

Background of TIMSS 2011

TIMSS 2011 was organised by the International Association for the Evaluation of Educational Achievement (IEA). There were 53 and 45 countries/regions participating in the assessments at Grade 4 (P4 in Hong Kong) and Grade 8 (S2 in Hong Kong) respectively. The international study aims to inform the achievements in mathematics and science at these two levels; and against the background information of the participating jurisdictions collected, to find out the explanatory factors affecting the learning of mathematics and science, and ways of improving the learning effectiveness of these two subjects.

TIMSS has been conducted in a four-year cycle since 1995, and TIMSS 2011 was the fifth round of this international study. The main study of the Hong Kong component of TIMSS 2011 was conducted from May to July in 2011. A total of 136 primary and 117 secondary schools with about 3 960 P4 students and 4 020 S2 students participated in the study.

Ranking of Grade 4 Students' Mathematics Achievement

TIMSS 2007		TIMSS 2011	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Hong Kong SAR	607	Singapore	606
Singapore	599	Korea, Rep. of	605
Chinese Taipei	576	Hong Kong SAR	602
Japan	568	Chinese Taipei	591
Kazakhstan	549	Japan	585
Russian Federation	544	Northern Ireland	562
England	541	Belgium (Flemish)	549
Latvia	537	Finland	545
Netherlands	535	England	542
Lithuania	530	Russian Federation	542
United States	529	United States	541
Germany	525	Netherlands	540
Denmark	523	Denmark	537
Australia	516	Lithuania	534
Hungary	510	Portugal	532
Italy	507	Germany	528
Austria	505	Ireland	527
Sweden	503	Serbia	516

TIMSS 2007		TIMSS 2011	
Slovenia	502	Australia	516
TIMSS Scale Average	500	Hungary	515
Armenia	500	Slovenia	513
Slovak Republic	496	Czech Republic	511
Scotland	494	Austria	508
New Zealand	492	Italy	508
Czech Republic	486	Slovak Republic	507
Norway	473	Sweden	504
Ukraine	469	Kazakhstan	501
Georgia	438	TIMSS Scale Average	500
Iran, Islamic Republic of	402	Malta	496
Algeria	378	Norway	495
Colombia	355	Croatia	490
Morocco	341	New Zealand	486
El Salvador	330	Spain	482
Tunisia	327	Romania	482
Kuwait	316	Poland	481
Qatar	296	Turkey	469
Yemen	224	Azerbaijan	463
		Chile	462
		Thailand	458
		Armenia	452
		Georgia	450
		Bahrain	436
		United Arab Emirates	434
		Iran, Islamic Rep. of	431
		Qatar	413
		Saudi Arabia	410
		Oman	385
		Tunisia	359
		Kuwait	342
		Morocco	335
		Yemen	248
		Botswana	419
		Honduras	396
		Yemen	348

Ranking of Grade 8 Students' Mathematics Achievement

TIMSS 2007		TIMSS 2011	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Chinese Taipei	598	Korea, Rep of	613
Korea, Republic of	597	Singapore	611
Singapore	593	Chinese Taipei	609
Hong Kong SAR	572	Hong Kong SAR	586
Japan	570	Japan	570
Hungary	517	Russian Federation	539
England	513	Israel	516
Russian Federation	512	Finland	514
United States	508	United States	509
Lithuania	506	England	507
Czech Republic	504	Hungary	505
Slovenia	501	Australia	505
TIMSS Scale Average	500	Slovenia	505
Armenia	499	Lithuania	502
Australia	496	TIMSS Scale Average	500
Sweden	491	Italy	498
Malta	488	New Zealand	488
Scotland	487	Kazakhstan	487
Serbia	486	Sweden	484
Italy	480	Ukraine	479
Malaysia	474	Norway	475
Norway	469	Armenia	467
Cyprus	465	Romania	458
Bulgaria	464	United Arab Emirates	456
Israel	463	Turkey	452
Ukraine	462	Lebanon	449
Romania	461	Malaysia	440
Bosnia and Herzegovina	456	Georgia	431
Lebanon	449	Thailand	427
Thailand	441	Macedonia, Rep. of	426
Turkey	432	Tunisia	425
Jordan	427	Chile	416
Tunisia	420	Iran, Islamic Rep. of	415
Georgia	410	Qatar	410
Iran, Islamic Republic of	403	Bahrain	409
Bahrain	398	Jordan	406
Indonesia	397	Palestinian Nat'l Auth.	404
Syrian Arab Republic	395	Saudi Arabia	394
Egypt	391	Indonesia	386
Algeria	387	Syrian Arab Republic	380
Colombia	380	Morocco	371
Oman	372	Oman	366
Palestinian National Authority	367	Ghana	331

TIMSS 2007		TIMSS 2011	
Botswana	364	Botswana	397
Kuwait	354	South Africa	352
El Salvador	340	Honduras	338
Saudi Arabia	329		
Ghana	309		
Qatar	307		
Morocco	381		

Ranking of Grade 4 Students' Science Achievement

TIMSS 2007		TIMSS 2011	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Singapore	587	Korea, Rep. of	587
Chinese Taipei	557	Singapore	583
Hong Kong SAR	554	Finland	570
Japan	548	Japan	559
Russian Federation	546	Russian Federation	552
Latvia	542	Chinese Taipei	552
England	542	United States	544
United States	539	Czech Republic	536
Hungary	536	Hong Kong SAR	535
Italy	535	Hungary	534
Kazakhstan	533	Sweden	533
Germany	528	Slovak Republic	532
Australia	527	Austria	532
Slovak Republic	526	Netherlands	531
Austria	526	England	529
Sweden	525	Denmark	528
Netherlands	523	Germany	528
Slovenia	518	Italy	524
Denmark	517	Portugal	522
Czech Republic	515	Slovenia	520
Lithuania	514	Northern Ireland	517
New Zealand	504	Ireland	516
Scotland	500	Croatia	516
TIMSS Scale Average	500	Australia	516
Armenia	484	Serbia	516
Norway	477	Lithuania	515
Ukraine	474	Belgium (Flemish)	509
Iran, Islamic Republic of	436	Romania	505
Georgia	418	Spain	505
Colombia	400	Poland	505
El Salvador	390	TIMSS Scale Average	500
Algeria	354	New Zealand	497
Kuwait	348	Kazakhstan	495
Tunisia	318	Norway	494
Morocco	297	Chile	480
Qatar	294	Thailand	472
Yemen	197	Turkey	463
		Georgia	455
		Iran, Islamic Rep. of	453
		Bahrain	449
		Malta	446
		Azerbaijan	438

TIMSS 2007	TIMSS 2011	
	Saudi Arabia	429
	United Arab Emirates	428
	Armenia	416
	Qatar	394
	Oman	377
	Kuwait	347
	Tunisia	346
	Morocco	264
	Yemen	209
	Honduras	432
	Botswana	367
	Yemen	345

Ranking of Grade 8 Students' Science Achievement

TIMSS 2007		TIMSS 2011	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Singapore	567	Singapore	590
Chinese Taipei	561	Chinese Taipei	564
Japan	554	Korea, Rep. of	560
Korea, Republic of	553	Japan	558
England	542	Finland	552
Hungary	539	Slovenia	543
Czech Republic	539	Russian Federation	542
Slovenia	538	Hong Kong SAR	535
Hong Kong SAR	530	England	533
Russian Federation	530	United States	525
United States	520	Hungary	522
Lithuania	519	Australia	519
Australia	515	Israel	516
Sweden	511	Lithuania	514
TIMSS Scale Average	500	New Zealand	512
Scotland	496	Sweden	509
Italy	495	Italy	501
Armenia	488	Ukraine	501
Norway	487	TIMSS Scale Average	500
Ukraine	485	Norway	494
Jordan	482	Kazakhstan	490
Malaysia	471	Turkey	483
Thailand	471	Iran, Islamic Rep. of	474
Serbia	470	Romania	465
Bulgaria	470	United Arab Emirates	465
Israel	468	Chile	461
Bahrain	467	Bahrain	452
Bosnia and Herzegovina	466	Thailand	451
Romania	462	Jordan	449
Iran, Islamic Republic of	459	Tunisia	439
Malta	457	Armenia	437
Turkey	454	Saudi Arabia	436
Syrian Arab Republic	452	Malaysia	426
Cyprus	452	Syrian Arab Republic	426
Tunisia	445	Palestinian Nat'l Auth.	420
Indonesia	427	Georgia	420
Oman	423	Oman	420
Georgia	421	Qatar	419
Kuwait	418	Macedonia, Rep. of	407
Colombia	417	Lebanon	406
Lebanon	414	Indonesia	406
Egypt	408	Morocco	376
Algeria	408	Ghana	306

TIMSS 2007		TIMSS 2011	
Palestinian National Authority	404	Botswana	404
Saudi Arabia	403	Honduras	369
El Salvador	387	South Africa	332
Botswana	355		
Qatar	319		
Ghana	303		
Morocco	402		