

The Impact of Personalized SMS Messages to Parents on Student Achievement in Kenya

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Sector(s): Education**Location:** Kenya**Sample:** 4,015 students**Initiative(s):** Post-Primary Education Initiative (PPE)**AEA RCT registration number:** AEARCTR-0005382**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 an SMS-based information provision program 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. A growing body of literature from Brazil, Chile, and the United States indicates that SMS messages to parents about their children's performance in school improves student learning outcomes. Researchers are now exploring whether SMS messages to parents, found to be effective in high-income countries, can improve student 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.



Parent holding cell phone.

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Details of the intervention

In September 2018, researchers partnered with Bridge to evaluate the effectiveness of personalized SMS messages to parents on student attendance and learning outcomes among grades 6 to 7 students.

The intervention focused on providing parents of a subset of grade 6 Kenyan students with weekly, personalized SMS messages. The SMS messages informed parents of their students' academic performance and encouraged them to be more involved in their child's education. Researchers first randomly assigned 202 of 315 schools to undergo the SMS program, and then randomly selected the parents of 2,600 students within the selected schools to receive the SMS messages. From August 2018 to April 2019, the randomly selected parents received these messages twice per week, with sub-groups receiving different personalized messages. The first message contained information about students' academic performance, while the second contained a message promoting a growth mindset view of education to encourage greater parental involvement in their child's education.

Learning outcomes were measured via internally administered tests. Drawing from Bridge's administrative data, researchers measured a number of outcomes at the student and parent levels. At the student level, they measured student attendance, retention, and test scores in math, English, Kiswahili, and social studies. At the parent level, they measured parental beliefs about the value of education, parental aspirations for their child's future, and parental use of SMS messages, among other outcomes.

Results and policy lessons

Research ongoing; results forthcoming.

De Laat, Joost and Michael Kremer. "A/B Testing Education Production: An Evaluation of Three Innovations to Improve Parental and Classroom Inputs in Child Learning and Academic Achievement." J-PAL Post-Primary Education (PPE) Initiative Round 11 Proposal.