The Impact of Daily Quizzing on Student Achievement in Kenya

Sample: 202 schools

Initiative(s): Post-Primary Education Initiative (PPE)

Target group: Children Parents Primary schools Students Youth

Outcome of interest: Enrollment and attendance Student learning Technology adoption Aspirations Attitudes and norms Soft skills

Intervention type: Digital and mobile Information Parental engagement Pedagogical innovation

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Partner organization(s): Bridge International Academies

Although primary school enrollment rates have risen across low- and middle-income countries around the world, student learning outcomes lag behind, limiting human capital development and economic growth, particularly in sub-Saharan Africa. In response, researchers are partnering with Bridge International Academies to evaluate the impact of daily quizzing on students' learning outcomes in Kenya.

Policy issue

While most low- and middle-income countries around the world have made significant progress in achieving universal primary school enrollment, they remain far behind high-income countries when it comes to learning outcomes. With children and youth struggling to achieve minimum proficiency standards in reading and mathematics, developing countries, particularly in sub-Saharan Africa, may need to focus on improving their quality of education to enable human capital development and economic growth. However, there is considerable debate on how to improve education quality, and whether approaches shown to be effective in high-income country contexts can be effective elsewhere. Efforts such as daily quizzing, which is intended to provide rapid performance feedback to students and thereby strengthen learning outcomes, has called into question the value of testing and the potential trade-offs associated with allocating class time towards test preparation. Researchers are now exploring whether daily quizzing can improve students' learning outcomes in Kenya.

Context of the evaluation

Bridge International Academies, a for-profit education organization, runs pre-primary and primary private schools using a unique education model that leverages technology to train and support underserved communities. Bridge schools are intended to be low-cost, charging US$6.60 per student per month (compared to US$20.11 per student per month in Kenyan public schools), in order to reach the most marginalized children. As part of its regular operations, Bridge uses technology to not only deliver education services but also collect detailed performance data on students, teachers, and schools. As of 2018, Bridge operates in over 500 private schools across India, Kenya, Liberia, Nigeria, and Uganda, and an additional 1,100 government primary schools in Nigeria.



Students walk home together after class.

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Details of the intervention

In September 2018, researchers partnered with Bridge International Academies to evaluate the effectiveness of daily quizzing on improving science and social studies test scores among grades 7 to 8 students in Kenya.

Researchers evaluated the impact of daily quizzing during class time for grade 7 students in a subset of Bridge's Kenyan schools. Researchers randomly selected 202 schools, of which 101 were randomly assigned to undergo daily quizzing. From August 2018 to April 2019, students at the 101 schools had their daily afternoon English, math, and social studies instruction replaced with daily science and social studies quizzes aligned with content from Kenya's high stakes primary school leaving exam, which they were scheduled to take in 2019. The remaining 101 schools continued with the traditional schooling format and served as the comparison group. This intervention was designed to study the impact of providing rapid performance feedback to students.

Learning outcomes were measured via internally administered tests, the Kenyan primary school leaving exam, and a number of other cognitive and non-cognitive tests, including Ravens progressive matrices, divergent thinking, listening comprehension, grit, and growth mindset. Drawing from Bridge's administrative data, researchers measured student attendance, retention, and learning outcomes.

Results and policy lessons

Research ongoing; results forthcoming.