Education’s Right Angle

The intersection between Quantity and Quality

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How is a country’s educational success most commonly measured?

Measurements of Quantity
- Enrolment Rate
- Attendance Rate
- Survival Rate

Measurements of Quality
- Youth Literacy
- PISA (Subject Performance)
Survival Rate @ Primary School

Source: UNESCO Institute for Statistics (n.d.)
Survival Rate @ Primary School

Source: UNESCO Institute for Statistics (n.d.)
Programme for International Student Assessment

Triennial international survey evaluating education systems worldwide by testing skills and knowledge of 15 year olds
Almost similar performance in terms of measurements of quantity...

But quality-wise, the performances are clearly different.

Source: OECD (n.d.)
WHY THE DIFFERENCE?

Time Spent Studying In and Out of School

Amount and Quality of Educational Resources

Number and Quality of Education Staff

PISA SCORES
**Time Spent Studying**
*(In and Out of School)*

Science best learnt with hands-on-experience

Sufficient time practicing a language is essential for mastery

Correlation between Time Spent and Performance

Little evidence that after school maths centers are effective

Source: OECD (n.d.)
<table>
<thead>
<tr>
<th>Educational Resource Index</th>
<th>Source: OECD (n.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate or poor quality</td>
<td>Educational Material</td>
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<tr>
<td>Indonesia</td>
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<tr>
<td>Singapore</td>
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<td>Thailand</td>
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<td>Vietnam</td>
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</tbody>
</table>
Key Findings

SINGAPORE

Best performer with LEAST LACK for all resources

Source: OECD (n.d.)
Key Findings

- Inadequate or poor quality Educational Material
- Assisting Staff
- Teaching Staff
- Lack of Educational Material
- Assisting Staff
- Teaching Staff

**THAILAND**

**LACK** in numbers and quality of **TEACHING & ASSISTING STAFF**

Source: OECD (n.d.)
### Key Findings

<table>
<thead>
<tr>
<th>Inadequate or poor quality</th>
<th>Lack of</th>
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<tr>
<td>Educational Material</td>
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<td>Teaching Staff</td>
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</tbody>
</table>

*VIETNAM*

LACK adequacy and quality of TEACHING AND ASSISTING STAFF

Source: OECD (n.d.)
Key Findings

Lack of inadequate or poor quality educational material assisting teaching staff.

INDONESIA

LACK in quantity and quality of educational materials.

Source: OECD (n.d.)
### Level of Educational Resources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sub-Variable</th>
<th>Correlation with Average PISA scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate of poor quality</td>
<td>Educational Material</td>
<td>-0.85</td>
</tr>
<tr>
<td></td>
<td>Assisting Staff</td>
<td>-0.62</td>
</tr>
<tr>
<td></td>
<td>Teaching Staff</td>
<td>-0.45</td>
</tr>
<tr>
<td>Lack of</td>
<td>Educational Material</td>
<td>-0.82</td>
</tr>
<tr>
<td></td>
<td>Assisting Staff</td>
<td>-0.58</td>
</tr>
<tr>
<td></td>
<td>Teaching Staff</td>
<td>-0.67</td>
</tr>
</tbody>
</table>

Source: OECD (n.d.)
Where should we go now?
Governments to invest more into obtaining high quality educational resources

**Infrastructure**
- Providing quality materials to schools
  - Building proper facilities such as science labs, internet connections

**Educational Material**
- Providing quality materials to schools
  - Identifying materials crucial to provide proper instructions at schools

**Teaching & Assisting Staff**
- Improving quality of teachers
  - Developing better staff support and training
Revamp the current education systems and methods of teaching in class

- Provide a more holistic curriculum
- Educate students on the necessary life and soft skills
- Device curriculums that go beyond the 3 basic areas of knowledge
- Alter mindset to focus on the attainment of knowledge rather than scoring in exams
- Implementing co-creation curriculum
What if???

Assumption
- No policy implemented
- Trend remains constant

Source: OECD (n.d.)
What if???

Assumption
- Policy implemented
SUMMARY

- **Maths and Science** best learnt in school
- **Language** requires a lot of practice and time
- **Lack of Quality Educational Materials** has a strong impact on student performance.
THANK YOU FOR LISTENING

QUESTIONS?