International Trends in Education: The Singapore Story and Challenges for Singapore Educators

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Overview

• Education in Focus

• Accountability and Performance

• Education in the 21st Century

• The Singapore Context

• Challenges
Education in Focus

• Education is the most important concern in all countries

• Gleny Stacey. Head of the Office of Qualifications & Examinations Regulation (Ofqual), UK.

“I believe that to be a very significant and important debate in this country: What is it that we actually expect to achieve and what do we value as a society?” (The Guardian, UK, 1 Nov 2013).
Shakeup of examination system in England set for 2017:

“England could be awarded the grades measured against their peers in countries such as Singapore, in an effort to tackle under-performance in international education league tables”

(Gleny Stacey)
Education in Focus

- Swedish Education Minister, Jan Bjorklund, is concerned that Swedish pupils have fallen behind their international peers [The Economist, (UK), 2 Nov 2013]

- He was referring to the Programme for International Student Assessment (PISA)

- Swedish results have been declining since 2000
Accountability and Performance

• TIMSS 2011 (Trends in Mathematics & Science Study)
  Assessed students achievement in Mathematics and Science at the 4th and 8th Grades in 63 countries and 14 States/Regions.

• PIRLS 2011 (Progress in Reading Literacy Study)
  Assessed student achievement in Reading at the 4th Grade in 49 Countries and 9 States/Regions.

• TIMSS & PIRLS are designed to measure trends in achievement and to show growth or decline over time.”

• [http://timss.bc.edu]
Accountability and Performance

• PISA (Programme for International Student Assessment) It aims to evaluate education system worldwide, every 3 years by assessing 15-year-olds’ competencies in the key subjects of Reading, Mathematics and Science. 70 Countries have participated since 1997.

• Next PISA result is due on 3 December 2013

• [www.oecd.org/pisa/]

[Image for NIE Singapore]
Accountability and Performance

- Singapore came in top 5 in TIMSS and PISA, along with other East Asian Countries.

- The results of Singapore students showed consistency across the different surveys which signals that we are on the right track.

- The success factors according to PISA are:
  - Home environment and pre-primary education
  - School environment
  - Teachers – Teacher selection and preparation
  - Students’ attitudes.
Education in the 21st Century

- Developing intelligence is about learning to solve problems.

- Problem solving in real-world contexts involves multiple ways of knowing and learning.

- Harnessing intelligences
  - From within individuals,
  - From groups of people and
  - From the environment to solve problems
Education in the 21st Century

Not creating value in education if we...

• Teach content and routines that do not relate to real world living
• Impart skills that are not sufficiently transferable across situations
• Use learning processes that do not impact on independent life-wide learning
• Use learning environments that do not encourage motivation, independence and collaboration
It’s about the Real World.....

Applying for a job at IKEA

Make a chair and take a seat.
World of Change and a Living Curriculum

- 21st CC (e.g., Global Awareness, Critical & Inventive Thinking, Information & Communication Skills and Collaborative Team Work)

- Learning in relation to Real World Living, Thinking and Working (environment and tools)
World of Change and a Living Curriculum

"No, you weren't downloaded. Your were born."
Singapore’s Key Success Factor: Tripartite Partnership

- Transforming teacher education is a task NIE cannot achieve in isolation.

- There is a need for unified commitment and alignment of efforts from all key stakeholders – NIE, MOE and schools.

- Schools are important partners in strengthening the theory-practice linkage.
Teacher Education in Singapore

- Teacher Education (TE) reflects Singapore’s approach to education and aims to be well-grounded in the pragmatics of the school’s role in developing the child as a holistic learner.

- TE asserts the university’s role of NIE in advocacy and advancing the frontier of knowledge and practice (research and evidence-based).
Emphasis in Teacher Education Programme in NIE
New Momentum

- Value-based teacher education (V³SK)
- Professional learning community (School, AST, NIE, others)
- Developing teachers with a world view (Ecological validity)
- Empowering evaluation (new approaches to assessment)
Professional Learning and Development

• Teacher lifestyle of improving practice in student-centric thinking (teaching practice and e-portfolio)

• Professional habits of thinking and models of improving practice (constructing teacher identity in different phases of development)

• Approaches and framework for role as collegial critic and professional learning (social co-construction of learning, etc)
Challenges

“A teacher is not just a teacher of the subject but more importantly a teacher of the learner and a preserver and custodian of the values of society.”

Tan Oon Seng, 2012
Dean, Office of Teacher Education
National Institute of Education
Challenges

• Recognition of Changing World

• Changing Nature of Knowledge

• Changing Profiles and Participation of Learners
Challenges

- 21st Century skills integration
- Changing students' profile
- Complex environment
- Volatile, Uncertain, Complex, Ambiguous
- New Assessment for Applied Learning
- Creativity
- Critical thinking
- Intrinsic motivation
- Accountability
- Workload
- Appraisal
- Professional development
- Promotion
- Parental pressure, etc
- Customized programme
- Technology

THE PROFESSIONAL

- Nurturing leadership
- Conducive environment
- Collegial team
- Mentors
- Appreciative students
- Planned professional development
- Access to relevant resources
- Developmental review/appraisal
- Professional learning communities
- Clear career development
Exporting the NIE model