

## Appendix 3A: TIMSS 2015 Fourth Grade Stratification Variables

Country	Explicit Stratification Variables	Number of Explicit Strata	Implicit Stratification Variables
Australia	State or territory (8)	8	Geographic location (3) School type (3) Socioeconomic status (2)
Bahrain	Governorate (5) Gender (2)	9	None
Belgium (Flemish)	Region (6) School type (3) Socioeconomic status (4)	18	None
Bulgaria	School type (3) Urbanization (3)	8	Urbanization (2)
Canada	Province (5) Language (2) School type (2) within Alberta Grade 4 only / grade 4 and 8 within Ontario (2) School type (3) within Ontario School type (2) within Quebec	15	Region (4) in public and Catholic schools within Ontario Postal code area (6) in English schools within Alberta
Chile	Grade 4 / grade 4 and 8 schools (2) School type (3) Urbanization (2)	7	National assessment score level (5)
Chinese Taipei	Urbanization (3)	3	None
Croatia	School type (3) Urbanization (2) Region group (6)	15	None
Cyprus	Districts (4)	4	Urbanization (2)
Czech Republic	Region (14)	14	None
Denmark	School type (2)	2	None
England	School type (2) Attainment level (5)	6	None
Finland	Region (6) Urbanization (2)	10	None
France	School type (3)	3	None
Georgia	Grade 4 only / grade 4 and 8 schools (2) Region (4) Math average score (3)	14	None
Germany	School type (2) Socioeconomic status (4)	5	None
Hong Kong SAR	School finance type (5)	5	None
Hungary	Grade 4 only / grade 4 and 8 schools (2) National assessment score (2) Type of community (3)	7	None





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Country	Explicit Stratification Variables	Number of Explicit Strata	Implicit Stratification Variables
Indonesia	Performance (3) School type (2) School funding (2)	9	None
Iran, Islamic Rep. of	School type (2) Gender (3) Region group (3) Province (6)	22	None
Ireland	DEIS (3) Language of instruction (3) Gender (3)	8	Urbanization (2)
Italy	School type (2) Region (6)	7	None
Japan	Urbanization (4)	4	None
Jordan	School type (6) Achievement level (6)	31	Gender (3)
Kazakhstan	Grade 4 only / grade 4 and 8 schools (2) Region (4) Urbanization (2) Language (2)	18	None
Korea, Rep. of	Urbanization (3)	3	None
Kuwait	School type (2) Region (6) Gender (2) Language (3)	15	None
Lithuania	Grade 4 / grade 4 and 8 schools (2) Languages (5)	10	Urbanization (4)
Morocco	School type (2) Region (16)	18	Urbanization (2)
Netherlands	Socioeconomic status level (5) Urbanization (5)	12	None
New Zealand	School type (2) Socioeconomic status (4) Urbanization (2)	9	None
Northern Ireland	Region (5) Deprivation (5)	14	None
Norway (5)	Grade 5 only / grade 5 and 9 schools (2) Language (2) Municipality size (3)	8	None
Oman	School type (3) Governorates (11)	13	None
Poland	Urbanization (4) School performance level (5)	15	None
Portugal	Region (7) School type (2)	9	None





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Country	Explicit Stratification Variables	Number of Explicit Strata	Implicit Stratification Variables
Qatar	Grade 4 only / grade 4 and 8	2	School type (4) Gender (3)
Russian Federation	Region (42)	42	None
Saudi Arabia	Gender school (2) Type of education (2) School type (2)	6	None
Serbia	Region (3) Urbanization (2) School hierarchy (2)	7	None
Singapore	None	1	None
Slovak Republic	Language (2) Socioeconomic status (4) Geographical area (5)	10	None
Slovenia	Performance level (4)	4	None
South Africa (5)	School type (2) Province (9) Socioeconomic status (2)	11	Performance level (3) Region (2)
Spain	Region (7) School type (2)	14	None
Sweden	Grade 4 / grade 4 and 8 schools (2) Grade average (3)	4	School type (2)
Turkey	Urbanization (2) Statistical region (12)	13	None
United Arab Emirates	Grade 4 only / grade 4 and 8 schools (2) Educational zone (4) National assessment score (4) Curriculum (3) School type (2) within Dubai Region (3) within Abu Dhabi School type (2) within Abu Dhabi Curriculum (3) within Abu Dhabi Performance level (3) within Abu Dhabi	27	Educational zones (5) Language of test (3)
United States	Poverty level (2) School type (2) Census Region (4)	12	Urbanization (4) Ethnicity status (2)





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Country	Explicit Stratification Variables	Number of Explicit Strata	Implicit Stratification Variables			
Benchmarking Partic	Benchmarking Participants					
Buenos Aires, Argentina	Grade 4 only / grade 4 and 8 schools (2) School type (2) Socioeconomic status (3)	10	None			
Ontario, Canada	Grade 4 / grade 4 and 8 schools (2) Language (2) School type (3)	6	Regional office (3)			
Quebec, Canada	School type (2) Language (2)	4	None			
Norway (4)	Grade 5 only / grade 5 and 9 schools / grade 4 only (3) Language (2) Municipality size (3)	9	None			
Abu Dhabi, UAE	Grade 4 only / grade 4 and 8 schools Region (3) School type (2) Curriculum (3) Performance level (3)	13	None			
Dubai, UAE	Grade 4 only / grade 4 and 8 schools schools (2) School type (2)	4	Language of test (3)			
Florida, US	Poverty level (2)	2	Urbanization (4) Ethnicity status (2)			

