

An international context



CAMBRIDGE ASSESSMENT

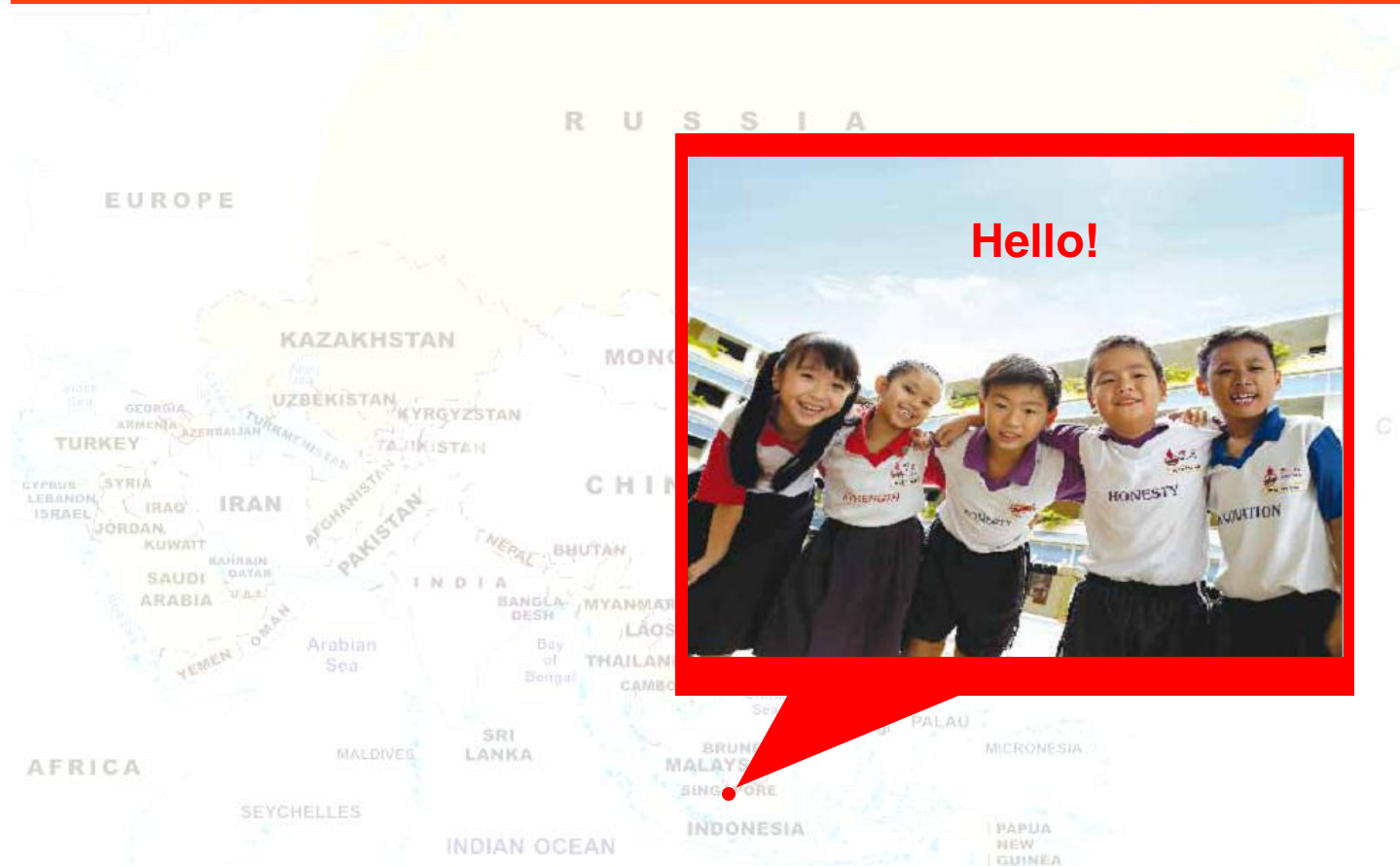
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UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

Greetings from The Little Red Dot



Singapore Fast Facts



Singapore – an island of 700 sq km, population of 5.4 million
(We have **NO** natural resources.)

Then..

Singapore in its
early days



High achievement was not a given. In 1960, among 30,615 candidates who sat for the first Primary School Leaving Examination, 45% of the candidates passed.

In the 1970s, drop out
rate was as high as
56%*

Before 1995, in the
1980s Singapore was
placed 16th out of 24 in
TIMSS when compared
with other industrialized
nations.

* Out of 1,000 pupils entering Primary 1, only 440 reached Secondary 4 after 10 years

And now..

Singapore then (1965)



- Per Capita GDP US\$512.
Literacy rate 45%.
- In 1984, SISS ranking
16th out of 26 nations.

SISS - Second International Science Study
TIMSS = Trends in International Mathematics and Science Study
PISA - Programme for International Student Assessment
PIRLS - Progress in International Reading Literacy Study

Singapore today



- Per Capita GDP
US\$38,000 (in 2015)
- Literacy rate 97%.
- Since 1995, Singapore
students ranked Tops in
International Studies
(TIMSS, PISA, PIRLS &
others)

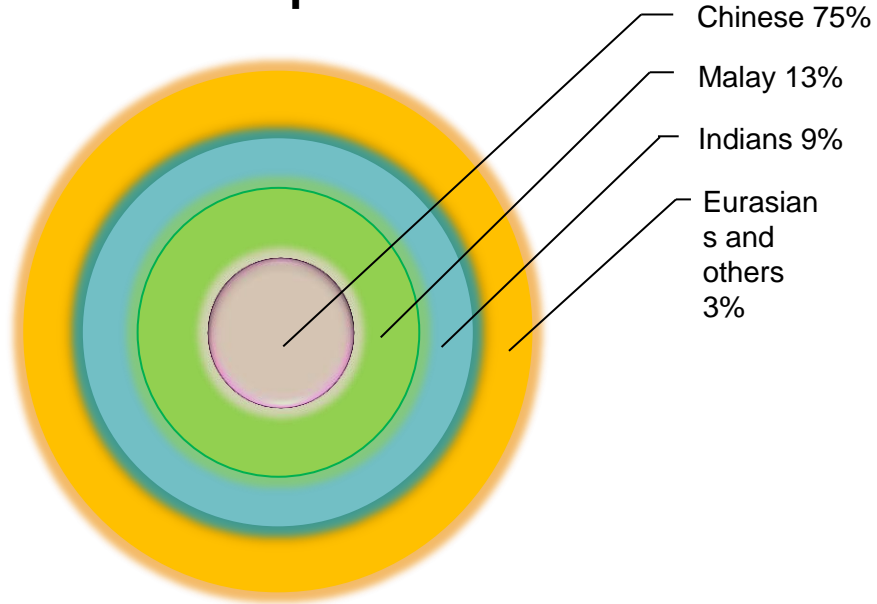
But

10 – 12 % of our households fall under the basic living expenditure of \$1250 per month, per household.

23 – 26% Singapore households income fall under the upper band of \$3000, which is relative poverty.

Racial composition

Racial Composition



Languages Most Frequently Spoken at Home	Percentage
English	32%
Mandarin	37%
Chinese Dialects	14%
Malay	12%
Indian	4%
Others	1%
Total	100%

School hours

Formal School Hours for Primary Schools

0730 – 1300 (5.5 hours)

1300 – 1830 (5.5 hours)

Primary	1	2	3	4	5	6
MINIMUM MATH HOURS PER WEEK	5	5	5	5	5	5

Formal School Hours for Secondary Schools

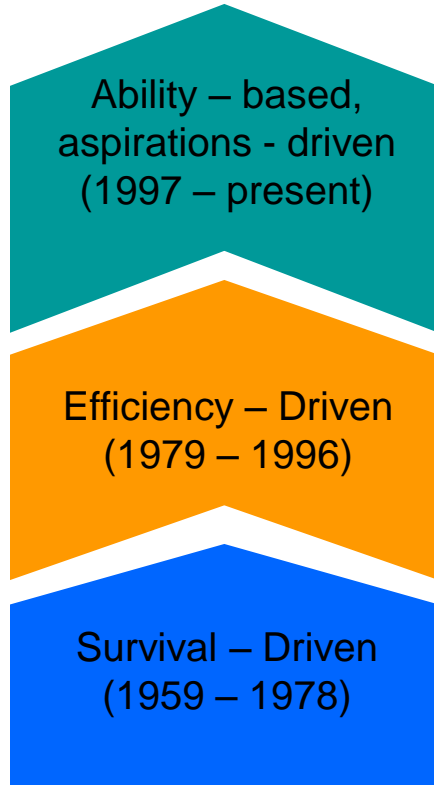
0730 – 1330 (6 hours)

Secondary	1	2	3	4
MINIMUM MATH HOURS PER WEEK	5.5	5.5	5.5	5.5

Qualifications of teachers (2015)

Level	Non-Graduates	Graduates
Primary	4,063	10,620
Secondary	801	14,407
Junior Colleges	9	2,998

Education Development in Singapore



- Progress in education = Teacher be nimble, teacher be quick!
 - Progress in education, technology
- From a skilled force to a professional force, from blue collar to white collar.
 - Not enough trained teachers
- Manufacturing industries – need for skilled labour. Small group of literate people guiding the majority. Teacher-student ratio of 1:50



In the early years (1980s)

Ministry of Education:

- Curriculum Planning Division
- Curriculum Development Institute of Singapore (textbooks)
- Examinations Division



Publishers

All divisions were **Independent** of each other

- CPDD – syllabus
- CDIS – books and teaching materials
- Exams – research and testing

An example of how it works:

1980

To address the difficulties with word problems and low achievement in Maths, Curriculum Planning and Development Division (MOE) developed the Model method, which is an important aspect of the Concrete - Pictorial - Abstract approach.

1982

The CPA approach was incorporated into the pedagogical framework and instructional design of the Primary Math textbooks.

Co-published by CDIS and Marshall Cavendish Education.

1990s to 2000

Revisions were made to reflect the rapid changes in a highly competitive and technologically driven world.

We preserved the Model Method and the CPA approach.

2001

MOE opened textbook development to commercial publishers. Closed down its own textbook publishing division.

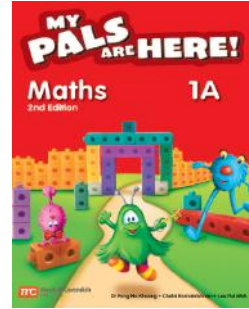
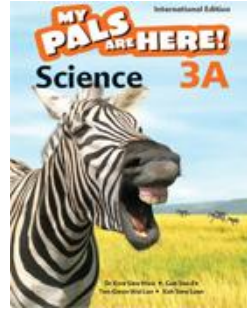
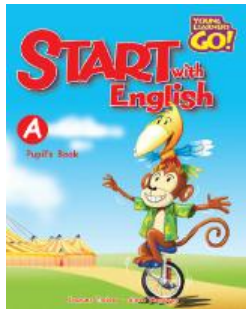
Marshall Cavendish published the textbooks along with other competitors.

We are still the market leader.

Factors for our success?

Our textbooks:

- Address the needs of both teacher and student.
- Learner-centric that caters to different abilities.
- Teacher-centric with embedded professional development (learn as you teach).



Factors for our success?

- A science and an art
- Authors & consultants, researchers
- Editorial input
- Instructional design consideration
- Teachers' and students' feedback, resources, "Armoury", efficacy studies
- Collaboration



Digital contents for education

1998

- Internet and multimedia
- MOE Started “Students’ & Teachers’ Workbench” project
- MC worked with MOE to deliver the animated lessons to schools.

2000 - current

- Learning management systems with contents provided to schools by various publishers

2016 – 2017

- New Vision - portal for contents?

Technology – content publisher on multi-platforms

Smartphone



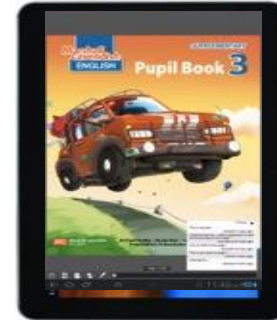
Net book



PC



Notebook



Tablet



Marshall Cavendish Institute

- Comprehensive professional development programmes
- Focus on curriculum content and pedagogy
- Topical courses, certifications or customised

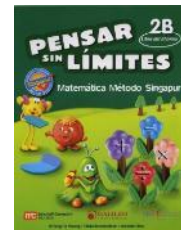
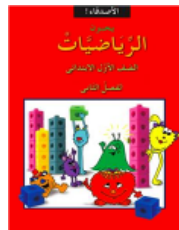
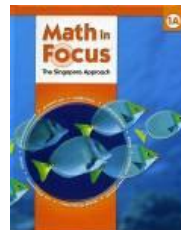
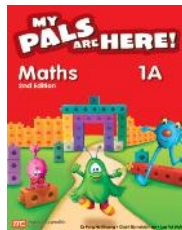
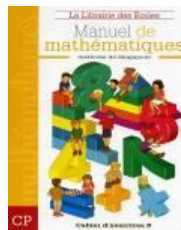
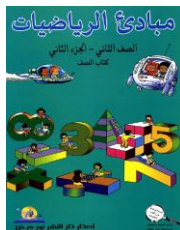
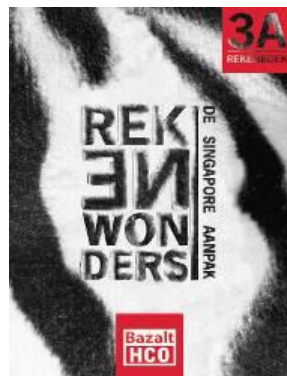


Singapore Curriculum Throughout the World

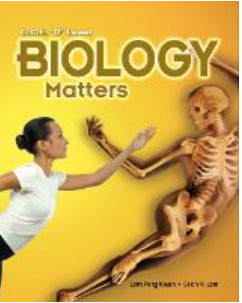
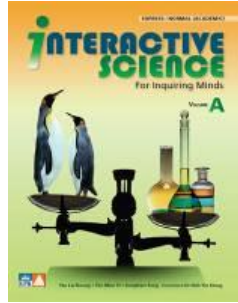
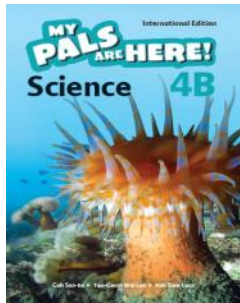
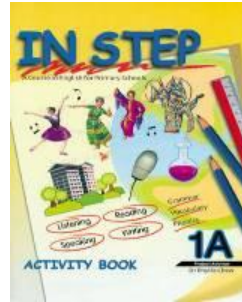
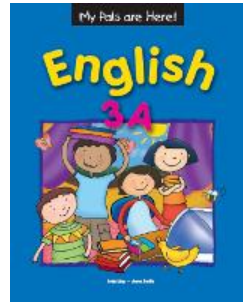
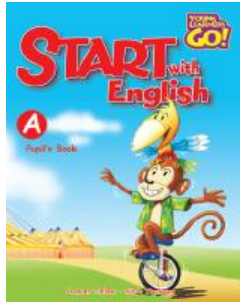
NEW!
Dutch Edition



Netherlands



Singapore Curriculum Throughout the World



Singapore's Approach to Education

*“Education is not just about training for jobs...
it opens doors for our children, gives them hope
and opportunities... our children are our future.”*

*- Mr Lee Hsien Loong
Prime Minister, Singapore*

