State of the Evidence

Description of the Evidence

Schools must recruit and hire high-quality teachers in order for school systems to run. Data from the United States shows the difference between a weak teacher and a great teacher may be up to a full year of learning (Hanushek and Rivkin 2010). While teacher selection is a necessary aspect of education systems to get right, it is often difficult, if not impossible, to conduct randomized evaluations to measure how to most effectively select and allocate high-quality teachers.

Most data and evidence on this topic comes from panel data studies that have tried to isolate teacher observable characteristics that are linked with student learning. While data in different contexts shows there is large variation in teacher effectiveness, observed characteristics about teachers such as education level, training, and salary do not appear to explain this variation in teacher quality (read more in Hanushek and Rivkin 2010). In fact, using data from Pakistan, Bao and Das (2020) find that observable teacher characteristics account for no more than 5 percent of the variation in teacher value-added (a measure which estimates a teacher’s contribution to student learning). However, the data from Pakistan aligns with data from sub-Saharan Africa which suggests that teachers who have greater content knowledge are more effective (Bold et al. 2016; Bietenbeck, Piopiunik, and Wiederhold 2018). The data in Pakistan also suggest linkages with teacher tenure.

Based on the current evidence on teacher selection and allocation, researchers sometimes suggest a policy of selective tenure. In this type of hiring approach, teachers are hired on a contractual basis and paid at lower wages. After the contract teachers gain experience, those who performed best are hired as full-time teachers.

Notes on Context

Data from a variety of contexts shows that effective teachers are necessary for student learning. However, data from many contexts also shows the difficulty in understanding which characteristics make an effective teacher. While data points to some characteristics that may be relevant across contexts, certain factors may be more or less important depending on the country, school, and student population. As more research and data is collected on this topic, education systems will start to gain a better understanding of which factors matter most when hiring high-quality teachers.

Equity Considerations

While there is limited data on how to select teachers who will impact not only learning but also equity in the classroom, education actors may need to consider how different characteristics and motivations of the teacher could affect students. Some possible considerations may include teacher gender, caste, religion, socio-economic status, or other factors.
Operationalization

Research Questions
Below are open research questions on this topic. This list is not exhaustive but rather is illustrative of the types of questions that will help education actors make more evidence-based decisions to improve learning. Education actors interested in implementing programs in this category may want to consider including a randomized evaluation alongside implementation to (1) understand the impacts of the program, and (2) add to the global knowledge base.

- What motivates people to become teachers? How can that motivation be emphasized in the recruitment process to hire the highest potential teachers?
- What are effective selection processes to identify the most high potential teachers?
- What types of hiring policies lead to the selection of high-quality teachers?

Further Action Options
For approaches with limited evidence 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 researchers to identify relevant open questions that would benefit from further research;
- Other activities to think through the 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, JPAL_Education@povertyactionlab.org, to set up an initial exploratory meeting. The team will be happy to brainstorm potential next steps.