Learning Loss and Student Dropouts during the COVID-19 Pandemic

Laura Moscoviz and David Evans

Source: Moscoviz and Evans 2022
We read 40 studies estimating learning loss (29 studies) and dropout rates (15 studies).

We learned three things.

Source: Moscoviz and Evans 2022
3 big messages

1. We still don’t know how much learning has been lost in the vast majority of countries.

2. Average measured learning loss was negative, but it varied dramatically across countries.

3. Learning loss and increased dropouts were much higher for the poorest children within countries.

Source: Moscoviz and Evans 2022
The COVID pandemic has been disruptive.

Source: UNESCO 2021
Schools were closed for a significant proportion of children’s schooling careers + Kids lose learning when schools are closed

- Learning loss during regular closures (Cooper et al. 1996; Slade et al. 2017)
- Added complications of COVID closures
  - Unexpected
  - Other shocks (health, income)

Source: Evans et al. 2021
Forgotten learning + foregone learning
“Learning loss”
What we searched for

- Studies that report empirical estimates of dropout rate, learning loss, or both
- Basic education: pre-primary, primary, and secondary
- Any country in the world

Source: Moscoviz and Evans 2022
Most learning loss estimates from high income countries

All dropout rate estimates from low- and middle-income countries

<table>
<thead>
<tr>
<th></th>
<th>Learning</th>
<th>Dropout</th>
<th>Both</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Low &amp; middle income</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>11</td>
<td>4</td>
<td>40</td>
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</tbody>
</table>

Source: Moscoviz and Evans 2022
This is just 14% of countries in the world!
Learning loss in high-income countries

Average learning loss in almost every study

• National samples:
  • Netherlands, UK, USA
• Subnational samples:
  • Belgium, Germany, Italy, Switzerland, USA
• Biggest impacts in primary
• Math and language (neither consistently larger)

Much worse for the poorest kids

• Netherlands and Italy: 60% higher losses for the poorest kids
• Belgium: Inequality within schools rose by 17-20%
• USA: Achievement gaps between low- and high-poverty schools rose by >=0.1 SD
• Australia: 2 months slower growth in least advantaged schools

Source: Moscoviz and Evans 2022
Learning loss in Brazil

Secondary education students in São Paulo State, Brazil

• School closures of 35 weeks in 2020
• Quarterly standardized tests
• Naive estimate understates learning loss (a lot) – caveat: simplified curriculum in 2020
• Estimated: 28% of learning in absence of closures

Test score impacts

Source: Lichand et al. 2022
Learning loss in Mexico

Mexico

• Two household surveys: November 2018 and May 2021
• 10-15 years old
• Two states: Campeche & Yucatan
• Medición Independiente de Aprendizajes
  • 2nd grade reading
  • 2nd and 4th grade math

% of 10-year-olds who can read with comprehension

Source: Hevia et al. 2022
South Africa and Bangladesh

South Africa

- Ten-week full closure in 2020, delayed re-opening in 2021, rotating attendance
- Same children: end-2019 vs end-2020
- Early 2021 – Grade 4 reading
  - \(\frac{1}{4}\) of home tongue reading ability
  - \(\frac{1}{2}\) of English ability

Bangladesh

- Repurposed impact evaluation
- 2018 vs 2021
- Adolescent girls aged 12-19 (grades 7 and 8)
- 6% drop in median score

Source: Shepherd et al. 2021 (backed up by Ardington et al. 2021)

Source: Amin, Hossain, and Ainul 2021
Where are we not seeing (average) loss?

Uganda

Burkina Faso, Burundi, Côte d’Ivoire, Senegal, and Zambia

Proportion of 5th/6th grade students who met or exceeded minimum proficiency levels in reading

Source: Sandefur 2022; building on Uwezo Uganda 2021

Source: UNESCO UIS 2022
Heterogeneous impacts in low- and middle-income countries

**Mexico**
Low SES students lost 2x as much reading

**Bangladesh**
Learning loss among poorest 40% of girls was > 2x higher

**Ghana**
Learning gap widened for poorest students in reading and math

**Uganda**
Number of non-readers doubled, concentrated among the poorest kids

**Little impact of gender differences** (Netherlands, Ghana, Mexico, Uganda)

Source: Moscoviz and Evans 2022
Massive heterogeneity in dropout rate changes

- Big increases in Kenya, South Africa, Brazil, Malawi
- Mostly concentrated among adolescents: Brazil, Kenya, Malawi
- South Africa: “School dropout has tripled from 230,000 pre-pandemic to approximately 750,000 in May 2021.”
- Doubled risk of adolescent pregnancy among girls in Kenya (5% in a year to 11%)
3 conclusions

1. We still don’t know how much learning has been lost in the vast majority of countries.

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