

Evaluating Education Interventions at Scale: Quasi-Experimental and Experimental Results from India

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Abstract

Governments routinely scale-up interventions without rigorous evaluation. To understand causal impacts at scale, this often necessitates the use of non-experimental evaluation methods. Lalonde (1986) famously showed that non-experimental methods fail to generate reliable estimates when compared with experimental estimates. Yet, non-experimental methods have become substantially more credible in the past several decades. We leverage a unique dataset in India to compare these more credible non-experimental methods, such as quasi-experimental difference-in-differences techniques, to experimental randomized trial estimates in multiple studies in India. We find a particularly low-cost application of difference-in-differences estimation yields credible results when compared with randomized trial estimates. We then use this method to conduct one of the largest scale evaluations of an education intervention to date in over 100,000 government schools with over 5 million children in Uttar Pradesh, India. The intervention studied—teaching at the right level—generates large learning gains of up to 13.5 percentage points gains in foundational numeracy and literacy skills at scale.

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