

# Measuring Learning Losses: key factors, challenges and other measurement issues

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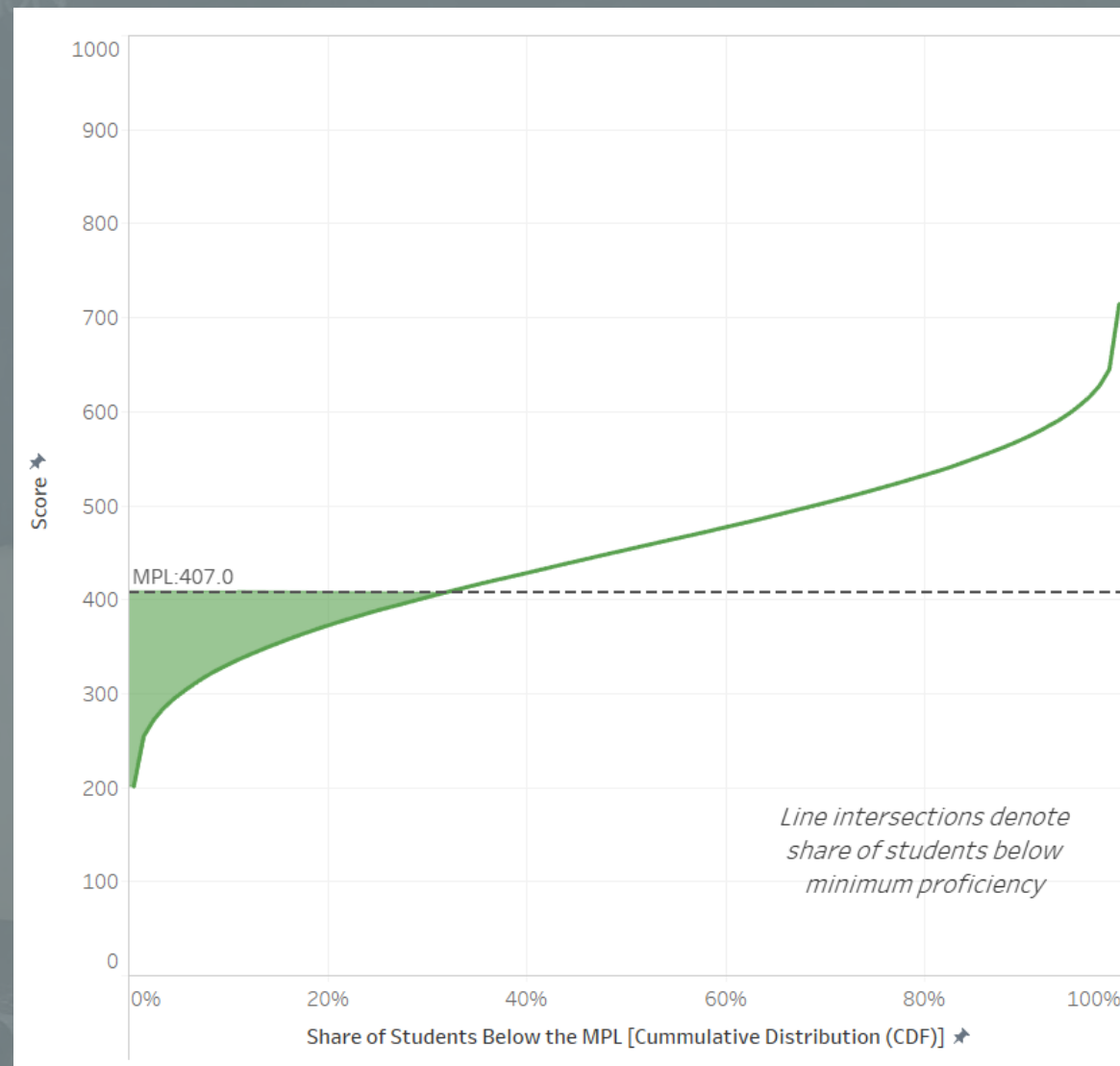
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# SDG 4.1.1

The SDG 4.1.1 measure has given us **focus** on learning below the Minimum Proficiency Level (MPL)

...and is very simple to communicate.

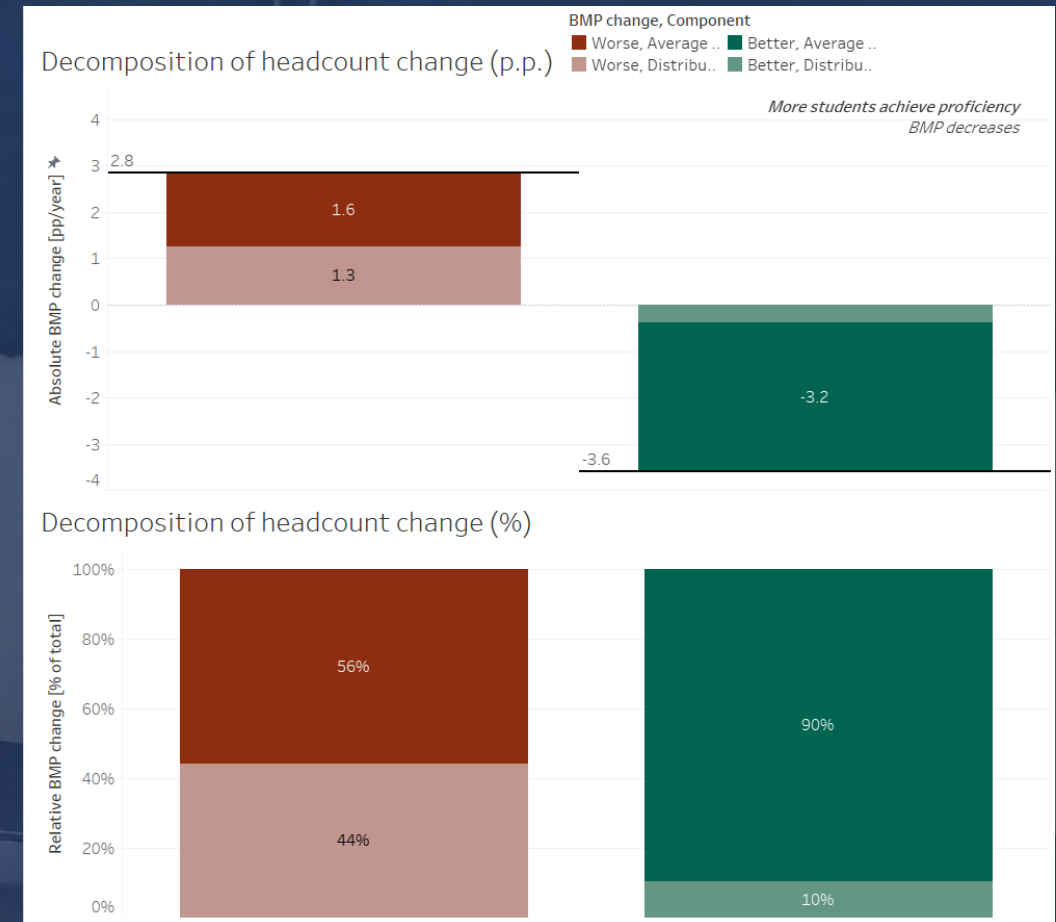


# THE FOCUS ON THE BOTTOM OF THE LEARNING DISTRIBUTION CAN AFFECT OUR UNDERSTANDING OF THE PROBLEM

The average learning and share of student below the MPL can move in very different ways



and the learning distribution does change specially when the share of students below the MPL increase





# THE CHALLENGE

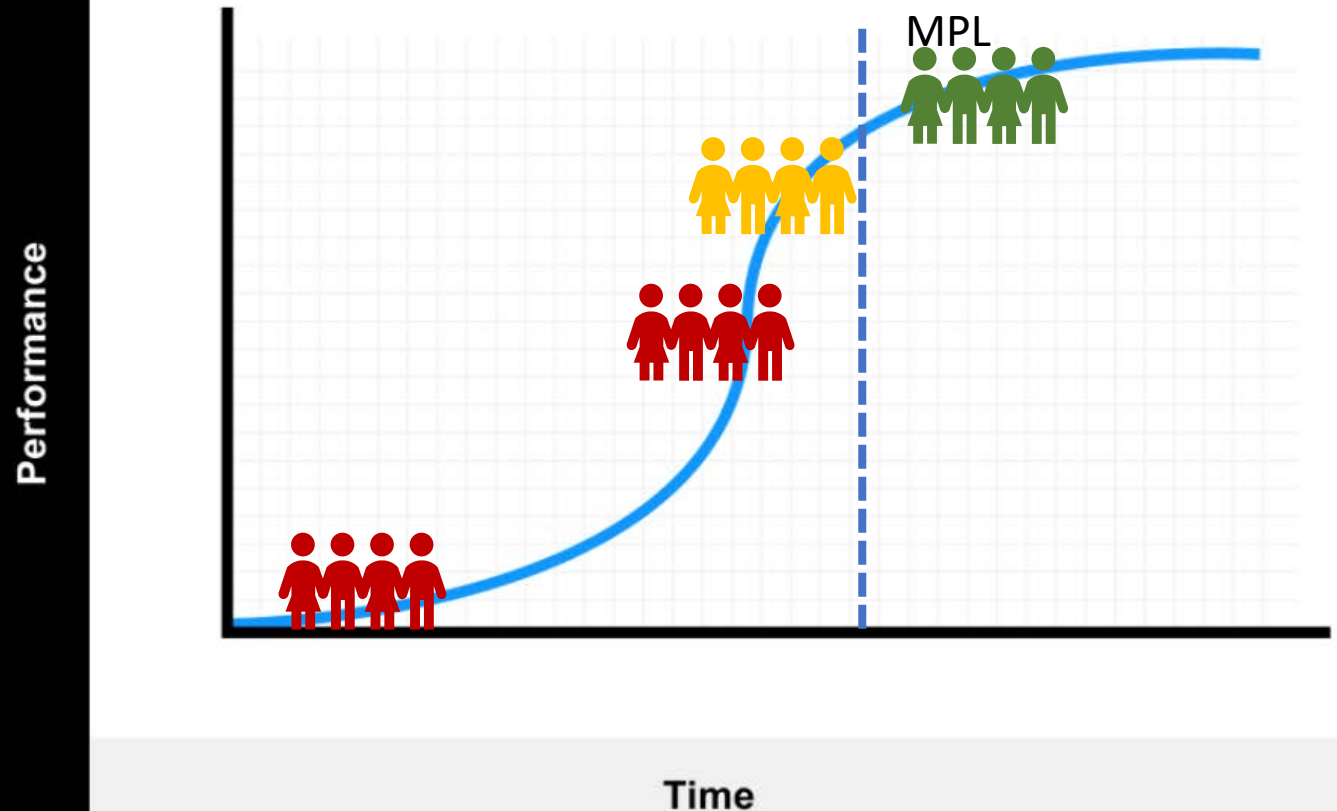
However, at high levels of learning deprivation (or low levels of learning), SDG 4.1.1 measures might not generate the correct incentives.

It fails to capture and recognize important efforts and results that countries might be obtaining at “foundational skills”

And is not sensitive to initial conditions of those below the MPL.

ENGLISH  
DICTATION

## Learning Curve



Source: <https://www.valamis.com/hub/learning-curve>

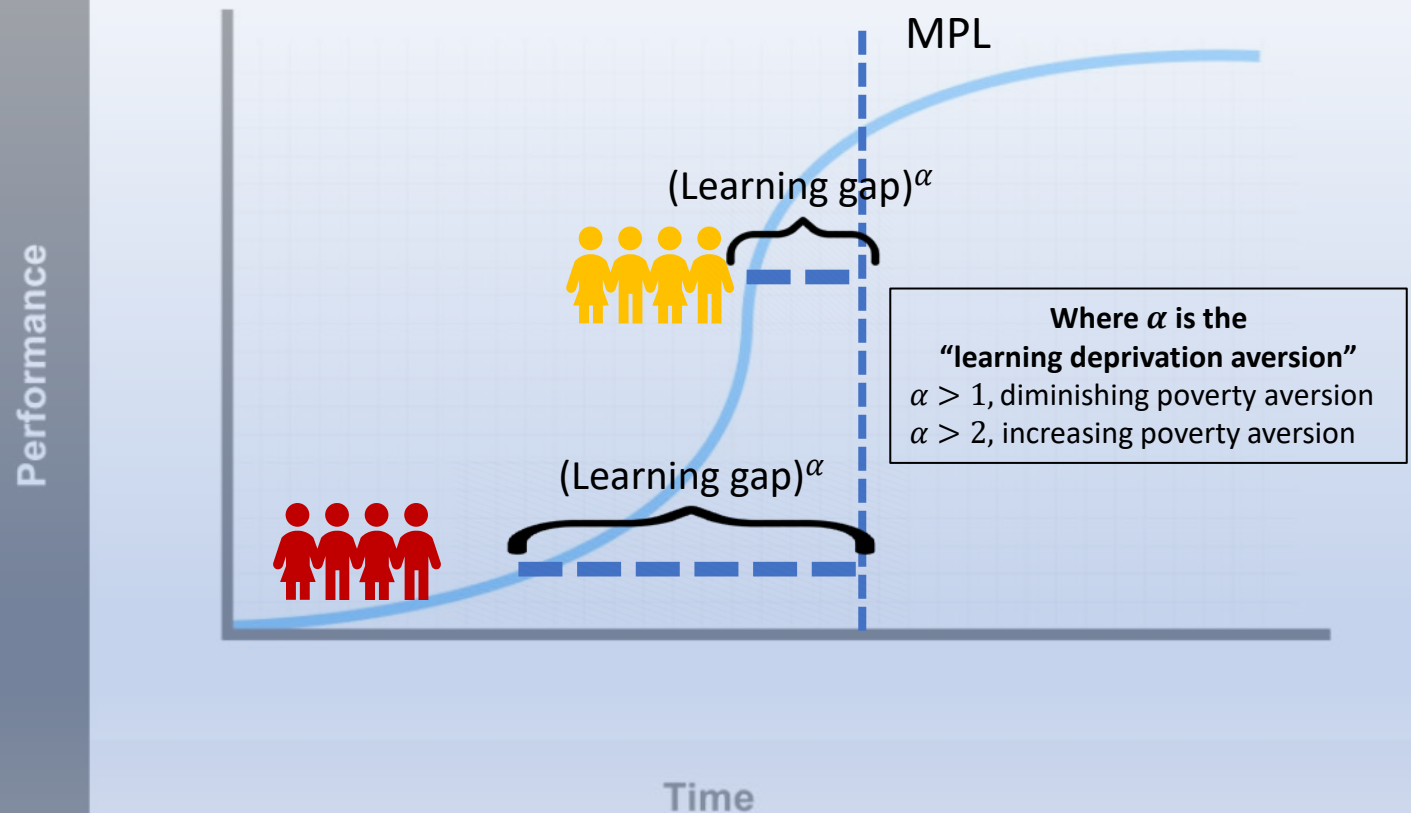
# THE SOLUTION

Gap measure (learning deprivation gap) ( $\alpha = 1$ ): sensitive to changes below the MPL, however, all changes below the MPL are equally important;

Gap-inequality measure (learning deprivation severity) ( $\alpha > 1$ ): is both sensitive to changes below the MPL and can differentiate progress made at different points of the learning curve.

ENGLISH  
DICTATION

## Learning Curve

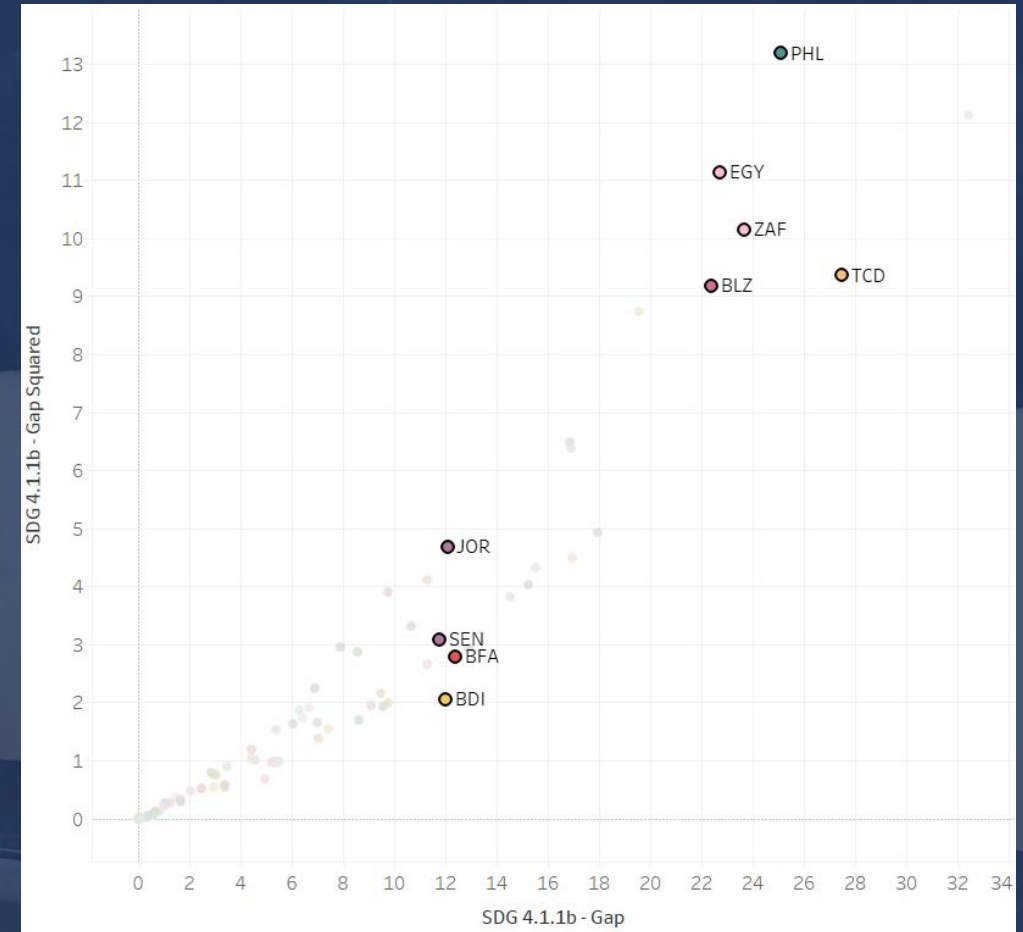
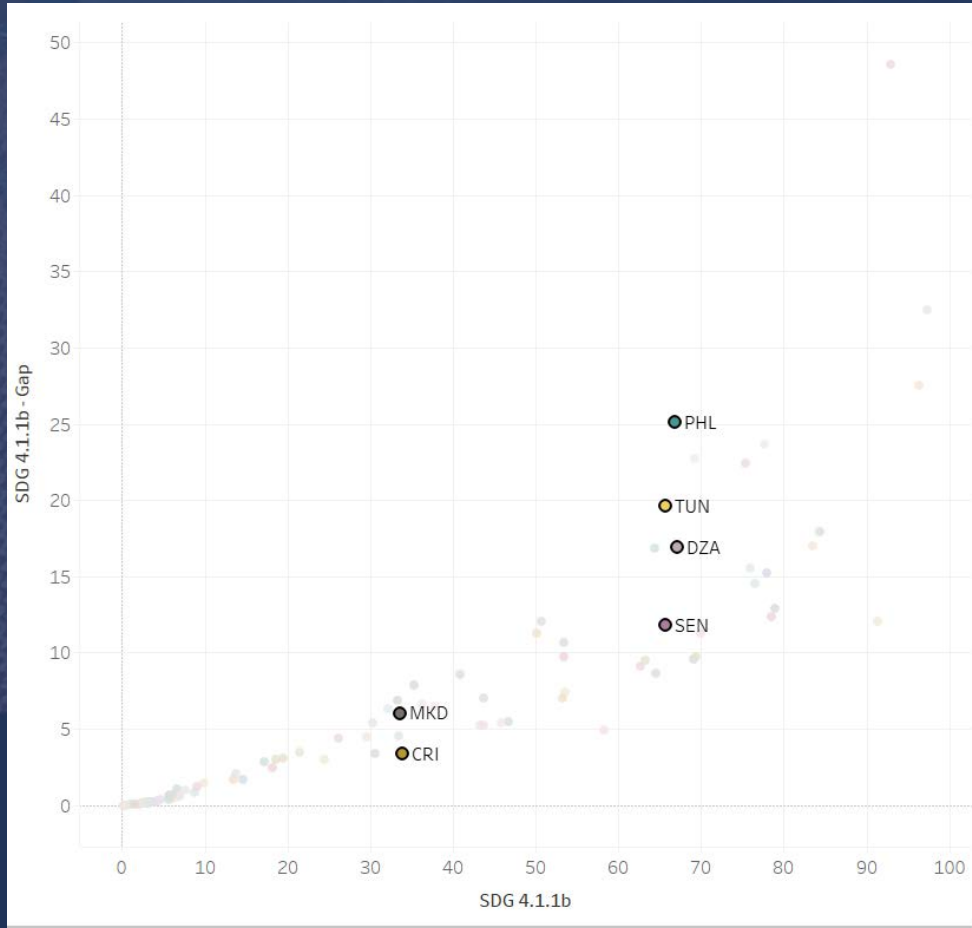


# THIS DIFFERENTIATION MATTERS

DICTATION

Countries where students are at the same level of learning deprivation, require very different levels of effort (learning gap).

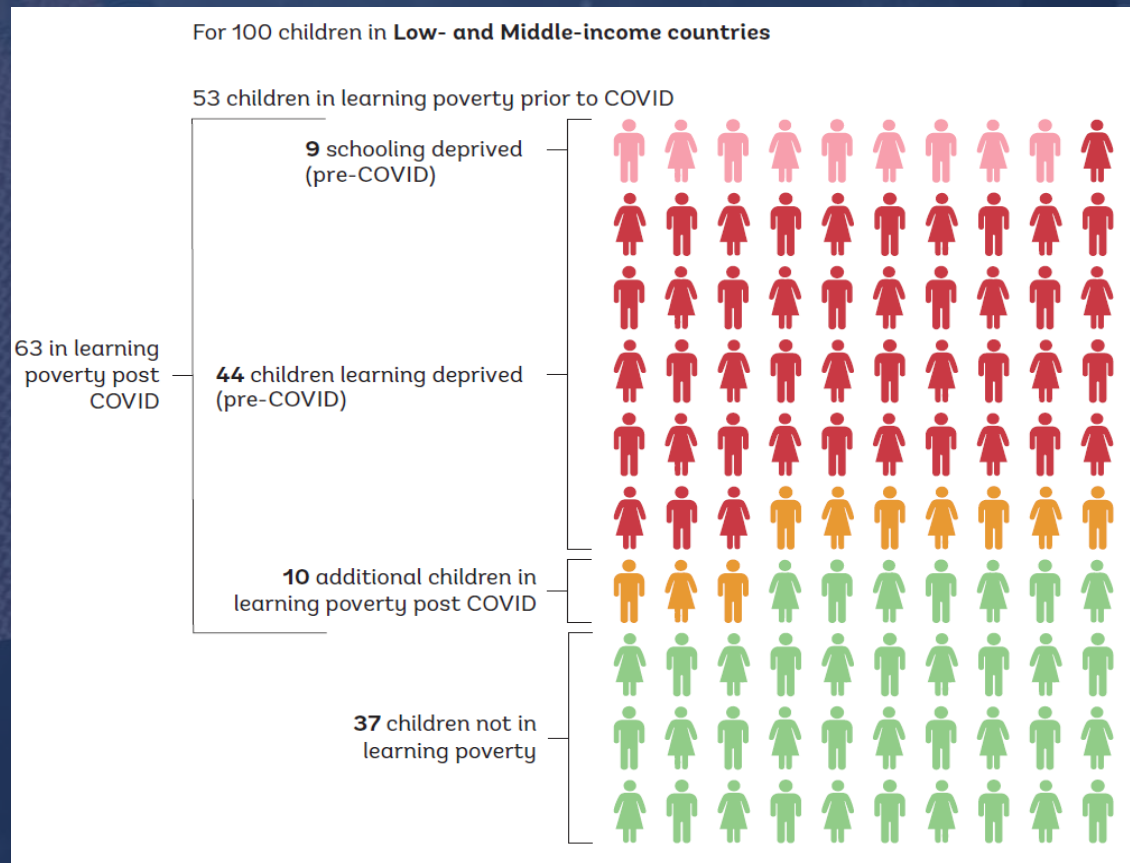
Countries that require the same average effort (learning gap); have very different levels of learning inequality among students below the MPL.





# LARGEST CRISIS IN EDUCATION IN THE LAST CENTURY

Initial simulations suggest that COVID-19 school closures will increase learning poverty by 10 percentage points



Source: Azevedo (2020)

- Up to 10 million children might not return to school
- Losses in mental health, lack of socialization, etc.
- Unless there is remedial education, this generation might accumulate less human capital and lose US\$10T in foregone earnings
- Potential large increases in inequality: 3 out of 4 students who cannot be reached by remote learning come from rural areas and/or poor households

Azevedo, Joao Pedro, Amer Hasan, Diana Goldemberg, Syedah Aroob Iqbal, Koen Martijn Geven. 2020. *Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates*. Policy Research working paper no. WPS 9284. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/329961592483383689/Simulating-the-Potential-Impacts-of-COVID-19-School-Closures-on-Schooling-and-Learning-Outcomes-A-Set-of-Global-Estimates>

Azevedo, Joao Pedro, 2020. *Learning Poverty: Measures and Simulations*. Policy Research working paper. no. WPS 9446. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/232501603286799234/Learning-Poverty-Measures-and-Simulations>

# DESPITE LEARNING POVERTY INCREASING MOSTLY IN ASIA AND LATIN AMERICA, THE PANDEMIC WILL RESULT IN A MUCH DEEPER CRISIS IN AFRICA

Most of the increase in Learning Poverty will take place in South Asia, Latin America and East Asia

COVID-19 might qualitatively change the nature of the learning crisis in the African continent, as students will come out of this pandemic in a much deeper learning crisis than before



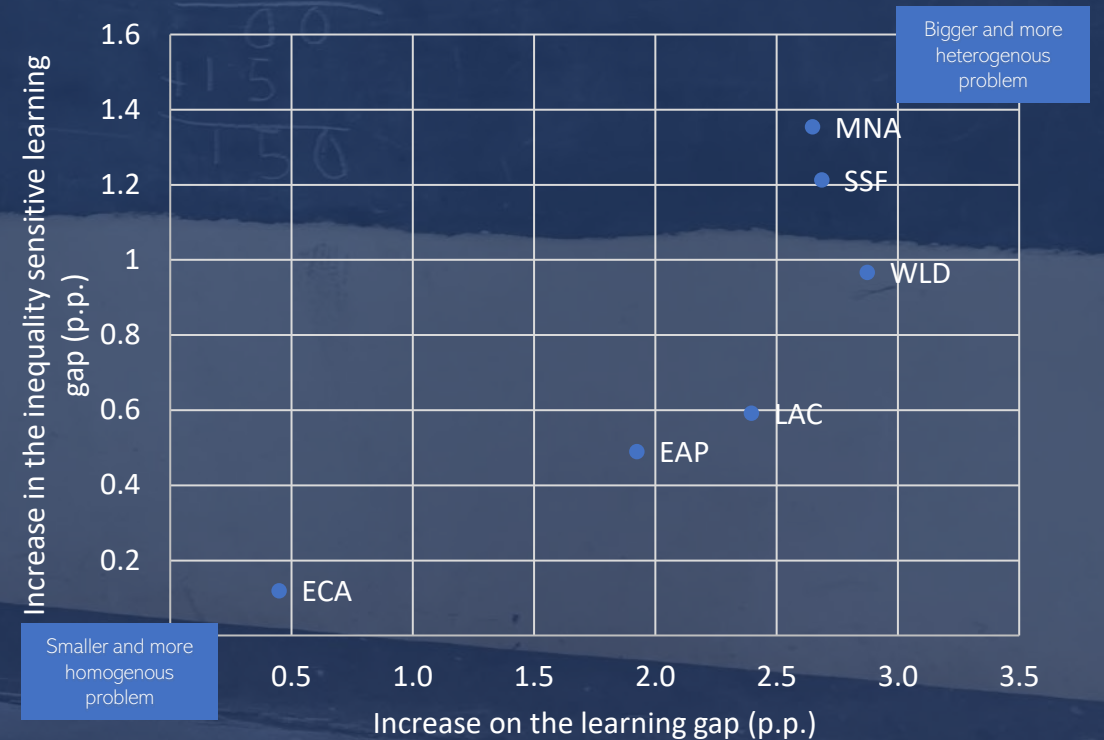
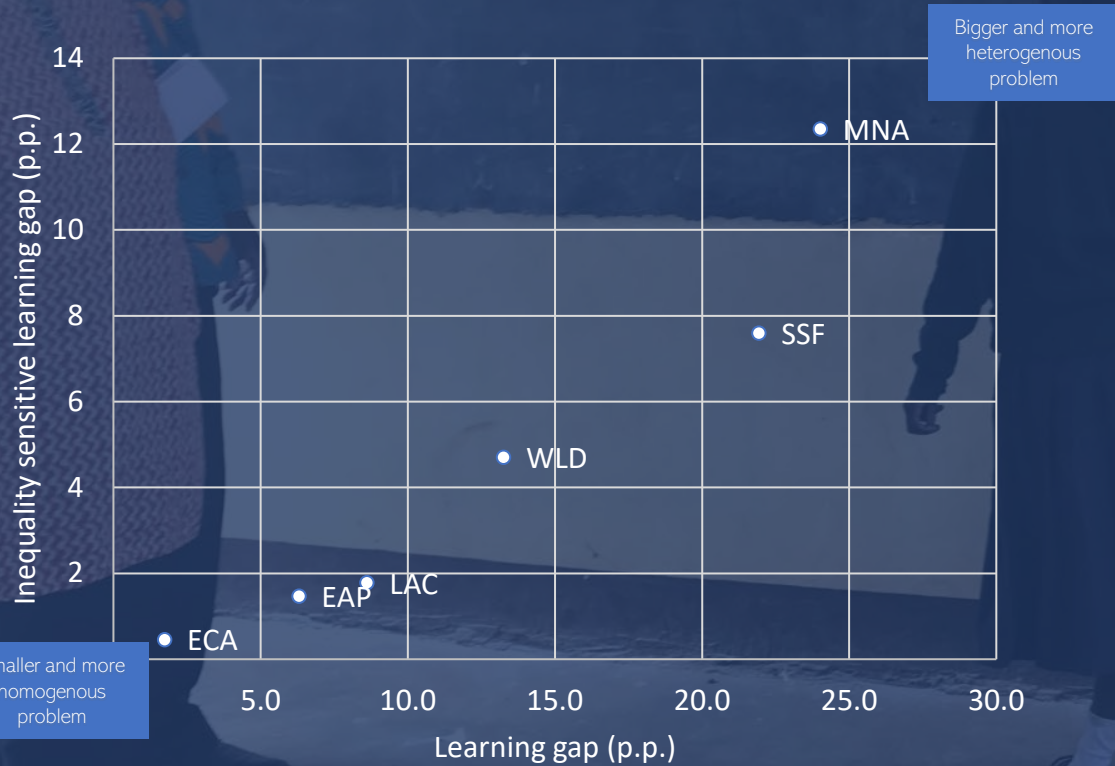
Source: Azevedo (2020)



# SINCE COVID-19 WILL LEAD TO GREATER INEQUALITY AMONG THE LEARNING POOR, TACKLING IT WILL REQUIRE STRATEGIES TO TEACH TO THE RIGHT LEVEL

Pre-COVID, the Middle East and Sub-Saharan Africa had the hardest challenge, as both the gap and gap-inequality of learning are the highest

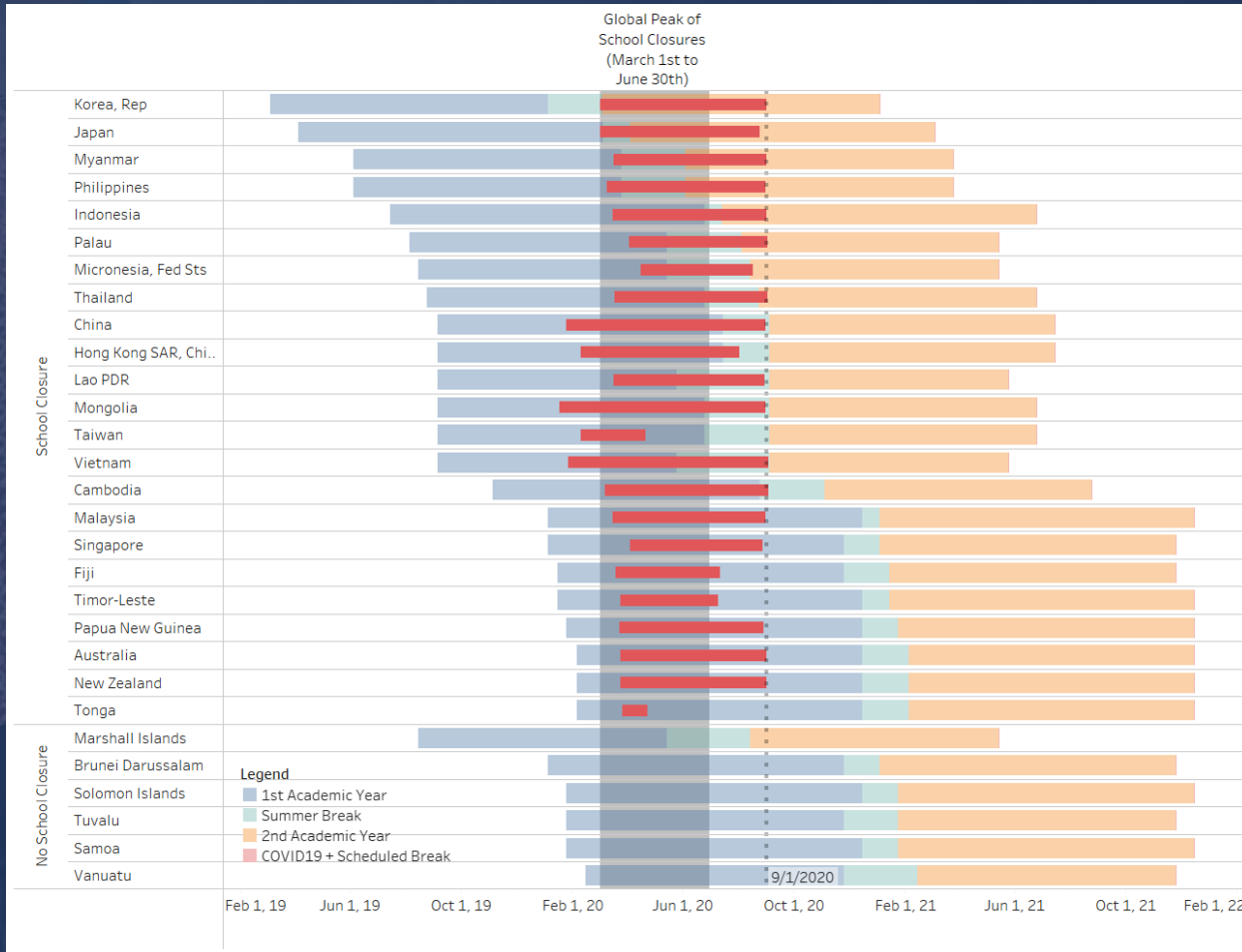
Post-COVID, the learning gap will increase the approximately the same in several regions, however, the gap-inequality will increase the most in the Middle East and Sub-Saharan Africa



Note: variances on types of Arab script poses specific challenges to the teaching and the assessment of learning in the Middle East region.  
Source: Azevedo (2020)

# AND WE NEED TO BE ABLE TO TRACK WHAT IS HAPPENING ON THE GROUND, ON NON-COGNITIVE SPACE AS WELL

The tracking of school closures remain critical



Source: Coutilier, et al ( 2020)

And there is some evidence of remote learning fatigue

