



EDUCATION FINANCE NETWORK EVIDENCE BRIEF

Public-Private Partnerships in Education: Conditions for Success

What conditions are necessary for public-private partnerships to improve learning outcomes for disadvantaged students?

February 2023





Public-Private Partnerships in Education: Conditions for Success

What conditions are necessary for public-private partnerships to improve learning outcomes for disadvantaged students?

Public-Private Partnerships (PPPs) have become a widespread form of education delivery in low- and middle-income countries (LMICs), but their success is contingent on multiple conditions and contextual factors. This evidence brief reviews the literature on PPPs in primary and secondary education globally and identifies four of the most common factors positively affecting the success of PPPs in improving learning outcomes.¹

The need for rapid expansion of basic education is urgent and increasing. In 2021, more than 244 million children were out of school, including more than 67 million primary-aged children (UNESCO, 2022). However, governments in resource-constrained environments have struggled to meet the needs of their growing school-aged populations. Public schools are increasingly overcrowded, with average pupil-teacher ratios reaching nearly 60:1 in countries such as Rwanda, Malawi, and Ethiopia (UIS, 2020).

Furthermore, as of 2015, African public secondary schools could accommodate only 36% of qualifying secondary-aged students (AAI, 2015).

Many LMIC governments have pursued PPPs as a cost-effective model of expanding education access and quality.

¹ This evidence brief focuses on primary and secondary education and excludes pre-primary and tertiary education.

As a result of these challenges, many LMIC governments have pursued PPPs as a cost-effective model for expanding educational access and quality (Aslam et al., 2017). PPPs have the potential to be cost-effective solutions, as they take advantage of existing non-state schools and require fewer resources to scale. Many studies offer promising evidence that PPPs successfully increase enrollment and expand access for out-of-school students (Barrera-Osorio et al., 2017; Barrera-Osorio et al., 2016; Barungi & Mwesigye, 2019; Crawford, 2017; Crawford and Hares, 2021). However, despite some strong case studies of successful PPPs, the evidence is mixed on whether PPPs improve learning outcomes for the most disadvantaged students (Aslam et al., 2017; Crawford and Hares, 2021). Further, while PPPs frequently expand access, they may disproportionately serve upper-middle income students and increase inequity (Baum, 2018; Aslam et al., 2017; Roddis, 2020). For PPPs to improve equity and quality in education, the literature points to certain conditions that are critical to ensuring these outcomes are met.

This evidence brief reviews the literature on PPPs to understand the conditions necessary for the effective implementation of PPP models. To focus findings on equity outcomes for disadvantaged students, this desk review emphasizes studies that account for student family background and income level. Drawing on findings from a range of regional contexts, this evidence brief discusses four key conditions for effective PPP implementation in detail and provides considerations for policymakers for each of the four factors.

In Africa, public secondary schools accommodate only 36% of students, illustrating the urgent need for governments to rapidly scale up education provision, and the potential of PPPs to fill this gap.

What conditions are necessary for PPPs to succeed at advancing learning outcomes for disadvantaged students?



1 Per-student subsidies are outcomes-focused



2 Schools are strategically located for out-of-school children



3 Providers have strong management, accountability, and autonomy



4 Government can provide strong oversight and monitoring of PPPs

Overview of PPPs in education

The following section provides an overview of the types of PPPs utilized for education delivery. Literature typically divides PPP models into three categories, which are outlined below. Please note that the specific processes and costs may vary within each category.



1. Contract schools: A model in which governments outsource the management of existing public schools to private providers. In most cases, this model utilizes public school teachers, buildings, and infrastructure.



2. Subsidized schools: A model in which governments provide subsidies to existing private schools that allows these schools to expand their enrollment capacity and admit low-income students free of charge ('supply-side subsidies').

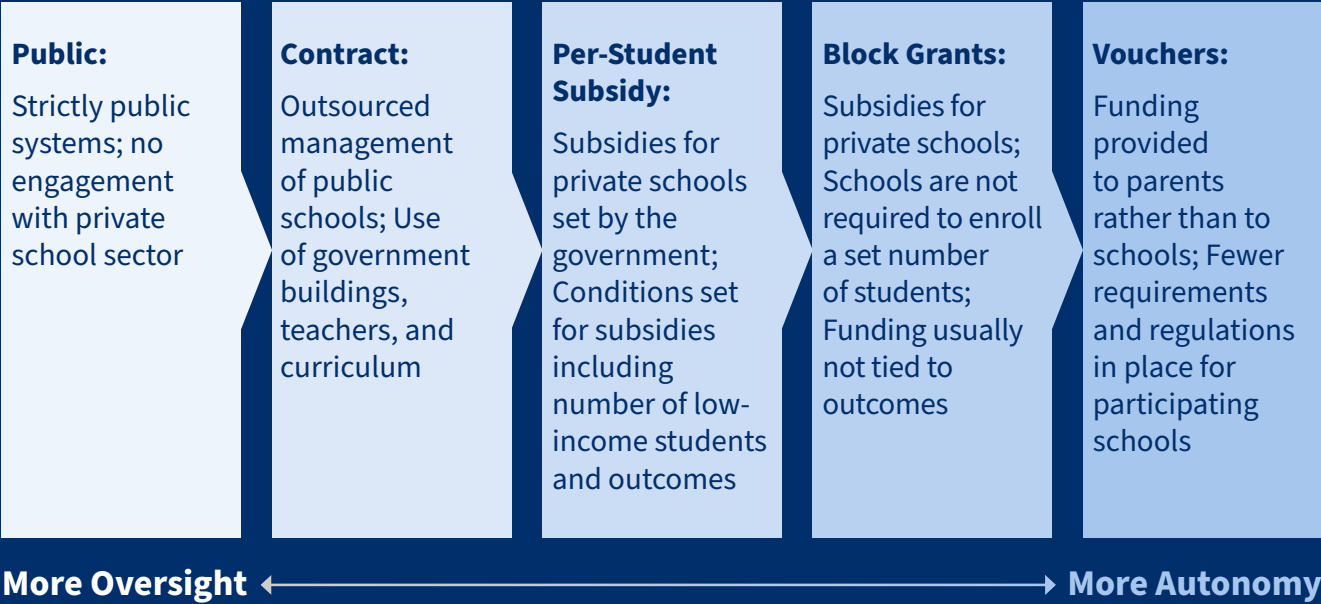
- **Per-student:** Subsidy amounts are calculated based on the number of students the school enrolls fee-free. Subsidies are provided directly to the schools, who can then allocate fee-free seats via a lottery or application process. In some instances, the government will oversee the selection process.
- **Block grants:** A subsidy in which the government provides the same grant amount regardless of the number of students.



3. Voucher schemes. A model in which governments provide parents with vouchers that cover the school fees of the private schools in their area, allowing parents to choose their children's private school free of charge ('demand-side subsidies').

The degree of government involvement varies widely depending on the type of PPP model, specifically in terms of regulation, oversight, financing, and monitoring (Crawford and Hares, 2021). The degree of government oversight across these models is illustrated in the figure below, which places the models, along with public and private schools, on a scale of "more oversight" to "more autonomy." However, it is worth noting that the level of autonomy and oversight also depends on each program's design and the contract specifications. Further, existing resources and capacity within the government will depend on context and impact the amount of oversight governments can provide. Contract-based models tend to have the most government engagement, with governments being more involved in teacher hiring and enacting regulations for teacher qualifications and salary standards. The government may set clear performance targets and employ regular monitoring to ensure targets are met. In other PPP models, government involvement is typically more limited. In voucher schemes, governments may be engaged in school selection, but private providers are responsible for the day-to-day operations and management of schools. The importance of government oversight across all PPP models is discussed in more detail in Section 4.

Figure 1: PPP continuum (Adapted from Crawford and Hares (2021))



The following sections discuss each of the four conditions for effective PPP implementation that have been identified in the literature. Each section synthesizes the literature on the specific condition and provides examples of PPPs that illustrate successes and challenges in implementation. Each section also provides key implications for policymakers to consider when engaging in PPP policies.

1. Per-student subsidies are outcomes-focused

Research indicates that per-student subsidies are the most effective model of PPPs for improving both access and learning outcomes (Aslam et al., 2017). Multiple examples of improved learning and access utilizing this PPP model can be found, including in Pakistan (Barrera- Osorio and Raju, 2015), Uganda (Crawfurd, 2016; Barrera-Osorio et al 2016) and Latin America (Osorio and Wodon, 2014).

To improve equitable learning outcomes, subsidy PPPs should tie funding to the educational outcomes of low-income students rather than allocating grants based on the number of low-income students enrolled (Aslam et al., 2017; Van der Berg, 2017). For example, one PPP in Colombia, the Colegios en Concesión (CEC) program, targets disadvantaged areas of Bogota. To be eligible for funding, CEC required that participating schools met minimum scores on the national standardized test. (Bonilla-Angel, 2011). Likewise, the Foundation Assisted Schools (FAS) PPP program in Pakistan provides per-student subsidies to disadvantaged schools. To continue receiving subsidies, students in these schools must meet predetermined targets in academic performance (Aslam et al., 2017). Studies of these

Key Finding:

Research finds that per-student subsidies are the most effective model of PPPs for improving both access and learning outcomes.

PPPs in Colombia and Pakistan have found both programs improved learning outcomes specifically for the disadvantaged students they enrolled (Malik, 2010; Bonilla-Angel, 2011).

In contrast to subsidy PPPs, many studies find that voucher programs do not have an impact on improving students' learning outcomes. In some contexts, voucher programs have been found to drive inequity in education (Balsera et al., 2016; Day- Ashley et al., 2020). Lastly, research has found that contract PPPs are the least cost-effective of the three models (Termes et al. 2015). As contract PPPs require higher teacher salaries and investments in new infrastructure, they tend to be more expensive than the other two models (Barrera-Osorio, 2007). As such, many authors conclude that there is not enough evidence that contract PPPs positively impact learning outcomes to justify the high cost of implementation (Crawford and Hares, 2021).

Implications for policymakers



Per-student subsidies:

- **To successfully improve learning outcomes for disadvantaged students, governments should allocate subsidies to private providers on a *per-student* basis.** In contrast to block grants, in which the government provides the same subsidy amount regardless of the number of students, per-student subsidies provide a financial incentive for schools to attract and retain students (Aslam et al., 2017). Block grants have been found to be a less effective model, while per-student subsidies have demonstrated evidence of improving learning outcomes (Aslam et al., 2017).



Focus on outcomes:

- **Governments should only allocate subsidies to those providers that meet a minimum quality standard based on educational outcomes rather than inputs.** For example, in South Africa, private providers only qualify for government subsidies if they meet minimum test scores, and subsidy amounts are calculated based on the schools' fee bracket (with lower fees qualifying for higher per-student subsidies) (van der Berg et al., 2017; Draper and Hofmeyr, 2015; Hofmeyr et al., 2013). By allocating subsidies based on school quality indicators and low-fee brackets, this ensures private providers are both accessible to low-income students and focus on learning outcomes

2. Schools are strategically located for out-of-school children

One of the most important benefits of PPPs highlighted in the literature is their potential to expand educational access cost-effectively (Aslam et al., 2017). Rather than requiring governments to establish new public schools in underserved areas – a process with extremely high start-up and administrative costs for building infrastructure and hiring teachers – PPPs allow governments to rapidly expand educational access by increasing the enrollment capacity of private schools that already exist in areas near students.

There are multiple examples of PPPs that expand access by strategic location in areas with high rates of out-of-school

Key Finding:

PPPs have the greatest impact when they are strategically located in hard-to-reach areas.

children (Ansari, 2020). Multiple rigorous studies found that the FAS PPP subsidy program successfully increased access for out-of-school children in Punjab, Pakistan (Ansari, 2020; Barrera-Orsorio and Raju, 2015; Malik, 2010). Likewise in Uganda, a PPP program was established that allowed existing secondary private schools to qualify for a government subsidy for every fee-free space they allocated. Notably, private schools could only participate in the program if there were no available government secondary schools located nearby (Crawford, 2017). The program significantly increased enrollment for students who would not otherwise receive a secondary school education, and illustrated improved learning outcomes compared to public schools (Roddis, 2020).

In addition to subsidizing existing private schools in locations without public schools, PPPs have also been found to improve access in geographically isolated areas where there are no public or private schools. PPPs can help ensure chains of private schools have sufficient funding to expand their reach to additional isolated locations where they previously needed more resources to operate. For example, Crawford and Hares (2021) find that the government subsidy programs in Pakistan and Uganda successfully incentivized private entrepreneurs to start new schools in areas where there previously was no access. In other regions, such as Latin America, the Fe Y Alegría chain of private schools has been able to utilize government subsidies to expand its reach to new locations successfully, and purposely locate its new schools in rural, isolated areas that have severely limited access to any other schools (Parra Osorio and Wodon, 2014).

Implications for policymakers

- **Consider equity in location planning:** Research consistently finds that PPPs can be an effective policy to expand access to hard-to-reach populations, particularly in areas with limited government schools (Crawford and Hares, 2021; Roddis, 2020). As such, PPPs can have the greatest impact when equity and access objectives are considered at the outset and PPPs are strategically planned in underserved areas.
- **Support capacity-building for non-state schools:** PPPs require an active and high-quality non-state school sector that governments can engage with. In countries that lack high-quality providers, policymakers should work with education practitioners to support non-state schools in building their capacity and enhancing their accountability, monitoring and evaluation mechanisms.
- **Target growth and financing for new or underserved educational markets:** PPPs can encourage long-term growth in new educational markets in two ways. First, in many cases, government provision of secondary and early childhood education is not as widespread as primary education. PPPs can help expand secondary or early childhood education access by engaging with private schools that already serve these markets. Second, private schools looking to enter a new market (e.g., private primary schools wanting to expand into secondary education) can use PPPs to reduce some of the financial risk of expanding into a new market (Aslam et al., 2017). Bringing in new financing and private sector actors can encourage the growth of the non-state education sector as a whole and strengthen the **enabling environment for successful PPPs in the future** (Aslam et al., 2017).



Facilitating growth of the non-state school sector through PPPs may have positive long-term impacts, as it encourages non-state providers to develop strong management capabilities.

3. Providers have strong management, accountability, and autonomy

Three key factors emerged as critical for PPPs to improve learning outcomes: management, accountability, and autonomy. Private providers need sufficient management capacity and accountability to improve learning outcomes effectively and self-monitor when results are not achieved. This capacity must be combined with autonomy so providers can adapt their practices if needed (Crawfurd and Hares, 2021).

Studies have found that schools with more flexibility and autonomy tend to see better learning outcomes (Roddiss, 2020). The CEC program in Colombia provides an example of a PPP model where a high degree of autonomy has improved learning outcomes. The government builds new schools through the CEC program and contracts school management to private providers. Barrera-Osorio (2007) finds that CEC schools saw higher test scores than comparable public schools in math and literacy. Providers in Colombia have the flexibility to contract administration and teaching staff and can implement their own pedagogical models as long as they meet performance standards (Roddiss, 2020; Barrera-Osorio, 2007). The freedom to select their teaching and administrative staff likely led to better teaching quality than in public schools, where staff changes are highly restricted (Roddiss, 2020).

Key Finding:

Successful PPPs require high quality school management, internal accountability, and autonomy to adapt as necessary.



“Autonomy may provide the opportunity for better management, but is not in itself sufficient.”

– Crawfurd (2017), p. 27

However, more than autonomy and flexibility is needed to result in good management practices and performance. Crawfurd (2017) finds that the quality of management of subsidized private providers in Uganda correlates with student performance, though the study also indicates that PPP schools are not necessarily better managed than public schools. Of the providers evaluated, only one low-fee private provider – Promoting Equality in African Schools (PEAS) – was found to score higher than public schools on management quality (Crawfurd, 2017).

Case Study: PEAS Uganda

PEAS is a non-profit organization and an implementing partner of the Uganda Secondary Education (USE) PPP program. Under the PPP arrangement, PEAS operates 28 low-cost secondary schools in seven regions of Uganda in which low-income students are admitted free of charge (EPRC, 2016).

PEAS schools target disadvantaged students, and despite their students having lower levels of prior achievement, PEAS students experience higher learning outcomes than students in public schools (Aslam et al., 2017; EPRC, 2016). PEAS secondary schools are consistently found to be high quality and effectively managed, resulting in improved learning outcomes for their students (Aslam et al., 2017; Economic Policy Research Centre, 2016).

What explains their success? Crawford (2017), Aslam et al. (2017) and EPRC (2016) attribute the success of the PEAS Uganda program to rigorous internal accountability standards enforced by PEAS management, including:

- **Developing school improvement plans with performance targets**
- **Rewards and sanctions for head teachers based on performance**
- **Strong accountability to parents via high functioning parent-teacher associations**
- **Consistent internal and third-party monitoring**
- **Ongoing professional development for teachers, with year-round support**
- **Hiring of school directors for administrative tasks, which allows head teachers to focus on teaching quality rather than administration**



Photo source: Opportunity International

Implications for policymakers

- **Pair autonomy with internal accountability:** To improve learning outcomes, private providers would benefit from strong internal accountability systems to self-evaluate and course-correct as needed.

An autonomous PPP program (such as Uganda USE) may be most appropriate in contexts with strongly established providers. In contexts that lack a high-quality and established non-state school sector, a PPP model that incentivizes performance may be more appropriate (e.g., by providing performance incentives to teachers, or requiring minimum test scores). Designing a PPP model with accountability

“With greater autonomy comes the need for greater accountability.”

– Aslam et al., (2017), p. 70

requirements can also help build the capacity of private providers in management, monitoring and evaluation, and reporting.

- **Support providers in developing accountability systems:** Policymakers should work with education practitioners and providers to jointly develop the accountability mechanisms necessary to improve learning outcomes. Such mechanisms may include teacher performance reviews, parent-teacher associations, and school improvement plans. Adequate funding to develop these systems is also critical to incorporate into PPP policy design.
- **Develop strategies to assess accountability at the design phase:** To select providers with the strongest management and accountability systems, it is important that governments have a strategy in place to assess accountability during the PPP’s design. Policymakers can support governments in developing tools and criteria for ensuring PPP bids have accountability mechanisms in place. While the government’s ability to oversee and monitor private providers may be limited in certain contexts, developing a clear accountability criterion at the outset can give governments a clearer path forward. These criteria include the following highlighted in the research:
 - Policies in place for hiring, rewarding, and firing teachers based on clear performance indicators.
 - Plans for ongoing teacher training and school leadership professional development.
 - Existing third-party monitoring reports or plans in place for future monitoring.
 - Clear methods for engaging with and soliciting feedback from parents.

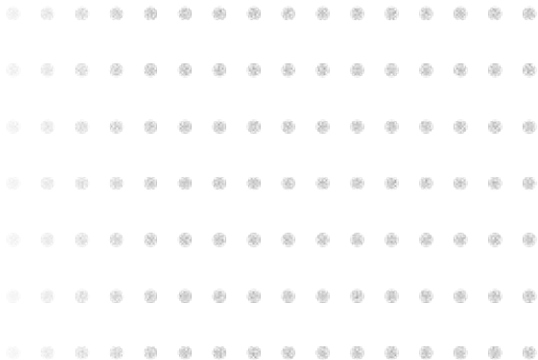
4. Governments can provide strong oversight and monitoring of PPPs

The fourth condition for PPP success is the capacity of the government to oversee, monitor, and enforce established policies and regulations. Government oversight is essential to ensuring that PPP programs remain equitable for the most disadvantaged learners. In particular, regulation can help ensure that private providers do not engage in inequitable practices, such as only admitting fee-paying students (Aslam et al., 2017).

Enforcing regulations can be particularly challenging in low-resource environments where governments may have more limited capacity to engage with private providers. For example, Romero et al. (2020) highlight several challenges in the Liberia LEAP PPP program. Results in the program were mixed in improving learning outcomes: the study found that some school providers improved learning outcomes while others did not. Further, some providers engaged in poor management practices, such as shifting underperforming teachers to other schools, which restricted equity as well as learning. Citing the LEAP program, Crawford and Hares (2021) highlight the importance of designing PPP contracts with regulation and oversight mechanisms in place to prevent inequities from occurring, but note that it is challenging to accomplish this in many contexts.

Key Finding:

Government oversight is essential to ensuring the PPPs remain equitable and improve learning outcomes for the most disadvantaged students.



Despite the challenges, there are key examples of governments successfully expanding their capacity to regulate PPP contracts within limited resources. In Pakistan, for example, the extensive PPP education programs in multiple regions are managed by semi-autonomous bodies such as the Punjab Educational Foundation or the Sindh Education Foundation. These entities oversee private providers and management is handled by these quasi-independent bodies rather than the Ministry of Education itself (Crawford and Hares, 2021). This approach can potentially improve accountability measures while reducing the burden on under-resourced governments.

Implications for policymakers

- **Implement strong regulations:** Research indicates that a strong regulatory framework is critical to improving learning outcomes for disadvantaged students within PPPs. **Rigorous accountability mechanisms should be built into contracts between governments and providers from the outset.** In addition to regulating existing providers, standards must also be in place to evaluate new providers before selection (Roddiss, 2020; Aslam et al., 2017).
- **Outsource regulation in low-resource environments:** Policymakers should be aware of the challenges of implementing regulatory frameworks in many contexts and consider outsourcing regulation to quasi-independent bodies to mitigate these challenges (Crawford and Hares, 2021). This approach can help ensure accountability without placing an additional burden on under-resourced governments. Policymakers should consider these options for expanding government capacity and dedicate adequate time and resources to achieving these solutions.



Photo source: Opportunity International

References

- Africa-America Institute (AAI). (2015). State of Education in Africa Report 2015: A report card on the progress, opportunities and challenges confronting the African education sector. Accessed: <https://www.aaionline.org/wp-content/uploads/2015/09/AAI-SOE-report-2015-final.pdf>
- Ansari, Ali H. (2020). Cream skimming? Evaluating the access to Punjab's public-private partnership programs in education. *International Journal of Educational Development*, Elsevier, vol. 72(C).
- Aslam, M., Rawal, S. and Saeed, S. (2017). Public private partnerships (PPPs) in education in developing countries: A rigorous review of the evidence. Education Partnerships Group, London. Accessed: <https://epg.org.uk/wp-content/uploads/2021/06/EPG-PPP-Report.pdf>
- Balsera, M., Delphine Dorsi, Andreu Termes, Xavier Bonal, Antoni Verger and Javier Gonzalez Diaz. (2016). Private actors and the right to education, Compare: *A Journal of Comparative and International Education*, 46:6, 976-1000, DOI: 10.1080/03057925.2016.1207939
- Barrera-Osorio, F. (2007). The Impact of Private Provision of Public Education: Empirical Evidence from Bogota's Concession Schools. World Bank Policy Research Working Paper No. 4121, Washington D.C. Accessed: <https://openknowledge.worldbank.org/handle/10986/7153>
- Barrera-Osorio, F. & Raju, D. (2015) Evaluating the Impact of Public Student Subsidies on LowCost Private Schools in Pakistan, *Journal of Developmental Studies*, 51(7), 808-825.
- Barrera-Osorio, F., Galbert, P., Habyarima, J. and Sabarwal, S. (2016). Impact of Public-Private Partnerships on Private School Performance: Evidence from a Randomised Control Trial in Uganda. *Policy Research Working Paper; No. 7905*. World Bank, Washington, DC. Accessed: <https://openknowledge.worldbank.org/handle/10986/25804>
- Barrera-Osorio, F., Blakeslee, D., Hoover, M., Linden, L., Raju, D., and Ryan, S. (2017). Delivering Education to the Underserved through a Public-Private Partnership Program in Pakistan. *NBER Working Paper 23870*
- Barungi, M. and Mwesigye, F. (2019). Lowering the Cost of Secondary Education through Strategic Public-Private Partnerships: Evidence from the PEAS programme in Uganda. Economic Policy Research Centre - Policy Brief. Accessed: <https://ageconsearch.umn.edu/record/291794/>
- Baum, D.R. (2018). The effectiveness and equity of public-private partnerships in education: A quasi-experimental evaluation of 17 countries. *Education Policy Analysis Archives*, 26, 105
- Bonilla-Angel, J.D. (2011), Contracting out Public Schools and Academic Performance: Evidence from Colombia. PhD Thesis, *University of Maryland*.
- Crawfurd, L. (2017). School Management and Public-Private Partnerships in Uganda. *Journal of African Economy*, 26, 539-560. <https://doi.org/10/gcmcn5>
- Crawfurd, L. (2018). Contracting Out Schools at Scale: Evidence from Pakistan, *RISE Working Paper 022*. Accessed: https://riseprogramme.org/sites/default/files/2020-11/RISE_WP-022_Crawfurd.pdf
- Crawfurd, L., Patel, D., Sandefur, J. (2021). *Heterogeneous Effects of Low-Cost Private Schools: Experimental Evidence from Delhi*.
- Crawfurd, L. and Hares, S. (2021). The Role and Impact of Private Schools, School Chains and PPPs in Low and Middle Income Countries. Paper commissioned for the 2021/2 Global Education Monitoring Report, Non-State Actors in Education. Accessed: <https://unesdoc.unesco.org/ark:/48223/pf0000380060>
- Damera, V.K. (2017). Choice for the poor or poor choice? Experimental evidence from implementation of India's school choice policy. *BSG Working Paper Series*. Accessed: <https://www.bsg.ox.ac.uk/sites/default/files/2018-05/BSG-WP-2017-022.pdf>

Draper, K. & Hofmeyr, J. (2015). *Low-fee private schools: International experience and South African realities*. Johannesburg, South Africa: The Centre for Development and Enterprise. Accessed: <http://www.cde.org.za/wp-content/uploads/2015/05/LOW-FEE-PRIVATE-SCHOOLS-May-2015.pdf>

Day Ashley, L. Skinner, R., Meyer, A, and Perry, T. (2020) "Private Education and Disadvantaged Children in India: A literature review of three models of private school provision." Save The Children International. Accessed: https://resourcecentre.savethechildren.net/pdf/private_education_and_disadvantaged_children_in_india_literature_review_of_three_models_of_private_school_provision_final.pdf/

Day Ashley, L., Mcloughlin, C., Aslam, M., Engel, J., Wales, J., Rawal, S., Batley, R., Kingdon, G., Nicolai, S. and Rose, P. (2015). What we know – and don't know about the impact of private schooling in developing countries. *UK Forum for International Education and Training*. Accessed: <http://www.ukfiet.org/2015/what-we-know-and-dont-know-about-the-impact-of-privateschooling-in-developing-countries>

Economic Policy and Research Centre. (2016). Evaluation of the PEAS Network under the Uganda Secondary Education (USE) Programme. Accessed: <https://eprcug.org/publication/evaluation-of-the-peas-network-under-the-uganda-universal-secondary-education-programme/Roddis, 2020>

Härmä, J. (2016). School Choice in Rural Nigeria? The Limits of Low-Fee Private Schooling in Kwara State. *Comparative Education* 52(2):246–66.

Hofmeyr, J., McCarthy, R., Oliphant, S., Schirmer, S. and Bernstein, A. (2013). Affordable private schools in South Africa. Johannesburg, South Africa: The Centre for Development and Enterprise. Accessed: <http://www.cde.org.za/wpcontent/uploads/2013/07/Affordable%20Private%20Schools%20in%20South%20Africa.pdf>

Malik, A. (2010). Public-private partnerships in Education: Lessons Learned from Punjab Education Foundation, *Asian Development Bank*. Accessed: <https://www.adb.org/sites/default/files/publication/27494/ppp-education-punjab.pdf>

Neilson, C., Allende, C. and Gallego, F. (2019). Approximating the equilibrium effects of informed school choice (Working Paper). Accessed: <https://irs.princeton.edu/publications/working-papers/approximating-equilibrium-effects-informed-school-choice>

Parra Osorio, J.C. and Wodon, Q. (2014). Faith-Based Schools in Latin America: Case Studies on Fe Y Alegria. World Bank Study;. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/16375>

Patrinos, H.A., Barrera Osorio, F. and Guáqueta, J.(2009). The Role and Impact of Public-Private Partnerships in Education. Washington, DC: World Bank Publications.

Roddis, S. (2020). "Literature Review of Blended Finance in the Non-State Education Sector." USAID. <https://www.edu-links.org/resources/blended-finance-non-state-education-sector>

Romero, M., Sandefur, J., and Sandholtz, W.A. (2020). Outsourcing Education: Experimental Evidence from Liberia. *American Economic Review*, 110(2):364-400.

Saguin, K. I. (2019). Designing effective governance of education, *Policy Design and Practice*, 2:2, 182-197, DOI: 10.1080/25741292.2019.1621034

Verger, A. Mauro C. Moschetti and Fontdevila, C. (2020). How and why policy design matters: understanding the diverging effects of public-private partnerships in education, *Comparative Education*, 56:2, 278-303, DOI: 10.1080/03050068.2020.1744239

Termes, A., Bonal, X., Zancajo, A., Lopez, L., Ramirez, Y.C., Angelica, S. and Verger, A. (2015). Public-Private Partnerships in Colombian Education: The Equity and Quality Implications of Colegios en Concesion, Privatisation in Education Research Initiative (PERI) Paper No 66.

UIS. (2020). Pupil-teacher ratio, primary - Sub-Saharan Africa. Data retrieved from UNESCO Institute for Statistics. Accessed: <https://data.worldbank.org/indicator/SE.PRM.ENRL.TC.ZS?locations=ZG>

UNESCO. (2022). New estimation confirms out-of-school population is growing in sub-Saharan Africa. Global Education Monitoring Report. Fact Sheet 62/Policy Paper 48. Accessed: <https://unesdoc.unesco.org/ark:/48223/pf0000382577>

van der Berg, S., van Wyk, S., Burger, R., Kotzz, K., Piek, M., and Rich, K. (2017). The Performance of Low Fee Independent Schools in South Africa - What Can Available Data Tell? *SSRN Electronic Journal* 1–30.

Zancajo, A., Fontdevila, C., Verger, A. and Bonal, X. (2021). Regulating Public-Private Partnerships, governing non-state schools: An equity perspective. Paper commissioned for the 2021/2 Global Education Monitoring Report, Non-State Actors in Education. Accessed: <https://unesdoc.unesco.org/ark:/48223/pf0000380092.locale=en>

About the Education Finance Network

The Education Finance Network convenes diverse education stakeholders with a focus on directing non-state resources toward creating inclusive, high-quality education in low- and middle-income countries globally.

The Network is open to a broad range of organizations, including foundations and family offices, donors, impact investors, practitioner networks and research and advisory orgs. It provides members with opportunities to network, engage the public sector through policy forums, work on technical issues and trends affecting the sector through focused working groups, access members' only research, and participate in professional development.

For more information, including how to apply to become a member, go to: <https://www.edu-links.org/about/global-engagement/education-finance-network>

Authored by:

Natalie Davirro, Research and Knowledge Manager for the Education Finance Network, Opportunity International.

Questions? Please submit any questions to educationfinance.network@dalberg.com

The executive committee members
who advise and support the Network are:



Dalberg





This report was made possible through support provided by the Bureau for Development, Democracy, and Innovation, Private Sector Engagement (PSE) Hub and Center for Education, U.S. Agency for International Development, under the terms of Contract No. 7200AA19C00080. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.