Reducing Travel Time to School

State of the Evidence

Description of the Evidence

Reducing the travel time cost of attending school can increase both school participation and learning outcomes. In both Afghanistan (Burde and Linden 2013) and Pakistan (Barrera-Osorio et al. 2017), creating local schools where previous access to schools was low was effective at increasing learning. In the Afghanistan example, creating village-based schools increased girls’ test scores by 0.65 standard deviations and boys’ test scores by 0.40 standard deviations, both raising overall achievement and dramatically reducing the gender gap in achievement. Creating primary schools in educationally underserved villages in Pakistan increased test scores by 0.63 standard deviations.

Reducing travel time by providing bikes has also shown to increase participation and learning in India (Muralidharan and Prakash 2017), including a 32 percent increase in girls’ age-appropriate enrollment in secondary school and a 12 percent increase in the number of girls who passed the secondary school certificate exam. Reducing travel time to school can be particularly helpful for girls, due to the restrictions on their mobility in some contexts, or in contexts where the area through which children must travel to get to school is unsafe for walking.

It is important not to interpret this as evidence that school construction is always a pathway to increasing learning outcomes. There is not evidence that building schools where schools already exist will increase learning, and school construction can be very expensive. Some types of school creation programs can take advantage of existing resources to reduce costs. For example, the Afghanistan school creation program was done through low-cost means using existing community resources, making it relatively cost-effective.

Notes on Context

This is likely most effective in areas where few schools exist or access to education is low, but creating local schools is possible, or where there are safe alternatives to reduce travel time to school. Similarly, this type of program is likely most cost effective where using existing resources to create new local schools is possible, or where cost-effective methods of reducing travel time are possible. Creating more schools will likely not be an effective or cost-effective way to increase learning outcomes in contexts where schools already exist and the main barrier to learning is not access to education.

Equity Considerations

It is important to ensure access to education for all students. If students from very rural or remote areas (or students who live in particularly unsafe or conflict-affected areas) do not currently have access to schools or a safe way to travel distances to school, then creating schools that they can reach more easily or more safely may increase learning outcomes and equity for these students. Reducing travel time to school can therefore be a way to increase equity among school-aged students. However, it is important to ensure that travel time is reduced for the students for whom travel time was a key barrier to attending school, rather than adding schools in areas with already high school density.
Operationalization

Generalizability

Drawing on J-PAL’s Generalizability Framework, below are questions that will help you determine if a program to reduce travel time to school 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 is the school density in your community? Can the existing schools serve all the children in the community? Is overcrowding—or turning students away from school because there is no room—a problem in your community?
- How long is the travel time to school for a typical student in your community? How do students get to school: do they walk, ride bikes, take public transportation, ride a school bus, or ride in a parent’s car?
  - Are the methods of transportation they use safe? Are they reliable? Are they expensive? Are they a large time burden on students? Is the length of time it takes students to get to school (or the cost, or the perceived danger they experience, or the inconvenience they experience) a barrier to them attending school?
- What is the safety and crime situation in your area? Do students need to walk or bike through unsafe areas to get to school? Does this ever prevent students from attending school?
- Are girls typically allowed to travel to school by themselves? Do they need a parent escort to travel to school? Does this provide a barrier to girls’ attendance in school?

Generalized Lessons on Behavior

- Reducing travel time to school may decrease the cost of attending school, which may increase attendance in school and/or learning outcomes.

Local Implementation

- Are there local resources that could be used to create additional schools in your area? Are there community centers or other spaces that could be turned into schools, either permanently or for part of a day or year? Are there groups with whom schools could partner to use space during the school day?
- What are building costs in your context if it would be necessary to construct new schools? How easy to procure are construction materials and expertise?
- How would additional schools be staffed? Is there a reliable source of teachers that could be used to staff additional schools? Is there a formal system for registering schools to be incorporated into existing school systems so they can take advantage of teacher training and allocation programs, centralized resources, etc.?
- Are bicycles a typical method of transportation for children in your area? Are they a safe method of transportation in your area? If more students had bikes, would they use them to get to schools that they might not otherwise be able to walk to?

Successful Examples

- Creating Schools through Public-Private Partnerships in Pakistan (Barrera-Osorio et al. 2017)
- Creating Community Schools in Afghanistan (Burde and Linden 2013)
- Providing Girls with Bicycles to Travel to School in India (Muralidharan and Prakash 2017)

Further Action Options

For approaches with mixed evidence or high variation of effectiveness in the literature, more evidence generation is recommended to close evidence gaps. Based on the evidence for this category, potential next steps might include:

- Connecting with implementers to learn more about evidence-based programs in this category;
- Connecting with researchers to identify relevant open questions that would benefit from further research;
- Other activities to think through the policy implications and/or research needs of this evidence in your context

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