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# Output-Based Aid in Education: What Have We Learned So Far?


*Education is a critical tool for reducing poverty and inequality, and for driving development. However, an estimated 24 million children worldwide will never enter a classroom, and 250 million cannot read or write, although many have been to school.*

*Education goals and priorities have traditionally focused on access, and results have been largely defined by enrollment and attendance rates. In recent years, however, attention has shifted to include the issue of quality, with an increased emphasis on learning outcomes, most often measured by test scores. Alongside these changes has come a growing interest in exploring innovative approaches to working in the education sector, such as results-based financing (RBF). In order to better understand the RBF landscape in education, and how the impact of output-based aid (OBA)—a form of RBF—can be maximized in the sector, the Global Partnership on Output-Based Aid (GPOBA) undertook a major scoping study. The study, which included an analysis of 24 education projects funded by the World Bank and other donors that were either stand-alone OBA or contained components that fully or mostly met the definition of OBA, was completed in 2015.[1] This note discusses its findings.*

OBA projects in education bridge the gap between the cost of providing quality education and the funds available. They tie the disbursement of funding to the achievement of clearly specified and verified results or outcomes. The 24 projects analyzed in the recent study address challenges in the education environment in several ways, including financing, improving the quality of education in contexts where enrollments have risen, reducing systemic inefficiencies and lack of accountability, and addressing a disconnect between the education system and the labor market through vocational training programs.

There are challenges unique to the education sector that must be considered when designing, financing,

### Box 1: Results-Based Financing in Education

| | |
|---|---|
| RBF schemes incentivizing country governments | • Cash on Delivery (CoD)<br>• Debt swaps and loan buy-downs for education |
| RBF schemes targeting service providers | • Output-Based Aid (OBA)<br>• Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs) for education |
| RBF schemes targeting teachers | • Teacher Performance Pay |
| RBF schemes targeting students/families | • Conditional Cash Transfers (CCTs)<br>• Performance-Based Scholarships |

and evaluating programs. The majority of costs in education—unlike those in the water or energy sectors, for instance—are recurrent (eg, teacher salaries) rather than upfront capital costs for infrastructure; the availability of long-term funding is therefore key to the scalability and sustainability of any education program. Teacher quality and attendance are significant concerns, and raise the question of whether OBA approaches that do not incorporate some capacity building or teacher training can truly improve learning outcomes. For poor populations, school attendance may represent an opportunity cost, as hours normally given over to income generation are spent in the classroom. All of the above make working in the education sector complex. However, the scoping study revealed certain factors related to context and project design that appear to facilitate the uptake and success of OBA education schemes.

Interest in testing and applying RBF in the education sector is increasing. In 2015, the World Bank launched Results in Education for All Children (REACH), a multi-donor trust fund that finances RBF programs in education, and also announced that it will be doubling investment in RBF for education to US$5 billion over the next five years. The World Bank's Global Partnership for Education (GPE) has adopted a new results-based funding model, with increased emphasis on providing incentives to achieve results and on evidence-based approaches. The graphic below shows a broad breakdown of the forms of RBF in education. OBA differs from other forms of RBF in several respects, including:

- Focus on service provision, with the service provider (SP) as the primary actor, and funds distributed to the SP (rather than, eg, households), typically through the government or an intermediary implementing agency
- SPs bear performance risk
- Targeted subsidies aim to incentivize private SPs to focus on the poor by creating opportunities to offer services that otherwise may not be financially attractive
- Explicit focus on increasing the engagement of private sector capital and expertise

## Country Contexts and the Private Sector

In most countries, service delivery—at least for basic education—is still overwhelmingly provided by the public sector. Strong country systems, particularly for data management and verification, and enabling legal/regulatory frameworks are therefore important to project success. However, as a result of government capacity constraints and rising demand, private sector involvement in education in developing countries is increasing, especially in early childhood development, low-cost private schools, vocational skills training programs, and higher education.

Private sector providers generally have more autonomy than public providers to experiment with innovative approaches, as well as greater adaptability and pre-financing capacity. However, working entirely outside the public sector has potential drawbacks—it may weaken government systems and risks lack of government buy-in—and OBA in education is likely to be more successful in contexts where there is an enabling environment for public-private partnerships (PPPs). A PPP might take the form of government purchase of education services from private schools, voucher programs, or capacity building initiatives. The degree to which innovation is possible amongst public providers is related to the level of centralization of the education system. According to the study, OBA may be best suited for decentralized education systems, where individual SPs—whether public or private—are likely to have greater flexibility and autonomy when implementing projects.

**Targeting**: The most appropriate targeting mechanism depends on the context, existing administrative capacity, and project objective. The 24 projects analyzed in the study have employed a range of targeting mechanisms, including means-testing, geographic, self-selection, and community-based, and have sometimes combined them. The study found that OBA, because of its emphasis on targeting and subsidizing the inclusion of specific groups—such as the poor, girls, and ethnic minorities—has proved an effective tool for encouraging SPs to include those left behind by education systems and has the potential for particular impact in contexts characterized by high levels of inequity in education. Within programs already effectively provided by the private sector, OBA may add value by targeting populations for inclusion—for example, by ensuring private schools enroll poorer students.

**Performance Risk**: A key feature of OBA projects in all sectors is the transfer of risk to the SP, with payments disbursed only when service provision is independently verified. However, pre-financing can pose a major challenge for education projects, which—unlike infrastructure programs that create hard assets—often have nothing tangible against which to secure loans. Education providers are unlikely to have considerable cash on hand, and some of the most significant gaps in education (eg, secondary schooling) tend

### Box 2: Examples of Indicators along the "Inputs to Outputs to Outcomes" Spectrum in Education

| Inputs | Outputs | Intermediate outcomes | Outcomes |
|---|---|---|---|
| • School construction<br>• Classroom materials<br>• Textbooks<br>• ICT equipment e.g. computers<br>• Teachers | • Number of schools constructed<br>• Number of teachers trained<br>• Number of texbooks distributed<br>• Time on task (number of hours spent in the classroom)<br>• Number of hours of active computer-assisted instruction | • Attendance rates<br>• Enrollment rates<br>• Progession rates<br>• Drop-out rates | • Learning outcomes (numeracy and literacy test scores)<br>• Youth employment rates<br>• Salaries/earnings (e.g. following graduation from TVET program) |

to have higher upfront costs. Project design should therefore consider not only how to incentivize SPs to bear risk, but also how to ensure that risk levels are reasonable and realistic, reducing the likelihood that SPs will fail to achieve outcomes due to factors outside of their control.

Pure OBA projects do not involve pre-financing, but it is feasible for projects with OBA components to provide an initial tranche of pre-financing. The study cites a small number of projects that operated on this model. In the Nepal Vocational Education and Training project, for example, 10 percent of payment to vocational trainers is provided upfront, with the remainder disbursed to institutions in installments upon the trainee's graduation and over a period of time afterwards if the trainee is employed. Other ways to mitigate the pre-financing burden include more frequent disbursements, loan guarantees, training and capacity-building, fostering student preparation and community engagement, and disbursing on a pro-rated rather than all-or-nothing basis.

## Outcomes and Indicators

OBA/RBF projects in education tend to disburse against intermediate outcomes (such as test scores) instead of outputs (number of teachers trained or textbooks distributed). However, educational outcomes are often influenced by factors outside the control of schools or teachers, such as home and family environments, and defining appropriate results can therefore be more complex in education than in other sectors. Some outputs, such as the number of qualified teachers trained, *can* be quantified, but they do not necessarily equate with improved access to education; even improved access is not an end in itself, as it does not automatically result in greater student learning.

Consequently, linking disbursements to a mix of indicators rather than a single one is preferable. The Dutch NGO Cordaid, for example, uses an array of indicators related to access and quality, taking a nuanced and flexible approach that allows schools to track the evolution of indicators over time (for example, whether schools are meeting certain outputs more easily than others or which indicators are leading to the best results). In South Kivu, Cordaid built up to this complexity by beginning with a basic set of indicators and ramping up to a more sophisticated, holistic set.

## Subsidies

Most OBA education projects provide subsidy payments on a per-student basis, though others provide lump sums for the institution. In some cases, SPs may be less willing to enroll disadvantaged populations, giving preference to students who they believe are more likely to meet performance targets and trigger disbursements. To counter this tendency, it is possible to provide weighted subsidies. The DRC School Performance and Malawi Contracting Schools are examples of projects that have paid higher subsidies to schools for enrolling members of a particular group, in this case girls.

## Monitoring and Evaluation

Collecting strong and timely data throughout the project cycle is crucial. The use of government education management information systems (EMIS) may be ideal from a cost and sustainability standpoint, but issues with data quality, timeliness, and access can necessitate the use of additional or alternative monitoring systems, and/or significant capacity building. OBA projects have employed a range of methods in addition to EMIS, including school-generated reports, national exams, open source platforms, annual census data, and community surveys.

Many OBA education projects are still under implementation, so only a few have undergone a formal impact evaluation.[2] Establishing a clear correspondence between the OBA project component and a particular outcome is sometimes difficult, but in order to expand the evidence base on OBA in education, more projects must incorporate evaluation into their design, including qualitative data collection. For example, the Tanzania KiuFunza project collects quantitative data but also sends an ethnographic research team into schools to interview teachers to ensure that results can be explained within the local context and to gain additional input on program results and effects.

## Conclusion

OBA is still relatively new in the education sector, though emerging evidence indicates its promise as a versatile tool

### Box 3: The Vietnam Upper Secondary Education Enhancement Project

GPOBA's first pilot in the education sector aimed to increase access of poor students to upper secondary education in selected provinces in Vietnam. Launched in partnership with East Meets West Foundation (EMWF), the US$3 million project provided subsidies to schools in the form of tuition fees for 7,500 students. Schools pre-financed the tuition, which GPOBA reimbursed upon independent verification of student attendance (at least 80 percent) and a minimum grade point average (GPA) of 5.0 on a ten-point scale. The project succeeded in increasing access to schooling, with a 17.6 percent rise in enrollment across all 67 participating schools (8,145 students were enrolled, of which 7,358 graduated). The average GPA for participating students increased over three years of from 5.95 to 6.33. A beneficiary assessment showed increased student motivation and effort, and overall strongly positive impressions of the project from target populations. Detailed preparation in the project design phase, strong and early collaboration with stakeholders, the utilization of existing local institutions, and alignment with the Vietnamese government's Education Development Strategy all contributed to project success. Important lessons were learned, particularly related to tuition subsidies. As the schools depended on tuition for operational and other costs, reimbursement at the end of term posed a hardship for some schools, and necessitated EMWF securing a loan to provide advances to schools. The project hired more IVAs and increased the frequency of verification, which speeded up the reimbursement process. A second issue related to subsidies having been set at a flat amount, which—although higher than the national average at project preparation—did not keep pace with rising tuition costs over three years.

to address issues related to access, quality, and system inefficiencies and inequities. Certain characteristics of OBA may make it especially suitable for selected interventions in the sector, but gaps remain in the evidence base, and few OBA education projects to date have been scaled up. It is important that projects are designed with sustainability in mind and that potential pathways to scale are identified from inception. It is also crucial that OBA schemes contain rigorous monitoring and evaluation components, so that stakeholders can better understand the contextual and design factors most likely to lead to success.

## Sources

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[1] The scoping study was completed for GPOBA by Results for Development Institute (R4D). For the purposes of the study, OBA in education was defined as 'a form of results-based financing in which service providers are contracted to improve education access and/or quality, especially for disadvantaged populations, whereby service providers assume some degree of performance risk for specific outputs/outcomes upon which payments are contingent.'

[2] Projects with publicly available evaluations are: Bangladesh Female Secondary School Assistance Project I; Chile Lifelong Learning and Training Project; Colombia Concession Schools; Punjab Education Foundation – Foundation Assisted Schools Program; and Vietnam Upper Secondary Project.

*Note:* All monetary amounts are in US$ unless stated otherwise.

## About OBApproaches

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