

LEARNING MORE WITH EVERY YEAR: SCHOOL YEAR PRODUCTIVITY AND INTERNATIONAL LEARNING DIVERGENCE

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Abstract

I use unique child-level panel data from Ethiopia, India, Peru and Vietnam, four developing countries with widely-differing levels of student achievement, to study the extent to which differences in the productivity of primary schooling can explain international differences in human capital. I document, using identical tests of quantitative skills across countries, that although some cross-sectional gaps in test scores between these countries are evident at preschool ages, these grow substantially in the first 2-3 years of schooling. By the age of 8 years, differences are particularly stark between Vietnam and the other three countries. Using value-added models, and a regression-discontinuity design based on enrolment guidelines, I show that the causal effect of an extra grade of schooling on test scores is substantially higher in Vietnam by 0.25-0.4 standard deviations compared to the other countries. This differential productivity of a school year accounts for most of the cross-country achievement gap at 8 years of age. Equalizing the exposure to and the productivity of schooling closes the gap with Vietnam almost entirely for Peru and India and by ~60% for Ethiopian students enrolled in school.

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