

# Learning Loss and Student Dropouts during the COVID-19 Pandemic

Laura Moscoviz and David Evans

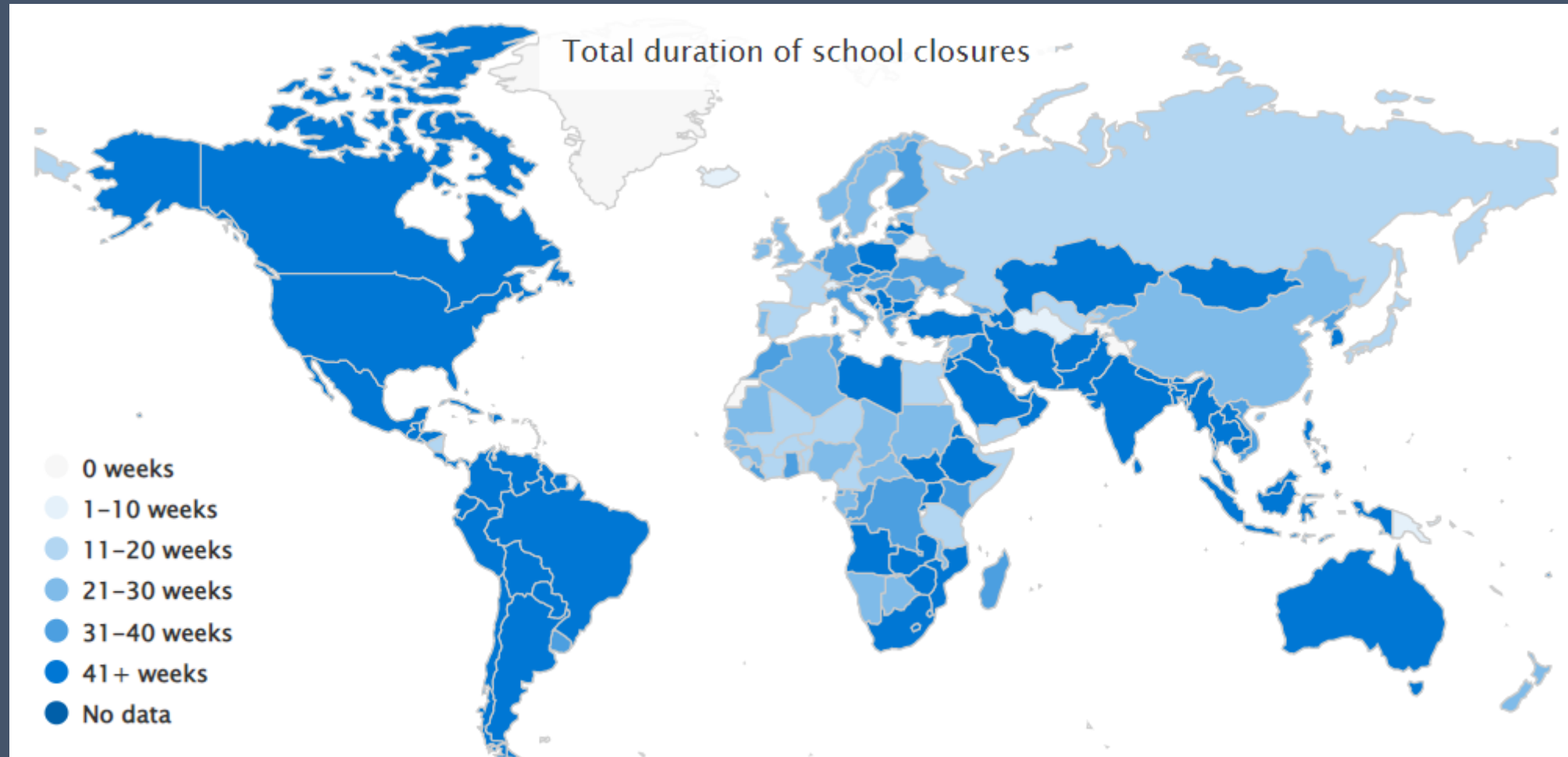
We read 40 studies estimating learning loss (29 studies) and dropout rates (15 studies).

We learned three things.

# 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.

# The COVID pandemic has been disruptive.

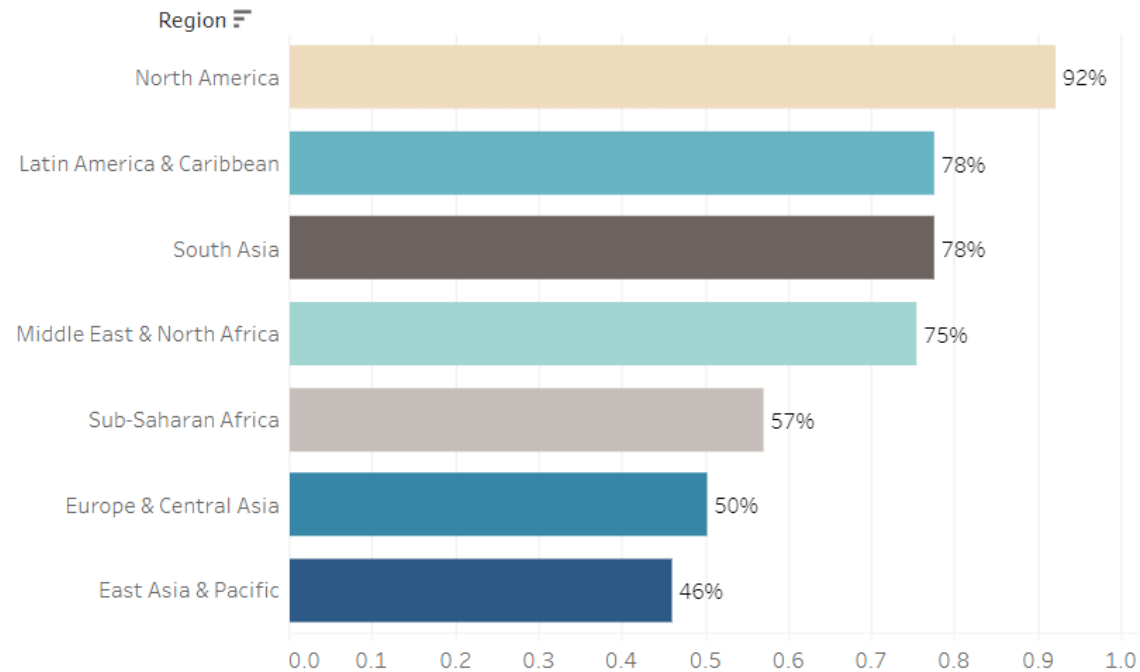


**Schools were closed for a significant proportion of children's schooling careers**

+

**Kids lose learning when schools are closed**

Average Percentage of Schooling Missed



Source: [Evans et al. 2021](#)

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

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

# What we found

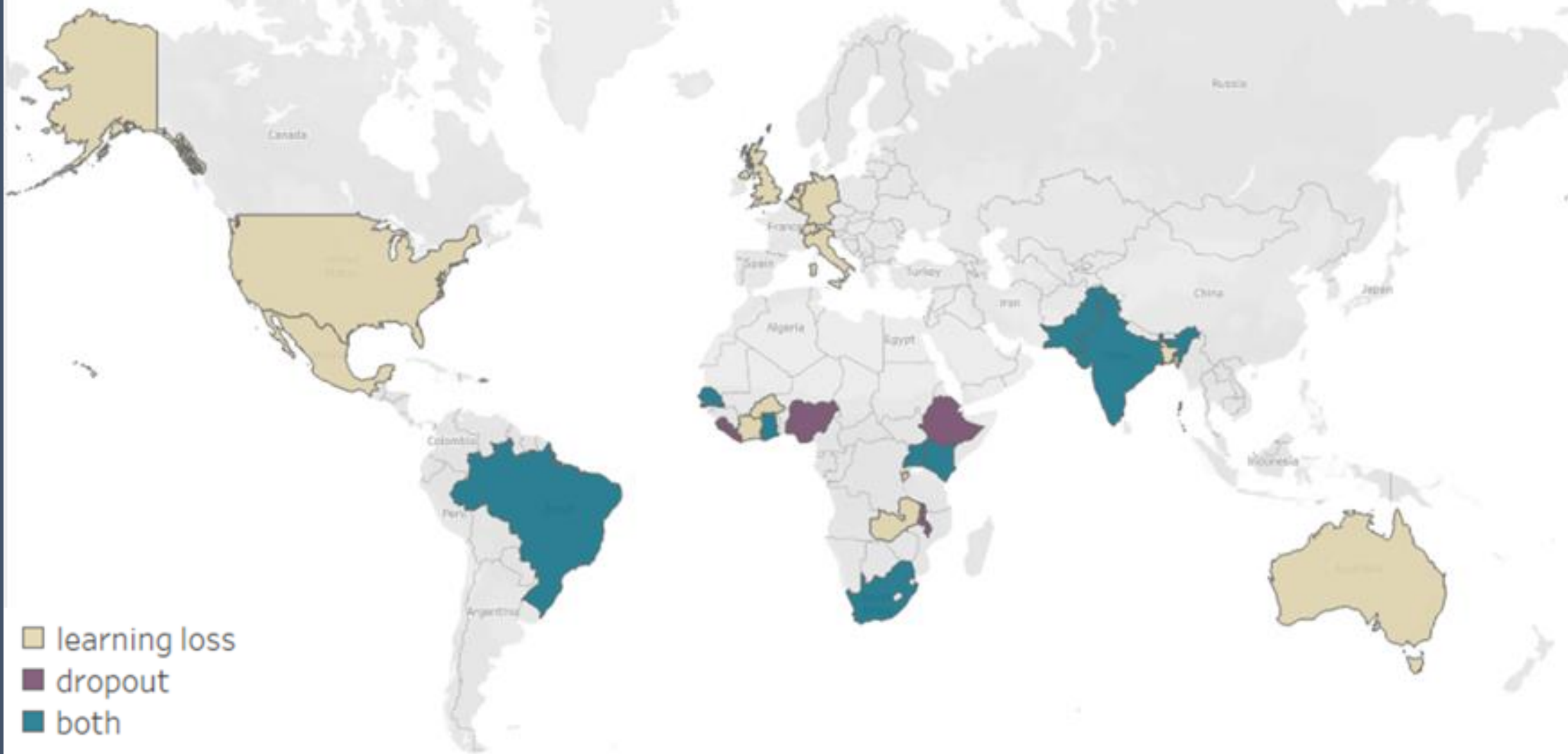
Most learning loss estimates from high income countries

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

|                     | Learning | Dropout | Both | Total |
|---------------------|----------|---------|------|-------|
| High income         | 17       | 0       | 0    | 17    |
| Low & middle income | 8        | 11      | 4    | 23    |
| Total               | 25       | 11      | 4    | 40    |



# This is just 14% of countries in the world!



# Learning loss in high-income countries

Better education  
technology BUT also  
more productive  
education systems

## 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

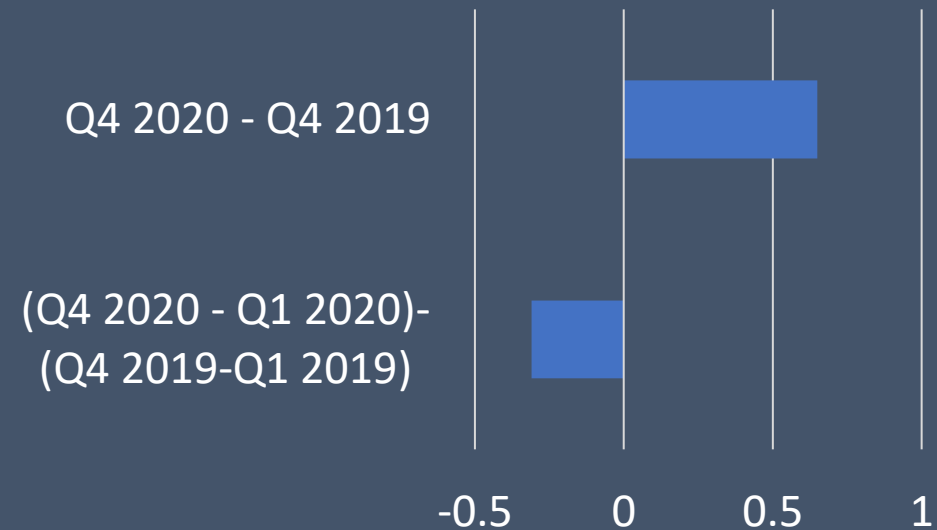
- Netherlands and Italy: 60% higher losses for the poorest kids
- Belgium: Inequality within schools rose by 17-20%
- USA: Achievement gaps between low- and high-poverty schools rose by  $\geq 0.1$  SD
- Australia: 2 months slower growth in least advantaged schools

# 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

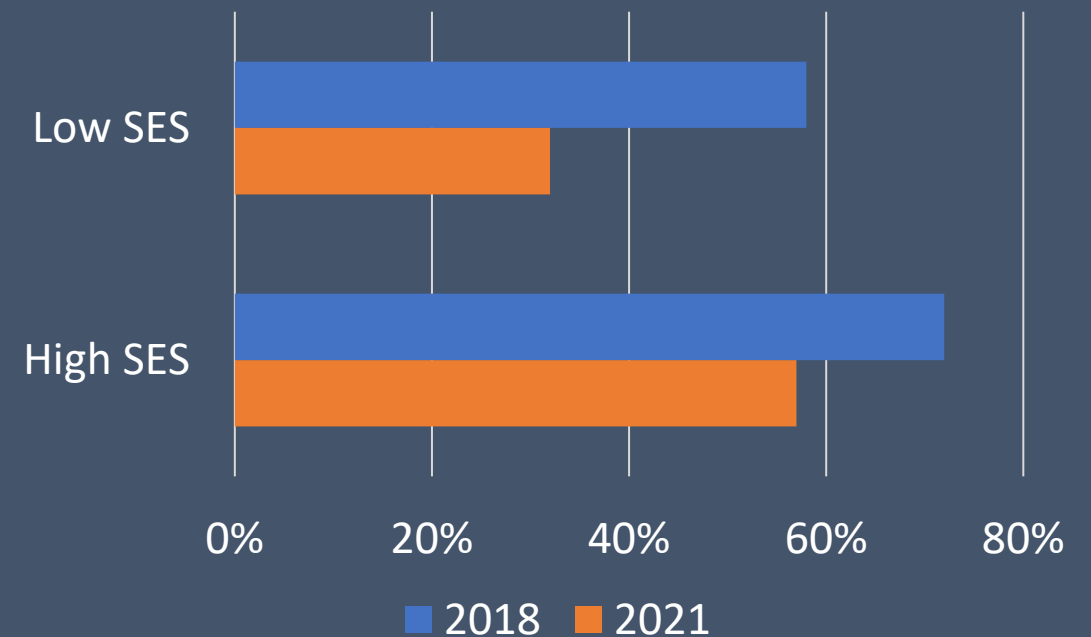


# Learning loss in Mexico

## Mexico

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

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



# 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

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

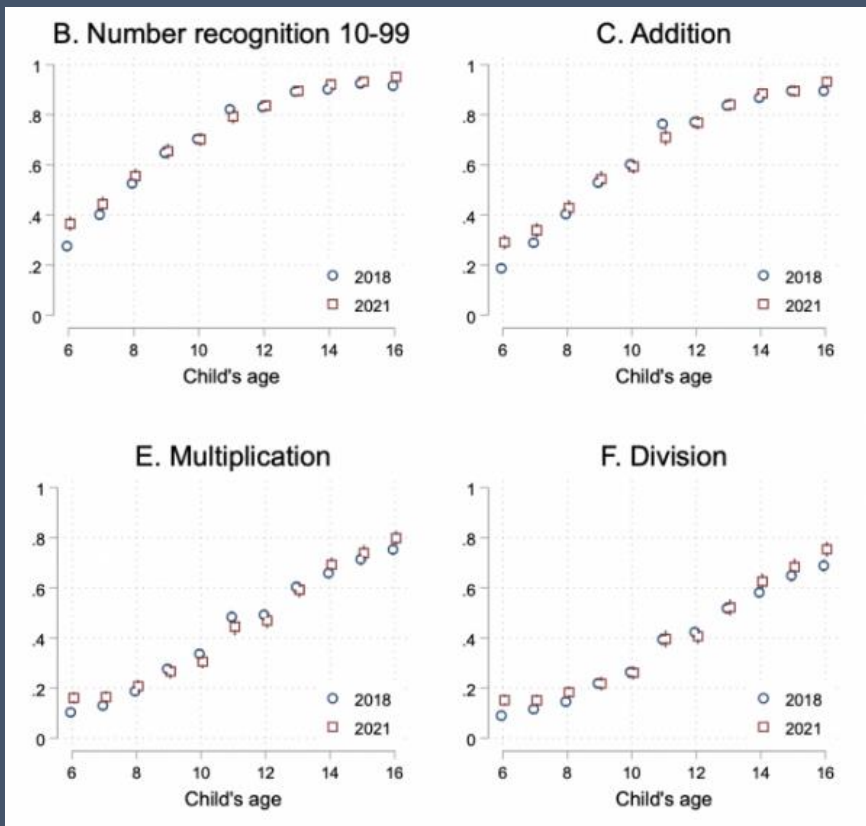
## Bangladesh

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

Source: Amin, Hossain, and Ainul 2021

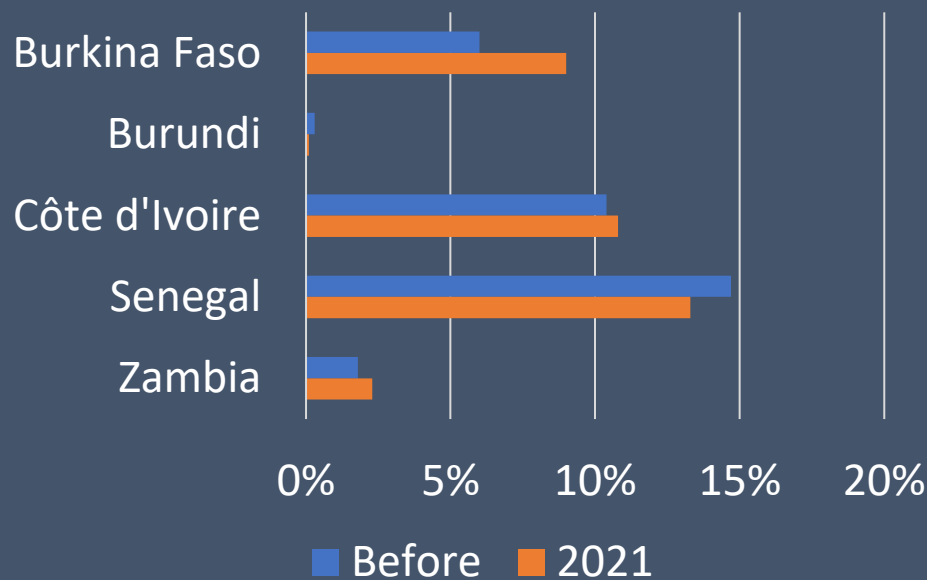
# Where are we not seeing (average) loss?

## Uganda



## Burkina Faso, Burundi, Côte d'Ivoire, Senegal, and Zambia

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



# Heterogeneous impacts in low- and middle-income countries

## Mexico

Low SES students loss  
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

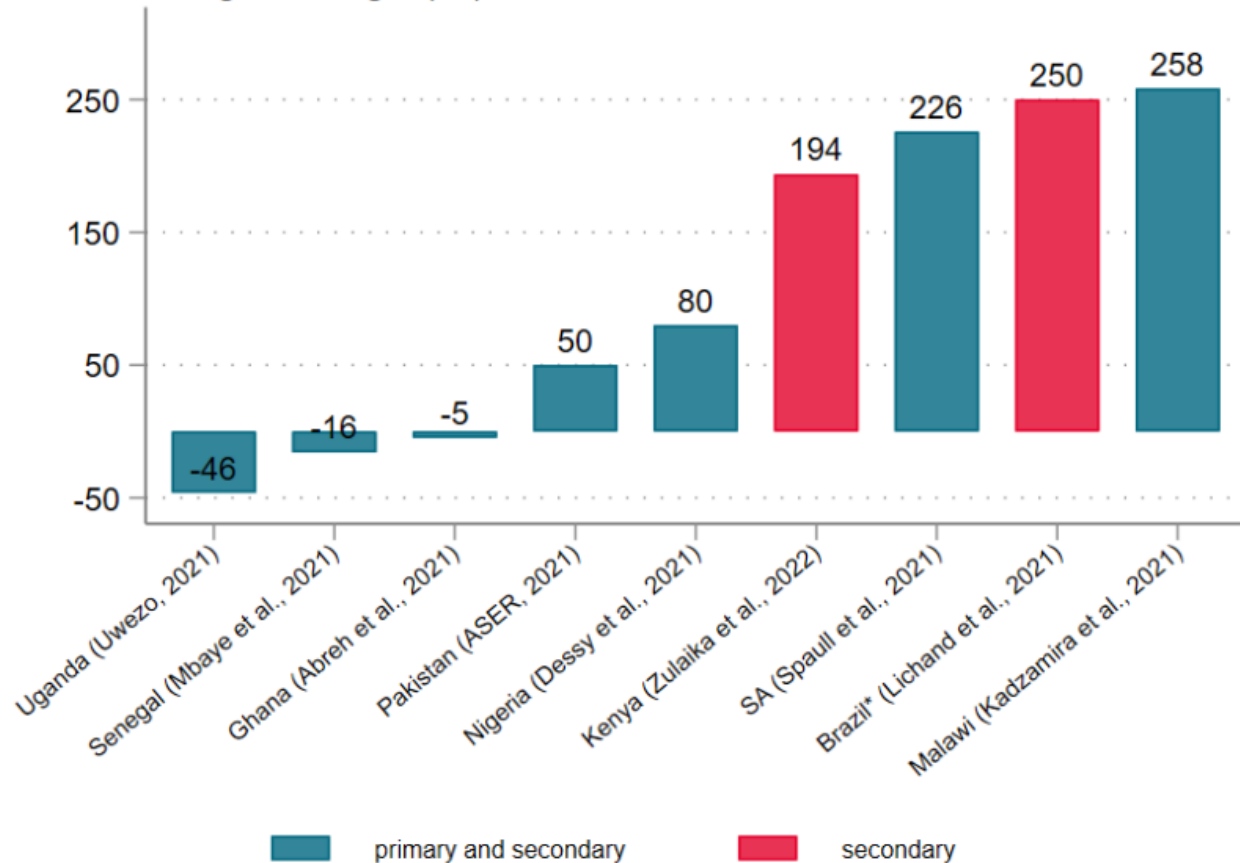
Number of non-readers  
doubled, concentrated  
among the poorest kids

## Little impact of gender differences

(Netherlands, Ghana,  
Mexico, Uganda)

# Massive heterogeneity in dropout rate changes

Percentage change (%)



- 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.
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.