State of the Evidence

Description of the Evidence

Increasing student motivation through different types of financial assistance have led to improvements in learning outcomes. There are two pathways through which financial resources may affect motivation and ultimately learning outcomes: merit-based aid which covers the cost of school for academically qualified children, and directly motivating student effort through small incentives.

Merit-based financial aid: Merit-based aid for students who meet a certain performance threshold and might not otherwise be able to afford school allows these high-potential students greater access to additional schooling. Merit-based scholarships (or need-based scholarships with a merit-based component of a minimum threshold of performance to qualify) increased learning outcomes in Ghana (Duflo et al. 2021) by 0.15 standard deviations, Kenya (Miguel et al. 2009) by 0.27 standard deviations, and Cambodia (Barrera-Osorio and Filmer 2016) by 0.17 standard deviations (including positive impacts nine years later, see Barrera-Osorio et al 2018). In Kenya (Miguel et al. 2009), boys (who were ineligible for the program) and girls whose achievement levels meant they were unlikely to become eligible for the program also saw increases in learning. These findings suggest that providing merit-based aid to academically qualified students for whom the financial cost of school may be a hurdle can increase learning outcomes. However, as merit-based scholarships inherently involve covering the costs of school, this is a relatively expensive category of intervention.

Financial incentives: Because children are likely motivated by short-term rewards and education benefits occur over the long-term, there is a strong case for designing approaches that increase students’ short-run motivation. Small financial incentives based on educational performance may be one way to shorten the timeline of educational rewards. Research from Benin (Blimo 2014), Mexico (Behrman et al. 2013), and India (Hirshleifer 2017) indicates that incentives for students conditional on their performance may increase motivation (effort) and improve learning outcomes in low- and middle-income country contexts. However, in some contexts such as the United States (Fryer 2016), incentives conditional on student performance did not improve learning outcomes.

Notes on Context

Merit-based scholarships may be most impactful at increasing learning outcomes when the main barrier to enrollment or learning is financial costs associated with school. Additionally, merit-based scholarship programs may not be useful in contexts where there is widespread lack of learning such that no students would be able to meet a minimum threshold required to participate in the program, or all students would meet a relatively similar low threshold. Due to the above factors, targeting is likely an important aspect of any merit-based scholarship program aiming to increase learning outcomes for youth experiencing poverty.
**Equity Considerations**

Merit-based scholarship programs will need to be careful about how they identify students to ensure that the most advantaged (who often perform well) are not the only students receiving the scholarships. One option is to combine merit and need-based components to target academically qualified but financially disadvantaged students. However, even this approach assumes that students in need are able to meet a certain academic threshold. Since data shows that most children in low- and middle-income countries are learning below grade-level expectations, merit-based scholarship programs will need to set realistic academic thresholds that are inclusive of the students intended to be reached.

**Operationalization**

**Generalizability**

Drawing on J-PAL's Generalizability Framework, below are questions that will help you determine if a merit-based scholarship program might increase learning outcomes in your context. The below questions are not meant to be an exhaustive list of questions you will need to answer to determine if this type of program is appropriate for your context. They can, however, provide a starting point for applying the global evidence on this type of program to your specific context.

**Local Conditions**

- What are the major barriers to enrollment and learning?
- For example, are students motivated to be in school and learn (compared to other alternatives such as getting a job)?
- Are there many academically qualified students who are unable to attend school due to financial barriers?

**Generalized Lessons on Behavior**

- Merit-based scholarships can support learning when it is targeted to academically qualified students for whom the financial cost of school is a primary barrier.
- Merit-based scholarships and incentives can increase student motivation and effort, which in turn can increase learning.

**Local Implementation**

- Are monetary incentives for students politically and financially feasible?
- Are there non-monetary incentives that may be used instead?
- Are there any groups that would resist merit-based scholarship or incentive programs for students?
- Do students receive merit-based scholarships or incentives conditional on performance, have the necessary support or tools to increase their own learning? Do students need supplemental support?

**Successful Examples**

- Incentives to Learn: A Merit-Based Girls’ Scholarship Program in Kenya (Miguel et al. 2009)

**Further Action Options**

Approaches with high and consistent effectiveness are recommended for direct action through pilots to demonstrate local proof of concept and generate momentum in-country; scale-up is recommended especially if an existing country effort is operational and ready for scale. These takeaways are meant to only be a guide rather than a definitive recommendation. In some cases, even effective and well-studied interventions might benefit from further research, for example, to test scale pathways or to optimize programs for cost-effectiveness.

Based on the evidence for this category, potential next steps might include:

- Connecting with implementers to learn more about how to adapt and pilot evidence-based programs in this category;
- Connecting with researchers to identify relevant open questions on implementation and scale that may benefit from further research;
- Other activities to think through the policy implications of this evidence in your context.

If you are interested in exploring these or other options, please contact the J-PAL Education team at JPAL_Education@povertyactionlab.org, to set up an initial exploratory meeting. The team will be happy to brainstorm potential next steps.