 4 - Girls	7	0	7	0	0	0	0
Private	55	0	55	0	0	0	0
<b>Total</b>	<b>117</b>	<b>0</b>	<b>117</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Belgium (Flemish)

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), schools with language of instruction other than Dutch, and special needs schools (only types 2, 4, 5, 6, 7, and 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 (public, private) within Antwerpen region, socioeconomic status (3), and special needs schools as a separate stratum
- No implicit stratification
- Sampled two classrooms per school
- The Field Test and Main Data Collection samples were selected simultaneously

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Antwerpen - Public - High SES	8	0	5	3	0	0	0
Antwerpen - Public - Med SES	8	0	7	0	1	0	0
Antwerpen - Public - Low SES	8	0	5	1	0	2	0
Antwerpen - Private - High SES	8	0	7	1	0	0	0
Antwerpen - Private - Med SES	8	0	8	0	0	0	0
Antwerpen - Private - Low SES	8	0	7	0	1	0	0
Brussels Hoofdstedelijk Gewest - Low-Med SES	8	0	3	2	1	2	0
Limburg - High SES	8	0	5	2	1	0	0
Limburg - Med SES	8	0	5	1	1	1	0
Limburg - Low SES	8	0	8	0	0	0	0
Oost-Vlaanderen - High SES	8	0	7	1	0	0	0
Oost-Vlaanderen - Med SES	8	0	8	0	0	0	0
Oost-Vlaanderen - Low SES	8	0	6	2	0	0	0
Vlaams-Brabant - High SES	8	0	6	1	0	1	0
Vlaams-Brabant - Med SES	8	0	5	1	0	2	0
Vlaams-Brabant - Low SES	8	0	3	2	1	2	0
West-Vlaanderen - High SES	8	0	5	3	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
West-Vlaanderen - Med SES	8	0	4	3	0	1	0
West-Vlaanderen - Low SES	8	0	6	1	1	0	0
Special Education schools	7	0	4	1	0	2	1
<b>Total</b>	<b>159</b>	<b>0</b>	<b>114</b>	<b>25</b>	<b>7</b>	<b>13</b>	<b>1</b>

## Belgium (French)

### 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 at state level, public at the local level, private sectarian) and socioeconomic status (very disadvantaged, disadvantaged, advantaged, very advantaged)
- Implicit stratification by region (6)
- Sampled two classrooms per school
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public at state level	14	0	14	0	0	0	0
Public at the local level - Very disadvantaged	22	0	20	1	0	1	0
Public at the local level - Disadvantaged	18	0	17	1	0	0	0
Public at the local level - Advantaged	20	0	19	1	0	0	0
Public at the local level - Very advantaged	20	0	20	0	0	0	0
Private sectarian - Very disadvantaged	14	0	12	2	0	0	0
Private sectarian - Disadvantaged	18	0	16	2	0	0	0
Private sectarian - Advantaged	16	0	16	0	0	0	0
Private sectarian - Very advantaged	24	0	23	1	0	0	0
<b>Total</b>	<b>166</b>	<b>0</b>	<b>157</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>0</b>

## Bosnia & Herzegovina

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 62.4 percent, restricted to students in regions other than Republika Srpska and West Herzegovina Canton
- School-level exclusions consisted of very small schools (measure of size < 5), and schools with students taught in languages other than Bosnian, Croatian, and 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 (10) and urbanization (urban, rural) within Tuzlanski Canton and Zenicko-dobojski Canton regions
- Implicit stratification by language (Bosnian, Croatian, Serbian) in all regions and urbanization (urban, rural) within half of the regions
- Sampled two classrooms per school
- A census of schools was taken in three 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Unsko sanski Canton	10	0	10	0	0	0	0
Posavski Canton	6	0	6	0	0	0	0
Tuzlanski Canton - Rural	10	0	10	0	0	0	0
Tuzlanski Canton - Urban	10	0	10	0	0	0	0
Zenicko-dobojski Canton - Rural	8	0	8	0	0	0	0
Zenicko-dobojski Canton - Urban	10	0	10	0	0	0	0
Bosansko - podrinjski Canton Gorazde	6	0	6	0	0	0	0
Srednjobosanski Canton	10	0	10	0	0	0	0
Hercegovacko- neretvanski Canton	10	0	9	0	0	1	0
Canton Sarajevo	24	0	24	0	0	0	0
Hercegbosanski Canton	9	0	9	0	0	0	0
Brcko district BiH	8	0	8	0	0	0	0
<b>Total</b>	<b>121</b>	<b>0</b>	<b>120</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>



## Brazil

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, indigenous schools, and 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 state (28) and school type (public federal, public state, public municipal, private)
- Implicit stratification by urbanization (urban, rural), location (capital, country), socioeconomic status (lowest SES, low SES, high SES, highest SES), and school type (public state, public municipal) when school types are combined in a state
- Sampled two classrooms in large schools (measure of size > 96) and one classroom otherwise
- The Main Data Collection fourth grade sample was selected sequentially using the Chowdhury approach to maximize the sample overlap with the eighth grade sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
All states - Public federal	8	0	7	1	0	0	0
All states - Private	27	0	16	4	4	3	0
Rondonia - Public state	17	1	13	1	0	2	0
Rondonia - Public municipal	16	0	14	0	2	0	0
Acre - Public state	22	0	20	2	0	0	0
Acre - Public municipal	12	0	12	0	0	0	0
Amazonas - Public state	17	0	16	0	0	1	0
Amazonas - Public municipal	13	0	13	0	0	0	0
Roraima	32	0	32	0	0	0	0
Pará - Public state	15	3	12	0	0	0	0
Pará - Public municipal	17	0	17	0	0	0	0
Amapá - Public state	16	0	15	1	0	0	1
Amapá - Public municipal	14	0	13	0	0	1	0
Tocantis - Public state	14	3	9	1	0	1	0
Tocantis - Public municipal	17	3	10	1	0	3	0
Maranhao	32	2	26	2	0	2	0
Piauí - Public state	14	3	11	0	0	0	0
Piauí - Public municipal	17	0	16	1	0	0	0
Ceará	30	0	26	1	2	1	0
Rio Grande Do Norte - Public state	16	4	10	0	2	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Rio Grande Do Norte - Public municipal	16	1	12	1	2	0	0
Paraiba - Public state	12	2	10	0	0	0	0
Paraiba - Public municipal	21	1	20	0	0	0	0
Pernambuco - Public state	8	1	7	0	0	0	0
Pernambuco - Public municipal	22	1	18	2	1	0	0
Alagoas - Public state	13	1	12	0	0	0	0
Alagoas - Public municipal	20	0	20	0	0	0	0
Sergipe - Public state	15	1	13	1	0	0	0
Sergipe - Public municipal	15	1	14	0	0	0	0
Bahia - Public state	7	0	7	0	0	0	0
Bahia - Public municipal	23	1	21	1	0	0	0
Minas Gerais - Public state	19	4	14	1	0	0	0
Minas Gerais - Public municipal	14	0	13	1	0	0	0
Espírito Santo - Public state	14	1	13	0	0	0	0
Espírito Santo - Public municipal	19	1	16	2	0	0	0
Rio de Janeiro - Public state	9	4	3	0	0	2	0
Rio de Janeiro - Public municipal	22	0	20	0	1	1	0
São Paulo - Public state	17	0	15	2	0	0	0
São Paulo - Public municipal	13	0	10	0	1	2	0
Paraná - Public state	4	0	3	0	0	1	0
Paraná - Public municipal	28	0	25	2	0	1	0
Santa Catarina - Public state	16	0	16	0	0	0	0
Santa Catarina - Public municipal	14	0	13	1	0	0	0
Rio Grande do Sul - Public state	20	0	17	3	0	0	0
Rio Grande do Sul - Public municipal	11	1	10	0	0	0	0
Mato Grosso do Sul - Public state	14	0	2	0	0	12	0
Mato Grosso do Sul - Public municipal	16	0	13	2	0	1	0
Mato Grosso - Public state	18	8	9	0	1	0	0
Mato Grosso - Public municipal	14	0	13	1	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Goiás - Public state	12	7	3	0	2	0	0
Goiás - Public municipal	21	0	20	1	0	0	0
Distrito Federal	32	0	31	1	0	0	0
<b>Total</b>	<b>885</b>	<b>55</b>	<b>741</b>	<b>37</b>	<b>18</b>	<b>34</b>	<b>1</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, indigenous schools, and 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 state (28) and school type (public federal, public state, public municipal, private)
- Implicit stratification by urbanization (urban, rural), location (capital, country), and socioeconomic status (lowest SES, low SES, high SES, highest SES)
- Sampled two classrooms in large schools (measure of size > 240) and one classroom otherwise

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
All states - Public federal	8	0	4	0	3	1	0
All states - Private	22	0	11	7	3	1	0
Rondonia - Public state	28	0	28	0	0	0	0
Rondonia - Public municipal	4	0	4	0	0	0	0
Acre - Public state	28	0	26	1	0	1	0
Acre - Public municipal	4	0	2	0	0	2	0
Amazonas - Public state	22	0	20	1	0	1	0
Amazonas - Public municipal	10	0	9	1	0	0	0
Roraima - Public state	28	0	27	0	0	1	0
Roraima - Public municipal	4	0	4	0	0	0	0
Pará - Public state	14	1	13	0	0	0	0
Pará - Public municipal	18	0	18	0	0	0	0
Amapá - Public state	28	2	24	2	0	0	0
Amapá - Public municipal	4	0	4	0	0	0	0
Tocantis - Public state	26	2	20	1	0	3	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Tocantis - Public municipal	6	0	6	0	0	0	0
Maranhao - Public state	10	1	8	1	0	0	0
Maranhao - Public municipal	22	0	21	1	0	0	0
Piaui - Public state	12	0	12	0	0	0	0
Piaui - Public municipal	20	2	16	2	0	0	0
Ceará - Public state	10	2	8	0	0	0	0
Ceará - Public municipal	22	0	22	0	0	0	0
Rio Grande Do Norte - Public state	18	0	17	1	0	0	0
Rio Grande Do Norte - Public municipal	14	0	12	0	2	0	0
Paraiba - Public state	16	1	15	0	0	0	0
Paraiba - Public municipal	16	1	15	0	0	0	0
Pernambuco - Public state	16	2	14	0	0	0	0
Pernambuco - Public municipal	16	0	14	2	0	0	0
Alagoas - Public state	14	1	11	1	1	0	0
Alagoas - Public municipal	18	0	18	0	0	0	0
Sergipe - Public state	18	0	17	0	0	1	0
Sergipe - Public municipal	14	1	12	0	0	1	0
Bahia - Public state	12	2	10	0	0	0	0
Bahia - Public municipal	20	3	17	0	0	0	0
Minas Gerais - Public state	24	1	23	0	0	0	0
Minas Gerais - Public municipal	8	0	7	1	0	0	0
Espírito Santo - Public state	18	0	17	0	0	1	0
Espírito Santo - Public municipal	14	0	13	1	0	0	0
Rio de Janeiro - Public state	16	0	15	1	0	0	0
Rio de Janeiro - Public municipal	16	1	14	0	0	1	0
São Paulo - Public state	26	0	23	1	1	1	0
São Paulo - Public municipal	6	0	6	0	0	0	0
Paraná - Public state	28	0	28	0	0	0	0
Paraná - Public municipal	4	0	4	0	0	0	0
Santa Catarina - Public state	20	0	20	0	0	0	0
Santa Catarina - Public municipal	12	0	12	0	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Rio Grande do Sul - Public state	20	0	17	3	0	0	0
Rio Grande do Sul - Public municipal	11	0	10	1	0	0	1
Mato Grosso do Sul - Public state	22	0	22	0	0	0	0
Mato Grosso do Sul - Public municipal	10	0	7	2	1	0	0
Mato Grosso - Public state	28	2	22	2	2	0	0
Mato Grosso - Public municipal	4	0	3	0	0	1	0
Goiás - Public state	26	2	24	0	0	0	0
Goiás - Public municipal	6	1	5	0	0	0	0
Distrito Federal	32	0	31	1	0	0	0
<b>Total</b>	<b>893</b>	<b>28</b>	<b>802</b>	<b>34</b>	<b>13</b>	<b>16</b>	<b>1</b>

## Bulgaria

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), and specialized 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, regional center, other)
- Implicit stratification by performance level (4)
- Sampled two classrooms in large schools (measure of size > 80) and one classroom otherwise
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Elementary - Capital/regional	8	0	7	1	0	0	0
Elementary - Other location	8	0	7	1	0	0	0
Basic - Capital	12	0	12	0	0	0	0
Basic - Regional center	32	0	31	1	0	0	0
Basic - Other location	32	0	31	0	0	1	0
General - Capital	18	0	16	1	1	0	0
General - Regional center	20	0	20	0	0	0	0
General - Other location	24	0	24	0	0	0	0
<b>Total</b>	<b>154</b>	<b>0</b>	<b>148</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>



## Canada

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 79.5 percent, restricted to students from the provinces of Alberta, Manitoba, Newfoundland, Ontario, and Quebec.
- School-level exclusions consisted of very small schools (measure of size < 6 in Alberta and Ontario, <5 in Manitoba, and <10 in Quebec), special needs schools, First Nation schools, non-funded schools, homeschooled, indigenous schools (Non-Ministry; Other language), band-operated schools, institutional schools, international schools, federal 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 province (Alberta, Manitoba, Newfoundland, Ontario, Quebec), school system (French, English) and school type (public, private) within the provinces of Alberta, Manitoba, and Quebec, language (English, French) and school type within English language (public, private, Catholic) within Ontario
- Implicit stratification by Language (English, French, English and French) in Newfoundland, region (6) in English school explicit strata within Ontario, and school type (public, private, Catholic) within the French school explicit stratum in Ontario
- Sampled two classrooms in large schools (measure of size > 40 in Ontario and measure of size > 75 in Quebec) and one classroom otherwise
- A census of Alberta and Manitoba French schools was 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Newfoundland	100	6	93	0	0	1	0
Quebec - English - Public	28	0	23	1	0	4	0
Quebec - English - Private	8	0	3	1	0	4	0
Quebec - French - Public	130	0	105	7	0	18	0
Quebec - French - Private	8	0	5	1	0	2	0
Manitoba - English - Public	136	0	133	2	0	1	0
Manitoba - English - Private	10	0	10	0	0	0	0
Manitoba - French	19	0	19	0	0	0	0
Alberta - English - Public	140	0	64	8	10	58	0
Alberta - English - Private	8	0	1	0	0	7	0
Alberta - French	33	0	11	0	0	22	0
Ontario - English - Public	96	0	95	0	0	1	0
Ontario - English - Private	8	1	0	0	1	6	0
Ontario - English - Catholic	38	0	38	0	0	0	0
Ontario - French	30	0	29	0	0	1	0
<b>Total</b>	<b>792</b>	<b>7</b>	<b>629</b>	<b>20</b>	<b>11</b>	<b>125</b>	<b>0</b>

## 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 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 grade, and school type (public, private subsidized, private)
- Implicit stratification by performance level (high, medium, low, no data), and urbanization (urban, rural)
- Sampled one classroom per school
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Public schools	8	0	8	0	0	0	0
Grade 4 only - Subsidized schools	8	0	4	3	1	0	0
Grade 4 only - Private schools	8	0	7	1	0	0	0
Grade 4 and Grade 8 - Public schools	52	0	45	5	1	1	0
Grade 4 and Grade 8 - Subsidized schools	76	0	59	15	2	0	0
Grade 4 and Grade 8 - Private schools	30	0	19	6	2	3	0
<b>Total</b>	<b>182</b>	<b>0</b>	<b>142</b>	<b>30</b>	<b>6</b>	<b>4</b>	<b>0</b>

### 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 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 grade, and school type (public, private subsidized, private)
- Implicit stratification by performance level (high, medium, low, no data), and urbanization (urban, rural)
- Sampled one classroom per school
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Public schools	8	0	6	2	0	0	0
Grade 8 only - Subsidized schools	8	0	8	0	0	0	0
Grade 8 only - Private schools	6	1	3	0	1	1	0
Grade 4 and Grade 8 - Public schools	52	0	43	5	1	3	0
Grade 4 and Grade 8 - Subsidized schools	74	0	57	14	2	1	0
Grade 4 and Grade 8 - Private schools	30	0	19	5	2	4	0
<b>Total</b>	<b>178</b>	<b>1</b>	<b>136</b>	<b>26</b>	<b>6</b>	<b>9</b>	<b>0</b>

## Chinese Taipei

### 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 a Different 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, Town Area, Rural Area, Remote Area), region (north, others)
- No implicit stratification
- Sampled two classrooms in rural and remote strata and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Metropolitan Area - North	28	0	26	1	0	1	0
Metropolitan Area - Others	10	0	9	1	0	0	0
City Area - North	28	0	27	0	1	0	0
City Area - Others	26	0	25	0	0	1	0
Developing City Area - North	22	0	22	0	0	0	0
Developing City Area - Others	32	0	32	0	0	0	0
Town Area - North	10	0	10	0	0	0	0
Town Area - Others	12	0	12	0	0	0	0
Rural Area	12	0	12	0	0	0	0
Remote Area	38	0	37	0	0	1	0
<b>Total</b>	<b>218</b>	<b>0</b>	<b>212</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>0</b>

### 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 a Different 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, Town Area, Rural Area, Remote Area), region (north, others)
- Implicit stratification by performance level (5)
- Sampled two classrooms in rural and remote strata and one classroom otherwise
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Metropolitan Area - North	24	0	23	1	0	0	0
Metropolitan Area - Others	10	0	10	0	0	0	0
City Area - North	25	0	25	0	0	0	0
City Area - Others	24	0	24	0	0	0	0
Town Area - North	21	0	19	1	0	1	0
Town Area - Others	42	0	41	1	0	0	0
Rural Area	20	0	19	0	0	1	0
Remote Area	20	0	19	1	0	0	0
<b>Total</b>	<b>186</b>	<b>0</b>	<b>180</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>

## Cote d'Ivoire

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 20), and special needs schools
- No within-school exclusions

#### Sample design

- Explicit stratification by region (Abidjan, other), school type (public, private), and urbanization (urban, rural)
- Implicit stratification by region (33)
- Sampled one classroom per school

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Abidjan - Public - Urban	10	0	10	0	0	0	0
Abidjan - Private - Urban	28	0	28	0	0	0	0
Other - Public - Urban	50	0	48	2	0	0	0
Other - Public - Rural	10	0	10	0	0	0	0
Other - Private - Urban	42	0	42	0	0	0	0
Other - Private - Rural	14	0	14	0	0	0	0
<b>Total</b>	<b>154</b>	<b>0</b>	<b>152</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 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, and schools with students taught in languages 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 two classrooms per school whenever possible
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public or Private with national curriculum - Nicosia	52	0	52	0	0	0	0
Public or Private with national curriculum - Limassol	36	0	36	0	0	0	0
Public or Private with national curriculum - Famagusta-Larnaca	32	0	32	0	0	0	0
Public or Private with national curriculum - Paphos	16	0	16	0	0	0	0
Private with other curriculum	14	0	12	0	0	2	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>148</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, schools in Turkish occupied area, and schools with students taught in languages 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 in large schools (schools with more than five classrooms) and two classrooms otherwise
- A census of all eighth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public or Private with national curriculum - Nicosia	29	0	29	0	0	0	0
Public or Private with national curriculum - Limassol	23	0	23	0	0	0	0
Public or Private with national curriculum - Famagusta-Larnaca	16	0	16	0	0	0	0
Public or Private with national curriculum - Paphos	8	0	8	0	0	0	0
Private with other curriculum	23	0	20	0	0	3	0
<b>Total</b>	<b>99</b>	<b>0</b>	<b>96</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>



## 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)
- No implicit stratification
- Sampled two classrooms per school whenever possible

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Praha	20	0	20	0	0	0	0
Stredocesky	24	0	24	0	0	0	0
Jihocesky	10	0	10	0	0	0	0
Plzensky	10	1	9	0	0	0	0
Karlovarsky	12	1	11	0	0	0	0
Ustecky	22	0	22	0	0	0	0
Liberecky	8	0	8	0	0	0	0
Kralovehradecky	8	0	8	0	0	0	0
Pardubicky	8	1	7	0	0	0	0
Vysocina	8	0	8	0	0	0	0
Jihomoravsky	26	1	25	0	0	0	0
Olomoucky	10	0	10	0	0	0	0
Zlinsky	8	0	8	0	0	0	0
Moravskoslezsky	26	1	25	0	0	0	0
<b>Total</b>	<b>200</b>	<b>5</b>	<b>195</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 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 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), School type (Basic School, Multi-year Gymnasium)
- Implicit stratification by Region (14) within Multi-year Gymnasium stratum
- Sampled two classrooms per school whenever possible
- The Main Data Collection sample was selected simultaneously with the ICILS Main Survey sample, to avoid overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Basic School - Praha	16	0	16	0	0	0	0
Basic School - Stredocesky	20	0	20	0	0	0	0
Basic School - Jihocesky	10	0	10	0	0	0	0
Basic School - Plzensky	8	0	8	0	0	0	0
Basic School - Karlovarsky	12	0	12	0	0	0	0
Basic School - Ustecky	20	0	20	0	0	0	0
Basic School - Liberecky	8	0	7	1	0	0	0
Basic School - Kralovehradecky	8	0	8	0	0	0	0
Basic School - Pardubicky	8	0	8	0	0	0	0
Basic School - Vysocina	8	0	8	0	0	0	0
Basic School - Jihomoravsky	24	0	24	0	0	0	0
Basic School - Olomoucky	8	0	8	0	0	0	0
Basic School - Zlinsky	8	0	8	0	0	0	0
Basic School - Moravskoslezsky	24	0	24	0	0	0	0
Multi-year Gymnasium	28	0	28	0	0	0	0
<b>Total</b>	<b>210</b>	<b>0</b>	<b>209</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Denmark

### 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 students taught in languages other than Danish
- 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)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 30) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public	132	0	104	19	6	3	1
Private	31	0	22	7	0	2	0
<b>Total</b>	<b>163</b>	<b>0</b>	<b>126</b>	<b>26</b>	<b>6</b>	<b>5</b>	<b>1</b>

## England

### Fifth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 7), special needs schools, pupil referral units, and alternative provision 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 (local authority maintained, academy, independent) and performance level (5)
- Implicit stratification by performance level (middle, not available) in the middle and not available explicit strata
- Sampled two classrooms in large schools (measure of size > 64) and one classroom otherwise
- The Main Data Collection fifth grade sample was selected sequentially using the Chowdhury approach to minimize the overlap with the PISA 2023, TIMSS 2023 ninth grade, and the TIMSS 2023 Field Test samples

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
LA Maintained - Low	14	0	12	1	0	1	0
LA Maintained - Low-Middle	18	0	16	0	0	2	0
LA Maintained - Middle-High	20	0	16	0	0	4	0
LA Maintained - High	18	0	16	1	0	1	0
LA Maintained - Middle and Not Available	16	0	14	1	0	1	0
Academy - Low	12	0	9	0	0	3	0
Academy - Low-Middle	10	0	7	1	0	2	0
Academy - Middle-High	12	0	10	0	0	2	0
Academy - High	10	0	9	0	0	1	0
Academy - Middle and Not Available	14	0	13	0	0	1	0
Independent	8	0	5	0	0	3	0
<b>Total</b>	<b>152</b>	<b>0</b>	<b>127</b>	<b>4</b>	<b>0</b>	<b>21</b>	<b>0</b>

### Ninth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 21), special needs schools, pupil referral units, and alternative provision 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 (local authority maintained, academy, independent, selective), and performance level (5)
- Implicit stratification by performance level (middle, not available) in the middle and not available explicit strata
- Sampled two classrooms in large schools (measure of size > 231) and one classroom otherwise
- The Main Data Collection sample was selected sequentially using the Chowdhury approach to minimize the overlap with the PISA 2023 and the TIMSS 2023 Field Test samples

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
LA Maintained - Low and Low-Middle	14	0	11	1	0	2	0
LA Maintained - Middle and Not Available	10	0	7	2	0	1	0
LA Maintained - Middle-High and High	12	0	9	2	0	1	0
Academy - Low	20	0	11	4	0	5	0
Academy - Low-Middle	18	0	16	1	0	1	0
Academy - Middle	18	0	17	1	0	0	0
Academy - Middle-High	20	0	16	1	0	3	0
Academy - High	14	0	14	0	0	0	0
Academy - Not Available	10	0	9	0	0	1	0
Independent	10	0	6	0	0	4	0
Selective	8	0	7	1	0	0	0
<b>Total</b>	<b>154</b>	<b>0</b>	<b>123</b>	<b>13</b>	<b>0</b>	<b>18</b>	<b>0</b>

## Finland

### 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 schools with students taught in languages other than Finnish or Swedish
- 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), region (4), and urbanization (urban/semi-urban, rural)
- Implicit stratification by regional state administrative agency (Eastern, Western & Inland, Northern, Lapland, No Åland)
- Sampled two classrooms whenever possible
- The Main Data Collection fourth grade sample was selected sequentially using the Chowdhury approach to minimize the overlap with the TIMSS eighth grade and ICILS Main Survey samples

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Finnish Speaking - Helsinki/ Uusimaa	44	2	42	0	0	0	0
Finnish Speaking - Southern - Urban and Semi-Urban	27	0	27	0	0	0	0
Finnish Speaking - Southern - Rural	9	0	9	0	0	0	0
Finnish Speaking - Western - Urban and Semi-Urban	32	0	32	0	0	0	0
Finnish Speaking - Western - Rural	10	0	10	0	0	0	0
Finnish Speaking - Northern & Eastern - Urban and Semi-Urban	29	0	29	0	0	0	0
Finnish Speaking - Northern & Eastern - Rural	10	0	10	0	0	0	0
Swedish Speaking	11	0	11	0	0	0	0
<b>Total</b>	<b>172</b>	<b>2</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in languages other than Finnish or Swedish
- 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), region (4), and urbanization (urban/semi-urban, rural)
- Implicit stratification by regional state administrative agency (Eastern, Western & Inland, Northern, Lapland, No Aland)
- Sampled two classrooms whenever possible
- The Main Data Collection sample was selected sequentially using the Chowdhury approach to minimize the overlap with the ICILS 2023 school sample

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Finnish Speaking - Helsinki/ Uusimaa	42	1	40	0	0	1	1
Finnish Speaking - Southern - Urban and Semi-Urban	25	0	25	0	0	0	0
Finnish Speaking - Southern - Rural	10	0	10	0	0	0	0
Finnish Speaking - Western - Urban and Semi-Urban	30	0	30	0	0	0	0
Finnish Speaking - Western - Rural	10	1	9	0	0	0	0
Finnish Speaking - Northern & Eastern - Urban and Semi-Urban	28	1	27	0	0	0	0
Finnish Speaking - Northern & Eastern - Rural	10	0	10	0	0	0	0
Swedish Speaking	10	0	10	0	0	0	0
<b>Total</b>	<b>165</b>	<b>3</b>	<b>161</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

## 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, private schools without a contract, and Mayotte 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 - priority education, public – outside priority education, private)
- No implicit stratification
- Sampled two classrooms per school whenever possible

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public Schools outside Priority Education	112	1	109	0	0	2	0
Public Schools in Priority Education	26	0	26	0	0	0	0
Private Schools	24	0	24	0	0	0	0
<b>Total</b>	<b>162</b>	<b>1</b>	<b>159</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>

### 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, private schools without a contract, and Mayotte 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 - priority education, public – outside priority education, private)
- No implicit stratification
- Sampled two classrooms whenever possible
- The Main Data Collection sample was selected simultaneously with the ICILS Main Survey sample, to avoid overlap



### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public Schools outside Priority Education	94	0	94	0	0	0	0
Public Schools in Priority Education	24	0	24	0	0	0	0
Private Schools	32	0	31	1	0	0	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>149</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Georgia

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 93 percent, restricted to students taught in Georgian
- 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 grade, urbanization (urban, rural), and school type (public, private)
- No implicit stratification
- Sampled two classrooms in large schools (more than three classes) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Urban - Public	93	0	93	0	0	0	0
Grade 4 and Grade 8 - Urban - Private	18	0	13	5	0	0	0
Grade 4 and Grade 8 - Rural	37	0	37	0	0	0	0
<b>Total</b>	<b>156</b>	<b>0</b>	<b>151</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 93.5 percent, restricted to students taught in Georgian
- 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 grade, urbanization (urban, rural), and school type (public, private)
- No implicit stratification
- Sampled two classrooms in large schools (more than two classes) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	8	0	6	2	0	0	0
Grade 4 and Grade 8 - Urban - Public	95	0	95	0	0	0	0
Grade 4 and Grade 8 - Urban - Private	16	0	12	4	0	0	0
Grade 4 and Grade 8 - Rural	37	0	37	0	0	0	0
<b>Total</b>	<b>156</b>	<b>0</b>	<b>150</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Germany

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and private 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 school type (regular - very low percentage of foreigners, regular - medium percentage of foreigners, regular - medium percentage of foreigners, regular - very low percentage of foreigners, special education needs schools)
- Implicit stratification by state for regular school types (16), and socioeconomic status (4) in some states
- Sampled one classroom per school

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Regular - High percentage of foreigners	46	0	45	1	0	0	0
Regular - Medium percentage of foreigners	66	0	65	1	0	0	0
Regular - Low percentage of foreigners	88	0	86	2	0	0	0
Regular - Very low percentage of foreigners	22	0	20	1	1	0	0
SEN	8	0	7	0	1	0	0
<b>Total</b>	<b>230</b>	<b>0</b>	<b>223</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>

## 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, and international school with Japanese as language of instruction
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

#### Sample design

- Explicit stratification by school finance type (5)
- Implicit stratification by gender (girls, boys, mixed)
- Sampled two classrooms per school for large schools (measure of size > 139) and one classroom otherwise
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Aided	114	0	98	11	2	3	0
Direct Subsidy	8	0	6	1	0	1	0
Government	10	0	9	1	0	0	0
Local Private	10	0	5	2	1	2	0
Non-Local Private	14	0	0	3	0	11	0
<b>Total</b>	<b>156</b>	<b>0</b>	<b>118</b>	<b>18</b>	<b>3</b>	<b>17</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 3), special needs schools, and international school with Japanese as language of instruction
- Within-school exclusions consisted of students with intellectual disabilities

#### Sample design

- Explicit stratification by school finance type (4) and performance level (4)
- Implicit stratification by performance level (4) within the Direct Subsidy and Government strata and gender (girls, boys, mixed) in all strata
- Sampled two classrooms per school for large schools (measure of size > 139) and one classroom otherwise
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Aided - Low	40	0	31	4	4	1	0
Aided - Middle	40	0	31	5	2	2	0
Aided - High	12	0	11	1	0	0	0
Direct Subsidy - Low/Mid/NA	10	0	6	1	0	3	0
Direct Subsidy - High	10	0	10	0	0	0	0
Government	12	1	3	1	0	7	0
Private	14	0	0	3	0	11	0
<b>Total</b>	<b>156</b>	<b>1</b>	<b>114</b>	<b>15</b>	<b>6</b>	<b>20</b>	<b>0</b>

## Hungary

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, community type (capital, county town, town, rural area), and performance level (low, medium, high) within Grade 4 and Grade 8 stratum
- Implicit stratification by community type (capital, county town, town, rural area), performance level (low or missing, medium, high), and region (7)
- Sampled two classrooms whenever possible
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Main Data Collection sample was selected sequentially using the Chowdhury approach to minimize overlap with the Field Test and ICILS 2023 samples

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only	20	0	20	0	0	0	0
Grade 4 and Grade 8 - Capital - High	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Capital - Low or Missing or Medium	16	1	15	0	0	0	0
Grade 4 and Grade 8 - County town - High	10	0	10	0	0	0	0
Grade 4 and Grade 8 - County town - Low or Missing or Medium	18	0	18	0	0	0	0
Grade 4 and Grade 8 - Town - Low or Missing	13	0	13	0	0	0	0
Grade 4 and Grade 8 - Town - Medium	20	0	20	0	0	0	0
Grade 4 and Grade 8 - Town - High	16	0	16	0	0	0	0
Grade 4 and Grade 8 - Rural area - Low or Missing	10	0	10	0	0	0	0
Grade 4 and Grade 8 - Rural area - Medium	12	0	12	0	0	0	0
Grade 4 and Grade 8 - Rural area - High	12	0	12	0	0	0	0
<b>Total</b>	<b>155</b>	<b>1</b>	<b>154</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Eighth Grade

### Coverage and Exclusions

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

### Sample design

- Explicit stratification by grade, community type (capital, county town, town, rural area), and performance level (low, medium, high) within Grade 4 and Grade 8 stratum
- Implicit stratification by community type (capital, county town, town, rural area), performance level (low or missing, medium, high), region (7)
- Sampled two classrooms whenever possible
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Main Data Collection sample was selected sequentially using the Chowdhury approach to minimize overlap with the Field Test and ICILS 2023 samples

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	25	0	25	0	0	0	0
Grade 4 and Grade 8 - Capital - High	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Capital - Low or Missing or Medium	16	0	16	0	0	0	0
Grade 4 and Grade 8 - County town - High	8	0	8	0	0	0	0
Grade 4 and Grade 8 - County town - Low or Missing or Medium	18	0	18	0	0	0	0
Grade 4 and Grade 8 - Town - Low or Missing	12	1	10	1	0	0	0
Grade 4 and Grade 8 - Town - Medium	20	0	20	0	0	0	0
Grade 4 and Grade 8 - Town - High	17	0	17	0	0	0	0
Grade 4 and Grade 8 - Rural area - Low or Missing	10	0	10	0	0	0	0
Grade 4 and Grade 8 - Rural area - Medium	12	0	12	0	0	0	0
Grade 4 and Grade 8 - Rural area - High	12	0	12	0	0	0	0
<b>Total</b>	<b>158</b>	<b>1</b>	<b>156</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>



## Iran, Islamic Rep. of

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by school type (public, private), gender (girls, boys, mixed), and province or grouped provinces (6)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Private	22	0	22	0	0	0	0
Public - Boys – Esfehan	10	0	10	0	0	0	0
Public - Boys - Fars and Khozestan	10	0	10	0	0	0	0
Public - Boys - Tehran Province	10	0	10	0	0	0	0
Public - Boys - Tehran City	10	0	10	0	0	0	0
Public - Boys - Khorasan Razavi	10	0	10	0	0	0	0
Public - Boys - Other Provinces	40	0	40	0	0	0	0
Public - Girls – Esfehan	10	0	10	0	0	0	0
Public - Girls - Fars and Khozestan	10	0	10	0	0	0	0
Public - Girls - Tehran Province	10	0	10	0	0	0	0
Public - Girls - Tehran City	10	0	10	0	0	0	0
Public - Girls - Khorasan Razavi	10	0	10	0	0	0	0
Public - Girls - Other Provinces	40	0	40	0	0	0	0
Public - Mixed	22	0	22	0	0	0	0
<b>Total</b>	<b>224</b>	<b>0</b>	<b>224</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Eighth Grade

### Coverage and Exclusions

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

### Sample design

- Explicit stratification by school type (public, private), gender (girls, boys, mixed), and province or grouped provinces (6)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Private	24	0	24	0	0	0	0
Public - Boys - Esfehan	8	0	8	0	0	0	0
Public - Boys - Fars and Khozestan	12	0	12	0	0	0	0
Public - Boys - Tehran Province	8	0	8	0	0	0	0
Public - Boys - Tehran City	8	0	8	0	0	0	0
Public - Boys - Khorasan Razavi	10	0	10	0	0	0	0
Public - Boys - Other Provinces	50	0	50	0	0	0	0
Public - Girls - Esfehan	8	0	8	0	0	0	0
Public - Girls - Fars and Khozestan	14	0	14	0	0	0	0
Public - Girls - Tehran Province	8	0	8	0	0	0	0
Public - Girls - Tehran City	8	0	8	0	0	0	0
Public - Girls - Khorasan Razavi	8	0	8	0	0	0	0
Public - Girls - Other Provinces	50	0	50	0	0	0	0
Public - Mixed	8	0	8	0	0	0	0
<b>Total</b>	<b>224</b>	<b>0</b>	<b>224</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 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, non-aided (private) schools, and islands 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 based on Delivering Equality of Opportunity in Schools (DEIS) program (urban band 1, urban band 2, rural), language of instruction (Gaelscoil, Gaeltacht, ordinary), gender (girls, boys, mixed), and school size (large, small)
- Implicit stratification by school level socioeconomic status based on Delivering Equality of Opportunity in Schools (DEIS) program (urban band 1, urban band 2, rural), gender (girls, boys, mixed), and urbanization (cities and towns, rural areas)
- Sampled two classrooms per school
- No overlap between fourth grade and eighth grade schools
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
All Irish School	10	0	10	0	0	0	0
Gaeltacht School	4	0	4	0	0	0	0
DEIS 1 - Ordinary School - Small Schools	8	0	8	0	0	0	0
DEIS 1/2 - Ordinary School - Large Schools	8	0	8	0	0	0	0
DEIS 2 - Ordinary School - Small Schools	4	0	4	0	0	0	0
DEIS R - Ordinary School - Small Schools	4	0	4	0	0	0	0
No DEIS - Ordinary School - Boys - Small Schools	4	0	4	0	0	0	0
No DEIS - Ordinary School - Girls - Small Schools	6	0	6	0	0	0	0
No DEIS - Ordinary School - Single - Large Schools	10	0	10	0	0	0	0
No DEIS - Ordinary School - Mixed - Small Schools	62	1	60	1	0	0	0
No DEIS - Ordinary School - Mixed - Large Schools	34	0	34	0	0	0	0
<b>Total</b>	<b>154</b>	<b>1</b>	<b>152</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Eighth Grade

### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of islands 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), gender (girls, boys, mixed), and school size (large, small)
- Implicit stratification by school sector (community/comprehensive, secondary, vocational), socioeconomic status (high, medium, low), and gender (girls, boys, mixed) within small schools
- Sampled two classrooms in large schools (measure of size > 150) and one otherwise
- The Main Data Collection sample was selected using the Chowdhury approach to minimize the overlap with the Field Test and PISA 2022 and samples

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Secondary - Girls - High SES - Large school	12	0	12	0	0	0	0
Secondary - Girls - Medium SES - Large school	8	0	8	0	0	0	0
Secondary - Boys - High SES - Large school	11	0	10	1	0	0	0
Secondary - Boys - Medium SES - Large school	8	0	8	0	0	0	0
Secondary - Mixed - High SES - Large school	16	0	16	0	0	0	0
Secondary - Mixed - Medium SES - Large school	11	0	11	0	0	0	0
Secondary - Small school	4	0	4	0	0	0	0
Secondary - Low SES - Large school	8	0	7	0	1	0	0
Vocational - Mixed - Medium SES - Large school	16	0	16	0	0	0	0
Vocational - High SES - Large school	10	0	10	0	0	0	0
Vocational - Low SES - Large school	17	0	16	0	0	1	0
Voc/Comm/Comp - Small school	6	0	6	0	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Comm/Comp - Mixed - Medium SES - Large school	11	0	11	0	0	0	0
Comm/Comp - Mixed - Low SES - Large school	8	0	8	0	0	0	0
Comm/Comp - High SES - Large school	8	0	8	0	0	0	0
<b>Total</b>	<b>154</b>	<b>0</b>	<b>151</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>

## 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 with students taught in languages other than Hebrew 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 sector (5), socioeconomic status (8), and subgroups within Arab sector (Arab, Druze, Bedouin)
- Implicit stratification by socioeconomic status when socioeconomic status groups collapsed for explicit strata, gender (girls, boys, mixed), and region (north, south)
- Sampled one classroom per school
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Hebrew-Secular - High SES	44	0	44	0	0	0	0
Hebrew-Secular - Medium-High SES	24	0	24	0	0	0	0
Hebrew-Secular - Medium-Low SES	13	0	13	0	0	0	0
Hebrew-Secular - Low SES	12	0	11	0	1	0	0
Hebrew-Religious - High SES	10	0	9	1	0	0	0
Hebrew-Religious - Med/Low SES	22	0	19	3	0	0	0
Arabic-Arab - Medium SES	12	0	12	0	0	0	0
Arabic-Arab - Low-Medium SES	8	0	8	0	0	0	0
Arabic-Arab - Low-Low SES	14	0	14	0	0	0	0
Arabic-Druze - Med/Low SES	16	0	16	0	0	0	0
Arabic-Bedouin - Low SES	20	0	20	0	0	0	0
<b>Total</b>	<b>195</b>	<b>0</b>	<b>190</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>

## 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, and schools with students taught in Slovenian, Ladin, or German
- Within-school exclusions consisted of students with functional disabilities

#### Sample design

- Explicit stratification by grade, region (5)
- Implicit stratification by region (5), school type (public, not public), and performance level (high, medium, low)
- Sampled two classrooms in large schools (measure of size > 75) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only	22	0	22	0	0	0	0
Grade 4 and Grade 8 - Center	26	0	25	1	0	0	0
Grade 4 and Grade 8 - South Islands	20	0	19	1	0	0	0
Grade 4 and Grade 8 - North East	26	0	24	2	0	0	0
Grade 4 and Grade 8 - North West	36	0	34	2	0	0	0
Grade 4 and Grade 8 - South	22	0	22	0	0	0	0
<b>Total</b>	<b>152</b>	<b>0</b>	<b>146</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Eighth 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 Slovenian, Ladin, or German
- Within-school exclusions consisted of students with functional disabilities

### Sample design

- Explicit stratification by grade, region (5)
- Implicit stratification by region (5), school type (public, not public), and performance level (high, medium, low)
- Sampled two classrooms in large schools (measure of size > 110) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	16	0	16	0	0	0	0
Grade 4 and Grade 8 - Center	28	0	27	1	0	0	0
Grade 4 and Grade 8 - South Islands	20	0	19	1	0	0	0
Grade 4 and Grade 8 - North East	26	0	24	2	0	0	0
Grade 4 and Grade 8 - North West	38	0	36	2	0	0	0
Grade 4 and Grade 8 - South	24	0	24	0	0	0	0
<b>Total</b>	<b>152</b>	<b>0</b>	<b>146</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>



## 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, and non-native language speakers

#### Sample design

- Explicit stratification by urbanization (very large city, large city, small city, non-city area)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Very large city	40	0	36	2	0	2	0
Large city	26	0	20	2	0	4	0
Small city	70	1	63	4	0	2	0
Non-city area	14	0	14	0	0	0	0
<b>Total</b>	<b>150</b>	<b>1</b>	<b>133</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>

### 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 urbanization (very large city, large city, small city, non-city area)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - Very large city	33	0	30	1	0	2	0
Public - Large city	24	0	21	2	0	1	0
Public - Small city	65	0	50	10	0	5	0
Public - Non-city area	13	0	12	1	0	0	0
Private or National school	15	0	5	1	0	9	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>118</b>	<b>15</b>	<b>0</b>	<b>17</b>	<b>0</b>

## Jordan

### 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 school type (7)
- Implicit stratification by gender (girls, boys, mixed), region (south, north, middle), urbanization (urban, rural), and school shift (single shift, double shift)
- Sampled one classroom per school
- The fourth grade and eighth grade Main Data Collection samples were selected sequentially without controlling for overlap
- The Field Test and Main Data Collection samples were selected sequentially without controlling for overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Private	32	0	32	0	0	0	0
UNRWA	20	0	20	0	0	0	0
MoD	20	0	20	0	0	0	0
Syrian	20	0	20	0	0	0	0
MoE	82	0	82	0	0	0	0
USAID1	30	0	30	0	0	0	0
USAID2	20	0	20	0	0	0	0
<b>Total</b>	<b>224</b>	<b>0</b>	<b>224</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 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 school type (7)
- Implicit stratification by gender (girls, boys, mixed), region (south, north, middle), urbanization (urban, rural), and school shift (single shift, double shift)
- Sampled one classroom per school
- The fourth grade and eighth grade Main Data Collection samples were selected sequentially without controlling for overlap
- The Field Test and Main Data Collection samples were selected sequentially without controlling for overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Private	22	0	22	0	0	0	0
UNRWA	20	0	20	0	0	0	0
MoD	20	0	20	0	0	0	0
Syrian	20	0	20	0	0	0	0
MoE	96	0	96	0	0	0	0
USAID1	27	0	27	0	0	0	0
USAID2	20	0	20	0	0	0	0
<b>Total</b>	<b>225</b>	<b>0</b>	<b>225</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Kazakhstan

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, region (17)
- Implicit stratification by region (17), urbanization (urban, rural), and language (Kazakh only, Russian only, Kazakh and Russian) in grade 4 only stratum
- Sampled two classrooms in large schools (measure of size > 100) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Main Data Collection sample was selected sequentially using the Chowdhury approach to minimize the overlap with the ICILS 2023 school sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only	8	1	6	1	0	0	0
Grade 4 and Grade 8 - Akmola	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Mangystau	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Turkistan	22	0	22	0	0	0	0
Grade 4 and Grade 8 - Pavlodar	8	0	8	0	0	0	0
Grade 4 and Grade 8 - East	8	0	8	0	0	0	0
Grade 4 and Grade 8 - North	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Nur-Sultan city	10	0	10	0	0	0	0
Grade 4 and Grade 8 - Almaty city	14	0	13	0	1	0	0
Grade 4 and Grade 8 - Shymkent city	11	0	11	0	0	0	0
Grade 4 and Grade 8 - Atyrau	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Aktobe	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Almaty	20	0	20	0	0	0	0
Grade 4 and Grade 8 - West	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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 and Grade 8 - Karaganda	10	0	8	2	0	0	0
Grade 4 and Grade 8 - Kostanay	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Zhambyl	12	0	12	0	0	0	0
Grade 4 and Grade 8 - Kyzylorda	8	0	8	0	0	0	0
<b>Total</b>	<b>186</b>	<b>1</b>	<b>181</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>

## Eighth Grade

### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), special needs schools, remote schools, schools with students taught in languages other than Kazakh and Russian, 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 grade, region (17)
- Implicit stratification by region (17), urbanization (urban, rural), language (Kazakh only, Russian only, Kazakh and Russian) in grade 8 only stratum
- Sampled two classrooms in large schools (measure of size > 100) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Main Data Collection sample was selected sequentially using the Chowdhury approach to minimize the overlap with the ICILS 2023 school sample

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Akmola	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Mangystau	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Turkistan	22	0	22	0	0	0	0
Grade 4 and Grade 8 - Pavlodar	8	0	8	0	0	0	0
Grade 4 and Grade 8 - East	10	0	10	0	0	0	0
Grade 4 and Grade 8 - North	7	0	7	0	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 and Grade 8 - Nur-Sultan city	10	0	10	0	0	0	0
Grade 4 and Grade 8 - Almaty city	14	0	13	0	1	0	0
Grade 4 and Grade 8 - Shymkent city	10	0	10	0	0	0	1
Grade 4 and Grade 8 - Atyrau	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Aktobe	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Almaty	20	0	20	0	0	0	0
Grade 4 and Grade 8 - West	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Karaganda	10	0	8	2	0	0	0
Grade 4 and Grade 8 - Kostanay	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Zhambyl	12	0	12	0	0	0	0
Grade 4 and Grade 8 - Kyzylorda	8	0	8	0	0	0	0
<b>Total</b>	<b>187</b>	<b>0</b>	<b>184</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>

## Korea, Rep. of

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, remote schools, 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 urbanization (big city, medium or small city, small town or village)
- Implicit stratification by region (17)
- Sampled two classrooms in large schools (measure of size > 180) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Big City	60	0	56	4	0	0	0
Medium or Small City	70	0	64	5	1	0	0
Small Town or Village	26	0	26	0	0	0	0
<b>Total</b>	<b>156</b>	<b>0</b>	<b>146</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, remote schools, 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 urbanization (big city, medium or small city, small town or village), gender (girls, boys, mixed)
- Implicit stratification by region (17)
- Sampled one classroom per school
- The TIMSS sample was selected simultaneously with the ICILS Main Survey sample, to avoid overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Big City - Boys	10	0	8	2	0	0	0
Big City - Girls	10	0	7	2	1	0	0
Big City - Mixed	46	0	31	13	2	0	0
Medium or Small City - Boys	10	0	7	3	0	0	0
Medium or Small City - Girls	10	0	9	0	1	0	0
Medium or Small City - Mixed	54	0	46	6	2	0	0
Small Town or Village - Boys	8	0	7	1	0	0	0
Small Town or Village - Girls	8	0	6	2	0	0	0
Small Town or Village - Mixed	20	0	19	1	0	0	0
<b>Total</b>	<b>176</b>	<b>0</b>	<b>140</b>	<b>30</b>	<b>6</b>	<b>0</b>	<b>0</b>



## Kosovo

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and Serbian or Bosnian 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)
- Implicit stratification by region (7)
- Sampled two classrooms in large schools (measure of size > 74) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
City	78	0	78	0	0	0	0
Village	74	0	74	0	0	0	0
<b>Total</b>	<b>152</b>	<b>0</b>	<b>152</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Kuwait

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in languages other than Arabic or English
- Within-school exclusions consisted of students with intellectual disabilities

#### Sample design

- Explicit stratification by grade, school type (public, private), and education district (7)
- Implicit stratification by gender (girls, boys, mixed) and language (Arabic, English)
- Sampled two classrooms in large schools (measure of size > 275) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Assime	14	0	14	0	0	0	0
Grade 4 only - Hawally	12	0	12	0	0	0	0
Grade 4 only - Farwaniya	18	0	18	0	0	0	0
Grade 4 only - Ahmadi	20	0	20	0	0	0	0
Grade 4 only - Jahraa	18	0	18	0	0	0	0
Grade 4 only - Mubarak Al-kabeer	12	0	12	0	0	0	0
Grade 4 only - Private	8	0	7	0	0	1	0
Grade 4 and Grade 8 - Assime	3	0	3	0	0	0	0
Grade 4 and Grade 8 - Hawally	1	0	1	0	0	0	0
Grade 4 and Grade 8 - Private	56	0	45	0	0	11	0
<b>Total</b>	<b>162</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, and schools with students taught in languages other than Arabic or English
- Within-school exclusions consisted of non-native language speakers

### Sample design

- Explicit stratification by grade, school type (public, private), and education district (7)
- Implicit stratification by gender (girls, boys, mixed) and language (Arabic, English)
- Sampled two classrooms in large schools (measure of size > 275) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Assime	14	0	14	0	0	0	0
Grade 8 only - Hawally	12	0	12	0	0	0	0
Grade 8 only - Farwaniya	18	0	18	0	0	0	0
Grade 8 only - Ahmadi	20	0	20	0	0	0	0
Grade 8 only - Jahraa	20	0	20	0	0	0	0
Grade 8 only - Mubarak Al-kabeer	10	0	10	0	0	0	0
Grade 8 only - Private	10	0	9	0	0	1	0
Grade 4 and Grade 8 - Assime	3	0	3	0	0	0	0
Grade 4 and Grade 8 - Hawally	1	0	1	0	0	0	0
Grade 4 and Grade 8 - Private	48	4	39	0	0	5	0
<b>Total</b>	<b>156</b>	<b>4</b>	<b>146</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>

## Latvia

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, schools with students taught in languages other than Latvian and Russian, and distance learning schools
- Within-school exclusions consisted of students with intellectual disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by urbanization (Riga, city, town and rural), language (Latvian, Russian, Latvian and Russian), and school type (basic or beginners, secondary)
- Implicit stratification by language (Latvian, Russian, Latvian and Russian), and school type (basic, beginners, secondary)
- Sampled two classrooms in large schools (measure of size > 80) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Town and Rural - Latvian Only - Basic or Beginners	26	1	23	1	0	1	0
Town and Rural - Latvian Only - Secondary	38	1	34	2	1	0	0
Town and Rural - Latvian and Russian or Russian Only	10	0	10	0	0	0	0
City - Latvian Only	20	0	19	0	0	1	0
City - Latvian and Russian or Russian Only	16	1	15	0	0	0	0
Riga - Latvian Only	26	1	24	1	0	0	0
Riga - Latvian and Russian or Russian Only	24	0	24	0	0	0	0
<b>Total</b>	<b>160</b>	<b>4</b>	<b>149</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>0</b>

## Lithuania

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, schools providing remote learning, adult schools, schools in prisons, and schools with students taught in languages other than Lithuanian, Polish or Russian
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by grade and language (5)
- Implicit stratification by urbanization (capital, other major cities, cities, small cities and villages) and school type (primary, basic, progymnasium, gymnasium)
- Sampled two classrooms in large schools (more than four classes) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Lithuanian only	30	0	29	1	0	0	0
Grade 4 only - Other	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Lithuanian only	119	0	118	1	0	0	1
Grade 4 and Grade 8 - Russian only	17	0	17	0	0	0	0
Grade 4 and Grade 8 - Polish only	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Combination of Lithuanian, Russian and Polish	8	0	8	0	0	0	0
<b>Total</b>	<b>190</b>	<b>0</b>	<b>188</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, schools providing remote learning, adult schools, schools in prisons, and schools with students taught in languages other than Lithuanian, Polish or Russian
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

### Sample design

- Explicit stratification by grade and language (5)
- Implicit stratification by urbanization (capital, other major cities, cities, small cities and villages) and school type (primary, basic, progymnasium, gymnasium)
- Sampled two classrooms in large schools (more than four classes) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Lithuanian only	14	0	14	0	0	0	0
Grade 8 only - Other	2	0	2	0	0	0	0
Grade 4 and Grade 8 - Lithuanian only	155	0	154	1	0	0	1
Grade 4 and Grade 8 - Russian only	17	0	17	0	0	0	0
Grade 4 and Grade 8 - Polish only	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Combination of Lithuanian, Russian and Polish	8	0	8	0	0	0	0
<b>Total</b>	<b>204</b>	<b>0</b>	<b>203</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

## Macao SAR

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- No explicit stratification
- No implicit stratification
- Sampled all classrooms per school
- A census of all fourth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
All	59	0	59	0	0	0	1
<b>Total</b>	<b>59</b>	<b>0</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

## 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, remote schools, and schools that do not follow mainstream curriculum
- Within-school exclusions consisted of students with intellectual disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by administrative unit (6) and urbanization (urban, rural) within Ministry of Education strata
- Implicit stratification by State (16)
- Sampled two classrooms in Ministry of Education daily schools and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
MOE Daily School - Urban	104	0	104	0	0	0	0
MOE Daily School - Rural	28	0	28	0	0	0	0
MOE Fully Residential School	8	0	8	0	0	0	0
MOE Religious School - Urban	8	0	8	0	0	0	0
MOE Religious School - Rural	8	0	8	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 Schools	8	0	6	1	1	0	0
<b>Total</b>	<b>180</b>	<b>0</b>	<b>178</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>



## Malta

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special needs schools, and schools with students taught in languages other than Maltese and 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 (state, church, independent)
- No implicit stratification
- Sampled all classrooms
- A census of all eighth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Church	21	0	21	0	0	0	0
Independent	7	0	7	0	0	0	0
State	14	0	14	0	0	0	0
<b>Total</b>	<b>42</b>	<b>0</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Montenegro

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 2), and schools with students taught in languages other than 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 (urban, suburban, rural)
- Sampled three classrooms in large schools (measure of size > 75) and two classrooms otherwise
- A census of all fourth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
North	63	0	63	0	0	0	0
Central	53	0	53	0	0	0	0
South	25	0	25	0	0	0	0
<b>Total</b>	<b>141</b>	<b>0</b>	<b>141</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 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 (public, private) and region (12)
- Implicit stratification by urbanization (urban, rural)
- Sampled two classrooms in public schools from the region of Eddakhla-Oued Eddahab, where all schools were selected, and sampled one classroom otherwise
- Schools were oversampled at the region level with a census of schools in the region of Eddakhla-Oued Eddahab
- There was no field test selected for fourth grade
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Private - Casablanca-Settat	10	0	10	0	0	0	0
Private - Other regions	18	0	18	0	0	0	0
Public - Béni Mellal-Khénifra	20	0	20	0	0	0	0
Public - Casablanca-Settat	22	0	21	0	0	1	0
Public - Drâa-Tafilalet	20	0	20	0	0	0	0
Public - Eddakhla-Oued Eddahab	22	0	22	0	0	0	0
Public - Fès-Meknès	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 - Marrakech-Safi	20	0	20	0	0	0	0
Public - Oriental	20	0	20	0	0	0	0
Public - Rabat-Salé-Kénitra	20	1	19	0	0	0	0
Public - Souss-Massa	20	0	20	0	0	0	0
Public - Tanger-Tetouan-Al Hoceima	20	0	20	0	0	0	0
<b>Total</b>	<b>272</b>	<b>1</b>	<b>270</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

## Eighth Grade

### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10)
- No within-school exclusions

### Sample design

- Explicit stratification by school type (public, private) and region (12)
- Implicit stratification by urbanization (urban, rural)
- Sampled two classrooms in public schools from the region of Eddakhla-Oued Eddahab, where all schools were selected, and sampled one classroom otherwise
- The eighth grade Field Test and Main Data Collection samples were selected simultaneously to avoid overlap
- Schools were oversampled at the region level with a census of schools in the region of Eddakhla-Oued Eddahab
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Private - Casablanca-Settat	8	0	7	0	0	1	0
Private - Other regions	12	0	12	0	0	0	0
Public - Béni Mellal-Khénifra	20	0	20	0	0	0	0
Public - Casablanca-Settat	26	0	26	0	0	0	0
Public - Drâa-Tafilalet	20	0	20	0	0	0	0
Public - Eddakhla-Oued Eddahab	10	0	10	0	0	0	0
Public - Fès-Meknès	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 - Marrakech-Safi	20	0	20	0	0	0	0
Public - Oriental	20	0	18	0	0	2	0
Public - Rabat-Salé-Kénitra	20	0	18	0	0	2	0
Public - Souss-Massa	20	0	20	0	0	0	0
Public - Tanger-Tetouan-Al Hoceima	20	0	19	0	0	1	0
<b>Total</b>	<b>256</b>	<b>0</b>	<b>250</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>

## 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, and non-native language speakers

#### Sample design

- Explicit stratification by socioeconomic status (high, medium/high, medium/low or unknown, low)
- Implicit stratification by socioeconomic status (medium/low, unknown) within the medium/low or unknown explicit stratum
- Sampled all classrooms
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
High SES	8	0	3	1	3	1	0
Medium/high SES	52	0	26	10	6	10	0
Medium/low or unknown SES	70	0	40	13	6	11	0
Low SES	22	0	10	5	0	7	0
<b>Total</b>	<b>152</b>	<b>0</b>	<b>79</b>	<b>29</b>	<b>15</b>	<b>29</b>	<b>0</b>

## New Zealand

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, te Aho o Te Kura Pounamu correspondence school, and Māori-medium Level 1 immersion schools or schools with most of the student cohort in Level 1 or 2 immersion units
- 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 (low, medium, high)
- Implicit stratification by urbanization (major urban centers, smaller urban centers) within state schools
- Sampled two classrooms per school
- The Main Data collection sample at fourth grade was selected sequentially using the Chowdhury approach to minimize overlap with the eighth grade Main Data Collection sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Low	28	0	9	7	3	9	0
Moderate	60	0	34	11	8	7	0
High	80	0	64	11	1	4	0
Independent	8	0	3	2	1	2	0
<b>Total</b>	<b>176</b>	<b>0</b>	<b>110</b>	<b>31</b>	<b>13</b>	<b>22</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 4), special needs schools, te Aho o Te Kura Pounamu & 3H School International, and Māori-medium Level 1 immersion schools or schools with most of the student cohort in Level 1 or 2 immersion units
- 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 (low, medium, high)
- Implicit stratification by gender (boys, girls, mixed)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Independent	8	0	3	1	1	3	0
Low	24	0	9	4	1	10	0
Moderate	76	0	29	19	1	27	0
High	44	0	24	6	0	14	0
<b>Total</b>	<b>152</b>	<b>0</b>	<b>65</b>	<b>30</b>	<b>3</b>	<b>54</b>	<b>0</b>

## North Macedonia

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, schools with students taught in languages other than Macedonian and Albanian, and schools with less than 4 fourth-grade students who were taught together with another grade
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

#### 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, and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Urban - Macedonian	43	0	42	0	0	1	0
Urban - Albanian	8	0	8	0	0	0	0
Urban - Mixed	10	0	10	0	0	0	0
Rural - Macedonian	16	0	16	0	0	0	0
Rural - Albanian	25	0	25	0	0	0	0
Rural - Mixed	8	0	8	0	0	0	0
Mixed - Macedonian	28	0	28	0	0	0	0
Mixed - Albanian or Mixed	12	0	12	0	0	0	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>149</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>



## 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, international schools, Samii schools, and immigrant schools
- Within-school exclusions consisted of students with functional disabilities

#### Sample design

- Explicit stratification by grade
- Implicit stratification by grade 5 class sections (4)
- Sampled two classrooms whenever possible
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Main Data Collection school sample was selected sequentially using the Chowdhury approach to minimize the overlap with the ICILS 2023 school sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 5 only	136	2	128	1	0	5	0
Grade 5 and Grade 9	33	0	31	0	0	2	0
<b>Total</b>	<b>169</b>	<b>2</b>	<b>159</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>0</b>

### Ninth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade
- Implicit stratification by grade 9 class sections (4)
- Sampled two classrooms whenever possible
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Main Data Collection school sample was selected sequentially using the Chowdhury approach to minimize the overlap with the ICILS 2023 school sample

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 9 only	121	1	118	0	0	2	0
Grade 5 and Grade 9	41	0	39	0	0	2	0
<b>Total</b>	<b>162</b>	<b>1</b>	<b>157</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>

## Oman

### 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 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 large schools (measure of size > 215) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Muscat Governorate	32	0	32	0	0	0	0
Ash Sharqiyah North Governorate	14	0	14	0	0	0	0
Ash Sharqiyah South Governorate	14	0	14	0	0	0	0
Ad Dakhliyah Governorate	26	0	26	0	0	0	0
Ad Dhahirah Governorate	10	0	10	0	0	0	0
Al Batinah North Governorate	38	0	38	0	0	0	0
Al Batinah South Governorate	24	0	24	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	14	0	14	0	0	0	0
Al Wusta Governorate	8	0	6	0	0	2	0
Private Schools	14	0	14	0	0	0	0
International Schools	12	0	11	1	0	0	0
<b>Total</b>	<b>222</b>	<b>0</b>	<b>219</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>

### 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 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 Governorates (11) and school type (Private, International)
- Implicit stratification by gender (girls, boys, mixed)
- Sampled two classrooms in large schools (measure of size > 225) and one classroom otherwise
- The Main Data Collection eighth grade sample was selected sequentially using the Chowdhury approach to maximize overlap with the fourth grade sample

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Muscat Governorate	37	0	37	0	0	0	0
Ash Sharqiyah North Governorate	13	0	13	0	0	0	0
Ash Sharqiyah South Governorate	16	0	16	0	0	0	0
Ad Dakhliyah Governorate	26	0	26	0	0	0	0
Ad Dhahirah Governorate	10	0	10	0	0	0	0
Al Batinah North Governorate	35	0	35	0	0	0	0
Al Batinah South Governorate	24	0	24	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	15	0	15	0	0	0	0
Al Wusta Governorate	9	0	9	0	0	0	0
Private Schools	11	0	11	0	0	0	0
International Schools	13	0	13	0	0	0	0
<b>Total</b>	<b>225</b>	<b>0</b>	<b>225</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Palestinian Nat'l Auth.

### Eighth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by region (West Bank, Gaza Strip), supervising authority (public, private, UNRWA), and intervention type (regular, intervention) in public strata
- Implicit stratification by district (25) and gender (girls, boys, mixed)
- Sampled one classroom per school

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
West Bank - Public - Regular	70	0	68	0	0	2	0
West Bank - Public - Intervention	20	0	19	0	1	0	0
West Bank - Private	14	0	14	0	0	0	0
West Bank - UNRWA	10	0	10	0	0	0	0
Gaza Strip - Public - Regular	14	0	14	0	0	0	0
Gaza Strip - Public - Intervention	16	0	16	0	0	0	0
Gaza Strip - Private	8	0	8	0	0	0	0
Gaza Strip - UNRWA	48	0	48	0	0	0	0
<b>Total</b>	<b>200</b>	<b>0</b>	<b>197</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>

## 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 students taught in languages 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 (village, town to 20K inhabitants, town to 100K inhabitants, town over 100K inhabitants)
- Implicit stratification by region (16)
- Sampled two classrooms whenever possible
- The Field Test and Main Data Collection samples were selected sequentially using the Chowdhury approach to minimize sample overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Village	54	0	53	1	0	0	0
Town to 20k inhabitants	25	0	25	0	0	0	0
Town to 100k inhabitants	30	0	28	2	0	0	0
Town over 100k inhabitants	41	0	41	0	0	0	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>147</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Portugal

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, school type (public, private), and region within public schools (5)
- Implicit stratification by school type (public, private) and region within public schools (5) both within the Grade 4 only strata
- Sampled two classrooms in large schools (more than five classes) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only	12	1	9	2	0	0	0
Public - Alentejo	10	0	10	0	0	0	0
Public - Algarve	10	0	8	2	0	0	0
Public - Lisboa	40	0	40	0	0	0	0
Public - Centro	28	0	28	0	0	0	0
Public - Norte	48	0	47	1	0	0	0
Private - All Regions	10	1	8	0	1	0	0
Grade 4 only - Madeira and Açores	8	0	8	0	0	0	0
<b>Total</b>	<b>166</b>	<b>2</b>	<b>158</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, school type (public, private), and region within public schools (5)
- Implicit stratification by school type (public, private) and region within public schools (5) both within the Grade 8 only strata
- Sampled two classrooms in large schools (more than five classes) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to avoid overlap
- The Main Data Collection eighth grade sample was selected simultaneously with the ICILS Main Survey sample to maximize overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	16	0	15	1	0	0	0
Public - Alentejo	10	0	9	1	0	0	0
Public - Algarve	10	0	9	1	0	0	0
Public - Lisboa	36	0	34	2	0	0	0
Public - Centro	28	0	26	2	0	0	0
Public - Norte	46	0	43	3	0	0	0
Private	10	0	6	4	0	0	0
Grade 8 only - Madeira and Açores	8	0	7	1	0	0	0
<b>Total</b>	<b>164</b>	<b>0</b>	<b>149</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>



## Qatar

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade and gender (girls, boys, mixed) within grade 4 only stratum
- Implicit stratification by gender (girls, boys, mixed) within grade 4 and grade 8 stratum and school type (community, government, international, private)
- Sampled one classroom per school
- A census of all schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Boys	38	0	38	0	0	0	0
Grade 4 only - Girls	46	0	46	0	0	0	0
Grade 4 only - Mixed	70	0	70	0	0	0	0
Grade 4 and Grade 8	125	0	125	0	0	0	0
<b>Total</b>	<b>279</b>	<b>0</b>	<b>279</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools and schools with students taught in languages other than Arabic and English
- Within-school exclusions consisted of students with intellectual disabilities, and students with functional disabilities

#### Sample design

- Explicit stratification by grade
- Implicit stratification by gender (girls, boys, mixed) and school type (community, government, international, private)
- Sampled one classroom per school
- A census of all schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	66	0	66	0	0	0	0
Grade 4 and Grade 8	125	0	125	0	0	0	0
<b>Total</b>	<b>191</b>	<b>0</b>	<b>191</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Romania

### 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 Different curriculum
- Within-school exclusions consisted of students with intellectual disabilities

#### Sample design

- Explicit stratification by grade, urbanization (urban, rural), and region (5)
- Implicit stratification by urbanization (urban, rural) and region (5) in grade 4 only stratum
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Main Data Collection samples were selected sequentially using the Chowdhury approach to maximize the overlap with the ICILS 2023 school sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only	20	2	14	1	0	3	0
Grade 4 and Grade 8 - Bucharest-Ilfov	22	0	16	0	0	6	0
Grade 4 and Grade 8 - North - Urban	25	2	16	0	0	7	0
Grade 4 and Grade 8 - Center - Urban	13	0	8	0	0	5	1
Grade 4 and Grade 8 - South - Urban	34	0	21	2	0	11	0
Grade 4 and Grade 8 - West	13	0	10	0	0	3	1
Grade 4 and Grade 8 - North - Rural	24	1	16	1	0	6	2
Grade 4 and Grade 8 - Center- Rural	9	0	4	0	0	5	1
Grade 4 and Grade 8 - South - Rural	30	2	21	0	0	7	0
<b>Total</b>	<b>190</b>	<b>7</b>	<b>126</b>	<b>4</b>	<b>0</b>	<b>53</b>	<b>5</b>

### 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

### Sample design

- Explicit stratification by grade, urbanization (rural, urban), and region (5)
- Implicit stratification by urbanization (rural, urban) and region (5) in grade 8 only stratum
- Sampled two classrooms in large schools (measure of size > 40) and one classroom otherwise
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously with maximum overlap
- The Main Data Collection samples were selected sequentially using the Chowdhury approach to maximize the overlap with the ICILS 2023 school sample

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only	17	0	10	0	1	6	1
Grade 4 and Grade 8 - Bucharest-Ilfov	18	0	13	0	0	5	0
Grade 4 and Grade 8 - North - Urban	23	1	15	0	0	7	0
Grade 4 and Grade 8 - Center - Urban	11	0	7	1	0	3	1
Grade 4 and Grade 8 - South - Urban	32	0	21	1	0	10	0
Grade 4 and Grade 8 - West	16	0	11	1	0	4	0
Grade 4 and Grade 8 - North - Rural	32	1	21	2	0	8	0
Grade 4 and Grade 8 - Center- Rural	10	0	3	0	0	7	0
Grade 4 and Grade 8 - South - Rural	34	1	21	0	0	12	0
<b>Total</b>	<b>193</b>	<b>3</b>	<b>122</b>	<b>5</b>	<b>1</b>	<b>62</b>	<b>2</b>

## 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 with language of instruction other than Arabic or English, and schools in conflict zone
- 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) and gender (girls, boys)
- Implicit stratification by education directorates (48)
- Sampled one classroom per school

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - Boys	87	2	82	3	0	0	1
Public - Girls	92	1	90	1	0	0	0
Private - Boys	10	0	10	0	0	0	0
Private - Girls	10	1	9	0	0	0	0
International - Boys	10	1	9	0	0	0	0
International - Girls	10	0	8	2	0	0	0
<b>Total</b>	<b>219</b>	<b>5</b>	<b>208</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>1</b>

### 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 with language of instruction other than Arabic or English, and schools in conflict zone
- 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) and gender (girls, boys)
- Implicit stratification by education directorates (48)
- Sampled one classroom per school

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - Boys	82	0	79	3	0	0	0
Public - Girls	86	1	85	0	0	0	0
Private - Boys	10	0	10	0	0	0	0
Private - Girls	10	0	10	0	0	0	0
International - Boys	10	0	10	0	0	0	0
International - Girls	10	0	9	1	0	0	0
<b>Total</b>	<b>208</b>	<b>1</b>	<b>203</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 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 languages 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 (city, other), and school hierarchy (main school, branch department) within the Central Serbia other schools stratum
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 100) and one classroom otherwise
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Belgrade - City	36	0	35	1	0	0	0
Belgrade - Other	10	0	10	0	0	0	0
Vojvodina - City	23	0	22	0	0	1	1
Vojvodina - Other	14	0	14	0	0	0	0
Central Serbia - City	50	0	50	0	0	0	0
Central Serbia - Other - Main school	14	0	14	0	0	0	0
Central Serbia - Other - Branch department	12	0	12	0	0	0	0
<b>Total</b>	<b>159</b>	<b>0</b>	<b>157</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>

## 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, and students with functional disabilities

#### Sample design

- No explicit stratification
- No implicit stratification
- Sampled two classrooms per school
- A census of all schools was selected for the Main Data Collection
- Sampled two classrooms with probability proportional to the size and 19 students randomly sampled within classrooms
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
All	181	0	181	0	0	0	0
<b>Total</b>	<b>181</b>	<b>0</b>	<b>181</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 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 functional disabilities

#### Sample design

- No explicit stratification
- No implicit stratification
- Sampled one classroom per school
- A census of all schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
None	145	0	145	0	0	0	0
<b>Total</b>	<b>145</b>	<b>0</b>	<b>145</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



## 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, and schools with students taught in languages other than Slovak and Hungarian
- 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), performance level (high, medium, low, missing) within the Slovak schools stratum, and special schools
- Implicit stratification by performance level (high, medium, low, missing) within the Hungarian and special schools strata
- Sampled two classrooms per school whenever possible

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Slovak - Low	14	0	14	0	0	0	0
Slovak - Medium	42	0	41	1	0	0	0
Slovak - High	80	0	79	1	0	0	0
Slovak - Missing	8	0	8	0	0	0	0
Special Schools	8	0	8	0	0	0	0
Hungarian	10	0	10	0	0	0	0
<b>Total</b>	<b>162</b>	<b>0</b>	<b>160</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Slovenia

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of special needs schools, schools with students taught in Italian, and special curriculum 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 size (small, large)
- Implicit stratification by regional area (East, South-east, Central, West)
- Sampled two classrooms in large schools (more than two classrooms) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Small	55	0	54	1	0	0	0
Large	95	0	90	4	0	1	0
<b>Total</b>	<b>150</b>	<b>0</b>	<b>144</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>

## 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 (public, independent) and province (9) within public schools
- Implicit stratification by performance level (5 quintiles) within the public schools strata and province (9) within the independent schools stratum
- Sampled one classroom per school
- The Main Data Collection fifth grade sample was selected sequentially using the Chowdhury approach to maximize overlap with the ninth grade sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Independent	30	2	22	2	1	3	0
Public - Eastern Cape	31	0	30	0	0	1	0
Public - Free State	30	0	30	0	0	0	0
Public - Gauteng	30	3	26	0	0	1	0
Public - KwaZulu-Natal	31	0	30	0	0	1	0
Public - Limpopo	30	1	28	0	0	1	0
Public - Mpumalanga	31	0	30	0	0	1	0
Public - Northern Cape	30	0	30	0	0	0	0
Public - North West	30	0	29	0	0	1	0
Public - Western Cape	30	0	27	0	0	3	0
<b>Total</b>	<b>303</b>	<b>6</b>	<b>282</b>	<b>2</b>	<b>1</b>	<b>12</b>	<b>0</b>

### Ninth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 9), 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, independent) and province (9) within public schools
- Implicit stratification by performance level (5 quintiles) within the public schools strata and province (9) within the independent schools stratum
- Sampled one classroom per school

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Independent	30	1	25	3	1	0	0
Public - Eastern Cape	30	1	28	0	0	1	0
Public - Free State	30	1	28	0	0	1	0
Public - Gauteng	30	2	27	0	0	1	0
Public - KwaZulu-Natal	30	1	27	0	0	2	0
Public - Limpopo	30	0	29	0	0	1	0
Public - Mpumalanga	30	2	28	0	0	0	0
Public - Northern Cape	30	0	28	0	0	2	0
Public - North West	30	1	29	0	0	0	0
Public - Western Cape	30	1	28	0	0	1	0
<b>Total</b>	<b>300</b>	<b>10</b>	<b>277</b>	<b>3</b>	<b>1</b>	<b>9</b>	<b>0</b>

## 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, remote 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 (11) and school type (public, private)
- Implicit stratification by region (9) within the other regions strata
- Sampled one classroom per school
- Oversampled in Andalusia, Asturias, Balearic Islands, Canary Islands, Castile and Leon, Catalonia, Galicia, Madrid, and Navarra

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
ANDALUCÍA - Public	38	0	38	0	0	0	0
ANDALUCÍA - Private	12	0	12	0	0	0	0
PRINCIPADO DE ASTURIAS - Public	36	0	36	0	0	0	0
PRINCIPADO DE ASTURIAS - Private	14	0	14	0	0	0	0
ILLES BALEARS - Public	32	0	32	0	0	0	0
ILLES BALEARS - Private	18	0	18	0	0	0	0
CANARIAS - Public	38	0	38	0	0	0	0
CANARIAS - Private	12	0	12	0	0	0	0
CASTILLA y LEÓN - Public	34	0	34	0	0	0	0
CASTILLA y LEÓN - Private	16	0	16	0	0	0	0
CATALUNYA - Public	34	0	34	0	0	0	0
CATALUNYA - Private	16	0	16	0	0	0	0
GALICIA - Public	36	0	35	0	1	0	0
GALICIA - Private	14	0	14	0	0	0	0
COMUNIDAD DE MADRID - Public	28	0	28	0	0	0	0
COMUNIDAD DE MADRID - Private	22	0	22	0	0	0	0
NAVARRA - Public	34	0	34	0	0	0	0
NAVARRA - Private	16	0	16	0	0	0	0
Other larger regions - Public	40	0	39	0	0	1	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Other larger regions - Private	17	0	17	0	0	0	1
Other smaller regions - Public	8	0	8	0	0	0	0
Other smaller regions - Private	10	0	10	0	0	0	0
<b>Total</b>	<b>525</b>	<b>0</b>	<b>523</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>

## 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, 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 performance level (low, medium, high, missing) and school type (public, private)
- No implicit stratification
- Two classrooms were selected in large schools (at least 48 students) and one classroom otherwise
- The Main Data Collection fourth grade sample was selected using the Chowdhury approach to minimize the overlap with the eighth grade sample and the ICILS 2023 school sample

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Low - Public	10	0	10	0	0	0	0
Low - Private	10	0	8	1	0	1	0
Medium - Public	10	0	10	0	0	0	0
Medium - Private	10	1	9	0	0	0	0
High - Public	14	0	14	0	0	0	0
High - Private	10	0	10	0	0	0	0
Missing - Public	90	2	88	0	0	0	0
Missing - Private	10	0	10	0	0	0	0
<b>Total</b>	<b>164</b>	<b>3</b>	<b>159</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>

### 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 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 performance level (low, medium, high, missing) and school type (public, private)
- Implicit stratification by school type within the missing performance level stratum
- Two classrooms were selected in large schools (at least 102 students) and one classroom otherwise
- The TIMSS eighth grade sample was selected simultaneously with the ICILS sample to avoid overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Low - Public	38	0	37	0	0	1	0
Low - Private	10	0	10	0	0	0	0
Medium - Public	40	1	39	0	0	0	0
Medium - Private	10	0	10	0	0	0	0
High - Public	38	1	37	0	0	0	0
High - Private	10	0	10	0	0	0	0
Missing	11	0	11	0	0	0	0
<b>Total</b>	<b>157</b>	<b>2</b>	<b>154</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>



## Türkiye

### Fifth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special needs schools, schools with students taught in languages other than Turkish, schools with different curriculum, and schools impacted by 2023 earthquake during data collection
- 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 region (12)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - Urban Istanbul	24	0	20	3	1	0	0
Public - Western Marmara Cities	8	0	5	1	2	0	0
Public - Eastern Marmara Cities	12	0	7	4	1	0	0
Public - Aegean Cities	14	0	12	1	1	0	0
Public - Western Anatolia Cities	12	0	9	1	2	0	0
Public - Mediterranean Cities	11	0	8	2	1	0	9
Public - Central Anatolia Cities	8	0	5	1	2	0	0
Public - Eastern Anatolia Cities	8	0	7	1	0	0	2
Public - Southeast Anatolia Cities	9	0	8	0	1	0	15
Public - Western Black Sea Cities	8	0	8	0	0	0	0
Public - Eastern Black Sea Cities	8	0	8	0	0	0	0
Public - Rural Areas	7	0	5	1	1	0	1
Private	12	0	9	2	1	0	0
<b>Total</b>	<b>141</b>	<b>0</b>	<b>111</b>	<b>17</b>	<b>13</b>	<b>0</b>	<b>27</b>

## Eighth Grade

### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 10), special needs schools, schools with students taught in languages other than Turkish, schools with different curriculum, and schools impacted by 2023 earthquake during data collection
- 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 region (12)
- 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	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - Urban Istanbul	24	0	16	4	4	0	0
Public - Western Marmara Cities	8	0	6	0	2	0	0
Public - Eastern Marmara Cities	12	0	8	4	0	0	0
Public - Aegean Cities	14	0	9	1	4	0	0
Public - Western Anatolia Cities	12	0	9	2	1	0	0
Public - Mediterranean Cities	14	0	10	3	1	0	6
Public - Central Anatolia Cities	8	0	7	1	0	0	0
Public - Eastern Anatolia Cities	9	0	3	3	3	0	1
Public - Southeast Anatolia Cities	8	0	7	0	1	0	14
Public - Western Black Sea Cities	8	0	7	1	0	0	0
Public - Eastern Black Sea Cities	8	0	5	2	1	0	0
Public - Rural Areas	6	0	2	2	2	0	2
Private	10	0	5	4	1	0	2
<b>Total</b>	<b>141</b>	<b>0</b>	<b>94</b>	<b>27</b>	<b>20</b>	<b>0</b>	<b>25</b>

## United Arab Emirates

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6 in all emirates except Dubai private) and schools with students taught in languages other than Arabic and English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by grade, emirate (Dubai, Abu Dhabi, Sharjah, all other emirates), school type (public, private, charter), and the main curriculum taught (3) within private schools in all emirates except Dubai
- Implicit stratification by region within Abu Dhabi (Abu Dhabi, Al Ain, Al Dhafra), within Sharjah (Al Sharjah, Sharjah/Eastern), and within other emirates (Ajman, Umm Al Quwain, Ras Al Khaimah, Al Fujairah), gender (girls, boys, mixed), language (Arabic, English) within Abu Dhabi and Sharjah, and curriculum (UK/US/AUS/Indian/IB/Pakistani/Philippine/SABIS, Ministry of Education) within the private schools strata in Dubai
- Sampled two classrooms per school
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to maximize overlap
- A census of all fourth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Dubai - Private	35	1	34	0	0	0	0
Grade 4 and Grade 8 - Dubai - Private	152	2	149	0	0	1	0
Grade 4 only - Dubai - Public - MoE	16	0	16	0	0	0	0
Grade 4 only - Abu Dhabi - Public - MoE	40	0	38	0	0	2	0
Grade 4 only - Abu Dhabi - Private	19	0	19	0	0	0	0
Grade 4 only - Abu Dhabi - Charter - UK/US/I/CAN/AUS/Indian/SABIS	11	0	11	0	0	0	0
Grade 4 only - Sharjah - Public - MoE	21	0	20	0	0	1	0
Grade 4 only - Sharjah - Private - MoE	4	0	4	0	0	0	0
Grade 4 only - Sharjah - Private - UK/US/I/CAN/AUS/Indian/SABIS	11	0	10	0	0	1	0
Grade 4 only - Other Emirates - Public - MoE	40	0	40	0	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Other Emirates - Private - MoE	5	0	4	0	0	1	0
Grade 4 only - Other Emirates - Private - UK/US//CAN/AUS/Indian/SABIS	4	0	4	0	0	0	0
Grade 4 only - Other Emirates - Private - Other curriculums	4	0	4	0	0	0	0
Grade 4 and Grade 8 - Dubai - Public - MoE	2	0	2	0	0	0	0
Grade 4 and Grade 8 - Abu Dhabi - Public - MoE	27	0	24	0	0	3	0
Grade 4 and Grade 8 - Abu Dhabi - Private - MoE	43	0	42	0	0	1	0
Grade 4 and Grade 8 - Abu Dhabi - Private - UK/US//CAN/AUS/Indian/SABIS	143	0	143	0	0	0	0
Grade 4 and Grade 8 - Abu Dhabi - Private - Other curriculums	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Abu Dhabi - Charter - UK/US//CAN/AUS/Indian/SABIS	3	0	2	0	0	1	0
Grade 4 and Grade 8 - Sharjah - Public - MoE	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Private - MoE	21	0	21	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Private - UK/US//CAN/AUS/Indian/SABIS	75	1	74	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Private - Other curriculums	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Other Emirates - Public - MoE	16	0	15	0	0	1	0
Grade 4 and Grade 8 - Other Emirates - Private - MoE	23	0	23	0	0	0	0
Grade 4 and Grade 8 - Other Emirates - Private - UK/US//CAN/AUS/Indian/SABIS	26	0	26	0	0	0	0
Grade 4 and Grade 8 - Other Emirates - Private - Other curriculums	10	1	8	0	0	1	0
<b>Total</b>	<b>773</b>	<b>5</b>	<b>755</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>

## Eighth Grade

### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6 in all emirates except Dubai private) and schools with students taught in languages other than Arabic and English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

### Sample design

- Explicit stratification by grade, emirate (Dubai, Abu Dhabi, Sharjah, all other emirates), school type (public, private, charter), and the main curriculum taught (3) within private schools in all emirates except Dubai
- Implicit stratification by region within Abu Dhabi (Abu Dhabi, Al Ain, Al Dhafra), within Sharjah (Al Sharjah, Sharjah/Eastern), and within other emirates (Ajman, Umm Al Quwain, Ras Al Khaimah, Al Fujairah), gender (girls, boys, mixed), language (Arabic, English) within Abu Dhabi and Sharjah, and curriculum (UK/US/AUS/Indian/IB/Pakistani/Philippine/SABIS, Ministry of Education) within the private schools stratum in Dubai
- Sampled two classrooms per school
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to maximize overlap
- A census of all eighth grade schools was selected for the Main Data Collection

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Dubai - Private	5	0	5	0	0	0	0
Grade 4 and Grade 8 - Dubai - Private	152	1	150	0	0	1	0
Grade 8 only - Dubai - Public - MoE	17	0	17	0	0	0	0
Grade 8 only - Abu Dhabi - Public - MoE	69	0	67	0	0	2	0
Grade 8 only - Abu Dhabi - Private	5	0	5	0	0	0	0
Grade 8 only - Abu Dhabi - Charter - UK/US/I/CAN/AUS/Indian/SABIS	8	0	8	0	0	0	0
Grade 8 only - Sharjah - Public - MoE	31	0	31	0	0	0	0
Grade 8 only - Sharjah - Private - All	7	1	6	0	0	0	0
Grade 8 only - Other Emirates - Public - MoE	56	0	56	0	0	0	0
Grade 8 only - Other Emirates - Private - MoE	1	0	1	0	0	0	0
Grade 4 and Grade 8 - Dubai - Public - MoE	2	0	2	0	0	0	0
Grade 4 and Grade 8 - Abu Dhabi - Public - MoE	27	0	24	0	0	3	0
Grade 4 and Grade 8 - Abu Dhabi - Private - MoE	43	0	43	0	0	0	0

### School Participation Status (Continued)

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 and Grade 8 - Abu Dhabi - Private - UK/US/I/ CAN/AUS/Indian/SABIS	143	0	142	0	0	1	0
Grade 4 and Grade 8 - Abu Dhabi - Private - Other curriculums	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Abu Dhabi - Charter - UK/US/I/ CAN/AUS/Indian/SABIS	3	0	3	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Public - MoE	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Private - MoE	21	0	21	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Private - UK/US/I/ CAN/AUS/Indian/SABIS	75	1	74	0	0	0	0
Grade 4 and Grade 8 - Sharjah - Private - Other curriculums	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Other Emirates - Public - MoE	16	0	15	0	0	1	0
Grade 4 and Grade 8 - Other Emirates - Private - MoE	23	1	22	0	0	0	0
Grade 4 and Grade 8 - Other Emirates - Private - UK/US/I/CAN/AUS/Indian/ SABIS	26	0	26	0	0	0	0
Grade 4 and Grade 8 - Other Emirates - Private - Other curriculums	10	0	10	0	0	0	0
<b>Total</b>	<b>762</b>	<b>4</b>	<b>750</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>

## 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 school type (public, private), census region (Northeast, South, Midwest, West), and poverty level (high, low) within public schools
- 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

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - NE - high	10	0	4	2	2	2	0
Public - NE - low	33	0	11	7	2	13	0
Public - MW - high	11	0	7	1	1	2	0
Public - MW - low	46	1	27	9	1	8	0
Public - S - high	35	3	22	2	4	4	0
Public - S - low	76	1	57	8	3	7	0
Public - W - high	22	0	16	2	1	3	0
Public - W - low	47	0	28	10	3	6	0
Private - NE - low	4	0	2	1	0	1	0
Private - S - low	5	0	3	1	0	1	0
Private - MW - low	7	2	3	0	0	2	0
Private - W - low	4	0	2	0	0	2	0
<b>Total</b>	<b>300</b>	<b>7</b>	<b>182</b>	<b>43</b>	<b>17</b>	<b>51</b>	<b>0</b>

### 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 school type (public, private), census region (Northeast, South, Midwest, West), and poverty level (high, low) within public schools
- 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

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Public - NE - high	8	1	1	2	1	3	0
Public - NE - low	35	0	13	4	3	15	0
Public - MW - high	9	0	6	1	1	1	0
Public - MW - low	48	0	28	6	3	11	0
Public - S - high	27	1	16	2	4	4	0
Public - S - low	83	6	53	4	3	17	0
Public - W - high	19	0	8	1	1	9	0
Public - W - low	51	0	33	3	6	9	0
Private - NE - low	4	0	2	0	0	2	0
Private - S - low	5	0	1	0	2	2	0
Private - MW - low	7	0	1	0	1	5	0
Private - W - low	4	0	1	0	0	3	0
<b>Total</b>	<b>300</b>	<b>8</b>	<b>163</b>	<b>23</b>	<b>25</b>	<b>81</b>	<b>0</b>



## Uzbekistan

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, schools with students taught in languages other than Uzbek and Russian, non-governmental schools, schools not under the jurisdiction of the Ministry of Public Education, 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 region (14)
- Implicit stratification by urbanization (urban, rural)
- Sampled one classroom per school
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to maximize overlap

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Tashkent City	12	0	12	0	0	0	0
Andijan	14	0	14	0	0	0	0
Bukhara	8	0	8	0	0	0	0
Fergana	16	0	16	0	0	0	0
Jizzakh	8	0	8	0	0	0	0
Kashkadarya	14	0	14	0	0	0	0
Khorezm	10	0	10	0	0	0	0
Namangan	14	0	14	0	0	0	0
Navoi	8	0	8	0	0	0	0
Republic of Karakalpakstan	10	0	10	0	0	0	0
Samarkand	18	0	18	0	0	0	0
Sirdarya	8	0	8	0	0	0	0
Surkhandarya	14	0	14	0	0	0	0
Tashkent	12	0	12	0	0	0	0
<b>Total</b>	<b>166</b>	<b>0</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 5), special needs schools, schools with students taught in languages other than Uzbek and Russian, non-governmental schools, schools not under the jurisdiction of the Ministry of Public Education, 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 region (14)
- Implicit stratification by urbanization (urban, rural)
- Sampled one classroom per school
- Fourth grade and eighth grade Main Data Collection school samples were selected simultaneously to maximize overlap

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Tashkent City	12	0	12	0	0	0	0
Andijan	14	0	14	0	0	0	0
Bukhara	8	0	8	0	0	0	0
Fergana	16	0	16	0	0	0	0
Jizzakh	8	0	8	0	0	0	0
Kashkadarya	14	0	14	0	0	0	0
Khorezm	10	0	10	0	0	0	0
Namangan	14	0	14	0	0	0	0
Navoi	8	0	8	0	0	0	0
Republic of Karakalpakstan	10	0	10	0	0	0	0
Samarkand	18	0	18	0	0	0	0
Sirdarya	8	0	8	0	0	0	0
Surkhandarya	14	0	14	0	0	0	0
Tashkent	12	0	12	0	0	0	0
<b>Total</b>	<b>166</b>	<b>0</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 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 institutional 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 (English, French) and school type (public, private, catholic) within the English stratum
- Implicit stratification by regional office (Thunder Bay, Sudbury-North Bay, London, Barrie, Ottawa, Toronto and Area) in the English strata and school type (public, private, catholic) within the French stratum
- Sampled two classrooms in large schools (measure of size > 40) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
English - Public	96	0	95	0	0	1	0
English - Private	8	1	0	0	1	6	0
English - Catholic	38	0	38	0	0	0	0
French	30	0	29	0	0	1	0
<b>Total</b>	<b>172</b>	<b>1</b>	<b>162</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>0</b>

## Quebec, Canada

### Fourth 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, federal 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) and school type (public, private)
- No implicit stratification
- Sampled two classrooms in large schools (measure of size > 75) and one classroom otherwise

#### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
English - Public	28	0	23	1	0	4	0
English - Private	8	0	3	1	0	4	0
French - Public	130	0	105	7	0	18	0
French - Private	8	0	5	1	0	2	0
<b>Total</b>	<b>174</b>	<b>0</b>	<b>136</b>	<b>10</b>	<b>0</b>	<b>28</b>	<b>0</b>

## Abu Dhabi, United Arab Emirates

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, school type (public, private, charter), and the main curriculum taught (UK/US/CAD/AUS/Indian/SABIS/International, Ministry of Education, other) within the private schools stratum
- Implicit stratification by region (Abu Dhabi, Al Ain, Al Dhafra), gender (girls, boys, mixed), and language (Arabic, English)
- Sampled two classrooms whenever possible
- A census of all fourth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Public - MoE	40	0	38	0	0	2	0
Grade 4 only - Private	19	0	19	0	0	0	0
Grade 4 only - Charter - UK/US//CAN/AUS/Indian/SABIS	11	0	11	0	0	0	0
Grade 4 and Grade 8 - Public - MoE	27	0	24	0	0	3	0
Grade 4 and Grade 8 - Private - MoE	43	0	42	0	0	1	0
Grade 4 and Grade 8 - Private - UK/US//CAN/AUS/Indian/SABIS	143	0	143	0	0	0	0
Grade 4 and Grade 8 - Private - Other curriculums	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Charter - UK/US//CAN/AUS/Indian/SABIS	3	0	2	0	0	1	0
<b>Total</b>	<b>293</b>	<b>0</b>	<b>286</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), and schools with students taught in languages other than Arabic and English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

### Sample design

- Explicit stratification by grade, school type (public, private, charter), and the main curriculum taught (UK/US/CAD/AUS/Indian/SABIS/International, Ministry of Education, other) within the private schools stratum
- Implicit stratification by region (Abu Dhabi, Al Ain, Al Dhafra), gender (girls, boys, mixed), and language (Arabic, English)
- Sampled two classrooms whenever possible
- No overlap control was done with the Field Test sample when selecting the Main Data Collection sample
- A census of all eighth grade schools was selected for the Main Data Collection

### School Participation Status

Explicit Strata	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Public - MoE	69	0	67	0	0	2	0
Grade 8 only - Private	5	0	5	0	0	0	0
Grade 8 only - Charter - UK/US/I/CAN/AUS/Indian/SABIS	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Public - MoE	27	0	24	0	0	3	0
Grade 4 and Grade 8 - Private - MoE	43	0	43	0	0	0	0
Grade 4 and Grade 8 - Private - UK/US/I/CAN/AUS/Indian/SABIS	143	0	142	0	0	1	0
Grade 4 and Grade 8 - Private - Other curriculums	7	0	7	0	0	0	0
Grade 4 and Grade 8 - Charter - UK/US/I/CAN/AUS/Indian/SABIS	3	0	3	0	0	0	0
<b>Total</b>	<b>305</b>	<b>0</b>	<b>299</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>

## Dubai, United Arab Emirates

### Fourth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, and school type (public, private)
- Implicit stratification by curriculum (UK/US/AUS/Indian/IB/Pakistani/Philippine/SABIS, Ministry of Education) within the private schools stratum
- Sampled two classrooms whenever possible
- A census of all fourth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Private	35	1	34	0	0	0	0
Grade 4 and Grade 8 - Private	152	2	149	0	0	1	0
Grade 4 only - Public - MoE	16	0	16	0	0	0	0
Grade 4 and Grade 8 - Public - MoE	2	0	2	0	0	0	0
<b>Total</b>	<b>205</b>	<b>3</b>	<b>201</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

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

#### Sample design

- Explicit stratification by grade, and school type (public, private)
- Implicit stratification by curriculum (UK/US/AUS/Indian/IB/Pakistani/Philippine/SABIS, Ministry of Education) within the private schools stratum
- Sampled two classrooms whenever possible
- A census of all eighth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Private	5	0	5	0	0	0	0
Grade 4 and Grade 8 - Private	152	1	150	0	0	1	0
Grade 8 only - Public - MoE	17	0	17	0	0	0	0
Grade 4 and Grade 8 - Public - MoE	2	0	2	0	0	0	0
<b>Total</b>	<b>176</b>	<b>1</b>	<b>174</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>



## Sharjah, United Arab Emirates

### Fourth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), and schools with students taught in languages other than Arabic and English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

#### Sample design

- Explicit stratification by grade, school type (public, private), and the main curriculum taught (UK/US/CAN/AUS/Indian/SABIS/International, Ministry of Education, other) within the private schools stratum
- Implicit stratification by region (Al Sharjah, Sharjah/Eastern), gender (girls, boys, mixed), and language (Arabic, English)
- Sampled two classrooms whenever possible
- A census of all fourth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 4 only - Public - MoE	21	0	20	0	0	1	0
Grade 4 only - Private - MoE	4	0	4	0	0	0	0
Grade 4 only - Private - UK/US//CAN/AUS/Indian/SABIS	11	0	10	0	0	1	0
Grade 4 and Grade 8 - Public - MoE	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Private - MoE	21	0	21	0	0	0	0
Grade 4 and Grade 8 - Private - UK/US//CAN/AUS/Indian/SABIS	75	1	74	0	0	0	0
Grade 4 and Grade 8 - Private - Other curriculums	7	0	7	0	0	0	0
<b>Total</b>	<b>147</b>	<b>1</b>	<b>144</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>

### Eighth Grade

#### Coverage and Exclusions

- Coverage is 100 percent
- School-level exclusions consisted of very small schools (measure of size < 6), and schools with students taught in languages other than Arabic and English
- Within-school exclusions consisted of students with intellectual disabilities, students with functional disabilities, and non-native language speakers

### Sample design

- Explicit stratification by grade, school type (public, private), and the main curriculum taught (UK/US/CAD/AUS/Indian/SABIS/International, Ministry of Education, other) within the private schools stratum
- Implicit stratification by region (Al Sharjah, Sharjah/Eastern), gender (girls, boys, mixed), and language (Arabic, English)
- Sampled two classrooms whenever possible
- A census of all eighth grade schools was 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	Total Sampled Schools	Ineligible Schools	Participating Schools			Refusal Schools	Excluded Schools
			Original Schools	1 <sup>st</sup> Replacements	2 <sup>nd</sup> Replacements		
Grade 8 only - Public - MoE	31	0	31	0	0	0	0
Grade 8 only - Private	7	1	6	0	0	0	0
Grade 4 and Grade 8 - Public - MoE	8	0	8	0	0	0	0
Grade 4 and Grade 8 - Private - MoE	21	0	21	0	0	0	0
Grade 4 and Grade 8 - Private - UK/US/I/CAN/AUS/Indian/SABIS	75	1	74	0	0	0	0
Grade 4 and Grade 8 - Private - Other curriculums	7	0	7	0	0	0	0
<b>Total</b>	<b>149</b>	<b>2</b>	<b>147</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>