

Singapore Experience on improving quality of education

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Global Trends – effective education

In a 21st century world where jobs can be shipped wherever there's an internet connection; where a child born in Dallas is competing with children in Delhi; where your best job qualification is not what you do, but what you know, education is no longer just a pathway to opportunity and success, it is a prerequisite ... The future belongs to the nation that best educates its citizens.

Mr Barrack Obama

President, United States of America

The Singapore Story



**An island of just
707.1 sq km
with no natural
resources**

**Its only resources –
Its PEOPLE**

The ideal student in the era of modernisation was diligent, rule following, rational, national.

The ideal student in the era of globalisation is multilingual, creative, transnational, technology-embracing.

Objectives of Education

- National goals
- Eradication of poverty
- Self actualisation

In the case of Singapore, education policy has been linked with:

- Economic development policy
- Development of national identity and cohesiveness

From Third World to First

Singapore then (1965)



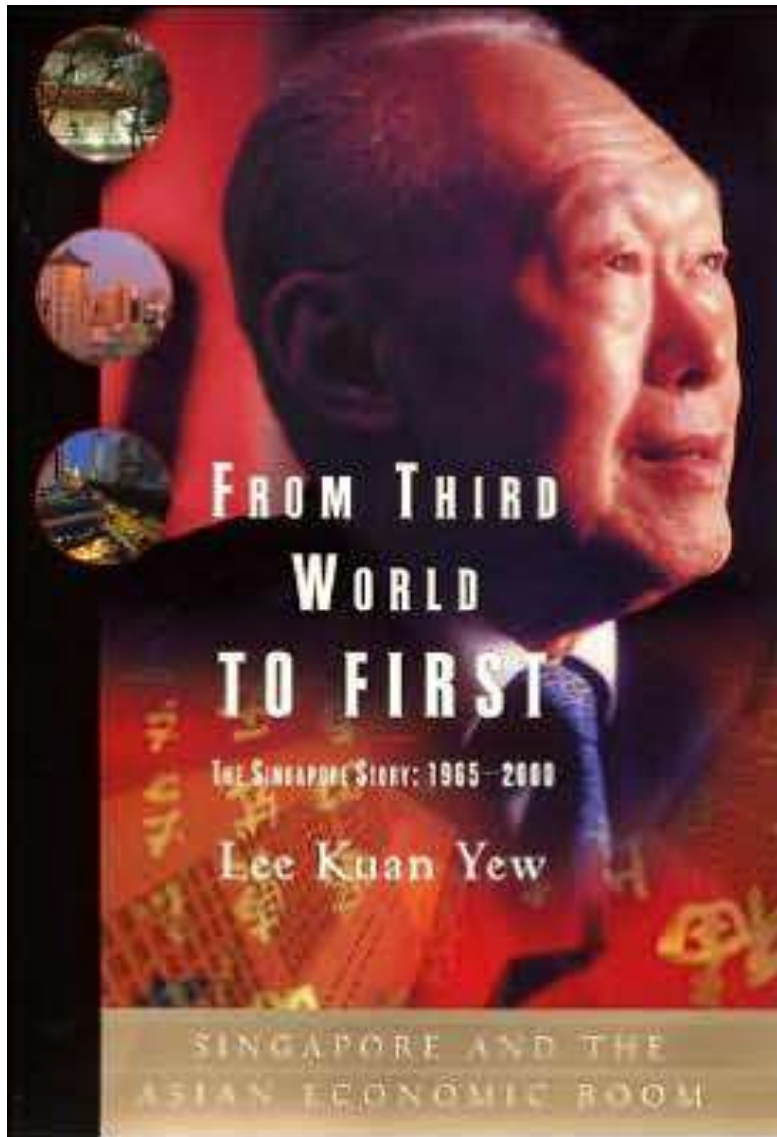
- Per Capita GDP USD1,300
- Literacy rate 45%.
- In 1984, TIMSS ranking 16th out of 26 nations.

Singapore today



- Per Capita GDP USD42,000
- Literacy rate 97%.
- In 2003, TIMSS ranking 1st out of 49 nations.

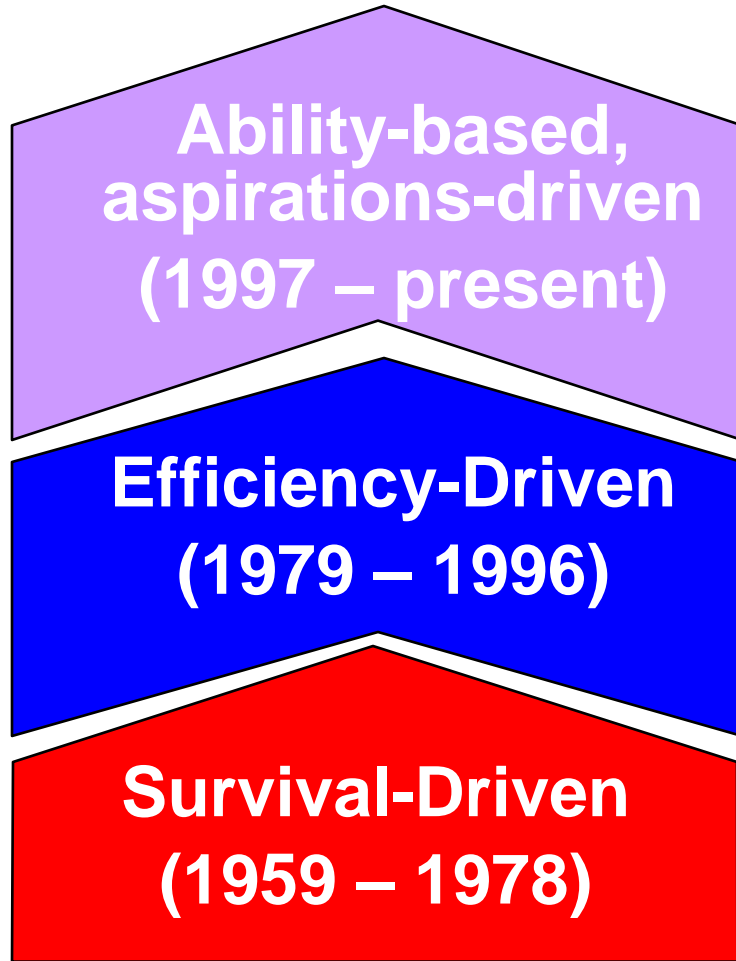
TIMSS = Trends in International Mathematics and Science Study



*From Third
World to First
The Singapore Story:
1965 – 2000*

**by Minister Mentor Lee
Kuan Yew**

Education Development in Singapore



- Flexibility and diversity
- Top-down support for ground-up initiatives
- Developing further peaks of excellence in different areas
- Ability-based streaming introduced
 - Independent School
 - Autonomous Schools
- Building a national education system
- Bilingual policy
- Vocational and Technical Institutions

The State, the Economy & Education

“We have to prepare ourselves for a future of intense competition and shifting competitive advantages, a future of ever increasing change where technologies are replaced at an increasing pace.”

Goh Chok Tong
Prime Minister, Singapore
1997

Policy Responses: Pedagogy

- ✓ Towards Excellence in Education (1986)
- ✓ Thinking Schools Learning Nation (1997)
- ✓ IT Masterplan (1997)
- ✓ National Education (1997)
- ✓ Innovation & Enterprise (2003)
- ✓ Teach Less Learn More (2004)
- ✓ Nurturing Every Child (2005)
- ✓ Curriculum 2015 (2009)
- ✓ PERI (2009), SERI (2010)
- ✓ Curriculum Flexibility for N(T) (2011)

Singapore's Education Reforms

Towards Excellence in Education: Singapore's rapid school expansion efforts had resulted in standardization. The Excellence Report which created 'independent schools' (and later autonomous schools) was an attempt to devolve greater management and curriculum authority to schools, as well as to enable the top 20% to benefit from an enriched curriculum.

Singapore's Education Reforms

- ✓ **TSLN (1997):** to introduce critical and creative thinking, more diversity in curriculum, greater structural diversity (independent and autonomous schools, niche schools, IP schools) greater resourcing to encourage bottom up innovation, improvements in teacher education and service and working conditions.
- ✓ **Innovation & Enterprise (2003)**
- ✓ **Teach Less Learn More (2004)**

Singapore's Education Reforms

IT Master Plans: to exploit the potential of information and communication technology to give students access to new information sources and make anytime, anywhere learning possible.



Singapore's Education Reforms

National Education:

designed to better
acquaint students with
their own history, to
strengthen civic
commitments, and protect
and defend Singapore's
core values



Singapore's Education Reforms

“We have identified as a key focus the fostering of a culture of innovation and enterprise throughout our education system. To prepare students for a future of relentless change, schools themselves must keep looking for ways to improve and stay relevant. Schools themselves have to be models of innovative practices. We must remain open to new ideas and approaches, and at times create new approaches or pedagogical methods.”

Tharman Shanmugaratnam
Minister for Education, Singapore
2003

Singapore's Education Reforms

In order to make a successful economic transition Singapore needed:

- Close linking of manpower and economic priorities
- An education system with a strong focus on science and technology
- English to communicate with investors and to seek export markets
- A labor force with relevant industrial skills



Results

- ✓ Singapore has created a system of high averages with high levels of post-secondary participation, >75% of year 10 school leavers go on to high quality, work-relevant programmes
- ✓ Outstanding results in TIMSS, PISA, PIRLS
- ✓ Compared to other 'tiger economies', Singapore's productivity levels are higher
- ✓ Workforce has a strong work-ethic, is collaborative rather than confrontational and has much improved opportunities for re-training
- ✓ High regard for TVET; skill acquisition pays off in the economy
- ✓ Government investment in R&D is rapidly increasing and a research culture is being built up

Institute of Technical Education



New ITE Headquarters (1995)



ITE College East (2005)



New ITE Bishan Institute
(1994)

Singapore Education system

Qualifications of Singapore Teachers

Level	Non-Graduates	Graduates
Primary	5 928	6 669
Secondary	1 070	10 602
Junior Colleges	11	2 524

Singapore's Education Reforms

Teacher Capacity Building

- 100 hours of professional development entitlement
- More opportunities for postgraduate study
- Teachers Network; Academy of Singapore Teachers
- Senior Teachers / Master teachers
- Research Activists
- School-based Curriculum Development
- Systemic training for school leaders since mid 1980s

WORLD CLASS EDUCATION



A World Leader in Education – Research Reports

Singapore as a model for education cited in several reports:

- The Global Competitiveness Report, [World Economic Forum](#), 2010.
- Rethinking Human Capital in Education: Singapore as a Model for Teacher Development, [Aspen Institute Education and Society Program](#), 2008.
- How the World's Best-Performing School System Come Out on Top, [McKinsey & Company](#), 2007.
- What the United States Can Learn from Singapore's World Class Mathematics System, [American Institute for Research](#), 2005.

A World Leader in Education – News Obama Video



... For Our Children For Our Future



THANK YOU.

