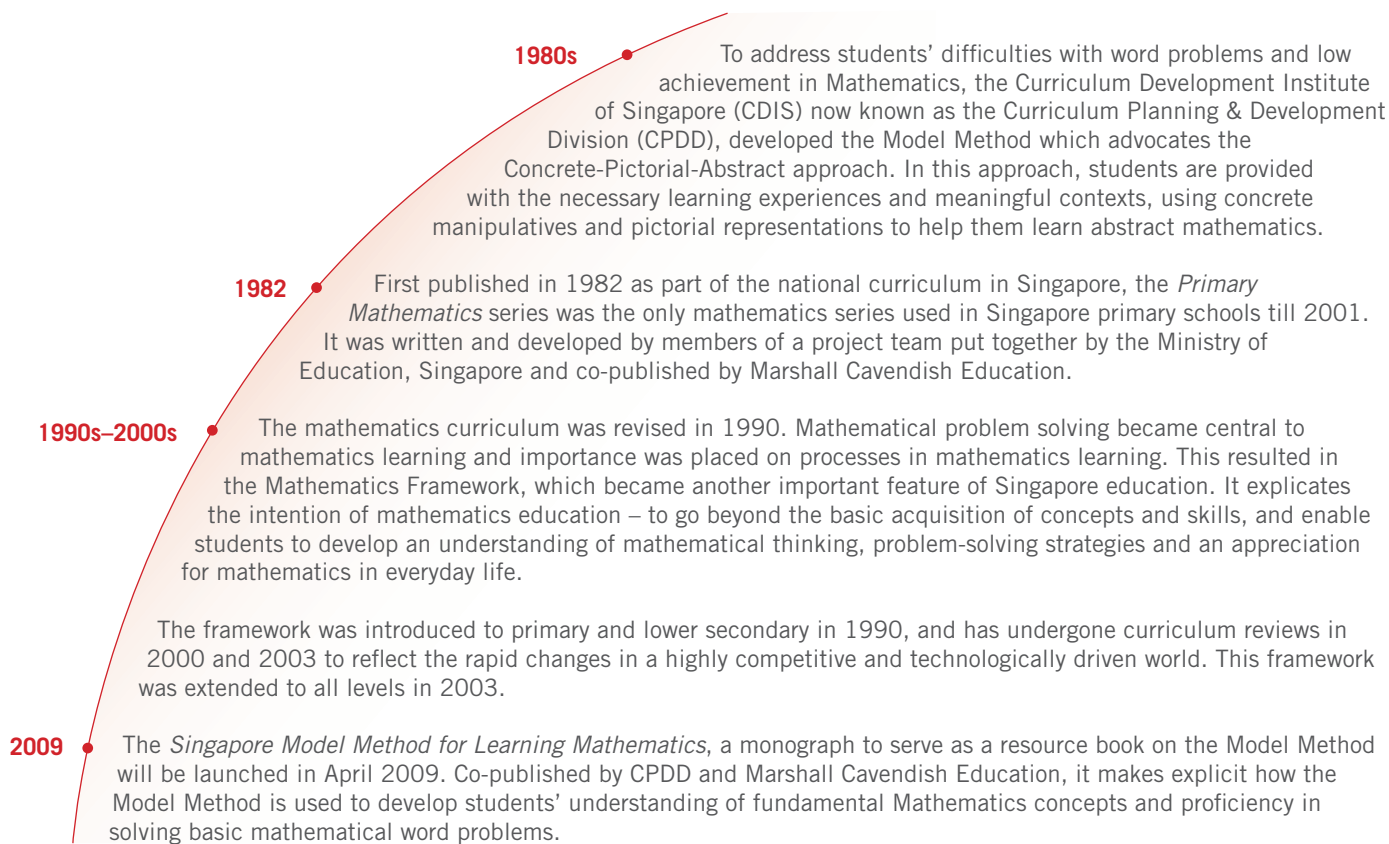


SINGAPORE MATH FACT SHEET

1. SINGAPORE MATH



1.1 Trends in International Mathematics and Science Study (TIMSS)

- The International Association for the Evaluation of Educational Achievement conducted the Trends in International Mathematics and Science Study (TIMSS) since 1995. This is a study of Mathematics and Science achievement of Grade 4 and Grade 8 students in different countries every 4 years. Singapore is consistently in the top ranking countries in 1995, 1999, 2003 and again in 2007.

Exhibit 1.2 TIMSS 2007 Multiple Comparisons of Average Mathematics Achievement

Country	Average Scale Score	Hong Kong SAR	Singapore	Chinese Taipei	Japan	Kazakhstan	Russian Federation	England	Latvia	Netherlands	Lithuania
Hong Kong SAR	607 (3.6)										
Singapore	599 (3.7)										
Chinese Taipei	576 (1.7)	⊙	⊙								
Japan	568 (2.1)	⊙	⊙	⊙							
Kazakhstan	549 (7.1)	⊙	⊙	⊙	⊙						
Russian Federation	544 (4.9)	⊙	⊙	⊙	⊙	⊙					
England	541 (2.9)	⊙	⊙	⊙	⊙	⊙	⊙				
Latvia	537 (2.3)	⊙	⊙	⊙	⊙	⊙	⊙	⊙			
Netherlands	535 (2.1)	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
Lithuania	530 (2.4)	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	

ICSE, IGA/Trends in International Mathematics and Science Study (TIMSS) 2007

TIMSS 2007 Mathematics 4th Grade In grade 4, there is no significant statistical difference between the average achievement of Hong Kong and Singapore.

Exhibit 1.2 TIMSS 2007 Multiple Comparisons of Average Mathematics Achievement (Continued)

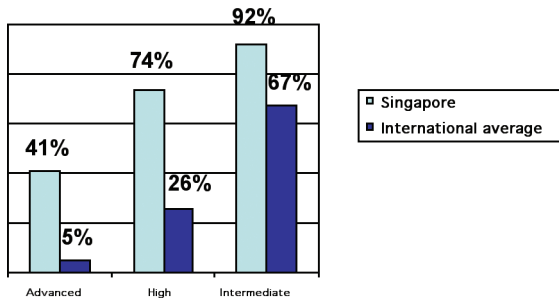
Country	Average Scale Score	Chinese Taipei	Korea, Rep. of	Singapore	Hong Kong SAR	Japan	Hungary	England	Russian Federation	United States	Lithuania
Chinese Taipei	598 (4.5)										
Korea, Rep. of	597 (2.7)										
Singapore	593 (3.8)	⊙	⊙								
Hong Kong SAR	572 (5.8)	⊙	⊙	⊙							
Japan	570 (2.4)	⊙	⊙	⊙	⊙						
Hungary	517 (3.5)	⊙	⊙	⊙	⊙	⊙					
England	513 (4.8)	⊙	⊙	⊙	⊙	⊙	⊙				
Russian Federation	512 (4.1)	⊙	⊙	⊙	⊙	⊙	⊙	⊙			
United States	508 (2.8)	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
Lithuania	506 (2.3)	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	

ICSE, IGA/Trends in International Mathematics and Science Study (TIMSS) 2007

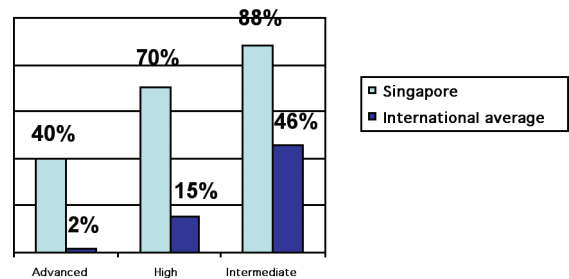
TIMSS 2007 Mathematics 8th Grade For grade 8, Chinese Taipei, Korea and Singapore are the top ranking countries. There is no significant statistical difference between the average achievement of these countries.

- At grade 4, 41% of Singapore students performed at or above the advanced mark, 74% reached the high benchmark and 92% reached the intermediate benchmark. The corresponding international averages are 5%, 26% and 67%
- At grade 8, 40% of Singapore students performed at or above the advanced mark, 70% reached the high benchmark and 88% reached the intermediate benchmark. The corresponding international averages are 2%, 15% and 46%

**International Benchmark Grade 4
Mathematics Performance 2007**



**International Benchmark Grade 8
Mathematics Performance 2007**



1.2 Index of Students' Positive Affect Toward Mathematics (PATM).

Among the top-ranking countries in Mathematics performance, more Singapore students (71% for grade 4 & 60% for grade 8) enjoyed Mathematics than students from Hong Kong, Chinese Taipei or Korea.

Grade 4 PATM	High Attitude	Medium Attitude	Low Attitude
Singapore	71%	14%	15%
Hong Kong	67%	15%	19%
Japan	62%	21%	17%
Chinese Taipei	50%	21%	29%

Grade 8 PATM	High Attitude	Medium Attitude	Low Attitude
Singapore	60%	20%	20%
Hong Kong	47%	22%	31%
Chinese Taipei	37%	18%	45%
Korea	33%	23%	44%
Japan	30%	30%	40%

The Straits Times December 2004

WORLDWIDE TREND STUDY
Students here enjoy learning maths, science

That maybe one reason why they have come out on top in both subjects
By Ho Ai Li and Liza Lin

STUDYING SMART: Primary 5 pupil Eugene Oh was set on scoring high in maths and science – and he got ‘A’ for both and English in the PSLE. —ONG CHIN KAI

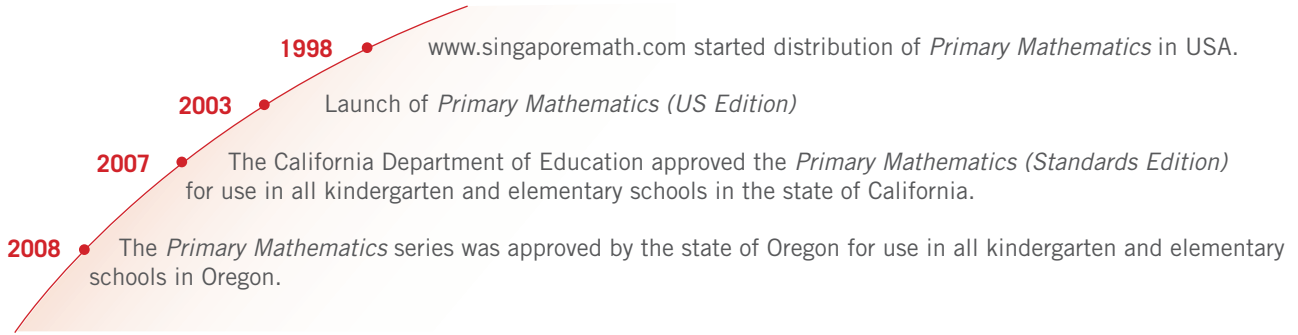
Singapore – **THREE** in four students here say they enjoy learning maths and science, and this may explain why they have beaten peers from 48 countries in the two subjects.

Singapore students were No. 1 in a worldwide study of student achievements in maths and science, called Trends in International Mathematics and Science Study (TIMSS) 2003. Good home and school environments, highly motivated students and access to resources are other reasons cited by a report – from the organisers of the study – on the success of Singapore students.

Enjoying lessons

THREE quarters of the 12,700 Primary 4 and Secondary 2 students said they enjoyed learning the subjects ‘at least a little’. More students, compared to 1995 and 1999 when the same tests were carried out, also said they enjoyed learning these subjects ‘a lot’. Among the Primary 4 pupils, 57 per cent enjoyed maths a lot compared to 48 per cent in 1995.

2. SINGAPORE MATH IN THE UNITED STATES



- Number of adoptions of *Primary Mathematics*: 31 states (out of 50)
- District-wide public school adoption at North Middlesex Regional School District, in Townsend, Massachusetts, 2000.
- The largest public school district adoption to date is Hall County Schools, in Gainesville, GA, which has 22 elementary schools.
- Over 700,000 school children have used *Primary Mathematics* both at school and in home school environment. There are also a substantial number of parents supplementing their children's school program by tutoring at home with *Primary Mathematics*.
- A study of Singapore Math conducted by the American Institutes for Research (AIR) for the US Department of Education (released in Jan 2005) concluded, "What the US needs overall are the sound features of the Singapore Mathematics system." In studying several different American school districts that were experimenting with the program, including North Middlesex, Massachusetts, AIR researchers found that the introduction of Singapore Mathematics textbooks can produce sizeable improvements in student outcomes.



3. PRIMARY MATHEMATICS & OTHER SG MATH SERIES

- The *Primary Mathematics* series was at the heart of the Singapore's national math curriculum as it achieved its successive TIMSS victories. First published in 1982 as part of the national curriculum in Singapore, it was the only mathematic series used in Singapore schools till 2001.
- In 2002, the Israel Foundation for Math Excellence and the US-based Rosenbaum Foundation bought the rights to translate 10,000 copies of *Primary Mathematics 1* and 2 textbooks and workbooks into Hebrew and to distribute them to schools in Israel.

U.S, Malaysia, Thailand, Vietnam, India, Pakistan, Bangladesh, Finland ...

Now, Israel uses S'pore maths textbooks too

Primary 1 and 2 children in over 100 Israeli schools will study basic mathematics the way it is taught here

Starting this month Primary 1 and 2 children in over 100 Israeli schools will study basic mathematics the way it is taught here. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools.

Many people in Singapore are aware of the Singaporean Primary 1 and 2 textbooks. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools.

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Singapore influence has been felt in many parts of the world. In the UK, a pilot programme to use Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools.

that is, 100 per cent more than in 2000. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools.

The Straits Times, 2002 Singapore

US takes a leaf out of S'pore maths book

The United States is taking a leaf out of Singapore's Primary 1 and 2 mathematics textbooks. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools.

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Sitting up to share success, Education Minister Teo Han Joo (left) with American Education Secretary Figure Wisinger (right) in Monday.

The partnership can help to provide better education for children in both countries. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools. The Singaporean Ministry of Education has approved the use of the Singaporean Primary 1 and 2 textbooks in over 100 Israeli schools.

- The Standards Edition of Primary Mathematics was approved by the State of California and Oregon.
- *My Pals are Here! Maths* and *Shaping Maths* are two mathematics series developed in 2002 and published by Marshall Cavendish Education. Approved by the Ministry of Education, Singapore, they are used in over 95% of schools in Singapore today.
- Over 25 countries around the world have adopted the *Primary Mathematics* series published by Marshall Cavendish Education. These include South Africa, Saudi Arabia, Jordan, Chile, Panama, France, Germany, USA, Pakistan, India, Indonesia, Philippines and Taiwan.