## **TIMSS 2011** Grade 4 Stratification Variables

Country	Explicit stratification variables	Number of explicit strata	Implicit stratification variables
Azerbaijan, Republic of	National Eximation Score (4)	4	Geographic sub index (5); school type if score missing, NGE grouping otherwise (12)
Australia	States / Territories (8)	8	Geographic Location (3); SEIFA (10); School Type (3)
Austria	Regions (Bundesland) (9)	9	District (121)
Bahrain, Kingdom of	Public / private (2)	6	School gender within Public Schools (2);
	Governates within Public (5)		
Armenia	Grade 4 only / Grade 4 & 8 schools (2)	2	Provinces (11); regions within Yerevan (11)
Botswana	Inspectoral Regions (6)	6	Performance level (4)
Chile	School Administration (3)	6	Achievement categories (14); Urban / rural (2)
	Grade 4 only / Grade 4 & 8 schools (2)		
Chinese Taipei	Region (5)	5	None
Hrvatska (Croatia)	School type(3)	3	Regions or Areas (21)
Czech Republic	Extended education status (2)	2	Regions (14)
Denmark	Public / private (2)	2	None
Finland	Major Regions (5)	10	None
	Urban, semi-urban / rural (2)		
Georgia	Regions (12)	13	State / private (2); Highlands / towns / villages (3)
	Grade 4 only / Grade 4 & 8 schools (2)		
Germany	Federal States (16)	16	Regional subdivisions (30), School type (3)
Honduras, Republic of	Grade 4 only / Grade 4 & 8 schools (2)	6	School type (4); Geographic areas (18); Urban / private (2)
	Public / private (2)		
	Urban / rural (2)		
Hong Kong, SAR	School type (5)	7	School gender (3)
	Sessions (am / pm / day) (3)		
Hungary	Type of community (4)	8	Geographical regions (7)
	Grade 4 only / Grade 4 & 8 schools (2)		
Iran, Islamic Rep. Of	None	1	Provinces (31); Public / private (2); School gender (3)
Ireland	School Size (4)	4	School-level SES (4); Language of instruction (3); Shool gender (3)
Italy	Geographic areas (7)	14	Public/ private (2); Regions or provinces (104)
	Grade 4 only / Grade 4 & 8 schools (2)		
Japan	School Location (4)	4	None



Country	Explicit stratification variables	Number of explicit strata	Implicit stratification variables
Kazakhstan	Regions (16)	17	Urban / rural (2); Languages of Instruction (3); ISCED
	Grade 4 only / Grade 4 & 8 schools (2)		level (3) ; School Performance (4)
Korea, Repubic of	16 provinces (regions) (16)	16	School location (Urban, Surburb, Rural) (3)
Kuwait, State of	Regions (6)	6	Boys / girls (2)
Lithuania	Grade 4 only / Grade 4 & 8 schools (2)	8	School type (6)
	School location (4)		
Malta	None	1	Malta / Gozo (2); School type (3)
Morocco	Public / private (2)	11	Urban / rural (2); School type (10)
	Superior region (10)		
Oman	Grade 4 only / Grade 4 & 8 schools (2)	27	Urban / rural (2); School gender (3)
	Regions (11)		
	School type (4)		
Netherlands	SES Level (5)	5	Urbanisation (5); School Size (2)
New Zealand	Language of instruction (3)	6	SES indicator (5); School gender (3); Major urban /
	Grade 4 only / Grade 4 & 8 schools (2)		others (2)
	School size (3)		
Norway	Bokmål / Nynorsk, other) (2)	4	Community sizes (4)
	Grade 4 only / Grade 4 & 8 schools (2)		
Poland	Urbanisation (4)	4	Districts (voivodship) (16)
Portugal	Public / private (2)	2	Regions (12)
Qatar	Grade 4 only / Grade 4 & 8 schools (2)	2	School gender (3); School type (3)
Romania	Grade 4 only / Grade 4 & 8 schools (2)	6	Urban / rural (2); Geographical location (6)
	School performance (5)		
Russian Federation	Very large regions (16)	16	Urbanisation within selected regions (9)
Saudi Arabia	School Type (3)	5	School Location (5); Public / private (2);
	Boys / girls (2)		
Serbia	Regions (3)	10	Urban / rural (2); Index for Branch Dept
	School type (3)		
	Enrollment (2)		
Singapore	Grade 4 only / Grade 4 & 8 schools (2)	2	None
Slovak Republic	Regions (8)	13	Public / church or private (2)
	Slovak / Hungarian (2)		
Slovenia	Regions (12)	16	Language achievement category (9); Mathematics achievement category (8); Regions (12)
	Geographical areas (4)		
	Grade 4 only / Grade 4 & 8 schools (2)		
Andalucia	Andalucia	1	Public / private (2)
Spain	Autonomous Communities (18)	18	Public / private (2)
Sweden	Immigrant status (4)	5	Grade 4 only / Grade 4 & 8 schools (2); Grade point average (7)
	New schools (1)	-	
Thailand	Grade 4 only / Grade 4 & 8 schools (2)	10	Region (North, South, Central, North-eastern, Bangkok) (5)
maildHu	School Type (5)		
United Arab Emirates	Educational Zones (9)	18	School Type (3); Curricula (24) ; School gender (3) ; Test Language (3)
United Arab Emirates		10	



Country	Explicit stratification variables	Number of explicit strata	Implicit stratification variables
Tunisia	Public / private (2)	8	Regions (25)
	Districts (within 'Public') (7)		
Turkey, Republic of	Geographical regions (7)	14	Public / private (2); Urban / rural (2)
	Grade 4 only / Grade 4 & 8 schools (2)		
United States	High / low poverty index (2)	12	Location (4); Ethnicity status (2)
	Public / private (2)		
	Census regions (4)		
Florida	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
North Carolina	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Yemen	Programs (FGI, Not FGI) (2)	8	Governorate (21); Private / National, public (2)
	Urban / rural (2)		
	Overlap (Grade 4 only, Grade 4 and Grade 6) (2)		
	School gender (3)		
England	Grade 4 only / Grade 4 & 8 schools (2)	2	Attainment (6); School type (4)
Northern Ireland	Regions (5)	5	Deprivation Level (5)
Belgium (Flemish)	Provinces (5)	10	Equal opportunity policy level (5)
	Private / official (2)		
Yemen (Grade 6)	Grade 4 only / Grade 4 & 8 schools (2)	8	Governorate (21); Private / National, public (2)
	Programs (FGI, Not FGI) (2)		
	School gender (3)		
	Urban / rural (2)		
Ontario	Grade 4 only / Grade 4 & 8 schools (2)	4	Geographical regions (6); Type of school (4)
	English / French (2)		
Quebec	Grade 4 only / Grade 4 & 8 schools (2)	4	Public / private (2); All non native / No (2)
	English / French (2)		
Alberta	Grade 4 only / Grade 4 & 8 schools (2)	4	Funding (3); Immersion school status (2)
	School Size (2)		
Dubai	Grade 4 only / Grade 4 & 8 schools (2)	2	Curricula (14) ; Test Language (3)
Abu Dhabi	Grade 4 only / Grade 4 & 8 schools (2)	6	Private / public (2); Curricula (24) ; School gender (3);
	Educational zones (3)		Test Language (3)



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Country	Explicit stratification variables	Number of explicit strata	Implicit stratification variables
Australia	States / Territories (8)	8	Geographic Location (3); SEIFA (10); School Type (3)
Bahrain, Kingdom of	Public /private (2)	6	School gender within Public Schools (2);
	Governates within public (5)		
Armenia	Grade 8 only / Grade 4 & 8 schools (2)	2	Provinces (11); regions within Yerevan (11)
Botswana	Inspectoral Regions (5)	5	Performance level (4)
Chile	School Administration (3)	6	Achievement categories (14); Urban / rural (2)
	Grade 8 only / Grade 4 & 8 schools (2)		
Chinese Taipei	Regions (5)	5	Achievement score (9)
Finland	Major Regions (5)	10	None
	Urban, semi-urban / rural (2)		
Georgia	Regions (12)	13	State / private (2); Highlands / towns / villages (3)
	Grade 8 only / Grade 4 & 8 schools (2)		
Palestinian Nat'l Auth.	School Gender (3)	7	School gender (3); Educational districts (22)
	School Type (3)		
	School Group (3)		
Ghana	Public / private (2)	2	Regions (10)
Honduras, Republic of	Grade 8 only / Grade 4 & 8 schools (2)	6	School type (4); Geographic areas (18); Urban / private (2)
	Public / private (2)		
	Urban / rural (2)		
Hong Kong, SAR	School type (3)	3	School gender (3); School banding (3)
Hungary	Type of community (4)	8	Geographical regions (7)
	Grade 8 only / Grade 4 & 8 schools (2)		
Indonesia	Public / private (2)	4	School Classification (3); Provinces (31)
	General / islamic (2)		
Iran, Islamic Rep. Of	None	1	Provinces (31); Public / private (2); School gender (3)
Israel	Grade 8 only / Grade 4 & 8 schools (2)	10	Socio-Economic Status (SES) (3); School gender (3); Geographical regions (2)
	School orientation (5)		
Italy	Geographic areas (7)	14	Public/ private (2); Regions or provinces (104)
	Grade 8 only / Grade 4 & 8 schools (2)		
Japan	Public / private, national (2)	5	None
	School Location (4)		



Country	Explicit stratification variables	Number of explicit strata	Implicit stratification variables
Kazakhstan	Regions (16)	17	Urban / rural (2); Languages of Instruction (3);
	Grade 8 only / Grade 4 & 8 schools (2)		ISCED level (3) ; School Performance (4)
Jordan	School type (6)	6	Scale index (7); Governorates (12); Urban / rural (2) School gender (3)
Korea, Repubic of	16 provinces (regions) (16)	16	Urbanization (3); School gender (3)
Lebanon	Performance level (2)	3	Regions (7)
	Public / private (2)		
Lithuania	Grade 8 only / Grade 4 & 8 schools (2)	8	School type (6)
	School location (4)		
Malaysia	None	1	Regions (16), Urbanization (Rural, Urban, PED) (3)
Morocco	Public / private (2)	11	Urban / rural (2); School type (12)
	Superior region (10)		
Oman	Grade 8 only / Grade 4 & 8 schools (2)	26	Urban / rural (2); School gender (3)
	Regions (11)		
	School type (4)		
New Zealand	Grade 8 only / Grade 4 & 8 schools (2)	5	SES indicator (5); School gender (3); Major urban /
	Language of instruction (3)		others (2)
	School size (3)		
Norway	Bokmål / Nynorsk, other) (2)	4	Community sizes (4)
	Grade 8 only / Grade 4 & 8 schools (2)		
Qatar	Grade 8 only / Grade 4 & 8 schools (2)	2	School gender (3); School type (3)
Romania	Grade 8 only / Grade 4 & 8 schools (2)	6	Urban, rural (2); School performance (4); Geographical location (7)
	School performance (5)		
Russian Federation	Very large regions (14)	14	Urbanisation within selected regions (9)
Saudi Arabia	Boys / girls (2)	3	School Location (5); Public / private (2); School gender (2)
	Ministry / International (2)		
Singapore	Grade 8 only / Grade 4 & 8 schools (2)	2	None
Slovenia	Regions (12)	13	Language achievement category (9); Mathematic achievement category (8) ; Regions (5)
	Grade 8 only / Grade 4 & 8 schools (2)		
South Africa	Provinces (9)	29	Poverty index (7); Location (10)
SouthAmed	Languages (3)		
	School type (3)		
Sweden	Immigrant status (4)	5	Grade 8 only / Grade 4 & 8 schools (2); Grade poi average (7)
	New schools (1)		
Syrian Arab Republic	School gender (3)	4	Provinces (14)
Synan Arab Republic	Public / private (2)		
Thailand	Grade 8 only / Grade 4 & 8 schools (2)	10	Regions (5)
	School Type (5)		
United Arab Emirates	Educational Zones (9)	18	School Type (3); Curricula (24) ; School gender (3) Test Language (3)
	Grade 8 only / Grade 4 & 8 schools (2)		
Tunisia	Public / private (2)	8	Regions (25)
	District (within 'Public') (7)	0	



Country	Explicit stratification variables	Number of explicit strata	Implicit stratification variables
Ukraine	Grade 8 only / Grade 4 & 8 schools (2)	4	School stages (3); Regions (27)
	Urban / rural (2)		
Macedonia	Language (5)	5	Urban / rural (2)
United States	High / low poverty index (2)	12	Location (4); Ethnicity status (2)
	Public / private (2)		
	Census regions (4)		
Alabama	High / low poverty index (2)	2	Location (5); Ethnicity status (2)
California	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Colorado	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Connecticut	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Florida	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Indiana	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Massachusetts	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
Minnesota	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
North Carolina	High / low poverty index (2)	2	Location (4); Ethnicity status (2)
England	Grade 8 only / Grade 4 & 8 schools (2)	2	Attainment (6); School type (4)
Finland (Grade 7)	Major Regions (5)	10	None
	Urban, semi-urban / rural (2)		
Ontario	Grade 8 only / Grade 4 & 8 schools (2)	4	Geographical regions (6); Type of school (4)
	English / French (2)		
Quebec	Grade 8 only / Grade 4 & 8 schools (2)	6	Public / private (2); All non native / No (2)
	Special programs / No (2)		
	English / French (2)		
Alberta	Grade 8 only / Grade 4 & 8 schools (2)	3	Funding (3); Immersion school status (2)
	School Size (2)		
Dubai	Grade 8 only / Grade 4 & 8 schools (2)	2	Curricula (14) ; Test Language (3)
Abu Dhabi	Grade 8 only / Grade 4 & 8 schools (2)	6	Private / public (2); Curricula (24) ; School gender
	Educational zones (3)		(3); Test Language (3)

