Fixing the Foundation: Teachers and Basic Education in East Asia and Pacific

World Bank Regional Flagship Report, 2023
Early investments were key to East Asia’s remarkable development
East Asia Pacific is a region of education overachievers

PISA Reading Scores (2018)
The Problem
In 14 out of 22 countries, more than half of 10-year-olds can’t read with understanding

<table>
<thead>
<tr>
<th>Country</th>
<th>Share of 10-year-olds who cannot read and understand an age-appropriate text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>18</td>
</tr>
<tr>
<td>China</td>
<td>18</td>
</tr>
<tr>
<td>Thailand</td>
<td>23</td>
</tr>
<tr>
<td>Mongolia</td>
<td>39</td>
</tr>
<tr>
<td>Malaysia</td>
<td>42</td>
</tr>
<tr>
<td>Indonesia</td>
<td>53</td>
</tr>
<tr>
<td>Myanmar</td>
<td>89</td>
</tr>
<tr>
<td>Cambodia</td>
<td>90</td>
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<tr>
<td>Philippines</td>
<td>91</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>98</td>
</tr>
<tr>
<td>Palau</td>
<td>10</td>
</tr>
<tr>
<td>Fiji</td>
<td>41</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>53</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>58</td>
</tr>
<tr>
<td>Samoa</td>
<td>59</td>
</tr>
<tr>
<td>Marshall Islands, Rep.</td>
<td>61</td>
</tr>
<tr>
<td>Kiribati</td>
<td>62</td>
</tr>
<tr>
<td>Tonga</td>
<td>71</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>72</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>73</td>
</tr>
</tbody>
</table>

50% Line

Source: World Bank Learning Poverty Database
Strong skills must be built on strong foundations: the importance of foundational learning

- Basic Education
  - Literacy
  - Numeracy

- Secondary Education
  - Problem solving
  - Communication
  - Digital skills

- Tertiary Education
The Diagnosis
Teachers matter the most for learning in school

Impact of teacher quality on learning performance of Vietnamese primary-school students

Beginning 2nd grade

Average students

Source: World Bank estimates based on Carneiro et al. 2022
Impact of teacher quality on learning performance of Vietnamese primary-school students

Teachers matter the most for learning in school

Impact of teacher quality on learning performance of Vietnamese primary-school students

Average students

Top third

With high-performance teachers

Bottom third

With low-performance teachers

Beginning 2nd grade

End of 5th grade

Source: World Bank estimates based on Carneiro et al. 2022
Where data exist, they indicate that teachers have not mastered the curriculum they teach – example from Indonesia

Distribution of teacher scores in an assessment of the 4th-grade language content knowledge

Source: Yarrow N. B., Afkar, Masood, & Gauthier, 2020
Where data exist, they indicate that teachers have not mastered the curriculum they teach – example from Indonesia

Distribution of teacher scores in an assessment of the 4th-grade language content knowledge

Source: Yarrow N. B., Afkar, Masood, & Gauthier, 2020
Classroom observation indicates that teachers often employ ineffective teaching practices – example from the Philippines

Distribution of scores for effective teaching practices

<table>
<thead>
<tr>
<th>Percent (%)</th>
<th>Low</th>
<th>Medium Low</th>
<th>Medium High</th>
<th>High</th>
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<tr>
<td>19</td>
<td>66</td>
<td>15</td>
<td>0</td>
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</table>

Source: Molina et al. 2018
The Solutions
In principle, three ways to improve teacher quality

- Strengthen Teacher SELECTION
- Enhance Teacher CAPACITY
- Encourage Greater Teacher EFFORT

Improving Teacher Inflow
Improving Performance of Existing Teachers
But most of tomorrow’s teachers have already been recruited.

- **Incoming teachers in 2030**
- **Existing teachers in 2030**

### Improving Teacher Inflow
- Strengthen Teacher Selection
- Enhance Teacher CAPACITY

### Improving Performance of Existing Teachers
- 69% of teachers

### Encourage Greater Teacher EFFORT
Therefore, enhancing teacher capacity is the priority

- **Strengthen Teacher Selection**
  - Attract strong candidates (salaries, career paths)
  - Employ meritocratic, learning-focused selection

- **Enhance Teacher Capacity**
  - Support and incentivize improvement
    - **Training**
    - **Tools**
      - EdTech
      - Structured lesson plans
      - Targeted instruction

- **Encourage Greater Teacher Effort**
  - Incentivize teacher effort
    - Promotion
    - Salary
    - Accountability
    - Exit
Many training programs in nine countries surveyed were not well designed and, hence, likely not effective. The percentage of teacher training programs that involve the "four C's": Content (81%), Continued (85%), Colleagues (40%), and Career (88%).

Source: World Bank staff calculations, based on new 2022 ITTSI data.
Well-designed teacher training programs, based on the four C’s, enhance student learning

Proportion of 2nd grade students who can read with understanding

Tonga

"Come Let’s Read and Write"

Source: Macdonald et al., 2018
And money spent on effective training is a best buy

Present value of per pupil program cost: -$116

Present value of per pupil program benefit: +$1,425

Source: Macdonald et al., 2018
EdTech has the potential to improve both teaching quality and learning

Source: Nicola Bianchi, Yi Lu, Hong Song
The Way Forward
Reforms to support teachers and strengthen teaching are needed to accelerate learning

Actual

Historical progress

Projections

No reforms

With reforms

Learning poverty (%)

Historical progress

No reforms

With reforms

<table>
<thead>
<tr>
<th>Y1</th>
<th>Y2</th>
<th>Y3</th>
<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
<th>Y7</th>
<th>Y8</th>
<th>Y9</th>
<th>Y10</th>
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<td>56</td>
<td>46</td>
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Today

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<th>t-8</th>
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<th>t-6</th>
<th>t-5</th>
<th>t-4</th>
<th>t-3</th>
<th>t-2</th>
<th>t-1</th>
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Chart showing the percentage of learning poverty over time, with and without reforms, indicating the need for reforms to accelerate learning.
Vietnam

Why Vietnamese children outperform the British at school

Vietnam's education system is remarkably effective – what lessons can other developing countries learn?

By Sarah Newey, GLOBAL HEALTH SECURITY CORRESPONDENT, IN BANGKOK
29 August 2023 - 3:28am

- Efficient public spending on basic education
- Strong teacher selection and training
- Engagement of all stakeholders
Thank you for your attention!

Please visit the “Fixing the Foundation” website for more insights: