# ABILITY-DRIVEN EDUCATION IN SINGAPORE: RECENT REFORM INITIATIVES

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# Outline of Presentation

- Brief about Singapore and features of education system as cultural context

- Historical perspective on educational developments and reforms

- Current reforms in the context of ability-driven education

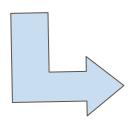- Personal Observations/Reflections

# SINGAPORE

- Small country

- Multiracial and multicultural

- Meritocracy

- Some national concerns - how to deal with competition from China, India and SEAsian neighbours; terrorism; globalisation.

# Role of Education in Singapore

- Nation-building
- Economic Development
- Social Cohesion

Government Investment in Education 3.8% of GDP in 2003

# Education System in Singapore

- National school system

- English as the medium of instruction

- Common Curriculum for all schools

- Primary Education – 6 years (178 pri schs)

- Secondary Education – 4 years (165 sec schs)

- Pre-University Education – 2 years (16JCs & 2 CIs)

# BILINGUALISM

- Children learn English and learn their Mother-tongue language in school.

- Results of the policy: Effectively a bilingual society, after four decades of nationhood.

  - The 2000 census showed for the first time that a majority of the Singapore population is now literate in two or more languages (56% in 2000 compared to 45% in 1990).

  - Among Chinese youths (aged 15-24), 88% are literate in Mandarin and 98% in English.

- Refinements to mother-tongue policy (2004)

# STREAMING

- Streaming occurs at P4. Streaming has been refined recently to remove EM1 and EM2 distinction.  EM 3 remains.

- High stakes examinations
  - PSLE which streamed children into Special/Express/Normal Academic and Normal Technical Streams.  More pressure on kids now to enter integrated programmes available in top secondary schools.
  - O level examinations - entry to pre-university, polytechnics and Institute of Technical Education
  - A levels and Poly Diploma - entry to 3 universities.

# Three Phases of Educational Developments

- Survival-Driven Education (1959 – 1978)

- Efficiency-Driven Education (1979 – 1996)

- Ability-Driven Education (from 1997)

# Survival-Driven Education

- Response to Economic Survival
    - Mass Education with rapid rate of building of schools
    - Technical Bias in curriculum
- Response to national cohesion
    - 4 vernacular schools and hence need to unify standards
    - Schools under a national system with a common curriculum

# Efficiency-Driven Education

- Ability streaming introduced
    - Streaming at P3 into normal, extended and monolingual (revised to P4 and renamed EM1,EM2, EM3; further revised in 2004 to remove EM1 and EM2 distinction)
    - Streaming at end of P6 into Special, Express and Normal Streams in secondary schools

- Curricular Changes

- School Management
    - Emphasis on school reform with schools given greater autonomy

# Effects of Efficiency-Driven Education

- Reduction of educational wastage

- Uniformity and standardisation

- Narrow emphasis on academic achievement

**"Thinking schools to be crucibles of questioning and searching, within and without the classroom ….and Singapore a Learning Nation that goes beyond schools.."**

**Prime Minister Goh Chok Tong**
**International Conference on Thinking, 2 July 1997**

# KEY THRUSTS OF TSLN

- Emphasis on Critical and Creative Thinking
- Use of Information Technology in Education
- National Education (Citizenship Education)
- Administrative Excellence

# THINKING SCHOOLS

- Fundamental review of curriculum

- Reduction of subject content

- Revision of assessment mode

- Greater emphasis on process instead of outcomes e.g. introduction of project work
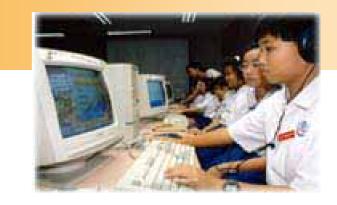
# Project Work allows students to:

- Apply creative and critical thinking skills

- Foster collaborative learning skills

- Improve communication skills

- Develop self-directed inquiry and life-long learning skills.

# Infusion of IT in Schools
## IT MasterPlan

- Pupil-Computer Ratio  2: 1
- Teacher-Notebook Ratio  2:1
- Whole School Networking
- 30% of curriculum time to be IT-based
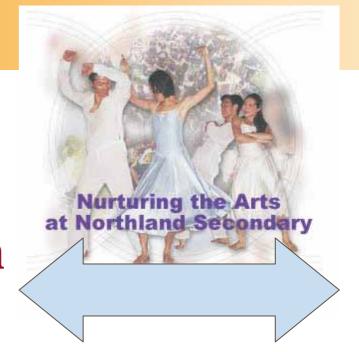
# National Education

**The objective is to develop national cohesion, the instinct for survival and confidence in the future by**

- fostering a sense of identity, pride and self-respect as Singaporeans;
- knowing the Singapore story;
- understanding Singapore's unique challenges, constraints and vulnerabilites;
- instilling core values of our way of life.

# TSLN heralds
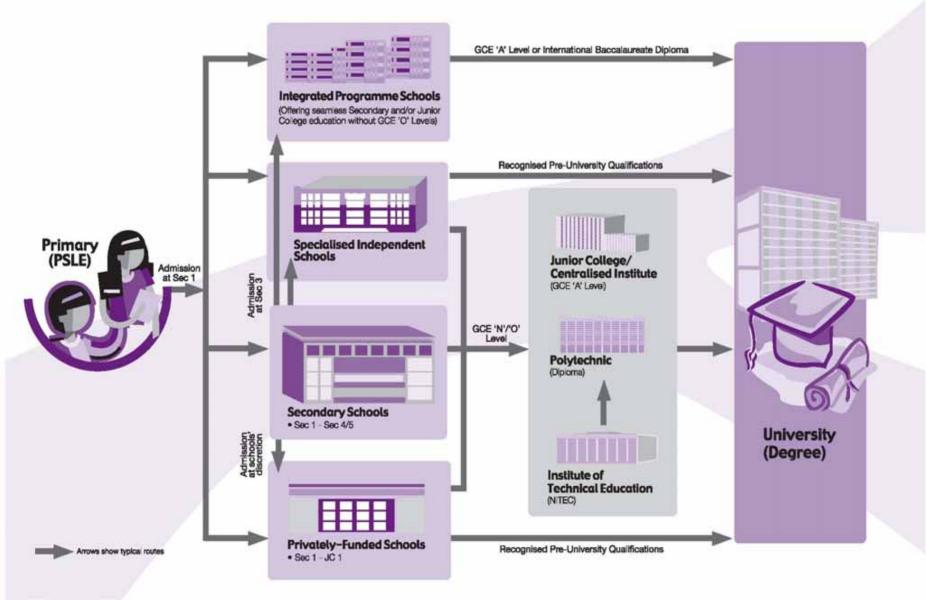# Ability-Driven Education

- Focus on developing the full spectrum of talents and abilities in each child through a mass customized approach to education

- Focus on holistic education with greater emphasis on character rather than imparting just knowledge and content.

# KEY PRINCIPLES

**Improving Quality**

**Increasing Diversity**

**Maintaining Access**

**Primary (PSLE)**

Admission at Sec 1

Admission at Sec 3

Admission at schools' discretion

**Integrated Programme Schools**
(Offering seamless Secondary and/or Junior College education without GCE 'O' Levels)

GCE 'A' Level or International Baccalaureate Diploma

**Specialised Independent Schools**

Recognised Pre-University Qualifications

**Secondary Schools**
• Sec 1 - Sec 4/5

GCE 'N'/'O' Level

**Privately-Funded Schools**
• Sec 1 - JC 1

Recognised Pre-University Qualifications

**Junior College/ Centralised Institute**
(GCE 'A' Level)

**Polytechnic**
(Diploma)

**Institute of Technical Education**
(NITEC)

**University (Degree)**

Arrows show typical routes

# The Education Landscape

# CURRICULUM REFORMS

- Innovations in Pedagogy
  - Strategies for Effective Engagement and Development (SEED) & lower class size
  - Strategies for Active and Independent Learning (SAIL)
  - IT Innovations – Digital Literacy
- Broadening of CCA framework (from 2004)
- Changes in assessment – source-based questions; IB and NUS High school Diploma.
- Revised JC Curriculum – K&I (in 2006)

qualitative

holistic

# School Leaders and Teachers are the keys to success of education reforms

**Autonomy**

**Quality**

# TEACHER ED REFORMS

- Review of Teacher & Educational Leadership Programmes
  - ➢ Foundation Programmes
  - ➢ Diploma in Departmental Management & Leaders in Education Programmes

- Professional Development of Teachers
- New Career Tracks; New Recognition Structure; Work Attachment Scheme; 3000 more teachers by 2010

CONNECT

EduPAC

# My Observations & Reflections

- **Pace of Reform & Teacher Stress**
- **Experimentation & failure/School Ranking?**
- **Elitism &Equity/Ethnicity**