Singapore’s Experience with Learning Assessment

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Background Information
Formal Schooling in Singapore

- **Primary School**
  - 6 years (Primary 1 to 6)

- **Secondary School**
  - 4 or 5 years (Secondary 1 to 4 or 5)

- **Junior College or Polytechnic**
  - 2 or 3 years

- **University**
National Examinations in Singapore

• Primary 6 (Grade 6)
  – Primary School Leaving Examination
    • PSLE

• Secondary 4 (Grade 10)
  – General Certificate of Education Ordinary
    • GCE N Level
    • GCE O Level

• Junior College 2 (Grade 12)
  – General Certificate of Education Advanced
    • GCE A Level
History
In the last 50 years, the achievement level has improved significantly ...

<table>
<thead>
<tr>
<th>PSLE 1960</th>
<th>PSLE 2008</th>
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<tbody>
<tr>
<td>45% of the 30 615 candidates passed the first national examination for elementary school students</td>
<td>97% of the 49 856 candidates passed the national examination for elementary school students</td>
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Source: Tan, Chow & Goh 2008
Source: Ministry of Education 2008
The control of the examination has been taken over by the local examination board.
In the earlier years, students took examinations meant for students in UK.

Since 2002, Singapore Ministry of Education (MOE) assumed greater control of the examinations.

In 2004, the Singapore Examinations and Assessment Board (SEAB) was set up.
The emphasis on problem-solving and other higher-order competencies has taken over the emphasis on memorizing facts.
Primary 6 (Grade 6) Mathematics

David and Michael drove from Town A to Town B at different speeds. Both did not change their speeds throughout their journeys. David started his journey 30 minutes earlier than Michael. However, Michael reached Town B 50 minutes earlier than David. When Michael reached Town B, David had travelled $\frac{4}{5}$ of the journey and was 75 km away from Town B.

a. What was the distance between Town A and Town B?

b. How many kilometers did David travel in 1 hour?

c. What was the time taken by Michael to travel from Town A to Town?
The form of examinations has changed but examinations continue to play important functions in the Singapore system.
Alternative modes of assessment were introduced.

• **Authentic Assessment**
• **Coursework Assessment**
• **School-based Assessment**
There is also greater flexibility and choice.

- Integrated Programme Schools
- Specialized Schools
- Direct School Admission
- Subject-Based Banding in Primary Schools
- Applied Subjects in Secondary Schools
Functions of National Examinations in Singapore
Students have a stake in their performance.
Examination results are used to select schools at the next level and to obtain scholarships. Employers use examination results to recruit workers.
Families have a stake in their performance.

Performance in examination plays a major role in transforming economic status of families.
Schools have a stake in their performance.

How students in schools perform in absolute as well as value-added terms are variables in determining schools’ performance.
Government has an interest in the students’ performance. Examination results indicate the state of education.
The Role of National Examinations in High Educational Outcomes in Singapore
Curriculum Goals

In preparing students for national examinations, teachers ensure the curriculum is well covered.
Hard Work
As everyone, including and especially the students and their families, has a vested interest in the outcome, national examinations teach the value of individual hard work.
Higher-Order Competencies

As the examination includes challenging items, schools have to help students develop higher-order competencies in order to do well in the examinations. This impacts on the quality of instruction in the classroom.
Future Competencies

Decisions made not based on cost alone have minimized the use of multiple-choice items and this requires students to develop presentation and communication skills in presenting answers.
Basic Competencies

If it is the public perception is that the assessment is fair and everyone has an equal chance to do well, then schools and parents will give struggling students the necessary remedial help to level up. This ensures the lowest achievers have enough basic competencies for further training.
Stability & Continuity

Citing educational principles and keeping politics out of education, MOE has always defended the high expectations of the national examinations. This has ensure stability and continuity in the assessment system over the years.
Future Directions

Such stability and continuity have allowed MOE to use assessment data to identify strengths and weaknesses of the system and make timely adjustments and reforms.
For national examinations and other forms of learning assessment to have impact, high level of public confidence is necessary.
The three necessary conditions for high level of public confidence

- Valid
- Reliable
- Fair