Quality Education India DIB: Learnings from outcomes-based instruments to deliver education outcomes at scale

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India needs high quality education interventions delivered at scale to bridge large gaps in foundational learning. While multiple interventions have been tried, the evidence on what works to improve outcomes in different contexts and across different types of programmes in India remains thin. This paper synthesizes evidence and learning from the implementation of the Quality Education India Development Impact Bond (QEI DIB) to add to the existing body of evidence and offer insights on paths to scale effective learning interventions. The QEI DIB was an outcomes-linked financial instrument that funded four education interventions across five locations in India between 2018-2022 to deliver improved learning outcomes for 200,000 children. The evidence from the programme yielded key insights that incremental investments in high quality interventions, providing organisations the flexibility to pursue innovations and linking financial incentives to meeting outcomes can help yield significant improvements in learning outcomes at scale. This experience shows that shifting focus from traditional inputs to outcomes can significantly enhance educational quality, offering a scalable model for future educational reforms. Finally, using robust data from QEI DIB and other recent high-performing educational interventions in government school settings showed that 1 Equivalent Year of Schooling in India costs ~USD 15-45[1], or 5-15% over the existing annual government spending per student. This provides a useful benchmark to education funders around how much learning improvement they should expect from effective interventions through their investments.

Keywords: foundational literacy and numeracy, primary education, learning outcomes, outcomes-linked financing, Development Impact Bonds, educational interventions, cost-effectiveness.

INTRODUCTION

India has made significant progress in achieving universal primary school enrolment, with a gross enrolment ratio (GER) of 100 percent[2], but many students still lack basic foundational literacy and numeracy skills. In 2022, only 20.5% of government school students in grade 3 in India could read a grade 2 level text and only 25.9% of the students could do a two-digit subtraction[3]. Addressing this foundational learning crisis remains key for India to achieve the Sustainable Development Goal 4 on Quality Education by 2030.

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[1] Dalberg, "Cost Effectiveness of education interventions in India", August 2021 found that high quality interventions1can deliver one additional year of learning in existing government schools for an additional investment of INR 1,000-3,000. In 2024 terms, this is equivalent to approximately USD 15-45.

[2] "Udise+ Dashboard." UDISE+ Dashboard, dashboard.udiseplus.gov.in/#/home. Accessed 3 May 2024.

[3] NGO Pratham, "Annual Study of Education Report", 2022

Outcomes linked financing instruments, such as Development Impact Bonds, have the potential to surface effective innovations and pathways to accelerate progress towards meeting this gap. In 2018, a pioneering collaboration between leaders from private and philanthropic sector including the British Asian Trust, UBS Optimus Foundation, Michael & Susan Dell Foundation, and others, resulted in the launch of the [Quality Education India Development Impact Bond](#) (QEI DIB). At USD 11 million and benefitting 200,000 children across government and private schools, QEI DIB was the world's largest development impact bond in education at the time of its launch. It funded five implementing partners Gyan Shala, Kaivalya Education Foundation, Society for All Round Development, Educational Initiatives, and Pratham Infotech Foundations to implement interventions in government schools and affordable private schools across five locations in India over the course of four years. [4] The interventions covered different approaches to bridging learning gaps including direct school teaching in low income communities, remedial education, teacher and school principal capacity development, and Personalized Adaptive Learning delivered via EdTech.

A key objective for the QEI DIB was to surface evidence, via large scale evaluations, on effective approaches across different contexts to bridge foundational learning gaps at scale. The programme concluded in 2022 and involved multiple rounds of large-scale student evaluations, as well as a sister study on the cost effectiveness of different education interventions. The learnings identified through the programme offer key insights into how education interventions and financing can be designed and delivered more effectively to improve the quality of learning for children. These are discussed in the next section.

PROGRAMME GENERATED INSIGHTS ON IMPROVING LEARNING OUTCOMES AND SCALING UP EFFECTIVE EDUCATION INTERVENTIONS

Evidence suggests that an additional investment of 5-15% in high quality interventions, over existing annual spend on education, can deliver one additional year of learning per student in government school settings.

Models assessed as part of the QEI DIB, and additional data obtained from other high-quality implementation organisations suggest that a spend of ~USD 15-45 produces one Equivalent Year of Schooling (EYOS) per child [5]. This is approximately 5-15% over and above the existing annual government spending per student (approximately INR 23,000).[6] The range captures the cost of direct and indirect models.[7] Direct models (e.g., Teaching at the right level, remedial teaching, etc.) cost INR USD 15-30 per EYOS[8] and indirect models (e.g., school leadership development, teacher training, etc.) cost USD 30-45 per EYOS. Similarly, adaptive EdTech models also cost INR 30-45 per EYOS[9]. These benchmarks can help set goals for education interventions in different settings and have already been employed to help design the programmes under [LiftEd](#) initiative.[10]

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[4] Educational Initiatives and Pratham Infotech Foundation operated in a partnership to implement a joint programme under the QEI DIB.

[5] Ibid.

[6] Annual government per-student spending of approximately INR 16,000 (2017) was inflated to 2019 prices and was used to calculate the cost of interventions as a percentage of annual government spending per student. This can vary from approximately INR 15,000 in low-capacity states to approximately INR 20,000 in high-capacity states (Source: NIPFP, 2017)

[7] Ibid.

[8] This is the cost of Teaching at the Right Level, Remedial education, and Non-Adaptive Ed-tech interventions that were studied.

[9] These data points come with the caveat that data was limited across models and not all the models could be studied. The study covered models like TaRL (Teaching at the Right Level) and some indirect models but not system change interventions. Deeper and more rigorous data is required to be able to formulate a rate card. Future DIBs (e.g., LiftEd DIB) and outcomes-based mechanisms provide an opportunity to evaluate this effectiveness.

[10] LiftEd is impacting the lives of up to 4 million children over 5 years by strengthening FLN learning in India through collective action, innovation, and finance. It is working in alignment with the Government of India's NIPUN Bharat Mission which

Further, a shift from focussing on inputs or activities to delivering outcomes for education interventions can result in higher learning outcomes.

In QEI DIB, improvement in learning outcome for students from intervention schools was 2.5 times the improvement shown by students in comparison schools (i.e., in schools that received no additional intervention over school-based teaching). In equivalent years of schooling (EYOS) terms, this translated to an additional two years of schooling for a student undergoing the intervention for three years (e.g., between grades 3 and 5). More students achieved grade level proficiency, including during the pandemic, in intervention schools than comparison schools. At the end of the four years of the intervention, 55% of students from intervention schools were at or above grade level proficiency, as against 25% of students in comparison schools[11].

Data collected from implementing partners suggests that the interventions operating in an outcomes linked programme demonstrated 50% higher learning outcome achievement, on average, compared to learning outcomes previously achieved by the same organisations in grant settings.

For education organisations, the adoption of an outcomes-based model resulted in flexibility to adapt their programmes based on the needs of the students and other stakeholders. This was especially evident during the Covid-19 pandemic.

Since the programme was linked to outcomes, it did not anchor funding to specific inputs and allowed them to introduce programme design or operational changes to better meet the needs of the students and other stakeholders (e.g., teachers receiving training and capacity building support) to deliver higher impact. In independent process reviews, many providers who received funding in the QEI DIB highlighted that such flexibility allowed them to better respond to challenges they encountered on the ground (e.g., in adapting programme to a certain segment of students) and pursue ideas emerging from their field teams. They further highlighted that such flexibility is often not available in grant mechanisms that remained anchored on following pre-designed inputs and activities. During Covid-19, the same flexibility allowed education providers to trial, iterate, and implement innovative remote learning models to ensure regular engagement with students continued. Many providers shifted to in-home or in-community programmes, launched digital learning activities, and implemented socio-emotional learning activities to support children. They continued to iterate on these models to adapt based on the need of their communities (e.g., digital access and usage) and programme data on which adaptations resulted in most student and stakeholder engagement.

High performing organisations with established models can further improve their intervention's performance in outcomes linked settings.

QEI DIB consisted of high-performing education providers that were selected based on their strong track-record and presence of capable teams. The organisations implemented models that had been tested in relevant settings and had early evidence of success but were not tested at scale. By the end of the programme, the organisations could surpass their past performance and even exceeded expectations on achieving outcome targets which were considered to be a stretch for the providers

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identifies FLN as an 'urgent and necessary prerequisite to learning'. It strengthens foundational learning, the 'building blocks' of every child's education journey, through a dual approach of a DIB and EdTech Accelerator.

[11] During Covid-19, even though 8-13% fewer students (compared to before the pandemic) from intervention schools reached grade level proficiency, the drop was steeper in comparison schools where 24-27% fewer students were able to demonstrate grade level proficiency.

(set based on best available knowledge and benchmarks at the time). The focus on outcomes gave clear, measurable goalposts to the providers which they were able to capitalise on to improve the effectiveness of their interventions. Further, the performance management function, a core element of an impact bond structure, helped the education providers in surfacing and pursuing innovations to push the boundary on outcomes achievement.

Finally, the data suggests that direct models are more potent at producing learning gains quickly, but indirect models may be better suited for scale-up.

Interventions under the programme were broadly categorised as direct or indirect interventions. In direct interventions, education providers work directly with children to deliver learning inputs (e.g., remedial teaching, teaching at the right level, Personalized Adaptive Learning for students using a web linked application, etc.). In indirect interventions, education providers focused on building the capacity of key stakeholders such as teachers, principals, and government officials, and therefore improve quality of learning in schools. Data from student evaluations conducted under QEI DIB showed that both direct and indirect interventions produced higher learning gains against comparison schools.

However, direct models were more adept at producing steep learning gains in short durations while indirect models were better suited for scale. On average, direct models demonstrated 50-70% higher annual learning gains per student when compared to indirect models. However, indirect interventions were 1.5x more cost-effective in terms of producing a unit of outcome indicating that they might be better suited to drive impact at scale. This inspired the LiftEd initiative, focusing on indirect interventions that work through and with the government officials to reach far more (1.5 million) students with a similar funding envelope.

CONCLUSION

The evidence from QEI DIB suggests that significant learning outcomes can be delivered at meaningful scale in government schools, and at relatively low additional cost, by facilitating incremental investments and partnerships with high-capacity education providers. These investments and partnerships can help schools or in school stakeholders (e.g., teachers and principals) to deliver tailored learning interventions that are contextualized to the needs of the students. However, the selection of the right model and the actual cost would depend on the operating context of each school and should be carefully considered before making these decisions.

For education providers and interventions, there is a strong case to link funding and incentives to concrete improvement in outcomes rather than to input or activities only. Specifically, for education providers, funding mechanisms that anchor on flexibility to adapt the programme and innovate a key principle when channelling funds can enable higher outcome achievement. In future, these principles could be incorporated to design outcomes-based programmes that aim for at scale delivery or to reform traditional giving mechanisms like grants can help increase the extent of outcome achievement. Additional support to the organisations to drive innovation can help them further push the boundary on outcomes achievement and help set new benchmarks for programme impact. However, more research is needed into suitability of outcomes linked mechanisms in supporting innovation for organisations and models at different stages of maturity. From the ongoing LiftEd DIB initiative, the authors hope that there will be much stronger body of evidence around the effectiveness/cost-effectiveness of indirect interventions that are designed for much larger scale that can be replicated across different state contexts in the country.