



# A Snapshot of Issues and Trends in 14 -19 yrs Education: A (Selective) Asian Perspective





# 21<sup>st</sup> Century Education Challenges

Educational, social and economic...

- Nurturing future citizens who have a sense of themselves as individuals and other their roles in and contribution to society
- Need to nurture students to ensure a socially cohesive, humane society, respecting differences of all kinds
- Contributing to economic growth and greater opportunities for all...

The economic, educational and social aspects of the 14-19 year education is played out differently in 3 East Asian contexts.....



# Secondary Education Challenges: Pedagogic

What and How Should Schools Teach....

- *“ the ability to learn how to learn and other metacognitive or thinking skills , the ability to learn on the job and in teams, the ability to cope with ambiguous situations and unpredictable problems”*

D.H. Hargreaves in *Education Epidemic*

- *Building an inclusive curriculum and certification framework.*



# Secondary Education Challenges: Economic

- Viable 21<sup>st</sup> century economies are likely to be those that leverage on knowledge and innovation
- Thus all countries face a national skills upgrade and a R & D challenge
- However, country responses vary widely for e.g.
  - UK has huge capacity for cutting edge R & D but major problems with literacy and numeracy
  - Singapore has a high plateau of basic knowledge and skills but underdeveloped innovation capacity



## Secondary Education Challenges: Affective divide?

“.. Secondary education coincides with a critical phase in students’ lives, identity issues, both academic and non-academic loom large, the influence of peers is strong and of parents weak. Many teenagers lack information about opportunities in the local, regional and national labour markets. ....They are going to require more opportunities to make those decisions that will impact on their future careers and civic roles.”







# Asian challenges...

- Individual economies are unique in terms of
  - Geography, demography
  - socio-political climate, and
  - resources set aside for education and its ability to contribute to socio-economic development
- Though there are many similarities, especially in policy intent, wide-ranging differences exist in resources, implementation, creation of skills and job creation capacity.





# Simplifying the picture in Asia

- A snapshot of 3 economies .
  - ***Japan***
    - Economy is principally ***innovation driven*** with some ***investment type*** features.
  - ***Singapore***
    - Economy is principally ***investment driven*** with some ***innovation*** features.
  - ***Thailand***
    - Economy is a combination of ***factor and investment driven types*** and there is a movement towards KE



# Asian economies.. under the microscope....

- The extent of deprivation amidst economic growth
  - 641 million live in poverty
  - 97 million children are malnourished
  - 4 million children die before 5
  - Agricultural productivity is declining; there is a need for another 'agricultural revolution' by giving farmers and their children access to relevant knowledge and skills

UN's Economic and Social Commission for Asia and the Pacific ( 2008 )



# Key Issues for Secondary Education Reform – Policy Moves (1)

- ❑ Relative success of EFA is putting pressure on budgets, curriculum and teachers.
- ❑ Curricular irrelevance: While there is some movement to make education ‘relevant’, academic education is strongly preferred as it leads to ‘prestigious professions’
- ❑ Mere access to secondary education does not translate to success (policy needs to promote better quality and higher standards of learning, teaching and teacher education.)



# Key Issues for Secondary Education : Policy Moves (2)

- ❑ Key policy moves to make secondary education more successful:
  - In developing countries the issue is of increasing access and improving quality; in developed economies it is about relevance.
  - Old debates about general and technical/vocational are increasingly irrelevant; all need access to economically valuable skills
  - Recruiting and preparing more high quality teachers to meet new pedagogical challenges.





# Key Issues for Secondary Education : Policy Moves (3)

- Key policy moves to make secondary education more successful (cont'd)
  - Investing in high quality technical and polytechnic institutes
  - Working closely with industry and service institutions
  - Offering more choice/pathways in secondary education

# Japan

- ❑ An OECD country, economic & technological superpower
- ❑ A century of experience in modernizing education and skills building
  - More than 15,000 vocational schools by 1931
- ❑ Schooling able to provide (up to now) a disciplined workforce
- ❑ Skills enhancement through on the job training.



# Challenges for Japan

- In 30-50 yrs, China will be able to do everything Japan can and it has a larger labour pool and internal market
- Education system can no longer guarantee compliant workers
- Need for greater mastery of foreign language
- Need for greater internationalization of education

# Responses by Japan

- Change in national curriculum for primary and secondary schools to promote more creative problem solving learning
- Minimization of knowledge requirements to reduce cramming
- MEXT action plan for upgrading English proficiency in 2003



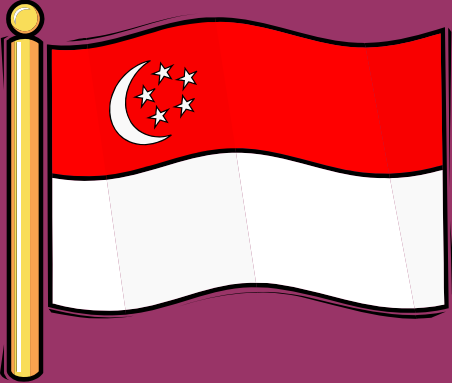


# How Japan prepares the less academically able youth for the workplace

- Enterprise-based training is the dominant mode of training; in most other countries public education institutions have been the TVET providers
  - this ensures direct entry into workplace
- Vocational education need not necessarily be purely vocational and technical.
  - TVET is geared to ensure relevance across a wide variety of occupations.
  - Emphasize general skills, broad attitudes and discipline in technical vocational education as these are more valued than vocational skills *per se* in labour market. This is particularly important in the rapidly changing economic systems

# Current Education Scenario in Singapore

- Existing education system seen as highly successful but high emphasis on content mastery
- More than 75% of Yr 10 students attain 5 or more 'O' levels
- English is the main language of instruction



# Challenges in Singapore

- ❑ Need more innovation in industry
- ❑ Improve language and IT skills
- ❑ Ensure everyone is able to find a job in the new economy – especially slow learners.



# Responses : More choices for secondary education in Singapore

Broader definition of ability and multiple pathways to secondary schooling

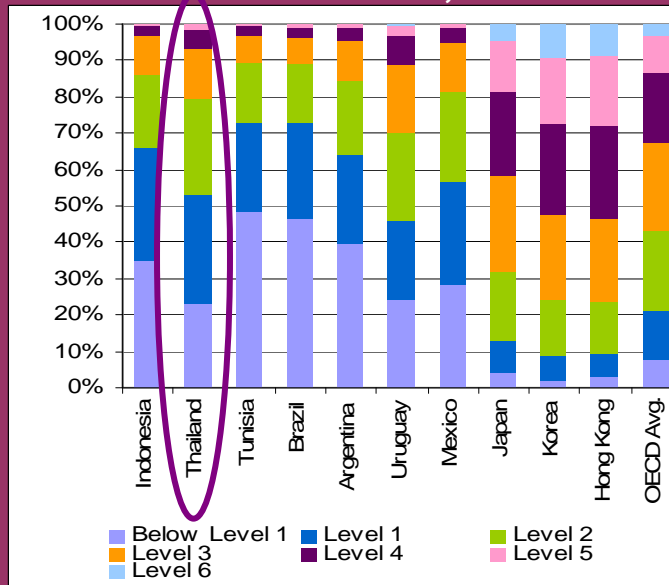
- ❑ Singapore Sports School
- ❑ NUS High School of Mathematics and Science
- ❑ School of the Arts
- ❑ School of Science and Technology
  - This includes Design, Environmental Science and Technology, Biotechnology and Media Studies)
  - It will also tap widely into ICT and draw teachers from schools, industry and polytechnics
- ❑ No attempt to equate academic and vocational qualifications



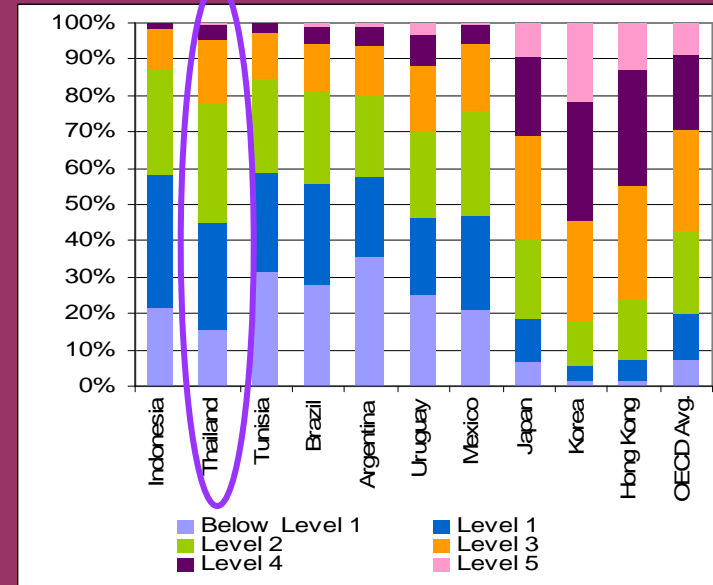
# Thailand

- A developing economy
  - Primary education is accessible to all
  - Low performance in PISA and TIMMs type of international ranking scales
- Need for both rural and urban type skills
- Workforce is relatively unskilled

PISA Test Scores in Mathematics, 2006



PISA Test Scores in Reading Literacy, 2006

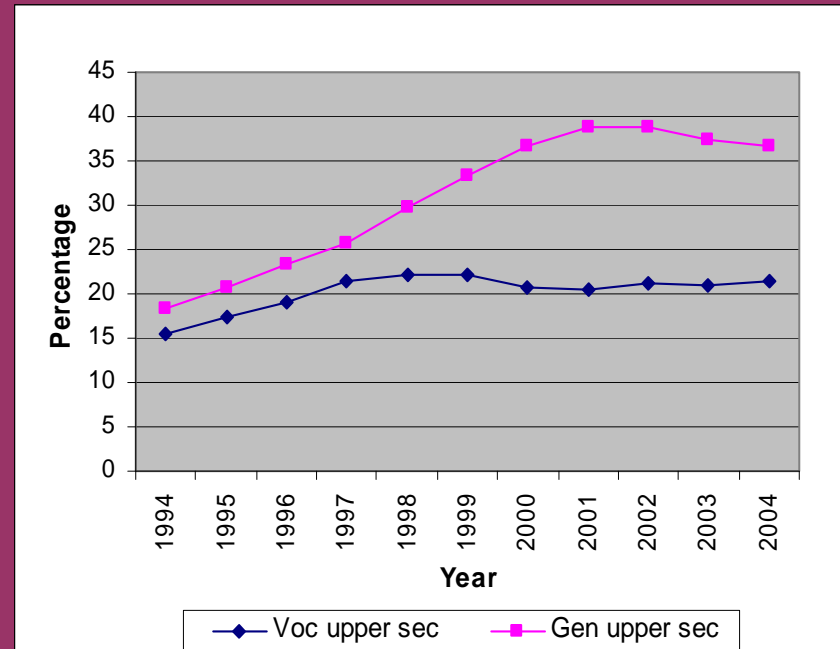


Source: PISA, 2006

# Thailand : 14-19 yr Education Challenges:



- ❑ Limited access to secondary education
- ❑ Difference in rural and urban school and teacher quality – due to poor relevance
- ❑ Difference in educational attainment between rural and urban sectors
- ❑ Educational finances strained by need to deal with AIDS and environmental degradation.
- ❑ Vocational education growth has remained flat, in spite of labor market demand.



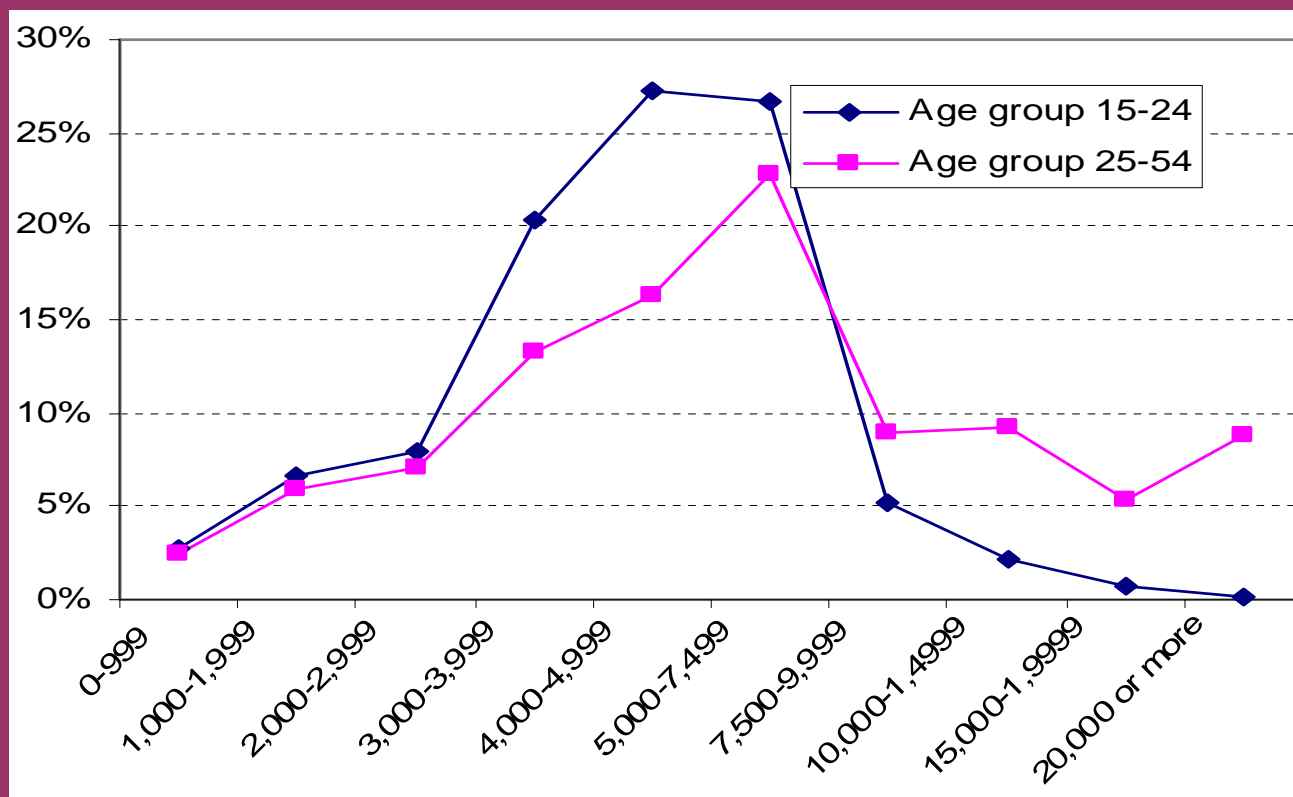
Gross Enrollment in Vocational and General Upper Secondary Education (as Percentage of Age Group Population)



# Moving from School to Work

- Students entering workforce face insecurity due to poor skills

## Monthly Wage Distribution According to Age Group, 2005



Source: LFS 4<sup>th</sup> quarter, 2005



# Thai Responses - Preparing youth for the world of work

- Thai Education Strategic Plan (2004-2008) has set an enrolment target to ensure up to 70% of secondary enrolment will be in vocational education.
- Setting up of the Thai Vocational Qualification Institute for the development of Vocational Qualification
  - Oversee the development of vocational qualifications (VQ) based on occupational competency standards, assessment and validation of workplace experience and the organization of training to bridge the skills gap
  - Credits appointed to all areas of vocational skills and this is accredited to encourage life-long learning culture.
- Schools in rural areas focus on skills that develop sustainable local economies

# Conclusion

- Reality - Issues faced by countries may be similar in some aspects as the economies modernize...
  - but this is usually tempered by country-based social and political realities....

The End