The Invisible Toll of COVID-19 on Learning

Pathways to Learning Recovery and a more Productive Future for Indonesia’s School Children

World Bank
June 26, 2023
Contents

1. Context of Learning Loss
2. Study Findings: How much learning losses occurred, for whom?
3. Economic Implications
4. Conclusions and Recommendations
How students missed out on learning due to COVID-19

1. Normally, students spend time in schooling, and their learning level increases over time.

2. Disrupted learning processes

3. Learning Loss: The gap between what students did not learn but would have learned in a normal year (forgone and forgetting)

4. Post-COVID19 Learning trajectory (Business as usual)

Learning trajectory:
- Pre-COVID19 Learning trajectory
- Learning trajectory
- School closing
- School opening

Time
The longer the schools remained closed, the larger were the learning losses, globally.

Note: Grades and subjects covered by these assessments vary across countries.

Source: World Bank (2023, p.6)
Indonesia has one of the longest school closures in the world

Length of School Closures (full and partial) in Days

<table>
<thead>
<tr>
<th>Country</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>649</td>
</tr>
<tr>
<td>Indonesia</td>
<td>644</td>
</tr>
<tr>
<td>Philippines</td>
<td>532</td>
</tr>
<tr>
<td>Vietnam</td>
<td>321</td>
</tr>
<tr>
<td>Singapore</td>
<td>115</td>
</tr>
</tbody>
</table>

Average number of structured learning hours by year

- **Fully Open**
  - 2018/19: 1086
  - 2019/20: 825
  - 2020/21: 567
  - 2021/22: 941

- **Partially Reopening**
  - 2018/19: 685
  - 2019/20: 129
  - 2020/21: 345
  - 2021/22: 247

- **Remote Learning**
  - 2018/19: 169
  - 2019/20: 247
  - 2020/21: 596

Sources:
- UNESCO Institute for Statistics
- Learning Loss Survey 2023
Government of Indonesia has made efforts to mitigate learning losses

Immediate Responses

- Broadcasted learning contents through TV and Radio
- Supported students and teachers through targeted education financing schemes, including a BOS (School Operational Funds) allocation reform.
- The GoI introduced Emergency curriculum in response to the pandemic.
- The GoI introduced distance learning guidance and a series of online-based initiatives with free internet quota during the distance learning period.
Study Findings:

How much learning losses occurred, for whom?
Providing new nationwide evidence of learning losses after COVID-19 induced school closures in Indonesia

Note: Additional schools under MoECRT were included in the 2023 survey to make the sample nationally representative.

- First before-after comparison
- Nationally representative*
- Same schools*
- Same grade (Grade 4)

- Same period of academic year
- Same tests and subjects
- Matching
- Weighting
Approximately 11 months of learning losses in math and language at a national level in Indonesia.

Size of Learning Losses in Months, by Subject

- Mathematics: -11.2 months
- Language: -10.8 months

Source: Authors’ analysis using SDI Survey 2019 and Learning Loss Survey 2023

Note: The scores were standardized with the mean of 0 and standard deviation of 1. Based on the standardized score, students’ performance was converted to the month-equivalent by using the internationally used rule of thumb, that is an average student learning in a year is equal to about 0.300 of a standard deviation.
Despite having one of the world’s longest periods of school closure, Indonesia’s learning loss may not appear as large as the global trend.

Source: Authors’ analysis using SDI Survey 2019 and Learning Loss Survey 2023
Widened inequality:

Students from poor households lost 18 and 27 months in math and language.

Source: Authors’ analysis using SDI Survey 2019 and Learning Loss Survey 2023

Note: The scores were standardized with the mean of 0 and standard deviation of 1. Based on the standardized score, students’ performance was converted to the month-equivalent by using the internationally used rule of thumb, that is an average student learning in a year is equal to about 0.300 of a standard deviation.
Students who had no internet use during school closures had particularly low performance.

Note: The scores were standardized with the mean of 0 and standard deviation of 1. Based on the standardized score, students’ performance was converted to the month-equivalent by using the internationally used rule of thumb, that is an average student learning in a year is equal to about 0.300 of a standard deviation.

Source: Authors’ analysis using SDI Survey 2019 and Learning Loss Survey 2023
Students who had experienced death or sickness of a family member or someone close were also affected.

Learning gaps among subgroups with different experiences in their environment during school closures

<table>
<thead>
<tr>
<th></th>
<th>Mathematics</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced Sickness</td>
<td>-11.9 (-11.9)</td>
<td>-10 (-8.9)</td>
</tr>
<tr>
<td>Family or Someone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced Death</td>
<td>-17 (-15.1)</td>
<td>-8.9 (-8.9)</td>
</tr>
<tr>
<td>Family or Someone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ analysis using SDI Survey 2019 and Learning Loss Survey 2023

Note: The scores were standardized with the mean of 0 and standard deviation of 1. Based on the standardized score, students’ performance was converted to the month-equivalent by using the internationally used rule of thumb, that is an average student learning in a year is equal to about 0.300 of a standard deviation.
Economic Implications
Losses of future earnings and productivity can be high in Indonesia.

The estimated *individual loss* of lifetime earnings will be:
- M: 31%
- F: 39%

If learning loss is not remediated.

Simulated age-earning profiles of workers with and without learning loss, by gender

Source: Authors’ analysis using SDI Survey 2019 and Learning Loss Survey 2023

Note: Indonesia Family Life Survey (IFLS) 2014 was used to calculate correlations of math competency on earnings.
Conclusions and Recommendations
Takeaways of Findings

1. Approximately 11 months of learning losses in both math and language experienced among Grade 4 students.

2. Widened inequality: Students from poor families lost 18 and 27 months in math and language.

3. Economic impact of learning losses can be large: Losses of lifetime future earnings and productivity.

However, the majority of teachers do NOT recognize learning losses. “Invisible Toll”
Current Responses from the Government

1. **Merdeka Belajar**: a comprehensive set of instruments that enable teachers and principals to shape their teaching practices
   - Relies on independent judgment by the relevant actors, some schools and regions, particularly those who are deeply affected by the pandemic, may need further guidance on how to use the instruments for learning recovery

2. **Kurikulum Merdeka**: allow for schools to adapt the curriculum to fit their context and environment
   - Implementation is limited to the use of curriculum without significant adaptation to local context. Can be a powerful tool to introduce progression of curriculum for learning recovery

3. **Pendidikan Guru Penggerak**: leadership and training program for teachers
   - Curriculum specifically designed to address learning recovery can be introduced to accelerate dissemination of information required to accelerate learning recovery
Policy Recommendation 1

Initiate deliberate actions for learning recovery now,
by
• creating political commitment for learning recovery,
• allocating resources, and
• engaging stakeholders

• Allocate budgets for immediate learning recovery actions and prompt political commitment through the Merdeka Belajar program for learning recovery

• Raise the awareness of teachers, principals, officials of subnational governments, and other education stakeholders about student learning loss and their role in addressing them

• Raise awareness of parents to engage them in continued supplementary home-based learning
Policy Recommendation 2

- **Catch-up on lost learning time**, by temporarily increasing class hours, offering remedial lessons, or leveraging private learning support outside regular class hours through initiatives like *Kampus Mengajar* initiative.

- **Teach at the right level for students**, and emphasize the implementation of *Merdeka Belajar* to *Teach at the Right Level* and actively adapting learning for learning recovery.

- **Track student performance improvement**, by continuously assessing student competency and monitoring improvements through promoting the use of the assessment instrument available in the *Merdeka Belajar* platform.
Address inequality in learning by

- allocating additional resources to support disadvantaged or underperforming students

- Allocate additional resources to subnational governments and educational institutions for learning recovery activities where learning performance is particularly low or learning loss is particularly large

- Provide implementation and capacity building support for subnational education officers to ensure effective use of resource and implementation of targeted interventions

- Provide support to students with disabilities, out-of-school children, and those who may need psychological help
Terima Kasih