



Quality Education India Development Impact Bond

A case study produced as part of the FCDO DIBs pilot evaluation

December 2022



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Summary

This case study report focuses on the design, successes, and lessons learned of the Quality Education India Development Impact Bond (QEI DIB). The report summarises findings from consultations completed during three research waves: the first wave of research was conducted between July and October 2018; the second between December 2019 and July 2020; and the third between June and August 2022. Consultations were conducted with key stakeholders involved in the DIB, including outcome funders, investors, service providers and intermediaries.

At time of launch the QEI DIB was the world's largest education DIB, throughout its lifetime it funded four interventions by five service providers across five regions of India: Lucknow (Uttar Pradesh), Ahmedabad (Gujarat), Mumbai (Maharashtra), New Delhi (Delhi NCR) and Surat (Gujarat). The overarching aim of the QEI DIB was to offer a solution at scale to the learning crises in India. There was concern that, despite evidence of improving enrolment, children in India perform lower than expected in literacy and numeracy due to low quality primary school education. The QEI DIB aimed to support this issue by funding a range of high-performing service providers to improve grade-appropriate learning outcomes for approx. 200,000 primary school aged children.

The QEI DIB also aimed to drive a focus towards outcome-based contracts in the development sector in India as well as to provide evidence of the benefits of private sector participation in service delivery. QEI DIB was designed with the potential to transform the way education interventions are funded in India; by measuring the cost and effectiveness of a range of education delivery models, it aimed to support the development of a robust body of evidence to inform the allocation of future funding in the sector. Key components included robust measurements, engagement with the education and development finance sectors, and consideration of ways to standardise processes and produce templates for future outcomebased contracts.

The Quality Education India Development Impact Bond (QEI DIB) April 2018–July 2022

Outcomes achieved: Students learned 2.5x more than students in non-participating schools; the price per outcome was 46% less than the original expected price.

Geographical coverage: Lucknow, Ahmedabad, Mumbai, New Delhi and Surat, in India.

Total service users supported: 200,000 primary school-aged children.

Outcome metric: Enrolment and learning gains.

Total value: \$9.2m

Total outcome payments: \$7.8m

Investment committed: \$3m

Investor return: 8% (expected and actual)

Activities: Five organisations delivering education programmes. Delivery model types include community learning centres, supplementary remedial learning, computer-based adaptive learning platform and school leadership training.

Service providers: Educational Initiatives and Shala; Kaivalya Education Foundation (KEF); Society for All Round Development (SARD)

Convenor & Intermediary: British Asian Trust

Outcome funders: Michael & Susan Dell

Corporate partner: BT

Investors: UBS Optimus Foundation (UBS – OF)

Performance manager: Dalberg Advisors

Outcome evaluator: ConveGenius Insights

Knowledge partners: Brookings Institution

1.1 About this report

This in-depth review is a series being produced as part of the Foreign Commonwealth and Development Office (FCDO, formerly Department for International Development, DFID) DIBs pilot programme evaluation, commissioned by the FCDO (then DFID) and undertaken by Ecorys. More information about the FCDO DIBs pilot programme evaluation, including other in-depth reviews, can be found at: https://golab.bsg.ox.ac.uk/ knowledge-bank/resources/lessons-from-the-fcdo-development-impact-bonds-pilot-programme/

The case study report covers the findings from all three waves of research. The case study primarily focuses on the use of the impact bond mechanism and to examine the 'DIB effect', i.e., how the design, delivery, performance, implementation, and impact of the intervention has been affected because it has been funded through a DIB.

Impact bonds are outcome-based contracts that incorporate the use of private funding from investors to cover the upfront capital required for a provider to set up and deliver a service. The service is set out to achieve measurable outcomes established by the outcome payer and the investor is repaid only if these outcomes are achieved. DIBs are impact bonds implemented in low- and middle-income countries where a donor agency, multilateral institution, or a foundation pays for the desired outcomes as opposed to the government (although some combination of government with third party is also possible).1

The report is based on a document review and consultations with key stakeholders. Initial consultations took place during 2018 (during the second year of implementation) and were updated with subsequent consultations in 2020 (the mid-point of delivery) and 2022 (final year of implementation). A full list of consultations is set out at the end of this case study.

1.2 DIB design and set-up

Summary of set-up phase

The QEI DIB successfully brought together sector-leading experts to work collaboratively on shared areas of interest in education and impact investing, creating a significant opportunity to support high-performing non-governmental organisations (NGOs) to deliver at scale. The DIB leveraged learning from the first DIB in education (delivered by Educate Girls) to improve the design and set-up approach. This included involving an outcome evaluator earlier in the project and allowing flexibility with the contracting process. The performance management aspect of the DIB was significant, with a tightly defined shared performance management framework to help service providers reflect on implementation and adapt to achieve more impact.

The DIB faced several challenges during its set-up phase. Additional costs and time were required for project management due to the size and nascent scope of this project, including the logistics of engaging multiple outcome funders and service providers, as well as restrictive regulations on financial flows to and from India. However, stakeholders felt that many of these additional costs were essential to ensuring that they achieved the project's aspirations; comparing a portfolio of interventions in terms of their cost and effectiveness; and supporting rigour in the overall design. Despite efforts to keep the technical model simple, the assessment of learning was complex and elements of the project were difficult to explain to many stakeholders, including potential outcome funders and the service providers. This was due to the diversity of interventions within one overarching programme and unavailability of standardised data and outcomes-based evaluation frameworks at that time.

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Despite these challenges, the evaluation team identified some key advantages of using a DIB during project design and set-up. Most notably, bringing together sector-leading experts to work collaboratively; supporting high-performing NGOs with a proven track record in delivering education outcomes to deliver at scale; and creating an opportunity to directly compare different education interventions, as well as a chance to improve and standardise measurement and assessment of learning with an outcomes focus.

Lessons learned - DIB design and set-up

- 1 Involve all actors upfront.
- 2 Clearly define roles and responsibilities.
- **3** Templates and standardised processes have helped, but more is needed.

1.3 DIB delivery

Summary of delivery

Building on good performance during Years 1 and 2, the QEI DIB began Year 3 in a strong position; however, delivery was heavily impacted by the COVID-19 pandemic. Delivery pivoted to a combination of virtual and in-person delivery, benefitting from the flexibility of the DIB consortium to support the changes. Targets were combined for Years 3 and 4 to reflect the circumstances, and three methods of assessment – difference in difference in difference and independent growth targets - were developed by CGI to understand learning levels and performance of students against learning targets. Over the course of the whole QEI DIB, performance was exceeded for both learning and enrolment outcomes. However, there was variation at the service provider level with two interventions not achieving the learning outcomes in Years 3 and 4, predominantly due to the longer school closures in urban areas, such as New Delhi and Mumbai

DIB effects observed during delivery

We undertook an initial literature review and stakeholder consultations to understand how the project might be impacted by a DIB mechanism, both positively and negatively – what we refer to as hypothesised 'DIB effects'. During the research we tested whether these DIB effects materialised by comparing the DIB with a comparable project delivered through an alternative funding mechanism.

All four hypothesised positive DIB effects were observed to some extent, and the design of the QEI DIB appears to have mitigated the effects of potential negative effects attributed to DIBs. Moreover, the QEI DIB was successful in increasing the efficiency and effectiveness of programming.

Table 1: DIB effects

DIB effect	Extent to which hypothesised DIB effects observed
Positive DIB effects	
1 Greater focus on outcomes and accountability	•
2 Strengthened performance management	•
3 Adaptive management and course correction, supporting innovation	•
4 Greater collaboration between stakeholders	•
Negative DIB effects	
5 Cherry picking of participants from target population	•
6 Level, quality, range and duration of support is reduced	•
7 Tunnel vision	•
8 Increased staff pressure affecting other DIB effects	•
Greater outcomes	
9 Increased efficiency and effectiveness, leading to increased number of beneficiaries supported and outcomes achieved	•

Key: ● Hypothesised DIB effect observed and attributable to the DIB; ● Hypothesised DIB effect observed and/or somewhat attributable to the DIB; • Hypothesised DIB effect not observed and/or not attributable to the DIB.

Lessons learned - delivery and relevance

- 1 Undertake more scenario-testing upfront to plan for and accommodate potential risks.
- 2 Ensure appropriate capacity building of NGOs is embedded into the performance management plan of the DIB.
- 3 An external performance manager can be useful, but they should have a clear role.
- 4 It is valuable to have an intermediary in a large consortium who is aware of context and needs of the programme.

Regarding relevance: Overall, the success of the QEI DIB indicates that DIBs can work in the education sector within India. Specifically, the education sector is favourable to impact bond models due to the ease of measuring learning and attainment outcomes through existing assessments or standardised testing models, as well as enrolment when implemented at a whole-class or whole-school level. However, there may be certain organisational requirements needed to succeed within a DIB, which may include an established programme and/or existing strong relationships in the relevant sector, ability to implement or adopt good data management systems and a clear commitment to run flexible, outcomes-focused delivery.

Sustainability and spillovers

Several spillover effects from the DIB were also observed. For QEI, at the organisation-level this included service providers rolling out processes and learning from DIB delivery to also improve the quality of their non-DIB delivery. Additionally, the DIB provided a reputational growth opportunity for stakeholders involved. Ecosystem-level effects included increased stakeholder interest, namely the QEI consortium members, to deliver DIBs or outcomes-focussed interventions and a wider contribution to the evidence base of successful delivery in education DIBs across India and globally.

Conclusion

Despite the impact of COVID-19 during the final two years of delivery, the QEI DIB overperformed against its reduced targets as well as original targets.. The DIB mechanism supported an increased focus on outcomes, accountability, and performance management in a high-stakes environment. Service providers improved their processes and the quality of their interventions, which led to improved outcomes for students. In India and more widely, stakeholders agreed that DIBs are a good fit for the education sector, primarily because learning and proxies for holistic development can be measured quantitatively. Scalability is dependent on the evidence base created from QEI and disseminating the key learnings and success to a wider audience for future interventions in the outcomes-funding space, education sector or India. Early application of these learnings can be seen from the QEI consortium's involvement in DIBs such as the Back to School Outcomes Fund, Bharat EdTech Initiative and Skill Impact Bond.

2 Intervention and DIB design

2.1 Stakeholders involved

The total value of the QEI DIB contract was \$11.45 million, of which outcomes funding was \$9.2 million and \$2.25 was operational costs, funded collectively by organisations in India and the UK, including a \$3 million investment from UBS-OF. It was designed and developed through a partnership between UBS-OF, MSDF and BAT. MSDF was the first organisation to commit to the project, committing \$4 million, acting as the 'anchor funder'. Then BAT, acting as the convener and intermediary, raised funds from Comic Relief (\$1.4 million), the Mittal Foundation (\$1 million), the Larry Ellison Foundation (\$1 million) and BT (\$0.4 million), and FCDO contributed \$1.97 million (£1.5 million²) through a technical assistance grant. Brookings Institution, commissioned through the FCDO grant, also contributed to the DIB as knowledge partner.

Before outcome payments can be made in a DIB, there is a gap in funding for the service providers in the first year. In a straight payment-by-results contract service providers would be expected to cover these costs; in DIBs, though, this upfront working capital is covered by a private investor. The UBS-OF was the investor and managed the payments to the service providers. Outcome funders then made payments to UBS-OF at the end of each year, which enabled the working capital to be recycled once an independent assessment was made to decide if the outcomes had been met. UBS-OF invested \$3 million of funding in the QEI DIB, which was raised to \$3.3m in Year 3 and 4 due to the need to increase investment as three were no outcome payments at the end of Year 3 due to COVID-19.

If the service providers underperformed against their targets, UBS-OF was at risk of losing the money. If service providers achieved above a base case, UBS-OF will have received a return on their investment. However, there was a cap on this return: if service providers achieved above 120% of their targets, the maximum return the investor will have received was 8% per annum. Service providers were also incentivised to overachieve on their targets in the DIB, as the contract included an 8% bonus payment (equal to the investor return amount) paid upon delivery completion in the final year if outcomes targets were exceeded.

Dalberg was the **performance manager** for the QEI DIB, overseeing the service providers and their delivery on behalf of UBS-OF. Dalberg worked with the service providers to develop a shared performance management framework that reflected their theories of change and objectives. Dalberg used data from this framework to manage risks and help service providers adapt their implementation during the contract, to maximise their chance of achieving outcomes. Dalberg also provided quarterly reports to the QEI DIB steering group with updates on the performance of the project.

CGI (formerly GMI) was the independent outcome evaluator in the QEI DIB, who were responsible for verifying student learning outcomes on behalf of the outcome funders. CGI were responsible for setting the targets for the DIB and selecting comparison schools. They also produced annual reports for the outcome funders and investors comparing the performance of beneficiaries with those from a comparison group (the evaluation approach is described further below).

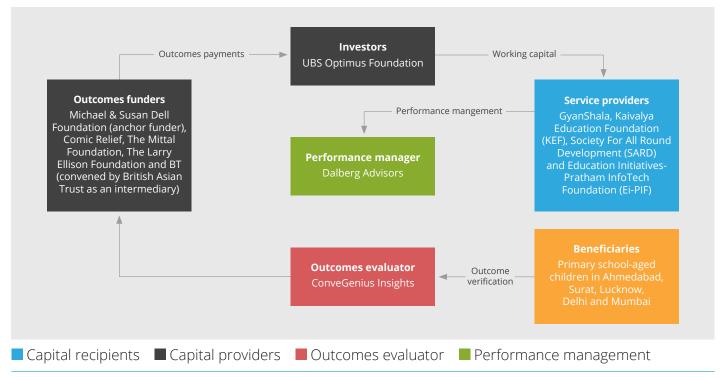
FCDO supported the QEI DIB via a **Technical Assistance Grant** (£1.5 million) paid to BAT. In this grant, £1 million was available to support the launch of the QEI DIB, paying for the outcome evaluator, knowledge partner and part of the performance management costs (majority funded by UBS-OF). The remaining £0.5 million was available to support learning on the effectiveness of DIBs and to develop tools, resources and partnerships to help replicate DIBs (in South Asia and globally).

In Year 1, the QEI DIB funded three services providers: KEF, Gyan Shala, and SARD. These service providers represented the well-established market of high-performing NGOs in India, all having over 10 years' experience providing education interventions, experience operating at scale and having engaged in independent evaluations to measure their effectiveness. The service providers were selected in a competitive process from over 70 NGOs in India. The process of selecting the service providers is described below with the design of the DIB. In the DIB, the three service providers were delivering four interventions with a mix of direct and indirect education model types. KEF delivered an indirect, whole school management programme that focused on school leadership training. Gyan Shala delivered a direct classroom programme within community learning centres for children in urban slums. SARD implemented two interventions, one direct model (supplementary remedial education) and one indirect (teacher training).

At the end of Year 1, the QEI DIB consortium decided to drop one of the interventions. Due to delays, technical and logistical issues, one intervention did not meet their targets for Year 1 under the DIB model and was not considered ready for the DIB requirements. In place of this intervention, another provider, KEF, was asked to expand its indirect model to Mumbai (Maharashtra) along with Ahmedabad (Gujarat). A new intervention was added to the DIB: a partnership between Educational Initiatives (EI)), a private company that developed the adaptive-learning, cloud-based application Mindspark, and Pratham InfoTech Foundation (PIF), a non-profit organisation that implemented Mindspark in schools based in Lucknow through the DIB.

Figure 1 summarises the QEI DIB and the main stakeholders involved.

Figure 1: Key stakeholders in the QEI DIB³



2.2 Outcome metrics

The primary outcome in the QEI DIB was improvement in learning outcomes (namely grade-appropriate numeracy and literacy skills). Improvement in learning was defined as the difference between a baseline⁴ and endline scores on a standardised test, at the start and end of each school year. Measuring distance travelled for each individual, rather than achieving a certain level of a test (i.e., a binary outcome⁵), was to ensure the service providers were properly incentivised to focus on achieving improvement in learning, and with all young people, rather than cherry picking⁶ those who were high performing at the start of the school year.

To support attribution⁷ of effectiveness, the performance of the students receiving the intervention was then compared to the performance of students from a comparison group of schools. The assessment of learning used in the DIB was based on a robust, standardised test of grade level skills in numeracy and literacy. This is different from the Annual Status of Education Report (ASER), a national citizen-led rapid assessment which assesses learning at a comparably basic level and has been conducted in India since 2005. Using a different test required the DIB to conduct baseline and endline assessments in both the intervention and comparison schools. Although only learning outcomes were linked to payment in the DIB, a minimum threshold of enrolment had to be met for payments to be made and the monitoring framework devised by Dalberg comprised a wider range of metrics, which aimed to provide evidence on the quality of the interventions. At the demand of outcome funders, this included feedback from the beneficiaries on the experience of the service, as well as monitoring of attendance.

³ Source: Adapted from a PowerPoint presentation delivered jointly by BAT and UBS-OF (AVPN June 2018). Updated by Ecorys, October 2022.

The state before the intervention, against which progress can be assessed or comparisons made. Baseline data is collected before a programme or policy is implemented to assess the before state. The availability of baseline data is important to document balance in preprogramme characteristics between treatment and comparison groups.

⁵ A binary outcome is a type of hard outcome that has only two states, either an outcome is achieved or it is not. For outcomes based contracts, they are used where it is deemed unacceptable for the public sector to pay for outcomes that include negative events.

⁶ This is a perverse incentive whereby providers, investors or intermediaries select beneficiaries that are more likely to achieve the expected outcomes and leave outside the cohort the most challenging cases.

⁷ The extent to which changes in the relevant outcomes can be attributed to a particular intervention

2.3 Payment structure and targets

The payment structure reflected the education models in the DIB. A higher payment was attached to models that worked directly with students (e.g., implementing supplementary remedial learning in community learning centres); and a lower payment attached to in-direct models (e.g., school leadership training). The difference between the models reflected the delivery costs and targets, which were higher for direct models. The targets were expressed as the difference from the comparison group performance in standard deviation (standard points of variation around the mean). CGI, the independent outcome evaluator, developed the targets for each of the models based on existing literature and data available on different interventions, including evidence of each of the service providers' own track record and costs in previous delivery. The outcome pricing structure, outlined in Table 2, comprised a fixed price per beneficiary for reaching the improvement target and the standard deviation target for the different models.

Table 2: Outcome pricing framework8

Operational model/benchmarks	Directly operating classrooms (i.e. in class teaching)	Remedial programmes	Teacher/ principal training
Proposed target cost per beneficiary (USD, per annum)	\$71	\$16.2	\$5
Proposed target outcomes improvement (standard deviation, per annum)	0.4	0.23	0.18/0.17

2.4 Governance

The governance arrangements for the QEI DIB were set up to align the interests of the different groups, but also to ensure there was efficiency in the decision-making processes given the number of stakeholders involved in the model. The main governance for the project was the responsibility of the steering committee.

Key features of the QEI DIB steering committee are listed below:

- The QEI DIB steering committee comprised of the DIBs strategic representatives from UBS-OF, MSDF, and BAT, who met on a quarterly basis to review progress, challenges, and emerging knowledge. Dalberg Advisors played a supporting role.
- > BAT represented the interests of the other outcome funders in its convening role for the DIB. BAT also reported to FCDO on decisions made by the committee. This representation and engagement was to ensure that outcome funders and FCDO were engaged in the decision-making process for the DIB, and that their contributions were streamlined to keep the committee meetings focused.
- > Although not present at the meetings, the outcome funders that were convened by BAT also had final say in decisions made by the other steering committee members, pertaining to issues which altered the initial design of the DIB. This included changing the outcomes, pricing, or targets; terminating or adding a service provider; geography (e.g., for political reasons); reallocation of unused funds; issues with data collection; or outcome evaluator results.
- > Force majeure events were included in the legal contracts as events which may require project **termination.** This included natural disasters, pandemics, political risks/policy changes that directly affect the intervention, and events such as riots/violence.

- > UBS-OF had the power of veto on the continuation of the DIB. This was based on the projected returns each year based on outcome performance. Every quarter, UBS-OF had to inform the steering committee about whether performance was on track. If too few children were reaching the expected targets, and the return was zero or negative, UBS-OF could have halted the project as the investment was no longer viable.
- > Supporting the steering committee was an advisory committee. The advisory committee comprised of sector experts (innovative finance, education, representatives from the Indian Government, not-forprofits, legal) who provided advice and oversight of the programme.

3 DIB set-up

3.1 Designing the intervention

From inception, the QEI DIB took two years to design and launch. The main design phase lasted six months, involving UBS-OF, Dalberg, BAT and MSDF. and included sector leading experts in the design phase of a project with this scope, to ensure maximum credibility and impact of the DIB. UBS-OF also explained that, in their experience, engaging organisations with strong local connections leads to better results and was therefore an objective in the QEI DIB to support a transition to procuring social impact bonds (SIBs) in India.

Outcomes, metrics, and payments

Designing the outcomes, metrics and payment structure was the most significant element of the **DIB development process.** MSDF led the work initially and then drew on expertise from CGI to create the outcome targets. MSDF reported that it was important that an independent organisation developed the benchmarks for the outcomes to ensure there was external validity in the model. It was MSDF who initially suggested that the model included an assessment of grade level learning outcomes, rather than basic numeracy and literacy; whereas for others, like BAT and UBS-OF, the main consideration was to ensure the model was attractive and understandable to investors and outcome funders. From MSDF's perspective attainment of just basic literacy and numeracy skills was not sufficient for the project objectives and would not make a significant change in the life outcomes of the students. Therefore, it was essential that the assessment in the DIB included a more rigorous assessment and measure the grade appropriate learning outcomes and it was agreed by BAT, MSDF and UBS-OF that this was the most robust approach to apply.

Including a new standardised assessment of learning carried some additional risk for the service providers. While all were familiar with being evaluated, a couple of the service providers were not familiar with the assessment and therefore their performance in this context was unknown. Those that were familiar with this type of assessment were new to using it as the basis for payment and the added focus this created on performance. However, because all the service providers were confident in their interventions and believed that the targets make sense and could be achieved, they were comfortable taking on the potential reputational risks.

During negotiations, other agreements were reached to keep the model simple without affecting the overall integrity of the design. This included representing the targets as average learning gains on a standardised scale, in addition to standard deviation, to make it easier to explain to those not familiar with statistical methods. Similarly, beneficiaries were counted discretely, which meant each individual was counted in the contract; rather than using a weighted discrete method, which counts each individual but also accounts for the number of years that the individual has received the intervention. The latter would reflect level of engagement with the intervention; however, it is harder to explain, and stakeholders felt it was important when engaging others in the project to be able to clearly communicate the target number of beneficiaries in the project (200,000).

Identifying service providers

The four interventions, delivered by five service providers, included in the QEI DIB were selected following a competitive process and an in-depth due diligence procedure during the design phase. UBS-OF, Dalberg, MSDF and BAT reviewed applications from over 70 NGOs in India considering a range of criteria in the decision making, including:

- Track record of running interventions supporting learning outcomes;
- Focusing on primary education for low incomes populations;
- > Ability to scale;
- Service costs;
- In-house monitoring and evaluation capabilities; and
- **>** Government relationships at the local level.

UBS-OF reported that it was essential to include service providers who were open to innovation, could be flexible in their implementation and had a track record delivering the outcomes. This was to ensure that the service provider was able to adapt and respond to the demands of the DIB, particularly in the set-up phase and the on-going performance management structure. In addition, it was essential that the service providers had strong links with the government in the relevant districts to be able to help CGI identify the appropriate comparison schools.

"QEI DIB is one of the most complex DIBs to actually try out because none of the interventions are similar to each other. The whole idea to bring these partners together and evaluate them is innovation to me. No one has actually tried it out. You are starting with an indirect model, an EdTech model and a very direct model. Bringing in different groups is innovation" (Outcomes evaluator)

All the service providers of the QEI DIB are well-established organisations with a known track **record in education.** They were all able to commit to the DIB requirements without needing to make substantial organisational changes. Although the focus on performance management and the focus on outcome-based targets was new for all, representatives from the organisations reported that they were familiar with being evaluated, and all were open to learning and supportive of this different way of working.

Performance management

A key part of the QEI DIB was the performance management framework. Dalberg Advisors was leading this element of the project and worked closely with the representatives from each of the selected service providers during the design phase to understand the theory of change of each of their interventions, as well as the potential risks in the DIB and their existing monitoring and evaluation systems. This work built on the due diligence conducted during the selection phase (described above) and aimed to ensure that the organisations were able to respond and deliver on the requirements of the DIB.

Contracting

The legal contracting process for the DIB took six months (January to June 2018). This was noted by several stakeholders as an improvement on the experience in the Educate Girls DIB, which took two years to contract. This supports the idea that with each DIB project some of the time and costs associated with the routine transactions can be reduced.

UBS-OF's preference was to have a single framework contract for all stakeholders involved in the DIB to keep governance arrangements simple, but it was challenging to align the interests of the outcome funders within one framework. It was made harder because the outcome funders had concerns about signing a contract that directly associated them with the service providers, who they had not selected and whose operations they were not overseeing. As a solution, UBS-OF signed a framework agreement with all stakeholders with sub agreements spelling out specific contractual relationships between stakeholders. UBS OF then signed separate outcome payment agreements with the outcome funders. The contract arrangements for the stakeholders in the QEI DIB are described below.

- **>** A framework Implementation Agreement: Between the Service Providers, Dalberg, UBS-OF and CGI.
- Outcome Evaluation Agreement: Between BAT and CGI. This covers the costs of outcome evaluation. activity being funded by FCDO.
- Performance Management Agreement: Between UBS OF and Dalberg
- Outcome Delivery Agreements: Individual agreement with each delivery organisation (1) Gyan Shala, (2) SARD, (3) KEF, and (4) EI-PIF.
- > Outcome Payment Agreements: Individual agreement between UBS-OF and (1) The British Asian Trust and (2) MSDF.

3.2 Enablers and challenges to launching the DIB

Enablers

There were several enablers which facilitated the setting up of the DIB. These are set out below.

Collective leadership:

Given the range of different interests represented in the QEI DIB, strong collective leadership at a strategic level, both within and across organisations, was integral to the successful development and mobilisation of the contract. UBS-OF also reflected that it had been a priority for them to involve stakeholders from organisations that were like-minded in their commitment to achieving social impact, and with a high level of expertise, in order to support the complex design phase of the project. In choosing the right partners they were able to navigate through the difficult decisions and agree a model for the DIB.

BAT also commented that the high level of openness to share organisational and technical knowledge was an asset to the project and was different to other types of collaboration in grant making, particularly in the international development sector. BAT reported that it was refreshing to work on a project where all stakeholders, particularly those from sector leading organisations, like MSDF and UBS-OF, were motivated to share their resources and apply their skillsets in a way to optimise the final design.

At an organisational level there was also positive feedback on the support provided by UBS-OF and **Dalberg to the service providers.** Service providers described the development phase as a collaborative one, with Dalberg making the effort to learn the details of their different interventions to inform the design of the monitoring system. Finally, to ensure that there was full buy-in to the new way of working and commitment to the requirements of the project, it was essential that Dalberg Advisors and the senior stakeholders within each service provider organisation worked together to engage the wider teams.

Clear, measurable outcomes and linked to overall objective of the intervention

UBS-OF stakeholders reported several reasons for why it is reasonably straightforward to create a **DIB financial model comprising education outcomes.** Firstly, there is justification to assess outcomes within a reasonably short timeframe, assessing student performance at the start and end of the school year. Secondly, it is possible to directly measure the outcome of interest, student learning, rather than relying on proxy measures, an indirect measure strongly correlated to the desired outcomes, as is often needed in healthcare DIBs for example. Therefore, in education there is opportunity to develop a payment model that suits the interests of both the investors, who want to receive their repayments within a reasonable timeframe, and the outcome funders, who want reliable evidence that the intervention had impact as intended. While at a high-level including education outcomes suits an outcome-based contract, there were challenges in defining the specific outcomes in this DIB as this was the first time different educational models were being tested at the same level and implementing an appropriate outcome-payment framework.

Shared understanding of the policy 'problem' and sufficient evidence for the intervention so that it is credible or knowledge-based

All the main stakeholders brought a high level of knowledge of the issues facing the education system in India as well as from their respective sectors. This includes evaluation (MSDF and CGI) and networks of grant-making or convening organisations (MSDF and BAT). Many of the stakeholders were also able to take forward knowledge from the Educate Girls DIB, which helped them to be efficient in decision making around the different issues, as well as building confidence in the effectiveness of the new DIB model. UBS-OF commented that because of the high-level of expertise within the team, little additional consultancy was needed to develop the DIB, beyond legal and financial advice.

Data to build up a business case, including data on the eligible cohort and outcomes likely to be achieved

It was possible to set the learning outcome targets for the DIB because MSDF could supply the data necessary to CGI to create the benchmarks for the targets. The targets for the DIB were purposively set at the cusp of achievable, but still at an aspirational level for the service providers, with lower targets in the first year, allowing for set up, and variation in targets for the model types (i.e., lower targets for indirect model and higher targets for direct models). Part of the reason for setting these targets was to balance the risk to the service provider in using the robust measurement but still push them to be efficient and vigilant in delivery.

The nascent and high-profile nature of the project

Many of the organisations partly engaged on the basis that they would be involved in a high-profile project in the impact investing space. The outcome funders in particular were all keen to understand how this nascent model of impact investing worked. They could see the benefits to their own organisations of learning from direct experience. The reputation of the main stakeholders, including MSDF, BAT and UBS-OF, also gave the project credibility and the service providers were also well known in India for their programmes. For the service providers, there was also potential to increase their reputational standing if their intervention was a success in the DIB; this stemmed partly from media exposure through the DIB but also in improving their track record through the rigorous evaluation in the DIB.

Technical assistance

Stakeholders reported that technical assistance significantly supported the set-up process, as it covered the costs of the outcome evaluator, knowledge partner and some of the performance management costs. Technical assistance to the QEI DIB was provided by FCDO, UBS Optimus Foundation and Hogan Lovells. Support from FCDO helped to attract the other outcome funders and provide more credibility.

Challenges

This section describes the main challenges that were experienced in the set-up of this QEI DIB. These reflect the scope of the project, which required a significant commitment from outcome funders, but also the priority placed on a robust assessment of learning and a rigorous evaluation of impact.

Considerable time and resource needed to engage the outcome funders

After MSDF confirmed their contribution of \$4 million, BAT needed to engage with contacts in their networks to raise the remaining \$6 million. For BAT this process was resource intensive, and for others, including UBS-OF, it caused delays in the development process. The process of engagement was resource intensive, as BAT needed to adopt a tailored, personal approach, rather than a generic one with their whole network. Notably, the additional time and resource requirement was due to the scale at which this was being implemented. Although the QEI DIB built upon the Educate Girls DIB, the scale and number of stakeholders involved heightened the complexity.

The engagement process was also made harder because BAT needed to explain some of the basic principles of outcome-based contracts and investment terminology, as the potential outcome funders were new to the area and had limited understanding of the differences in what their role would be. Specifically, BAT needed to be clear that funders were joining a very innovative and a first multi-party DIB in India but that it differed from regular grant making in the following ways:

- **Outcome funders would have less of a direct role** in managing the service providers they were funding. They would receive updates on progress and engage in decision making through the steering committee; however, Dalberg and UBS-OF would be responsible for direct management and feedback.
- > Outcome funders would also have less of a role in designing the model, including less oversight of outcome selection, the type of assessment or the service providers. This was due to the timing of the engagement, which followed the main design phase. Again, this differs from typical grant making, where the funder is involved from the beginning and has the main responsibility for setting up the project. However, the outcome funders in the QEI DIB were required to sign off on all terms of the final framework selected.

While the process in engaging outcome funders contributed to the set-up time and costs, on reflection BAT stakeholders felt that the organisations that engaged were well suited to the project in terms of their interests and skills in education and impact investing, as well the mix in terms of public and private funding and the involvement of both UK and Indian organisations.

Striking a balance between a robust, technical model and one that was attractive to investors and outcomes funders

UBS-OF stressed the importance of keeping the financial model in the DIB simple, to ensure that it was attractive to investors and easy to implement. However, it was a priority for MSDF to ensure the model of assessment was robust and credible. A number of stakeholders, including BAT and the outcome funders, also raised concerns about implementing an overly technical framework, and focussing solely on learning outcomes. The trade-offs introduced to achieve a balance of simplicity and robustness are described in the previous section. Despite attempts to keep the model simple, service providers reported that they did not have complete understanding of the outcome-payment framework, as the approach was very different to the standard fee-for service or grant-based contracts that they were used to. Despite this, service providers were generally open to working in this way and learning from the approach in practice.

Time and resource spent identifying a suitable comparison group

A third challenge was the process for identifying a comparison group, which both complex and resource intensive in the DIB set-up. The service providers needed to engage the local government for permission to access other government schools, identify suitable schools to serve as comparison schools, engage them in the assessment by CGI and then explain the monitoring requirements of the DIB. This was a demanding task for all service providers, in particular for one provider their model made it difficult to get permissions from the government given their context. The service provider therefore needed to spend additional time recruiting enough alternative schools, delaying the process of piloting and baseline data collection.

3.3 Lessons learned - DIB design and set-up

- 1 Involve all actors upfront: BAT reported that it would be more efficient to engage all actors prior to designing the details of the DIB model. This would mean that those funding the model would have the opportunity to shape the DIB design and selection of service providers.
- 2 Clearly define the roles and responsibilities within the DIB: BAT emphasised the importance of communicating the details of the model, including the sharing of risks, the level of investor returns, and the scope of the intermediary role. This is to ensure that there is clear understanding from all parties of their roles and responsibilities, as well as the terminology and structure of the DIB, during implementation. UBS-OF noted that as this was the first large-scale DIB in India, they requested more direct operational involvement from BAT, but that future investors may be less likely to adopt such a hands-on approach from outcome funders/conveners as DIB structures become more common.
- 3 Workshops with the different stakeholders work well to keep messaging consistent about **project objectives and solve challenging issues:** UBS-OF reported that organising workshop events to discuss the model and the requirements of the project helped considerably, given the scale of the project and the number of stakeholders involved.
- 4 Templates and standardised processes helped, but more was needed: Despite evidence in this DIB that learning had been taken forwards from the Educate Girls DIB to improve design and increase efficiency, the development process overall was still long and complex, particularly as the DIB structure included multiple outcome funders and multiple service providers for the first time in India. Developing templates to standardise processes would help with efficiency but would also help maintain organisational knowledge on a project. UBS-OF stakeholders reflected that through documenting and sharing experience on the routine processes, DIBs should become easier to share and adapt.
- 5 Potential benefits of including a special purpose vehicle (SPV): In the current model, UBS-OF manages all the financial flows from outcome funders and to the service providers. However, on reflection it would have preferred a SPV to separate out the finances, despite the complexities of setting this up as UBS-OF is part of UBS, and dependent on the legal possibilities/regulations in the country of operation.

DIB delivery (June 2018-July 2022)

4.1 Summary of delivery

This section provides an update on the delivery of the DIB and stakeholder experiences and perceptions. The table below illustrates the planned and actual results for the QEI DIB.

Table 3: Overview of objectives and results

	Planned ⁹		Actual ¹⁰	
Outcomes achieved	Learning ¹¹	Enrolment ¹²	Learning	Enrolment
	Y1: 5-10	Y1: 103.1k	Y1: 280%	Y1: 100%
	Y2: 5-12.5	Y2: 106.2k	Y2: 325%	Y2: 100%
	Y3/4: 12.5-33	Y3/4: 70.8k	Y3/4: 229%	Y3/4: 150%
Outcome payments made	\$9.2m ¹³		\$7.8m ¹⁴	
Investment committed	\$3m		\$3.3m ¹⁵	
Investment return	IRR 8% p.a.		8%	

The DIB performed well in Years 1 and 2 up to July 2020, showing a trend of growth in learning outcomes for two years in a row. All the service providers who were evaluated in Year 2 exceeded learning targets and recorded a better performance than comparison groups. The first year of implementation was mostly dedicated to understanding: the DIB model and functioning; each other's roles and responsibilities; and how best to interact and collaborate with other stakeholders. In Year 2, several improvements were made. Providers felt more confident about delivery and building on learnings from Year 1, focused on adaptation and how to improve their performance.

At the end of Year 2 (July 2020), the COVID-19 pandemic hit India and school closures began to affect delivery for service providers. All delivery pivoted to a combination of virtual and in-person delivery, with the consortium terming this 'phygital' for the combination of physical and digital delivery. The table below provides an overview of delivery during Years 3 and 4, which is followed by further detail.

⁹ For Years 3 and 4 the adjusted targets are included, the original targets were 20-50 for learning which was achieved at 123% and 107k enrolments which was achieved at 100%.

¹¹ Learning growth attributable to treatment effect, measured in scaled score points.

¹² Number of students enrolled/engaged on programme.

¹³ The QEI DIB was contracted in INR, therefore USD costs are indicative. Notably, the INR has depreciated against the USD since the QEI DIB was launched - Planned (2018) 628,767,123 INR versus Actual (2022) 568,566,489 INR.

¹⁴ There were a number of drivers which contributed to the lower outcome payments compared to the original commitment, including lower incentive payments due to non-payment of one provider, lower costs which lowered the value of incentive payments, and there was high performance of the DIB in early years which frontloaded payments.

¹⁵ This was raised to \$3.3m in Years 3 and 4 to take into account there was no outcome payment at the end of Year 3.

Table 4: Overview of delivery

Component	Year 3 (June 2020) to end of programme (July 2022)			
Outputs/ Outcomes achieved (vs expected)		Service provider	Actual	Expected Target range
	Number of beneficiaries supported vs. expected Enrolment	EI-PIF	139%	10.5k
Year 3 and 4 combined		Gyan Shala	80%	7k
results		KEF Gujarat (Ahmedabad)	175%	30.2k
		KEF Maharashtra (Mum-bai)	164%	15k
		SARD	102%	8.1k
	Outcomes achieved vs. expected Learning Gains	EI-PIF	308%	15-18
		Gyan Shala	327%	25-33
		KEF Gujarat (Ahmedabad)	387%	12.5-14.5
		KEF Maharashtra (Mum-bai)	-50%	14.5
		SARD	63%	15-20

Targets were subsequently combined for Years 3 and 4 to reflect the circumstances, and no outcome payments were made at the end of Year 3 (July 2021). However, delivery stabilised by Year 4 (July 2022) and the programme was able to conduct endline assessments which concluded that the programme exceeded the reduced COVID-19 targets, and its original targets.

Effects of COVID-19

During the second year of implementation, the COVID-19 pandemic impacted India and subsequently a wave of school closures restricted the QEI DIB's ability to deliver the existing model. The consortium reacted flexibly and quickly to the changing restrictions throughout India and in schools. Service providers appreciated the continued support during a time of heightened risk of non-delivery due to school closures. The steering committee reaffirmed their belief in service providers to pivot during this time by continuing to fund delivery, because "if we are committed to outcomes, it is outcomes under any context." (Intermediary)

As the QEI DIB included four service providers across five locations, the COVID-19 pandemic had a differential impact on each programme and therefore a one-size-fits-all response across the consortium was not possible. Across India, schools were open for in-person learning for a maximum of five out of 18 official school months from March 2020 to September 2021. While schools in Lucknow and Ahmedabad operated at full capacity when open, those in Delhi and Mumbai operated at 50%. The differential impact in cities versus rural areas impacted all service providers, with providers in Delhi and Mumbai suffering from longer lockdowns and not being able to deliver within schools. In rural areas, service providers experienced an uptake in enrolment figures, attributing this to the increased urban-rural migration in a costsaving effort from families. Similarly, children were moving from private to free government schools in a costsaving effort by parents, which increased enrolment numbers for KEF and EI-PIF, who operate in these schools. Service providers pivoted their delivery in various ways, all reacting in a needs-based way to deliver in the most appropriate and beneficial way for the students, families and communities. Providers adapted as follows:

- **Gyan Shala:** Worksheets were distributed, and children were guided over the phone until June 2020, after which house visits by teachers with up to five students took place. From September 2020, students attended the regular community classrooms in small groups wherein recorded video lessons were displayed on the TV. Students also took part in small group activities facilitated by teachers and sent home with guidance and worksheets at home. From September 2021, full classes were delivered, complemented with the recorded lessons and videos wherever suitable.
- **KEF:** Hired over 50 interns, based in the community, to offer basic lessons for maths and literacy in community classrooms. This was supported by KEF fellows who completed community outreach trips, distributed worksheets, and collected 1.5 Lakhs (approx. £1500) from donations for ration distribution across both DIB and non-DIB programmes.
- **Ei-PIF:** Implemented an SMS delivery model, which sent links to foundational learning courses until December 2020, in the absence of a mobile Mindspark model. From January 2021, Mindspark transitioned to an online model accessible outside of the classroom and classes were able to take place in community classrooms.
- > SARD: WhatsApp groups and Google Meet were used for sharing worksheets and videos and conducting classes with students.

The DIB steering committee also adapted their delivery during the pandemic and subsequent lockdowns. The consortium entered discussions with service providers, with Dalberg acting as the intermediary between the steering committee and service providers, relaying ground-level impacts and needs so the DIB could react accordingly. Ultimately, the steering committee agreed to provide service providers within the QEI DIB with a 'COVID relief fund' grant, to be spent on delivery across DIB and non-DIB programming with the aim of keeping as many students engaged in learning as possible during the pandemic.

The DIB structure was adapted to respond to the COVID-19 pandemic as needed in the following ways:

> Verification: ConveGenius Insights [CGI] (formerly Gray Matters India), redesigned their data collection method. Prior to COVID-19 this comprised of a week-long visit to each service provider conducting assessments using a paper method. During the pandemic, CGI trialled digital assessments with the help of service providers in collecting the data. A dipstick assessment was conducted during COVID-19 to understand the learning levels of students during the pandemic. Assessments for Gyan Shala in Year 2 could not take place as originally designed, therefore CGI modified their assessments employing a difference in difference approach to measure three-year growth, instead of two (Year 2 baseline to Year 4 endline). For KEF, SARD and Ei-PIF Year 2 endline and Year 3 baseline assessments were conducted as normal. CGI developed three approaches to overcome the challenges of missing data so that targets would still reflect comparison between treatment and control, and where not possible actual gains between baseline and endline in the treatment group, as follows:

Service Provider	Year 2 Cohort	Year 3 Cohort	Year 4 Cohort
Gyan Shala	Difference in Difference ^A	Difference in Difference	Independent Growth Target
SARD	Difference in Difference	Difference in Difference	Modified Difference in Difference
Ei-PIF	Modified Difference in Difference ^B	Independent Growth Target ^p	Independent Growth Target
KEF (Ahmedabad)	Difference in Difference	N/A ^c	Difference in Difference
KEF (Mumbai)	Difference in Difference	Not Measured E	Not Measured

Table 5: Modified assessment measures, per provider and cohort

A: Difference in Difference: Data was available.

B: Modified Difference in Difference: Comparison data was not available in relevant geography, but available in other locations or grades of the same provider.

C: N/A: No baseline data available.

D: Independent Growth Target: Targets of 5 scale score points per year were set where data was not available.

E: Not measured.

- > Targets: MSDF and BAT, with support from the outcome funders convened, showed flexibility in lowering outcome targets during Year 3, mitigating against the risk of low performance. Revised targets were discussed and agreed by the steering committee and as targets for Year 3 and 4 were combined, no assessments took place in Year 3,. Learning targets were reduced but still maintained at an aspirational level. Year 3 targets were lowered significantly on account of intervention disruptions and lockdowns Year 4 targets were kept unchanged as delivery was expected to stabilise by Year 4. Revised targets were 60-75% of the original Years 3 and 4 targets combined. Enrolment targets were reduced by approximately 32-38% for Year 3 and Year 4, given large scale migration back to villages and lack of confidence among parents to send children back to school.
- > Payment schedule: UBS-OF communicated their plans to continue funding throughout the pandemic promptly, showing their support of service providers during uncertain times. UBS-OF continued to absorb elevated risk and chance of low performance, especially with no outcome payments during Year 3 and combining results and outcome payments with Year 4. However, the reduced targets for which they were repaid upon eliminated some of this risk. The target price per outcome increased in Years 3 and 4 due to the combined reduced targets (increase by 87% for those 2 years) but the price per outcome over the 4-year delivery period stayed within the original targets, as the combined targets were similar to the sum of individual targets in Years 1 and Year 2.

The steering committee reflected in consultations (August 2022) that the continuous school closures and long-term nature of the pandemic forced them to rethink the targets and cater for the possible learning loss. Onus was placed on the risk investor more heavily during COVID-19, as their response was integral in allowing the DIB to continue through adjusted targets. Without UBS-OF agreeing to continue funding the DIB and skip outcome payments for a year, absorbing additional risk of underperformance in the final year, service providers would not have been able to continue delivery. In comparison, for their non-DIB programmes, Gyan Shala managed to obtain grant funding from SBI for their middle-school programme, however faced difficulty in sustaining their Uttar Pradesh programme as the funding 'dried up' and there were no COVID support funds to draw from like in the DIB, so they had to reduce the number of classes to 75%.

In the July 2020 consultations, stakeholders felt the outcome-oriented nature of the DIB had motivated all stakeholders to look for solutions, and to realign their interventions without losing sight of the expected targets through the flexibility the DIB framework enabled. This continued throughout the COVID-19 pandemic, with service providers reflecting on the flexibility of the DIB in August 2022. Service providers felt the consortium responded in a timely and appropriate manner during an unprecedented period of uncertainty. The DIB was able to divert funds and was flexible in allowing service providers to spend the funds on different lines of project activity than initially agreed. However, this was not unique to DIB delivery, as the QEI DIB service providers reacted consistently across both their DIB and non-DIB delivery during COVID-19.

4.2 DIB effects

This section describes the 'DIB effects' observed during implementation, i.e., how the design, delivery, performance, implementation, and impact of the intervention was affected because the project was funded through a DIB. To understand how the DIB model has affected the implementation of the intervention, we use a list of potential DIB effects identified from a review of the literature and stakeholder consultations. These potential effects are listed in the table below. Our research assessed whether the DIB effect was observed in the project and whether this could be attributed to the impact bond mechanism. It is important to distinguish between the two – just because an anticipated effect of the DIB exists in the project, does not mean the DIB itself necessarily created this effect, as it could have been caused by other factors. We assessed whether the effect can be attributed to the DIB by comparing the DIB to how these service providers operated when funded through grants. We explored whether the effect materialises more strongly in the impact bond-funded project compared to the similar grant-funded projects, and whether stakeholders attribute this difference to the impact bond mechanism rather than to other factors.

For each category of DIB effect below, we have set out our findings for the effects as a RAG (Red, Amber, Green) rating, indicating the extent to which these effects were observed and the extent to which it is attributable to the DIB.

DIB effect summary

Table 6: DIB effects

DIB effect	Extent to which hypothesised DIB effects observed
Positive DIB effects	
1 Greater focus on outcomes and accountability	9
2 Strengthened performance management	•
3 Adaptive management and course correction, supporting innovation	•
4 Greater collaboration between stakeholders	•
Negative DIB effects	
5 Cherry picking of participants from target population	•
6 Level, quality, range and duration of support is reduced	•
7 Tunnel vision	•
8 Increased staff pressure affecting other DIB effects	•
Greater outcomes	
9 Increased efficiency and effectiveness, leading to increased number of beneficiaries supported and outcomes achieved	•

Key: ● Hypothesised DIB effect observed and attributable to the DIB; ● Hypothesised DIB effect observed and/or somewhat attributable to the DIB;

Hypothesised DIB effect not observed and/or not attributable to the DIB.

Positive DIB effects

Greater focus on outcomes and accountability

Service providers were better aware of how the different activities they delivered affected learning outcomes, and how this differed by grade and subject. They were already used to tracking outcomes and did so in the non-DIB interventions they delivered, but this was stronger in the DIB interventions. In the DIB providers knew which activities they needed to focus on to achieve which outcomes, and where they needed to improve. Providers now approached programme results more analytically, looking not just at how the programme was progressing in general, but breaking down every aspect of the results. Service providers felt the presence of targets and outcomes helped them to maintain focus and work towards an end goal.

The following examples from providers' experiences show how the DIB effect materialized in practice:

- > KEF fellows understood the DIB model and the targets they were working towards. Although teachers and headmasters that the providers worked with were not aware of the specific service providers' targets, they were however clear about the learning outcomes the intervention should achieve. Fellows felt the "achievement goals of students [were] helpful as it gave [them] direction. Such things should be part of the programme, outcomes do matter".
- > GyanShala restructured their curriculum content around the objectives identified through the **DIB.** They aligned each Grade's activities with specific Grade-related objectives rather than cumulative objectives related to Grades 1 to 3. As a result, the design team included more activities to ensure better grade-specific learning outcomes, and the curriculum was more dynamic than before. This was also reflected in their non-DIB delivery, where they also adapted their measurements to annually instead of cumulatively across three years.

One of the reasons for this increased focus on outcomes and higher levels of accountability was that the DIB was structured around clear outcomes. Through regular workshops, visits and brainstorming sessions, and building on learning from Year 1, in Year 2, Dalberg and CGI clearly defined and explained to service providers, teachers and headmasters they worked with the DIB's expected outcomes and targets, how these were measured, the process for data collection and analysis and the specific activities that outcomes were attached to. This helped clarify any doubts left from Year 1 on outcome measurement. A sharper understanding of the end goal was achieved, which was then incorporated into the design of the providers' curriculum and activities. This triggered providers' motivation to deliver, as shown in the quote below:

"The earlier, non-DIB programme used to work fine, and teachers were motivated, but now their performance is measured, and this triggers competitiveness and motivation. Teachers now strive to achieve learning outcomes. At baseline in Y1, teachers realised what is measured by the DIB and understood what they need to work on, what parameters count." (Service provider)

Through Years 3 and 4, service providers continued to feel the presence of outcomes and the challenge of working in a high-stakes, outcomes-focussed environment. Across the providers, many noted the positive pressure this created in motivating performance, as noted in the below quote:

"I felt challenged due to the targets given but I felt satisfied when I achieved those targets and it motivated me further to do the good work (...) There was a pressure for performing better as it was an outcomebased model but that worked as an external motivator for us to achieve our targets on time and kept us focused on doing what we were doing earlier." (Teacher, Service provider)

This same pressure to achieve targets was not present in non-DIB delivery to the same extent. As service providers all operated with some form of assessment and outcomes-focus prior to the DIB, the accountability was present before but not the pressure to deliver and the risk of not achieving outcomes. An outcomes-focus in delivery was already present in non-DIB delivery, therefore the presence of the DIB enhanced the existing processes but is not necessarily the sole cause for the greater focus.

Strengthened performance management

Under the DIB, more and better data was collected and regularly discussed internally and with Dalberg, which informed strategic thinking and ongoing delivery. Service providers involved in the DIB had long operated in the sector, had strong monitoring and evaluation (M&E) systems in place and were delivering models that were inherently data driven, effectively leveraging data for decision making; there was therefore already an element of strong performance management.. However, under the DIB existing M&E activities became more intense, with more frequent and accurate data collection and analysis processes in place, as well as regular brainstorming sessions with Dalberg. There became greater alignment and understanding of how to map insights and data from the field to the programmes' broader strategy, to assess whether programmes were on the right track. This is shown in the example and quote below:

GyanShala reported they were more able to take better decisions in relation to the design and delivery of the intervention, with stronger processes in place to deliver the programme and achieve objectives. As a result of the DIB the Management Information System was improved across both DIB and non-DIB delivery, as more data was collected (e.g., data on learning outcomes, structured feedback from teachers and supervisors) and reviewed more frequently (quarterly and then annually). For example, the team formalised the process of collecting feedback from teachers and supervisors, which was only happening informally in the past. Previously, all teacher and supervisor feedback were discussed and actioned at the field level only; under the DIB feedback was escalated to the central level, with resulting improvements in practice. With quarterly tracking and updates, the team became able to detect and evaluate change in feedback and take course-correction measures more quickly. The team was also able to compare feedback between different zones where the intervention was delivered, and between new and old teachers, and come up with zone-specific solutions, as well as cross-programme solutions between their DIB and non-DIB programmes across elementary, middle and high school programmes. This positively affected teachers' practices. The entire organisation, not just its DIB-funded intervention, benefitted from these learnings.

"Dalberg is tracking teachers' performance, something that motivates the team. We are also learning a new perspective by attending Dalberg team workshops on planning and how to fill and read sheets, how to use them to improve strategy." (Service provider)

The reasons for improved performance management were a mix of DIB and non-DIB related causes.

The DIBs focus on clear outcomes, including visibility and transparency of results, helped organisations improve their existing M&E systems and decision-making processes (as mentioned above). The presence of a performance manager was equally important; through quarterly visits and reporting, frequent calls and brainstorming sessions conducted with different levels of the providers' teams. Dalberg pushed providers to improve data collection and analysis and identify areas for improvement through a customised approach. Service providers felt Dalberg leveraged the learning from all service providers in terms of reporting, data, and evidence-based decision-making; they were indirectly representing the DIB and were indirectly facilitating learning across the providers. Providers were satisfied with the support received from Dalberg but felt more could have been done to facilitate direct communication between service providers rather than through Dalberg as a mediator.

Once again, the DIB high stakes environment contributed to this DIB effect. Providers were validating their model through the DIB and were keen to understand how to use data to inform better decisions. Targets set by CGI through careful consideration of past data and the Indian context stretched providers' prior 'business as usual' targets (pre-DIB), to ensure that they would work to higher standards and with higher stakes.

As for non-DIB causes, Dalberg unlocked processes and a way of thinking that were already inherent to providers' models, providing an external perspective and expertise. Providers had been proactive in asking Dalberg to use brainstorming sessions to unpack data and improve their decisionmaking. If providers' models had not already been data-driven and characterised by strong M&E systems, according to stakeholders, results would have been unlikely to materialise. Still, Dalberg's contribution was invaluable, as demonstrated by the quote below:

"Our M&E system was already in place. However, Dalberg works very closely with us and became an integral part of the team's sharing and learning process...They adopt a collaborative approach that helps, and a third-party perspective helps, as the team might miss out on something if they tend to always act in the same way by default." (Service provider)

Adaptive management and course correction, supporting innovation

Service providers received support from the performance manager and other consortium members to improve service delivery and aid real-time performance improvements. Service providers received flexible funding that allowed them to adjust inputs and activities as needed, to achieve the expected outcomes. As outcomes and targets were clearer, it was easier for teachers and field team to understand which parts of the interventions needed improvement. The performance manager contributed to that, through quarterly reports and engagement. Dalberg brought its external perspective and helped providers to identify challenges and find and implement solutions, strategize, and use their time more effectively. Knowing they will have to report on their performance on a quarterly basis, providers were more proactive in acting upon the data and feedback collected. All this stimulated process innovation, as stated below.

"The need to innovate, create and implement was encouraged by the DIB, because of brainstorming with external stakeholders such as Dalberg, and their views. While usually you only brainstorm internally with your team. It is very important that external stakeholders pose different questions that the team would not ask otherwise." (Service provider)

The DIB factors that led to this were the high stakes environment and a more rigorous methodology for independent evaluation. This additional pressure created a more critical and reflective working culture, aiding in one sense to identify areas for service providers to improve.

Some elements of the adaptive management were already present in the non-DIB comparator projects. In non-DIB delivery, all service providers acted in a reactive and adaptive way to tailor their delivery to student, family, and community needs. Therefore, the presence of the DIB enhanced these processes but is not necessarily the sole cause.

However, the DIB model also limited adaptation and innovation in some ways:

- > The DIB contract stated that providers' main intervention model could be tweaked but not radically changed, as the QEI DIB was meant to test and validate existing, proven interventions providers had long been delivering. Given DIB visibility, the risk of experimenting was too high to radically innovate. Furthermore, the DIB's strict timeline and requirements limited providers' creativity and flexibility to some extent. For example, the need to conduct the endline assessment within a certain timeframe and with relation to Year 1 only forced one provider to delay and shorten Year 2 activities. The same activities were carried out earlier and for longer in non-DIB areas.
- > One service provider felt constrained by the DIB's requirements in comparison to their non-DIB delivery, feeling they could do more in their non-DIB areas. The service provider still felt the rigid third-party assessment was not flexible enough for their delivery, with the endline assessment timings delaying their regular delivery timescales. In addition, the provider stated that the overall targets did not best reflect their model of delivery and were not suitable enough for them to deliver innovation, feeling they could be more flexible and creative in with the non-DIB timescales.
- > Delivery across service providers was conducted in a reactive, adaptive, and needs-based way. This was heightened during COVID-19, where providers needed to respond to everchanging restrictions and school closures. All service providers praised the flexibility of the consortium to allow and trust service providers to deliver different activities than planned but still with the end of goal of improving access to education. Specifying that grant funded models would not have had this flexibility in approving a change in activities as the funding lines are more prescribed.

Greater collaboration between stakeholders

The DIB facilitated working with several service providers at scale and fostered collaboration between multiple stakeholders. Stakeholders considered the management and communication between stakeholders to be good, and providers felt well supported by stakeholders. This was partially attributable to the DIB, as its focus on outcomes allowed for the alignment of stakeholders' efforts, while the presence and efforts of the intermediary facilitated coordination and communication between different stakeholders.

"Collaboration with stakeholders has been very effective, with constant dialogue with Dalberg and a very collaborative interaction with [CGI]. There is a lot of dialogue going on. The fact that DIB is focused on outcomes allows all stakeholders to focus their efforts on that and makes them more aligned to improve final outcomes and operations" (Service provider)

As for non-DIB causes, it must be highlighted that QEI DIB stakeholders were all like-minded and bonded by their common interest in improving educational outcomes for children in India, and their willingness to innovate.

Stakeholders felt more could have been done to streamline information sharing and ensure that all stakeholders could quickly and easily access the information they needed, without necessarily using a go-between, such as the performance manager in this context. In addition, consultations in 2020 highlighted that more cross-learning opportunities between service providers could have been supported. This had been done to a limited extent at this point, partially because providers operated in different contexts and faced different issues, which made it more difficult to identify learning that was worth sharing. Providers' response to COVID-19 was identified as an area where providers could more profitably share learning with each other in 2020. By 2022, service providers reflected on the "unrealised goal" of cross-service provider learning and collaboration that they expected to see but did not materialise. The learning was held with the performance manager and shared second-hand rather than by service providers themselves. Whilst there was good collaboration at the steering committee, this did not cascade to service provider level collaboration and was a drawback of delivery from the perspective of service providers.

Finally, as per the outcome delivery agreement contract, and for attribution purposes, providers were not allowed to bring in other education providers and use their materials. The providers felt this hindered collaboration. Providers could only collaborate with other organisations if they worked in sectors different from education (health, nutrition). One interviewee believed that, as a result, the DIB stifled opportunities for collaboration with other NGOs. According to other stakeholders, though, this disadvantage was not too significant.

Negative DIB effects

Cherry picking of participants from target population

Not only did the DIB not encourage cherry picking, but according to providers, teachers were more focused on the entire classroom than in previous, non-DIB interventions. Consultations with teachers in 2022 highlighted that prior to working with the QEI DIB service providers teachers were more likely to focus on already gifted students and offer them more opportunities as they were more likely to succeed. In contrast, in the DIB teachers focused more broadly on the whole class. This was due to the DIB evaluation design, which was explicitly designed to avoid cherry picking. The evaluation sampled schools, not children, and tests were designed in a way that allowed testing of all levels of students, from low to high performers. This guaranteed that providers did not know who was going to be assessed and were not incentivised to recruit specific students.

"100% the nature of the design of the DIB affected the fact that providers are now focusing on classroom-level learning, rather than just individual students. They are focusing on the holistic level and not individual children." (Performance manager)

Level, quality, range, and duration of support is reduced

This effect has not been seen in the QEI DIB. By contrast, the quality of the services improved, and a larger number of students achieved more and better outcomes. Compared to the comparison groups, a greater proportion of students from the same class moved from beginner level of proficiency in Language and Maths, to intermediate and advanced proficiency.

Tunnel Vision

Tunnel vision means focusing on primary outcomes which have payments attached to them, at the expense of secondary, un-monetised outcomes. As mentioned above, **some stakeholders were** concerned that with the DIB only measuring Maths and Literacy learning outcomes quantitatively, this could have led to 'teaching to the test' due to the risk that the outcome payments would narrow providers' focus. However, the CGI tests were designed to test application of skills gained rather than rotememorised tasks and the tests are not shown to the providers. As a result, the risk of "teaching to the test" (that is, teachers just focusing on these questions throughout the year, for simulations and teaching, rather than on holistic children's development) was avoided.

Stakeholders introduced elements to try to reduce this risk, including incentivising a focus on classroom-level improvement, introducing a test designed to assess skills gained rather than rotememorised tasks and not showing the tests to providers and teachers in advance.

Nonetheless, it seemed like the risk of focusing on Maths and Literacy over-and-above wider social outcomes remained. According to one service provider, the DIB could be restrictive, with performance management efforts and recommended solutions focussing mainly on learning outcomes. Other team members believed that outcome measurement should incorporate elements that go beyond learning outcomes, to assess children's holistic development. This was a trade-off made during the design phase, combining the practicalities, costs and context, to determine the outcome measures.

Increased staff pressure affected other DIB effects

The DIB mechanism did create a high-stakes environment. According to most stakeholders, this **boosted staff morale.** From management to the field team, staff members were motivated to perform, showing solution-orientation. As mentioned, DIB visibility and the high stakes environment motivated providers to perform. In addition, all providers felt adequately supported by the performance manager and proactively asked for Dalberg's help to improve their performance.

However, there was some indication that the DIB had affected staff morale: some staff members and teachers had complained that although they made a great effort to comply with stricter DIB requirements, they received the same salary as before.

Furthermore, one provider stated how the culture change, which came with accountable performance and formal assessment, had drawbacks due to the pressure placed on delivering strong performance, as quoted below:

"Once people know that they're accountable they're less willing to share as they fear repercussions." From an organisational perspective, we need to know when things will go wrong." (Service provider) This provider felt as if there was a heightened chance of staff hiding underperformance or issues with delivery out of fear. To prevent this embedding itself further they instilled from the top-down the need for transparency, clear feedback loops and communication between and within teams.

Greater outcomes

Increased efficiency and effectiveness, leading to increased number of beneficiaries supported and outcomes achieved

Overall, the QEI DIB overperformed and students learnt on average two times more than the control group. From March 2020, targets for Years 3 and 4 were combined and learning gains were reduced from 20-50 to 12.5-33 scale points of pre to post improvement, and for enrolment from 107,000 to 70,800 students engaged in the programme, the targets were exceeded at 229% and 150% respectively. At provider level, two interventions did not meet targets, one provider performed strongly in Year 2 so had a higher baseline figure and one intervention was heavily impacted by the stricter lockdown so struggled operationally. At the end of the Year 4, 55% of students from treatment groups were at or above gradelevel proficiency, compared to 25% of students in control groups. Through the QEI DIB learning losses from COVID were mitigated, as the programme acted as a 'catch-up' programme for those receiving the intervention, compared to marginal gains for control groups. On average, the annual improvement observed in treatment groups was 2.5 times those in control groups, amounting to an additional two equivalent years of schooling.

However, this performance alone confirms the effectiveness of the interventions, but does not tell us whether the DIB mechanism itself contributed to these outcomes. For that, we must compare provider outcomes under the DIB against outcomes in non-DIB settings. Here, we were told that **the results** achieved through the DIB exceeded providers' historical performance (though supporting data to verify is not available). More than before, providers were focusing on classroom-level learning and improvements, rather than just on individual students, with the entire classroom moving from beginner to advanced level of understanding of the concepts they were evaluated against. Service providers were putting more efforts to recruiting new students, in order to meet enrolment targets.

This primarily occurred because of the two other DIB effects referenced above – namely a stronger focus on outcomes and a stronger culture of monitoring and evaluation – as well as the DIB high stake environment.

The long and more-stable funding brought about through the DIB also enabled providers' leadership to focus on improving performance over fundraising:

"If you get providers to focus on what they like to do, they succeed. Funding in India for non-profits is so tight and follows annual funding cycles, while DIB's flexible pot of funding helps them to be creative, allowing them to focus on what they like. The leadership is allowed doing something different from what they usually do: they are not just stuck in fundraising but can go deeper into data and performance and see what works." (Intermediary)

4.3 Lessons learned - delivery

DIB delivery

- 1 Undertake more scenario-testing upfront to plan for and accommodate potential risks: Service providers felt that challenges such as selecting and engaging with government schools, tackling underperformance, distributing costs with new providers, and addressing attribution problems in control groups could have been discussed and mitigated against with their involvement in decision-making upfront.
- 2 Recognise that field teams and teachers might benefit from incentives and rewards: Teachers and field teams noted that they were working harder, to ensure outcome achievement, but were receiving the same salary as before. To sustain their motivation and results, a few consultees believed that incentives and rewards could have been provided, not necessarily financial incentives, but certificates or in-kind rewards would have been appreciated.
- **3 Ensure appropriate capacity building is embedded into the DIB:** For the QEI DIB, there was an extensive five-stage selection process which underscored that a relatively limited pool of service providers in the education sector are ready to engage in outcome-based financing. Service provider capacity across a market is a particular concern when thinking of implementing or scaling impact bonds, therefore a capacity building element may need to be considered in DIB design.
- 4 Build in opportunities for service provider peer-learning: The presence of an external performance manager brought valuable insight and expertise to service providers. Overall, service providers were pleased with the level of communication with Dalberg and the wider consortium but felt more could have been done to establish the performance manager's role in connecting service providers directly to one another rather than indirectly through their second-hand communication.
- 5 Tie socio-emotional and secondary outcomes to payments: Service providers felt that the impetus was to focus more on academic gains as payments were not attached to secondary outcomes and the risk that these were overlooked remained. Service providers were able to channel DIB funding into socio-emotional activities during COVID-19, but the targets for learning and enrolment remained the primary outcomes and providers felt the more holistic outcomes were missing.
- 6 Presence of an intermediary in a large consortium who is aware of context and needs of the programme: Within QEI, the role of BAT was invaluable due to the size of the consortium, the number of service providers and the coordination role that was therefore needed. BAT were critical as the intermediary to manage multiple donors and facilitate quick decision making between stakeholders. BAT consulted with service providers, through the performance manager, to understand the local context, differing geographies and ground-level circumstances to make evidence and needs-based decisions on adaptation during the programme lifecycle.
- 7 It is important to balance the 'black box' commissioning approach of an impact bond with ensuring minimum quality standards are in place. Outcome payers learnt that they cannot solely focus on paying for outcomes and not oversee delivery. They learnt that they need to ensure that minimum standards – such as adequate safeguarding policies – are in place.

4.4 Sustainability and spillovers

This section describes other findings unique to the DIB, termed as spillovers and split between effects at the organisation level and the ecosystem level, as illustrated in the below table.

Spillover effect summary

Table 7: Spillover effects

Spillover effect	Extent to which hypothesised DIB effects observed
Organisation-level	
1 Rolling out of processes and learning	•
2 Increased visibility	•
3 Diverting of attention	•
Ecosystem-level	
4 Capacity strengthening to deliver DIBs	•
5 Increased stakeholder interest in DIBs	•
6 Contribution to the evidence base	•

Key: ■ Hypothesised DIB effect observed and attributable to the DIB; ■ Hypothesised DIB effect observed and/or somewhat attributable to the DIB; • Hypothesised DIB effect not observed and/or not attributable to the DIB.

Organisation level effects

Rolling out of processes and learning

Through regular senior and field staff meetings, service providers were transferring learnings from the DIB to other locations where they delivered non-DIB programmes. Anecdotally, a greater focus on outcomes, and learning on data analysis and use, performance tracking, quarterly reporting systems, had improved performance not only in the DIB, but also non-DIB areas where providers operated:

"Through sharing of learning, we are helping other parts of the organisation to grow. We hold meetings at different levels: senior management level, fellow level, programme leader level. At all of these levels, sharing is happening between DIB and non-DIB programmes, as all team members are interested in the Management Information System and how it helps to track performance, how to analyse and use data etc." (Service provider)

The delivery improvements implemented from lessons learnt in QEI delivery were not only unique to service providers, but other stakeholders too. For instance, MSDF adopted an outcomes-focus in their programming with all MSDF programmes now having target setting, including both hard and soft outcomes.

With the increased data generated from the external outcomes' evaluation and the real-time performance changes it allowed for treatment groups, control groups were keen to see the data to use it for improvement too. During Years 3 and 4 CGI stated how control groups were keen to read the reports being provided to treatment groups, as they saw the increased benefit of data-driven improvements during COVID-19 and identifying learning gaps from the assessments.

Increased visibility

The DIB and the inclusion of the risk investor allowed Indian service providers to operate on a larger scale both in terms of delivery and their profile on an international stage. Service providers noted how there were only reputational risks if they did not perform well and that being part of the DIB made them "more credible to work with other players and keeps us on our toes". For example, at the time of research (August 2022) SARD was liaising with the government to expand its activities and develop content and curriculum for different Indian states.

For other stakeholders in the QEI DIB, there was also a reputational/profile-raising benefit. For example, BAT rose to greater prominence in the outcome-based space and CGI also acquired significant visibility in the market.

Diverting of attention

Although stakeholders noted that the high-stakes environment created pressure around delivery of the DIB, the DIB did not divert focus from non-DIB delivery. As service providers were well established in delivering interventions in the education space, their non-DIB interventions remained accountable to other funders and therefore also had to remain on track for delivery or meeting outcomes targets for payment in some cases.

Ecosystem-level effects

According to stakeholders, one of the main goals of the QEI DIB was to trigger a systems transformation, bringing government and other funders to adopt outcome-based funding mechanisms and structure their testing models around learning outcomes. This is not an easy task, given that DIB providers only work in a subset of schools and locations, and it might take a long time for state governments, let alone central Indian Government, to adopt outcome-based funding over traditional funding mechanisms. COVID-19 undoubtedly created additional priorities for the government, which is struggling with the financial constraints created by the pandemic.

Nonetheless, the Indian Government has shown an increasing interest in outcome-based interventions, and willingness to partner with NGOs in education delivery. Building on the QEI DIB experience, BAT and MSDF developed another DIB with an Indian government agency, the National Skill Development Corporation (NSDC) who are the risk investor alongside MSDF, titled the Skill Impact Bond. For the Skill Impact Bond, the consortium replicated the people management and collaboration structures from QEI, whilst applying the learning of ensuring direct links to policymaking for long-term success, hence the inclusion of NSDC. Key stakeholders such as BAT, MSDF, CGI, UBS-OF and Dalberg are also involved in the Back-to-School Outcomes Fund, India's first outcomes fund aimed at systems change. The intended impact is for 1 million children to benefit directly from the DIB and a further 35 to 40 million to benefit indirectly. The outcomes fund is currently in the design phase, selecting implementation partners for the DIB.

5 Conclusion

Even with the challenges posed by COVID-19, the QEI DIB exceeded its targets for learning and enrolment. QEI DIB students learnt on average two and a half times more than the control group during COVID-19, equating to an additional two years of schooling.

Stakeholders agreed that the DIB had increased focus on outcomes and accountability for service providers and improved their processes for performance management. Anecdotally, we were told that the results achieved through the DIB exceeded providers' historical performance (though supporting data to verify is not available). Service providers adjusted their interventions and improved the quality of their services, which led to students achieving better learning outcomes. Stakeholders agreed that DIBrelated factors such as the strong presence of a performance manager, the external evaluation at the end of every year, and the DIB high stakes environment accounted for these improvements. At the same time, they agreed that this success was also driven by the quality of the service providers, the strength and flexibility of their interventions, and the fact that they were already data-driven organisations with strong M&E systems in place. This demonstrates the importance of selecting service providers that are ready to deliver against DIB requirements or preparing them to do so.

Besides supporting the achievement of learning outcomes, the DIB has generated important **learnings and spillover effects for all stakeholders involved**, particularly in terms of organisational improvements and learning on how to build the outcome-based market. This has been demonstrated in the improvements providers have made in their delivery outside of the DIB. In addition, the steering committee have joined efforts again to deliver on multiple outcomes-focussed interventions, including the Back to School Outcomes Fund, Bharat EdTech Initiative and Skills Impact Bond.

Overall, stakeholders consider that education is a good fit with a DIB structure, as education interventions are usually evaluated in quantitative terms. Language and Maths are considered good proxies for children's holistic development, but qualitative assessments like those currently conducted by Dalberg in the DIB are advisable to capture results and dynamics that go beyond that. A good DIB evaluation design and the quality, committed service providers are both crucial to ensure that quality education, and not teaching to the test, is at the core of providers' intervention. Service providers continued to stress the importance of including holistic measures in the targets in future delivery, although harder to quantify without those outcomes being tied to payment there is a chance they will be overlooked in delivery. In terms of sustainability of the results and changes achieved by the DIB mechanism, the value added of the DIB will be the providers' new mindset and focus on learning outcomes, and how this is going to inform their future practices. Changes have been seen in the spillovers from DIB implementation already from service providers activities, as well as the capacity building around outcomes-focussed delivery and rigorous internal performance management which is being embedded for future delivery.

The scalability of the QEI DIB also lies in its ability to create evidence for funders and government of the merits of outcomes-based, age-appropriate interventions and increase their roll-out across India. The QEI DIB brought together interventions across different geographies and delivery models, with its complexity not hindering the outcomes achieved the model appears to have been a success in India. In particular, the inclusion of a robust assessment tool means that the evidence from the project has the potential to provide important learning about the effectiveness of different types of education models as well as the suitability of the DIB model in different contexts. The QEI DIB steering committee and consortium have already begun work on new outcomes-funded programmes in India, using the QEI DIB as a learning piece for its design, set-up and implementation.

Annex

Stakeholder consultations

The following stakeholders were consulted during the evaluation from 2019 through to 2022. The research was conducted in three waves, with wave 1 and 2 consultations feeding into the previously published case study report in 2021. This report is now updated with the wave 3 consultations. In addition, keepingin-touch (KiT) interviews were conducted in December 2021 to shape the data collection and fieldwork planning in July/August 2022.

Stakeholder/Organisation	Wave 1 October 2019	Wave 2 July 2020	Wave 3 August 2022
British Asian Trust (BAT)	V	V	V
Comic Relief	~		
UBS-OF	~	~	✓
Dalberg		✓	✓
Educate Girls	✓		
Tata Trust	~		
Michael and Susan Dell Foundation (MSDF)		~	✓
Larry Ellison Foundation		✓	
FCDO (formerly DFID)	~	✓	✓
Convegenius Insights (CGI) (formerly Gray Matters India)		V	V
Kaivalya Education Foundation (KEF)		~	✓
Gyan Shala		~	✓
Pratham Infotech Foundation (PIF)		~	✓
SARD		~	



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