Private Schools for Public Goods

Exploring the potential of privately-run schools to benefit societies

About this report

About the Jacobs Foundation

The Jacobs Foundation invests in the learning and education of children and young people so that they become socially responsible and productive members of society. The Foundation is committed to improving learning opportunities and systemic educational change globally, with a particular focus on Switzerland and West Africa. In order to achieve this goal, children and youth must be given better opportunities for positive development and equitable access to education. Whatever their background, place of residence or family income, all children should have the chance to reach their full potential. In the 21st Century, adaptive teaching approaches and new technologies aimed at facilitating individualized learning are becoming increasingly important, and research plays a critical role in the development, evaluation and improvement of school practices and programs to benefit children and young people. To drive scientific progress, the Foundation is funding rigorous global research on learning and child development, supporting innovative scientists and institutions.

About L.E.K. Consulting and the Global Education Practice

L.E.K. Consulting is a global management consulting firm that uses deep industry expertise and rigorous analysis to help business leaders achieve practical results with real impact. The Global Education Practice is a specialist international team based in Singapore serving a global client base from China to Chile. The team's 70-plus consultants and seven partners have completed more than 700 education sector engagements across more than 90 countries, serving CXOs and boards of some of the world's largest educational organizations. Our experts bring insights into education businesses, investment opportunities, market dynamics, and impact across segments from K-12 to edtech.

Acknowledgements

Contents

Glossary

ADB	Asian Development Bank
AP curriculum	Advanced Placement; program created by the College Board in the U.S., offering college-level curricula and examinations to high school students
ASER	Annual Status of Education Report; annual survey providing estimates of children's schooling status and basic learning levels for each state and rural district in Pakistan
BOP	Base of the pyramid
CAGR	Compound annual growth rate
CBSE	Central Board of Secondary Education; India's national level board examination
CIRL	Tony Little Centre for Innovation and Research in Learning at Eton College
DES	Uganda Directorate of Education Standards
EBITDA	Earnings before interest, taxes, depreciation, and amortization
EdoBEST	Edo State Basic Education Sector Transformation
EdoSUBEB	Edo State Universal Basic Education Board
ESG investments	Environmental, Social and Governance investments, also known as sustainable investments
GCSE	General Certificate of Secondary Education; an internationally recognized qualification taken by secondary students in Commonwealth countries over two years
GER	Gross Enrollment Ratio
GSP	Government School Programme run by The Citizens Foundation
HE	Higher Education
HH Income	Household Income
IB	International Baccalaureate; a non-profit educational foundation offering internationally recognized programs that are offered in schools globally
IFC	International Finance Corporation, the private sector arm of the World Bank
IP	Intellectual Property
ISLI	India School Leadership Institute
KIPP	Knowledge is Power Program
KLDF	Knowledge is Power Program (KIPP) Leadership Design Fellowship
LAC	Latin America and the Caribbean
LCPS	Low Cost Private School
LEAP	Liberian Education Advancement Program
Lower Secondary Education	The final stage of compulsory schooling (for students typically between 12 and 15 years of age)
MCGM	Municipal Corporation of Greater Mumbai
MTB-MLE	Mother tongue-based multilingual education
NA	North America
OECD	Organization for Economic Co-operation and Development
PEAS	Partners for Education Agriculture and Sustainability
PISA	Programme for International Student Assessment (a global study by OECD of school students' mathematics and science performance)

PISA-D	Programme for International Student Assessment for Development; an initiative launched by the OECD and its partners aims to encourage and facilitate PISA participation by interested and motivated low- and middle-income countries
PPPs	Public-Private Partnerships
Primary Education	Typically the first stage of compulsory schooling, between early childhood education and secondary education
QEP4E	The Quality Enhancement Programme for Education; a joint effort of EducAid and the community of the Port Loko district to create whole school improvement programs
RPWD	Right of Persons with Disabilities Act (India)
RTE	Right to Education Act (India)
Secondary Education	Schooling which takes place after primary education and prior to tertiary education
SSA	Sub-Saharan Africa
SSC	State School Certificate
STEM	Science, Technology, Engineering, and Mathematics
STR	Student-Teacher Ratio
SWA	South and West Asia
TCF	The Citizens Foundation
TERCE	Third Regional Comparative and Explanatory Study; UNESCO's large-scale study of learning achievement
WASSCE	West African Senior School Certificate Examinations

Methodology

The study was conducted between August and October 2019 by the Global Education Practice at L.E.K. Consulting, commissioned by the Jacobs Foundation. It draws on the insights and expertise of over forty international education experts, as well as lessons gleaned from a detailed assessment of eight schools that have participated as case study organizations. Details of the research methodology are below:

- **Expert interviews:** L.E.K.'s Global Education Practice identified international education experts, including through its networks, online platforms, and referrals from other interviewees. Experts participated in phone interviews and then reviewed and approved quotes for inclusion in the report.

- **Case studies:** The research team identified eight case study organizations from an original long-list of 1,000 education interventions. This list was compiled through an online search, literature review, and review of publicly available organizational profiles, for example from websites like the WISE Awards Finalists. These were then further prioritized by relevance to the K-12 sector, followed by a selection of K-12 schools over non-school interventions. The list was narrowed down by additional research on whether the schools created public goods. The research team shortlisted the final eight case studies to deliver a set of projects with geographic diversity and diversity in approaches and structures.

  Case study organizations participated in structured telephone or in-person interviews with the L.E.K. Global Education Practice team. The team then developed detailed case studies based on these interviews, which were subsequently checked for accuracy by case study organizations and approved for publication.

  A range of other education case studies are included throughout the document and are based on secondary research (online sources) as of September 2019. These have not been vetted by the highlighted organizations.

- **Fact bases and analysis:** L.E.K. relied on publicly available data and statistics on the education sector (for example from UNESCO Institute of Statistics and World Bank Group) as well as its own non-proprietary insights on K-12 education.

Information about schools presented is based on self-reporting by schools themselves and reference to news reports and available grey literature. Impact claims have not been independently assessed nor has the quality of available evidence on school impact been assessed.

All currency figures are in USD, unless otherwise indicated.

Note on terminology

The use of the term "private schools" for the purpose of this study refers to privately-run schools, which may be run on behalf of the state. The term "public schools", where used, refers to state schools.

The terms "private K-12", "non-state schools", "privately-run schools", and "private schools" are used interchangeably in the study to refer to schools covering any grade levels that serve children aged approximately 5-18 years. Some relevant schools may cover early years as well (e.g. ages 3-4).

These schools may be for-profit or non-profit, and they may be fee-paying or free. These schools may be open enrollment or may have selective entry standards. This definition also includes public charter and public-private partnership schools run by private organizations on behalf of the government, as well as religious and community schools.

Executive summary

Sustainable Development Goal 4 on Quality Education sets several bold challenges for the world to achieve by 2030, including universal completion of free, equitable and quality primary and secondary education.[1]

However, progress to achieve Goal 4 has stagnated. For example, the number of out-of-school children globally dropped by just one million last year, to 262 million from 263 million.[2] Strides have been made in addressing global education challenges, but serious issues, particularly related to quality education, persist. Waiting 260 rather than 10 years more to achieve universal quality education is not a viable option.

Meanwhile, and perhaps in part because of perceived challenges in quality and accountability in education systems, privately-run school enrollments (in both non-profit and for-profit schools) have been growing globally at three times the rate of the public sector as affluence rises.[3] Given this expansion, education sector stakeholders cannot afford to ignore schools operated by private actors. Their particular strengths, such as innovation potential, must be harnessed to contribute to the greater good.

"Many children in school can't read so there is a fundamental challenge of basic education despite tremendous success in increasing access. The second challenge is around equity. We are seeing growing gaps between high and low performers and increasing differences between countries and within a country."
— *Harry Anthony Patrinos, Education Practice Manager, World Bank Group*

This report aims to shine a light on the ways this can happen. It explores the key challenges in global education and the state of the privately-run schools' sector. Then, it explores how privately-run schools can contribute to the creation of public goods in education, providing benefits for broader communities and education systems. Finally, it looks at how this activity can be supported by donors, funders, and investors.

The report uses the terms "private schools" and "privately-run schools" to refer to schools that are run by private organizations, either independently or in partnership with the state in public-private partnership models. These schools can be non-profit or for-profit, and maybe run by families, companies, religious organizations, and other organizations. For more on this definition, see the Methodology.

The challenge

Access to basic education has increased rapidly. In 1970, the gross primary enrollment rate was 68% in Sub-Saharan Africa and 47% in South Asia. In 2010, these figures rose to over 100% in both regions.[4] However, challenges still persist. The three most critical challenges affecting global education, experts contributing to this study concur, are inadequate access, poor quality and low relevance, and lack of accountability. These changes are more pressing in emerging and developing markets:

1. **Access** is a key issue, driven by insufficient supply and funding gaps. Particular access challenges are facing marginalized children (e.g. girls, special needs, rural, and conflict-affected youth).[5]

2. **Quality and relevance** are significant challenges, driven by a lack of suitable infrastructure and learning materials, a dearth of well-trained school leaders and teachers, outdated or misaligned curriculum, and poor pedagogical approaches.[6]

3. **Accountability** is in short supply, driven by a failure of governments and other key stakeholders to take full ownership and responsibility for education outcomes.[7]

Solutions to these challenges are urgently needed. However, public and donor funding have stagnated, and early access gains (from 2000-2011) have slowed.[8] The seriousness of the challenges merits drawing on the potential contributions of all education sector stakeholders.

"In my working life I saw private schools bring in and develop innovations faster, taking the risk that government might not be willing to take."
— *Gabriel Sanchez Zinny, Former Director General of Culture & Education, Province of Buenos Aires*

A shift toward private education

Against the backdrop of these challenges in global education, there is a shift toward private schooling. Among all consumer sub-sectors, education is the fastest-growing in terms of spend. Moreover, within education, schooling, or "K-12 education", is the largest sub-sector for household expenditure, with an estimated USD 370-390 billion spent globally in 2018.[9] Understanding its features is the key to understanding its potential contributions.

Privately-run schools, including both for-profits and non-profits (as well as religious schools, trust schools, and other private entities)

serve one in four children globally, with provision growing at 3% year-on-year for the last three years, compared to 1% in the public sector.[10] The private sector is particularly gaining share over the public sector in the fast-growing emerging markets, such as in India where private enrollment grew from 36% of enrollments in 2007 to 44% in 2017; in Malaysia (4% in 2007 versus 12% in 2017); and Brazil (11% in 2007 versus 18% in 2017).[11]

Moreover, private education is poised for strong, long-term growth: global youth populations continue to swell, affluence is on the rise, and private sector education spending is resilient to economic downturns.

Growth of private education is affected by six fundamental demand drivers: poor or inadequate public provision; rising household affluence; demand for English-based education; increasing expat populations; a focus on student outcomes; and prioritization of holistic "21st Century" education.

Despite its considerable scale, the global private K-12 sector is highly fragmented, with many "mom and pop" providers. A good deal of provision is offered by non-profit and/or religious entities, and there are only some 15 for-profit companies globally over USD 100 million in revenue.[12] Schools are local catchment-driven entities and very few have a significant scale. Fees are highly variable by geography and dependent on local incomes. The sector is also subject to highly variable regulation, but privately-run schools flourish where the government takes an active role as steward of private education systems. The private K-12 sector has also attracted significant investment and demonstrates characteristics that make it attractive for private sector investors, such as resilience and long-term revenue visibility.[13] This has contributed to high recent valuations for schools.

Privately-run schools' contribution to public goods

The sector's growing importance in the education landscape is undeniable, and this raises the question of its potential contributions to society at large. To assess how privately-run schools can contribute to creating public goods, this study undertook eight case studies after a global scan of more than 1,000 models (see Table 1). Among the case studies, social impact-focused mission and the availability of incentives are the key drivers for privately-run schools to create public goods.

Some of the case studies assessed reported better learning outcomes than state schools or control schools. Gathering further evidence on and expanding their approaches to the public sector

could in principle improve sector-wide outcomes, especially if these could be delivered at a cost comparable to current public sector expenditure (see Section 3 for details on outcomes of privately-run schools for some of the case studies assessed). The case studies demonstrate that privately-run schools can make contributions to public goods along the education value chain:

1. **Whole-school delivery:** In areas underserved by the government, organizations like Muktangan and The Citizens Foundation (TCF) are creating public goods by providing free, affordable and quality education. These and other case study organizations had innovative approaches to inclusivity and equity, supporting access by marginalized groups. For example, Alianza Educativa has a program called Superaula which has been specially created for students with learning difficulties. Each child receives 40-50 hours a year of dedicated professional support. At TCF, a shift to an all-female staff in some schools has helped to enable girls' enrollment in conservative communities.

2. **Curriculum and pedagogy:** Innovations in these areas could eventually be scaled to the public sector after demonstrating efficacy. Rising Academies and Eton College's Tony Little Centre for Innovation and Research in Learning (CIRL) tackle the challenge of outdated curriculum and ineffective pedagogical techniques. These and other case studies innovated in continuous revisions to curriculum or methods like grouping students by ability in class. For example, at Rising Academies, student and teacher feedback is regularly monitored and is used to guide modifications to the curriculum to better reflect the needs of students. At Alianza schools, curricula called 'Navegar Seguero' help provide socially relevant content to students from lower economic strata and aim to support their holistic development. In an example of a different pedagogical approach, at Muktangan schools, students in the same class are divided into three groups based on their subject aptitude, and instruction is delivered in the method best suited to their learning level.

3. **Professional development:** Privately-run schools can develop innovative and/or evidence-based teacher and school leadership training modules. Under KIPP's Leadership Design Fellowship (KLDF), the non-profit school network (which runs public schools that are free and open enrollment) hosts various summits for teachers and school leaders. In addition to operating 15 free schools, EducAid runs teacher training programs for community schools, including a teacher quality enhancement program where it trains partner school teachers. Rising uses instructional coaches in every school to

Table 1
Private schools for public goods case studies

Organization	Geography	Summary	Scale of Impact (since inception)
Bridge International Academies (Program: EdoBest)	Nigeria	Bridge International Academies is an education services group operating in Africa and Asia. In Nigeria's Edo state, Bridge is involved in creating public goods in the following ways: (a) Provision of technology-supported teaching and assessment solutions to streamline instruction delivery and provide real-time feedback and (b) Teacher training; all in government schools.	• Trained 11,000 teachers • Reached 850 schools and 270,000 pupils
Eton College's Tony Little Centre	U.K.	Eton's Tony Little Centre for Innovation and Research in Learning (CIRL) works to improve learning outcomes for young people by spreading Eton's best practices and innovations in teaching pedagogy, learning, and leadership in education through research and advocacy. The Tony Little Centre also conducts leadership training programs for students at Eton in collaboration with partner schools.	• Impact assessment pending
The Citizens Foundation (TCF)	Pakistan	The Citizens Foundation runs the Government School Programme (GSP), wherein it adopts primary and middle schools in remote rural areas of Punjab, Sindh and other provinces. Unlike other public-private partnerships, TCF is given the autonomy to manage, hire and train new teachers and principals under some contracts.	• Adopted 350+ public schools • Hired 1,700+ teachers and principals with over 100,000 hours of teacher training
EducAid (Program: QEP4E)	Sierra Leone	EducAid is a not-for-profit organization that runs a network of 15 free schools, free training programs for community and government schools, and tertiary programs for their graduates in Sierra Leone. The Quality Enhancement Programme for Education (QEP4E) is a free, multi-faceted training program to train teachers and staff from partner schools in modern, child-centered, holistic, and girl-friendly pedagogical methods and school management best practices.	• 650 teachers and 45 school leaders have been trained • 100 schools and 31,000 children have benefitted
Alianza Educativa	Colombia	Alianza Educativa is a non-profit organization formed by an alliance of three private schools and a university that operates seven concession (public-private partnership) schools and works on improving curriculum, pedagogy and management of these schools. Alianza also delivers a training program focused on pedagogy and curriculum for the teachers in its schools and trains teachers in neighborhood schools.	• Runs 7 schools to benefit 8,000 students • 130 hours of training in a year for over 350 teachers
Rising Academy Network	Liberia	Rising Academy Network, a low-cost private school operator, runs nearly 30 public schools in Liberia under the Liberian Education Advancement Program (LEAP) — a major public-private partnership initiative — and focuses on effective curriculum and rigorous teacher coaching.	• Scaled from 1,100 students in 2016 to 6,500 students in 2018 • Planning to grow from 30 to 87 schools in 2019
KIPP (Program: KLDF)	U.S.	KIPP (Knowledge is Power Program) is a non-profit organization that runs a chain of over 240 charter schools in the U.S. Amongst its many programs, KIPP runs KLDF, a school leadership training program in the United States, which has been assessed in detail in this case study.	• Runs over 240 charter schools • KLDF reached 12 million children through 320 participants till date
Muktangan	India	Muktangan is a non-profit organization that runs a chain of seven public English-medium schools in Mumbai that follow a constructivist teaching philosophy. Muktangan also trains current and potential teachers on innovative pedagogical methods and classroom management best practices.	• 3,800 students with 130 special need students • Trained 850 teachers so far

help teachers learn and improve through continuous lesson observation, feedback and coaching. TCF uses Area Managers in a 'Train the Trainer' approach. Other schools leverage innovations like observational visits to model schools and mock teaching.

4. **Management and governance:** Privately-run schools can introduce student and teacher evaluation frameworks alongside school management best practices. In EdoBEST schools in Nigeria, Bridge leverages tablets to digitize student and teacher attendance. This allows critical attendance data to be relayed to the government's data analysis team which utilizes it in near real-time to monitor the program and course-correct if needed. In another example, Rising has school performance managers who track student and teacher attendance and performance regularly to ensure ongoing program iterations and accountability.

5. **Infrastructure and technology:** Privately-run schools share school grounds, facilities and technology to enable learning as well as providing services. Case studies demonstrate technology provision adapted to a resource-poor setting. For example, Bridge has helped pioneer the use of technology support systems in developing contexts. In Edo State Nigeria, Bridge acts as a teacher training and technology partner for government schools as part of the EdoBEST program, a flagship educational initiative launched in 2018 to transform the public education system in the state.

Cost management, effective stakeholder engagement and decentralized management structures have also proven critical in ensuring the success of some scale case study schools.

Opportunities for foundations or donors

Key barriers for privately-run schools in contributing to public goods include lack of available resources or financial incentives, distrust between public and private sectors, and changing regulatory environment/government leadership. Expert insights and case studies reveal that donors and funders have four key levers for surmounting these barriers and encouraging privately-run schools to deliver public goods:

1. **Policy and advocacy:** As arguably neutral brokers, funders may bridge the divide between state and non-state actors through lobbying, dialogue, and supporting policy development. This can support the development of effective systems for managing and supporting privately-run schools, particularly in contexts where the state may have limited knowledge or resources and where private sector engagement, regulation, and quality assurance require improvement.

2. **Research, knowledge sharing, and showcasing best practices:** Funders can identify, codify, showcase, and reward best practices and innovations to incentivize the delivery of public goods. They may also share actionable toolkits for school operators or develop research to drive wider sectoral understanding. They can play a role in monitoring and evaluating programs and publishing results (both positive and negative). A key area for intervention is in raising standards for evidence and funding research on what works, particularly in low-income settings.

3. **Networks development:** Interviewees cited the importance of having places where private sector schools and stakeholders (including communities, think tanks, governments, and other education actors) can come together for collaboration and knowledge sharing. Networks development can come in the form of funding existing networks or convening new groups, either virtually or in person. These networks may have a role in researching and scaling public goods and in the development and transmission of the solution and best practices.

4. **Funding and incentivizing the creation of public goods:** Donor support can fuel the creation and dissemination of innovation by private sector schools. Funding in the form of grants, challenge prizes, loans, outcomes-based funding, and other approaches can support privately-run schools to generate public goods by providing them with the financial security and incentives to innovate.

To make these interventions successful, funders should avoid replication of the role of government, as well as considering potential implementation challenges in the public system and aligning with government priorities. Preparing for long-term engagement is also important.

Looking ahead

The conclusion to this research emphasizes the importance of government and effective regulation. The key ingredient making it possible for these privately-run schools to contribute is the willing participation and consistent partnership with the public sector. In most of the case examples assessed, the public sector is either a tacit or, more often, an explicit partner in the schools' activity. Looking ahead, it is this government engagement, often at the local and municipal level, that is most critical to harnessing the potential of the private sector. There are three key areas for attention:

1. A **supportive regulatory environment** that provides the right checks on privately-run schools while enabling them to operate with an appropriate level of independence and entrepreneurialism.

2. Second, and often related, is an **effective quality assurance regime** that enables government to assess privately-run school performance and provide the appropriate incentives for high performance and consequences for poor performance.

3. Third, **public-private partnership frameworks** are an important enabler of privately-run schools contributing to public goods, as they provide clear incentives for contributing to government objectives and often set clear targets for delivery.

Addressing the world's most stubborn education challenges must be a shared project of the private and public sectors of education — all stakeholders are needed at the table. The opportunity — and the challenge — before us is then to incentivize and channel the innovation potential and nimbleness of privately-run schools while ensuring they contribute in the fullest way to broader education objectives. Bridging the gap between the public sector and privately-run schools is a critical place to start.

Introduction

Nearly one in four children globally attends a private school.[14] Some of these schools are fee-paying, and private consumer spending on education is growing faster than any other area of consumer spend, and this trend is set to continue. Household spending on education is also resilient in economic downturns, meaning that trends in the private provision of education are likely to be sustained.

Against the backdrop of this growth, the appropriate role for privately-run schools in the delivery of education is a locus of much debate. Reasonable institutions and individuals have differing opinions, with concerns for access, equity, and quality at the heart of these discussions.

This study does not aim to enter into this discourse. Instead, it takes as a given that provision of privately-run education is growing significantly, particularly in developing and emerging markets, and asks a different question: **How can these privately-run schools be harnessed as a force for the public good?**

The study is interested in how and why privately-run schools, both for-profit and non-profit, contribute to public goods in education. It first examines the key challenges in global school education, with a particular focus on developing and emerging markets and on Latin America and Sub-Saharan Africa, two key focus geographies for the Jacobs Foundation. It then assesses the current state of private K-12 education, assessing the drivers of its growth, as well as key features and sector trends. The study then draws on case studies to investigate the role of privately-run schools in creating public goods and the lessons that can be drawn from that may inform broader practice. Finally, the study examines the unique role that foundations can play in catalyzing the creation of educational public goods by private sector schools.

Despite its contested nature, we will use the term "public good" in this study; its use is well-established, and alternatives are also contested (see Box 1). For the purpose of the study, a public good in education is defined as an educational intervention that is beneficial, non-discriminatory, and free for participants. This includes the dissemination of knowledge documents and publications. The authors are particularly interested in the question of how private K-12 schools can contribute to public goods, but the study makes some reference to other education actors — e.g. companies and non-profit organizations — that are contributing to public goods.

Box 1: Education — a public good?

Education is often referred to as a "public good" — a term we will use in this study.

In economics, public good is a good that is both non-excludable and non-rivalrous in consumption.

- Non-excludable: an individual cannot be excluded from its use

- Non-rivalrous: use by one individual does not reduce availability for others

The use of the term "public good" is contested within education and its use often goes beyond pure economic conceptions of "public goods":

- *"It is important to reinterpret the principle of education as a public good in a context characterized by the increasing involvement of non-state actors and by the blurring of boundaries between the public and the private"*[15]

- *The concept of public good… has become polysemic and confusing"*[16]

The term "public good" is also open to misinterpretation

- *"The economic definition of a public good is often misunderstood. Most people think of a public good as something publicly-funded and for the common good but in economics, it describes a good (like fresh air and an open-access curriculum) which you can't exclude people from, and a good for which one person's use doesn't detract from another's."* — John Rendel, Founder, PEAS

- *"The term "public good" is originally a technical term from economics that has specific criteria: non-excludable and non-rivalrous, but people often use the term when they mean a governmental obligation or a civil right. Education is absolutely a civil right and a governmental obligation, but depending on the context, certain educational initiatives or interventions, might not be public goods, in the technical sense."* — Owen Henkel, Investment Director, Pearson Ventures

Some argue that education should be considered as a different type of "good":

- *"The concept of education as a common good may represent a useful complementary framework for the governance of education."*[17]

- *"I would argue Education isn't a public good. Rather, education is a private good with public spill overs."* — Vineet Bewtra, Alfege Advisory

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1. Challenges in global education

There have been large strides in the improvement of education globally. Younger generations are progressively better educated than older generations, and literacy rates have climbed from 70% of the world population in 1980 to 86% today.[18] In the period 1960-2010, education inequality went down every year, for all age groups and in all world regions.[19] However, there are still significant challenges for global education. The section that follows explores the key challenges for global education systems.

Introduction

Global education experts consulted for this study concurred that three critical challenges are affecting the global education system:

1. **Insufficient access:** With over 250 million children still out of school, and persistence rates low for many, access to education remains a key challenge.

2. **Poor quality:** Attainment levels are low for many children, and in most cases, students are not being equipped with the relevant skillsets for the 21st Century.

3. **Lack of accountability:** Inclusive and quality education requires all stakeholders such as government, school leaders, teachers, and parents to fulfill their responsibilities, but there is a lack of responsibility and accountability which is evidenced through challenges in access and quality.

While there are important education challenges in every geography, the most acute challenges remain in lower-income and lower-middle-income countries. In what follows we explore education challenges with a particular focus on less well-off countries. However, we have included some relevant examples from higher-income countries as and where relevant.

"Access and quality are the big umbrella challenges that the global education community is working towards"

— Donny Baum, Research Fellow — Global Education Monitoring Report, UNESCO; Assistant Professor, Brigham Young University

Access

Context

Despite major efforts in developing economies to improve access for students, one out of seven children remains out of school. The number of out of school children dropped by approximately 100 million between 2000-11, driven by the abolition of school fees, construction of new schools and hiring of new teachers for the attainment of universal education.[20] Some 50% of this drop was concentrated in 11 countries, with India alone accounting for a decline of 16 million out-of-school children.[21] However, over the last six years, the global out-of-school population has stagnated (see Figure 1).[22] Today, one out of 11 primary school-age children and one out of three upper secondary school-age youth are not in school,[23] and this challenge is likely to persist: lower-income countries are predicted to achieve universal access to education 100 years after high-income countries and 70 years after upper-middle-income countries.[24]

Figure 1
Out of school population, by region, 2007-17
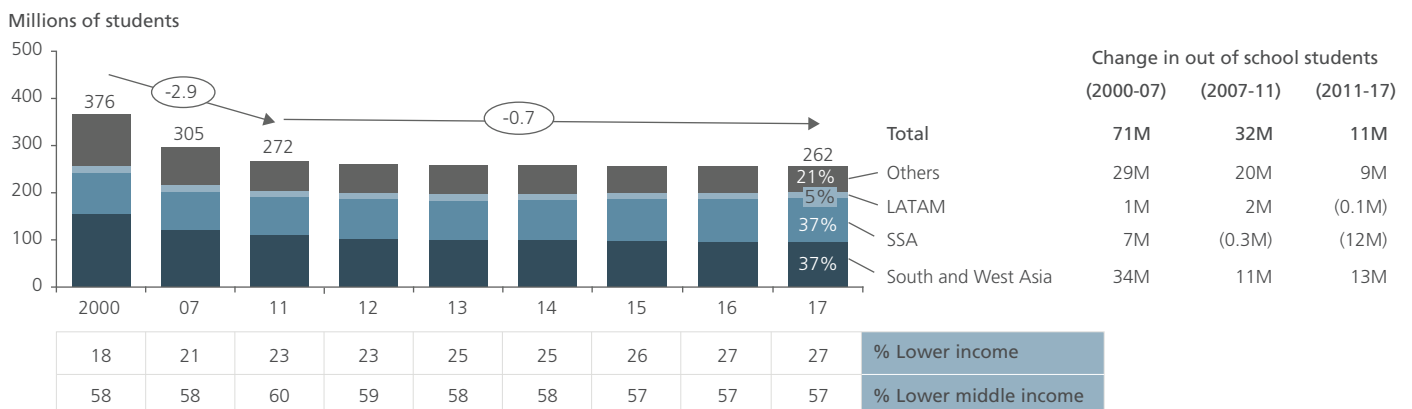
	Change in out of school students		
	(2000-07)	(2007-11)	(2011-17)
Total	71M	32M	11M
Others	29M	20M	9M
LATAM	1M	2M	(0.1M)
SSA	7M	(0.3M)	(12M)
South and West Asia	34M	11M	13M

	2000	07	11	12	13	14	15	16	17	
	18	21	23	23	25	25	26	27	27	% Lower income
	58	58	60	59	58	58	57	57	57	% Lower middle income

Low completion rates in education also signal an access challenge in some countries. Some of the key reasons for lack of persistence are:[25]

1. **Costs:** Parents are not able to afford costs of education — both the opportunity cost of children not working, and direct expenses. In many countries, public education is not free despite its name, as hidden costs such as uniforms and school supplies drive up expenses. In a 2015 survey of parents in Sub-Saharan Africa, 30% of respondents cited cost as the key driver for a student dropping out of school.[26]

2. **Quality:** Some parents do not see value in school education (especially where systems are of poor quality), and hence abstain from sending their child to school. Students who fail exams are more likely to be removed by their parents from school.

3. **Distance:** The school is not within walking range for the child. This is a particularly prominent issue for children living in nomadic families or sparsely populated rural areas.

4. **Gender-specific issues:** At the lower secondary level, child marriage (for both boys and girls) and pregnancy are major issues contributing to student dropout rates.

5. **National examinations:** Examinations may prevent further progression; for example, in 28 out of 43 countries in Sub-Saharan Africa, examinations take place at all education levels and regulate access to the next level.[27]

6. **Others:** Children may not be able to attend school because of illness or disability, because of either family preference or non-inclusive systems.

Completion rates are significantly lower in low-income countries than in high income ones (see Figure 2).[28] In 2016, the primary completion rate was close to 100% in high income OCED countries but only about 60% in low income ones, while the secondary completion rate was 96% in high-income OECD countries, but only 35% in low-income countries.[29] Wealth disparities further amplify when looking at gender-specific numbers. While the global lower secondary completion rate is 69%, only 12% of the poorest boys and 8% of the poorest girls complete this level.[30]

Figure 2
Distribution of completion rates across income groups, 2016
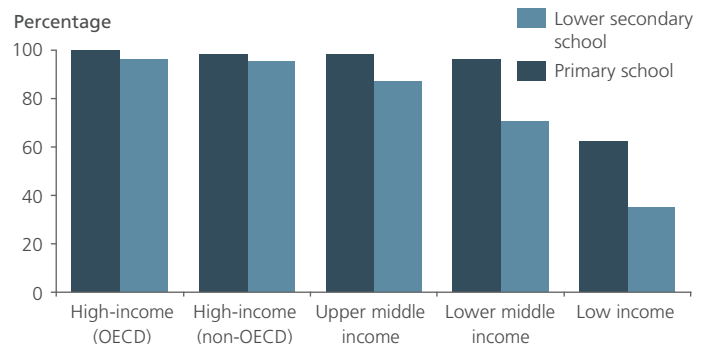
Key drivers

There are four key issues driving challenges in access:

1. **Supply:** There are not enough schools for children who need access. The school-going population has continued to increase without an equivalent growth in the number of schools.

2. **Funding:** There is a stagnation of public spending and donor funding on education.

3. **Marginalized groups:** Children belonging to marginalized groups are likely to be out of school.

4. **Crisis, conflict and safety:** Global conflict and crises (such as the global refugee crisis) are keeping children out of school.

The following section explores each of these four issues.

1. Supply

The population of school-age children is growing at a rate faster than in previous years (see Figure 3)[31]. A significant proportion of students are not able to attend school due to the lower availability

Figure 3
Population in the school-going age, by region, 2007-17
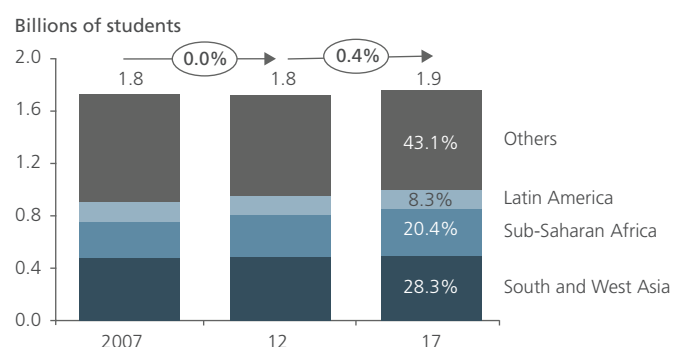
of schools or lack of sufficient capacity in available schools. The school building has not kept pace with population growth.

"In Sub-Saharan Africa, access and retention remain the primary challenge. There are populations particularly affected including rural areas, the lower wealth quintiles, and girls compared to boys."
— *John Rendel, Founder, PEAS*

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2. Funding

International aid, which accounts for 20% of the global spend on education, has plateaued at USD 2.5 billion since 2010, owing to the 2008 financial crisis.[32] Moreover, public spending on education has stagnated in some regions, with spending on education as a proportion of GDP staying static. Public spending on education as a proportion of GDP is the lowest in South and West Asia (1.44%), followed by Sub-Saharan Africa (2.7%) and Latin America (3.4%). Higher government expenditure can increase gross enrollment ratios.[33] The elimination of tuition fees in many countries has resulted in an increase in enrollments, suggesting that many parents simply lack resources to pay the school fees. Interventions reducing school-related costs, such as non-merit scholarships, have helped increase enrollment and attendance in schools.[34]

However, efficiency in spending and focus on school education is essential. Increased access to education lends to the issue of overcrowded classrooms and lowered the quality of pedagogy. For example, in a survey of 120 students and 40 teachers in Lagos, 91% strongly agreed that overcrowding affects students' academic performance.[35] Low efficiency can also relate to poorly functioning education systems. Thus an increase in funding as a proportion of GDP does not necessarily translate in increased access/improved learning outcomes. Further, increases in public spending across countries have not always been equitable and have sometimes been subject to corruption. For example, in Latin America, though public spending has increased, a majority is channeled toward university funding, with issues of phantom teachers, inflated contracts and other forms of corruption in some systems.[36]

3. Marginalized groups

Many marginalized groups have lower access to school. Children with these identities face additional barriers in access to education.

Gender: Less than two-thirds of girls complete their primary school in lower-income countries. This is for several reasons, such as the low perceived value of education for girls, familial duties, lack of nearby schools, and poor sanitary facilities. In Sub-Saharan Africa, the overall gender parity index improved from 1999-2012. However, the gains varied by country and economic status. For instance, 70% of the poorest girls in Niger and Guinea were likely to be out of school, compared to fewer than 20% of the richest boys.[37] Meanwhile in India, despite progress, the burdens of care and housework persist for girls, with approximately 40% of 15-18-year-old girls out-of-school, of whom 65% are engaged in housework.[38] In 28 (of 145) countries, fewer than 50% primary schools have access to basic sanitation, including 17 in Sub-Saharan Africa.[39] These issues persist in lower secondary and secondary school. This causes many children — especially adolescents who are menstruating — to miss out on school or stop going to school entirely.

"Access for girls in particular is still a big issue, so we can by no means say the whole issue of participation has been addressed."
— *Norman LaRocque, Principal Education Specialist, Asian Development Bank*

Rurality: Rurality is a particular challenge, as children residing in rural areas are over twice as likely to be out of primary school compared to urban children. In conflict-ridden areas, 27 million children are out of school.[40]

Disability: Students with disabilities are nearly always worse off than their counterparts in terms of access to education. Even in many middle and upper-middle-income countries, school systems are ill-equipped to support children with special educational needs stemming from physical or intellectual disabilities. Globally, 87% of children without disabilities attend school, compared to 77% of children with disabilities.[41] Analysis of household data in Malawi, Namibia, Zambia, and Zimbabwe show that 9-18% of children aged five years or older without a disability had never attended school, while 24%-39% of children with a disability had never attended school.[42]

4. Crisis, conflict, and safety

Children caught up in violence or disaster are less likely to go to school. Emergency-affected countries tend to have the highest out

Figure 4
Countries with the highest out of school rates, secondary education, 2015

Percentage

Country	Value
Niger	75
Central Africa	67
South Sudan	65
Eritrea	62
Tanzania	59
Burkina Faso	58
Guinea	58
Chad	58
Afghanistan	58
Mali	58
Ethiopia	56
Syria	55
Mozambique	54
Sierra Leone	54
Benin	45
Yemen	44
Gambia	41
Burundi	39
Rwanda	37
Malawi	36
Uganda	35
Djibouti	59
Mauritania	57
Côte d'Ivoire	55
Pakistan	55
Senegal	44
Cameroon	43
Honduras	41
Zimbabwe	38
Nigeria	38
Comoros	38
Myanmar	38
Cambodia	36
Zambia	35
Guatemala	39
Iraq	38

Lower income · Lower middle income · Upper middle income

■ Emergency-affected countries ■ Non-emergency countries

of school rates (see Figure 4).[43] Moreover, these countries are more likely to be low income or lower-middle-income countries, with the lack of resources making the situation even worse.[44]

Children living in the most conflict-affected areas make up about 20% of the world's primary school-age population in 2015. Yet they constitute about 50% of students not in school, an increase from 42% in 2008.[45] They are also far more likely to drop out of primary school before completion.[46]

Even when fragility, conflict, and violence do not directly disrupt access, these issues can affect learning by altering the pedagogical experience, such as through lack of teachers, resources or trauma from violence. Refugees in conflict-ridden areas face similar challenges: a refugee child is five times more likely than the average child to be out of school.[47]

Even for children in non-conflict-affected environments, feeling safe at school is a key driver of participation, and there are challenges in both poorer countries and richer ones. There is a correlation between school safety and academic achievement in most countries. However, by grade eight, fewer than half of the students feel a high level of safety at school.[48] In Latin America, classroom violence is among the highest, with more than half of the students reporting being attacked at least once at school.[49] In the U.S., with the increase in shooting incidents, children are less likely to feel safe at school.[50]

Quality

Context

While countries are striving to eliminate issues pertaining to access, the challenge of high-quality education provision also

remains to be tackled. Many countries still fall short of global benchmarks across standardized tests, such as PISA, with high number of children who do not meet the minimum proficiency in English or Mathematics (see Figure 5).[51]

For example, in Sub-Saharan Africa, studies conducted on learning levels of Grade 2 students found that three quarters could not count beyond 80 and 40% could not do a one-digit addition, while another 50-80% fall short of the threshold levels in literacy and barely managed to read a word.[52]

Similarly in Latin America, TERCE, an assessment conducted by UNESCO across 15 countries in the region, found an average of 40% students scored in the lowest achievement band, while at the secondary level, all 10 countries participating in PISA 2015 scored below the international average of 490-493 in reading, science and math.[53]

"Quality of education in K-12 in some countries is generally lacking because the curriculum is centrally prescribed and there is a large amount of political and religious content that crowds out real learning. Often teachers are not qualified to teach, have very few pedagogical skills and many don't turn up to teach. There are also wider social issues around poverty and going to school hungry that affect the way kids learn and how much they can absorb."
— Norman LaRocque, Principal Education Specialist, Asian Development Bank

Figure 5
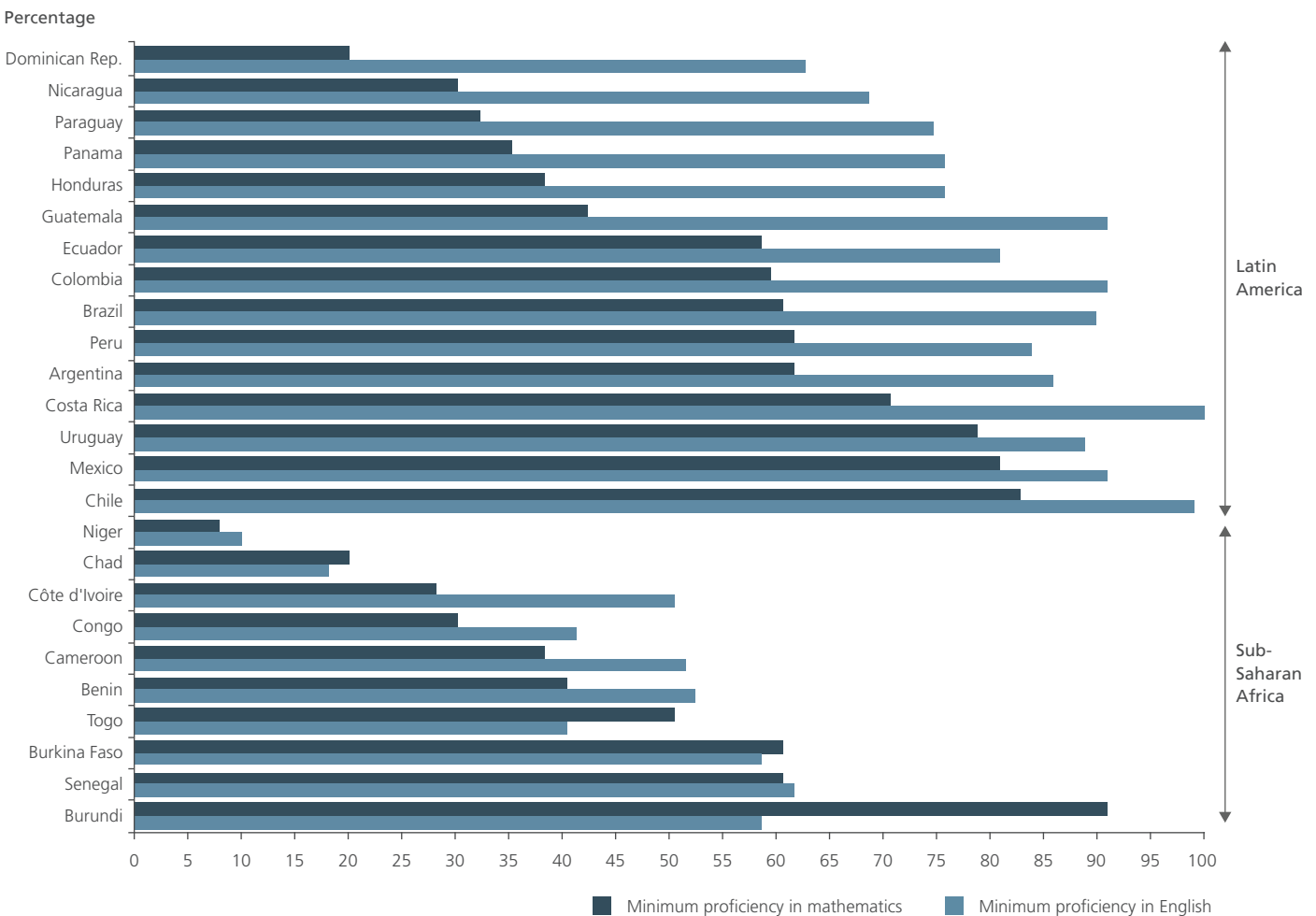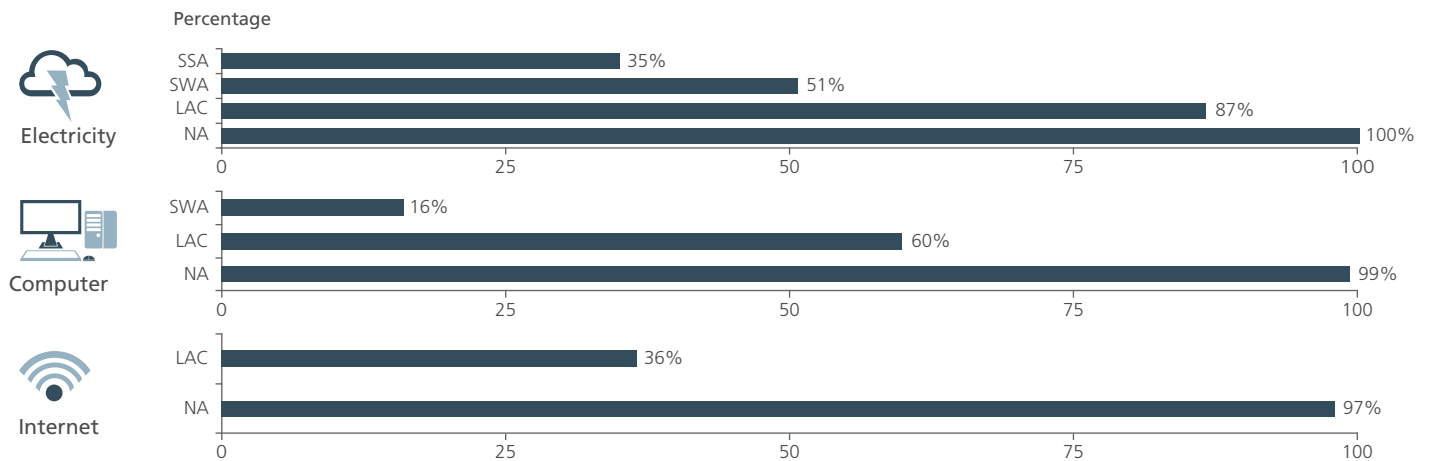Percentage of students with minimum proficiency level, primary level

Percentage

Minimum proficiency in mathematics   Minimum proficiency in English

Figure 6
Percentage of primary schools with access to basic minimum infrastructure (2017)

Percentage

Electricity

SSA	35%
SWA	51%
LAC	87%
NA	100%

Computer

SWA	16%
LAC	60%
NA	99%

Internet

LAC	36%
NA	97%

While South Asia has made considerable progress in improving access to education, it faces a major quality challenge in primary and secondary education. In India, the Annual Status of Education Report (ASER) survey reported that there were wide disparities in students' achievement of basic skills across states. In Pakistan, the ASER 2014 assessment demonstrated that in the Balochistan province of Pakistan, only 33% of Grade 5 students could read a story in Urdu, Sindhi or Pashto and only 24% of fifth-graders could do a division exercise, compared with 50% in Punjab.[54]

Some developed nations have also struggled to ensure quality provision of education. For example, the U.S. also faces challenges within education quality and PISA results from 2015[55] placed the U.S. at 38th out of 71 countries in math and 24th in science. Experts have cited several possible reasons, including low levels of teacher training, inequitable educational opportunities and low levels of attendance.[56]

Key drivers

Quality issues in education are due to four key factors:

1. **Infrastructure:** There is a lack of suitable infrastructure or learning material for students.

2. **Teachers and leadership:** There is a dearth of well-trained school teachers and a lack of strong school leadership.

3. **Curriculum:** Curriculum is often outdated or irrelevant, causing mismatches with what is learned in school and what is needed after school for life and work.

4. **Pedagogical approaches:** Rote learning approaches persist, leading to poor retention and outcomes.

In what follows each of these areas is explored in turn:

1. Infrastructure

Positive learning outcomes are heavily dependent on the ability to supply classrooms not only with well-trained teachers but also with classroom resources. However, many schools lack adequate infrastructure and learning materials (see Figure 6).[57] For example, in Sub-Saharan Africa, many students lack access to basic learning materials. The pupil to textbook ratio is 2.4:1; while the computer to learner ratio is 277:1.[58] In Latin America, basic school infrastructure in PISA-D (PISA for Development) countries is inadequate to cater to the student population and is typically in urgent need of repair.[59] Meanwhile, in South and West Asia, data shows that only 53% of government schools in rural India have electricity connection, only 28% of schools have a computer, and 9% have access to an internet connection.[60]

2. Teachers and school leadership

Teachers

Teachers play a critical role in enabling students to achieve positive learning outcomes within effective education systems, therefore the first step towards quality education is to ensure that there are enough teachers in classrooms. However, there is a global deficit of an estimated five million teachers, which is expected to reach eight million by 2030.[61] The teacher gaps are widening in part because of high attrition rates.[62] For example, in Angola, almost one in five teachers leave the profession in a given year.[63] The
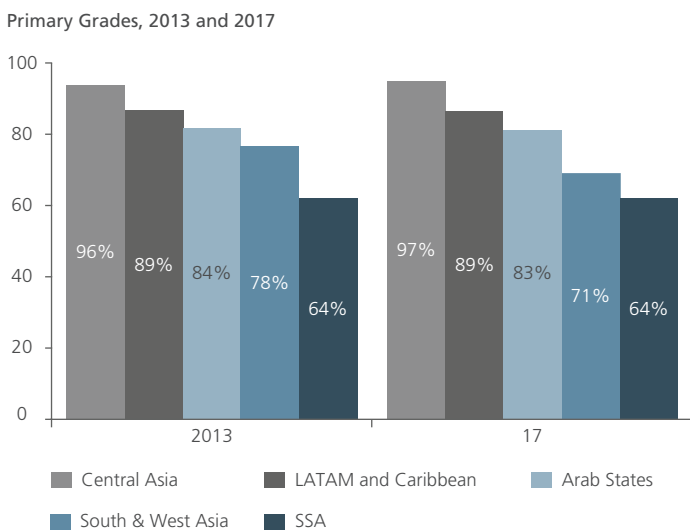
teacher shortage leads to inevitable compromises on the quality of education, as many countries resort to hiring less-qualified teachers or even lowering national standards.[64] Teacher shortfall also leads to overcrowded classrooms and affects learning quality.

To be effective, teachers must have structured opportunities for professional development and growth through training and mentoring, however, this is not available in many geographies. Amongst the current cohort of teachers, the proportion of trained teachers is low (see Figure 7)[65], and ongoing professional development is limited. Even for teachers who do receive professional development opportunities, studies find that a large part of their learning is overly theoretical or inconsistent.[66] Moreover, in regions where professional development is available, this may be misaligned to new skill areas required such as digital skills.

> "Another challenge we have identified is teacher quality. Meaning both how motivated the teachers are, and are they adequately prepared?"
> — Allison Rohner Lawshe, Chief Program Officer, IDP Foundation

Figure 7
Proportion of trained teachers by region

Primary Grades, 2013 and 2017

Legend:
- Central Asia
- LATAM and Caribbean
- Arab States
- South & West Asia
- SSA

2013: 96%, 89%, 84%, 78%, 64%
17: 97%, 89%, 83%, 71%, 64%

In terms of availability of trained teachers, in Sub-Saharan Africa, qualified candidates are in short supply: across 14 African countries for which data is available, the average sixth-grade teacher performs no better on reading tests than the highest-performing students in that grade.[67] In Latin America, the individuals entering teaching

are academically weaker than the overall pool of higher education students, and in a study of four countries, only 3% of teachers were found to be of an excellent standard.[68]

Teacher absenteeism is also a key issue (see Figure 8)[69], and maybe attributed to factors such as remoteness of school, difficulties of transportation, and unauthorized leave. The situation is worse in low-income countries, where the challenge of distance is further amplified by resource scarcity and poverty.

Figure 8
Reasons of teacher absenteeism from school, selected SSA countries (2015)

Percentage

Countries: Kenya, Tanzania, Togo, Uganda, Ethiopia, Madagascar, Mozambique, Nigeria, Senegal

Legend:
- Authorized leaves
- Unauthorized leaves
- Others
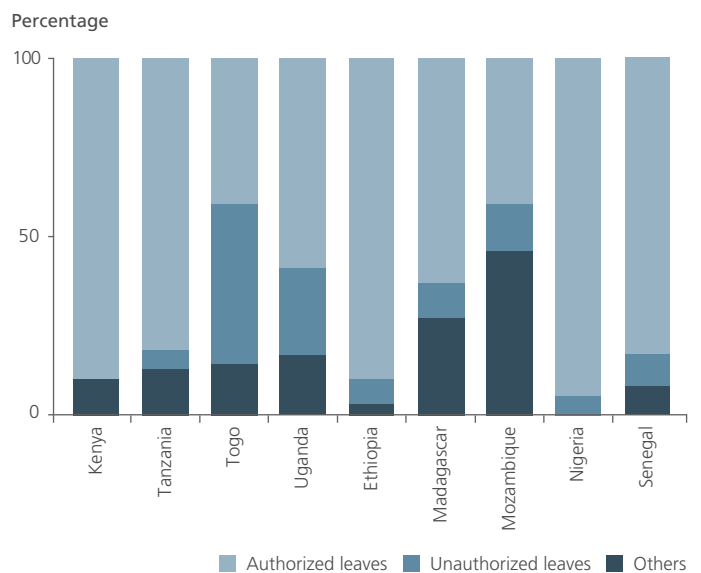
For example, in one study carried out in Sub-Saharan Africa between 2010 and 2016,[70] absenteeism by teachers ranged from 5% in Ethiopia to 43% in Mozambique. However, in all countries, absenteeism from class (that is, teachers present at school but not in the relevant class) poses an even greater issue. In Ethiopia, where teacher absenteeism from school is 5%, the class absence rate averaged 22%.[71] In Latin America, students in public schools miss one day of instruction per week on average due to teacher absenteeism. For example, one-third of the pupils in Argentina and Paraguay reported issues with teachers' late arrival, absenteeism, and skipping class.[72]

School leaders

Effective leadership and school management can play a key role in influencing student outcomes, by supporting best practices in teaching and monitoring the performance of faculty members and staff. Based on research conducted by Professor Nick Bloom

from Stanford University, a one-point increase in the scoring of school management practices is associated with a 10% increase in student performance.[73] Further, a large number of studies in North America show that a school principal accounts for 25% of the impact that schools have on student learning.[74] Studies have also shown that schools with better management have succeeded in securing better test scores.[75]

Successful school leadership models

India School Leadership Institute

The India School Leadership Institute (ISLI), was founded in 2012, and has trained 600 principals across five major cities in India.

The ISLI program focuses on training administrators about best practices in learning, leading faculty and staff, and creating a holistic learning environment and culture at the school. ISLI provides on-the-job training to school leaders that include 30 days of training per year and monthly support visits by trained ISLI staff.

ISLI has impacted around 6,000 teachers and 185,000 students till date. Approximately, 60% of ISLI's current cohort is private unaided schools (charging less than USD 5 as fees per month) and the remainder are government schools.

Lesson planning increased from 21% of teachers to 60%, on average, in the schools they worked with. The percentage of students scoring above average compared to the typical budget private school student on math, reading and reasoning assessments increased from 19% to 29%.

While studies show that school leaders have a significant role in driving education quality[76], too few schools have access to high-quality leadership. Features of such leadership include setting an example of appropriate values and ambitions, being role models within communities, being accountable for students' education and setting high academic standards.[77] Ineffective school leadership means school principals are not actively involved in helping teachers solve problems, do not provide instructional advice, or do not set goals that prioritize learning. Presently, the developing world lacks effective school leadership development, leading to poor student outcomes.[78] For example, an OECD report on Indonesia states that student outcomes are still relatively poor, and evidence suggests that low quality of teaching and ineffective school leadership are the main reasons for their dismal performance.[79] Meanwhile, research in Kenya, Ghana, and India has found that school leadership receives inadequate training for their role, as little as two days of support per year.[80] According to data from the World Bank's 2018 World Development Report, high-income countries tend to have better management in school (higher management scores, as assessed through a survey of sample schools on the adoption of 20 basic management processes) as compared to lower middle income and low-income countries (see Figure 9).[81]

3. Curriculum

Major gaps in the school curriculum still exist, especially in developing economies, which prevent students from acquiring necessary skillsets. Key challenges include:

- **Ineffective and irrelevant curriculum:** Provision of basic foundational skills is insufficient in many low and middle-income countries. Education systems and curricula are also

Figure 9
Average school management scores, by countries, by income level (2015)

Percentage

Country	Score
United Kingdom	100
Sweden	97
Canada	97
United States	96
Germany	88
Italy	72
Mexico	74
Brazil	73
India	60
Haiti	63
Tanzania	57

Low income
Lower middle income
Upper middle income
High income
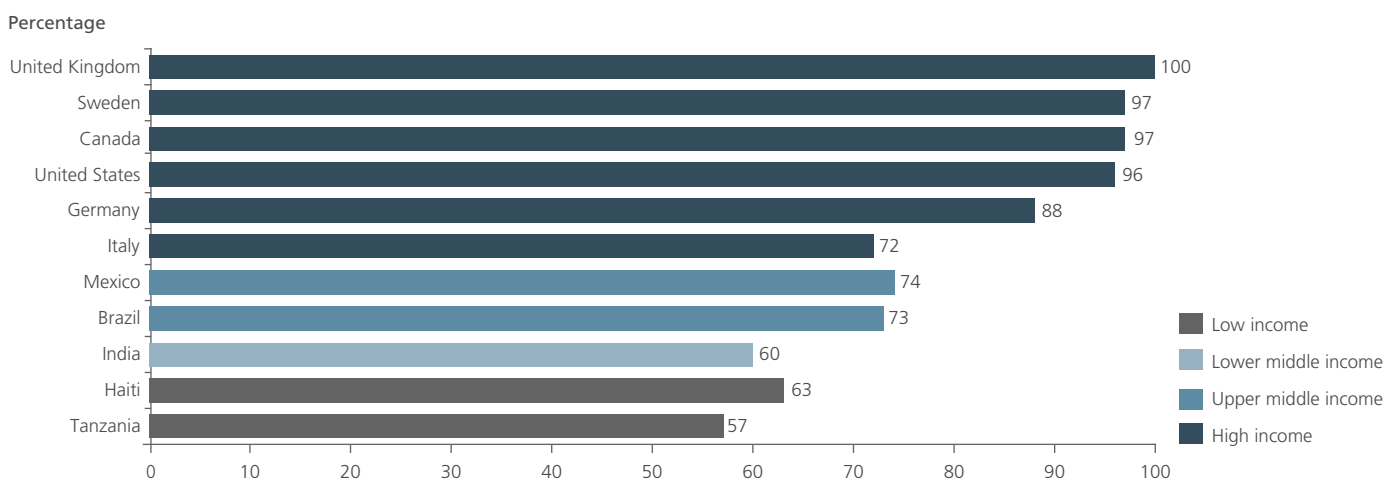
unequipped to address the labor market shifts taking place globally, and there is a major gap in the content taught across emerging economies, particularly in digital skilling. For instance, 85% of all countries include computer skills in their respective curricula. However, only 50% countries in Sub-Saharan Africa offer computer skills.[82]

"In India, while around 98% students are now in schools, less than 50% of them are actually learning something constructive. Quality of education is thus important and in a state of crisis."
— *Amitav Virmani, CEO, The Education Alliance*

- **Disconnect from the job market:** Global surveys of employers show that more than 40% of the required skills will change before 2022.[83] This includes shifts in the types of skills valued, the emergence of new skill sets, as well as a greater focus on existing skills that increase in importance.[84] Approximately, 55% of African employers agree that job seekers' skills do not match their requirements,[85] and a recent study found that 80% of Indian engineering graduates are "unemployable",[86] while more than 40% of all firms in Tanzania and 30% in Kenya cite, inadequately skilled workforce as a major obstacle.[87] If left unaddressed, this mismatch between rising enrollments at all levels and the system's inability to equip pupils with skills for employment risks creating "a demographic disaster", per the World Bank.[88]

- **Lack of 21st Century learning:** Current educational systems are often unable to teach broader socio-behavioral skills which can be attributed to the traditional rote learning teaching styles. Despite the growing awareness about the value of "21st Century skills", such as critical thinking, creativity and problem-solving, there is still a lot to be done in terms of framing teaching methodology and assessment criteria for imparting these effectively. Another issue is that new teaching frameworks are generally technology-heavy, which makes it difficult to employ them in developing economies, where only some have access to electricity, let alone ICT equipment.[89]

4. Pedagogy

Innovative pedagogical approaches are gaining traction and can serve as effective tools to enhance learning outcomes. Curricula designed to foster "21st Century" competencies must be complemented with pedagogical innovation in developing economies such as learner-centered, competency-based pedagogies. This can be done through[90]:

Blended learning and gamification: These use digital learning resources to make content more engaging.

Computational thinking: Elements of computational thinking include logical reasoning, decomposition, algorithms, abstraction and pattern identification — which envisions programming and coding as new forms of literacy.

Experiential learning: This involves active conceptualization and concrete experiences.

Embodied learning: Such learning promotes knowledge acquisition through the natural tendencies of the young toward creativity and expression.

Personalized education materials: These include virtual learning spaces, project-based learning, blended learning, and rotation stations where students are divided into groups with and conduct different activities at each "station". Such materials are often employed to benefit mixed ability groups.

Innovation leading to better educational outcomes in Latin America

Innova Schools

Innova Schools aim to provide quality education at a reasonable cost to children in Peru. Some unique features that contributed to their success are:

Blended learning model: The program combines direct hands-on experiences in classroom with digital learning. It allows students to collaborate in groups or learn solo where they construct own goals, paths and workflows under the supervision of their teachers.

Innovation program: Aimed at connecting classroom learning to real world and fostering leadership skills, this program involved framing of a community issue which the students work towards solving through the course of the semester.

Teacher resource center: This is an online platform which contains a comprehensive set of quality lessons for each subject across every grade. The objective is to not only regulate the quality of teaching but to also serve as a collaborative space for teachers to build on existing material and share new recourses.

Accountability

Context

Ensuring children receive good quality education is a shared responsibility between multiple stakeholders: government, school leaders, teachers, and parents. However, these stakeholders may not be willing or able to fully realize their roles in children's education for reasons such as lack of incentives, corruption, burnout and overwork, and disengagement, among others. While accountability as a challenge in itself cannot be measured (like access or quality), lack of accountability manifests itself in the form of challenges in access and quality.

"Accountability and lack of data is one of the biggest issues. It is hard to know who is learning and who is not. Teachers are not adequately supported with the right skills, tools and motivation to show up and be effective in classrooms."
— Shikha Goyal, Director of Investments, Omidyar Network

Key issues

There are several key issues at play when considering system accountability:

1. Government oversight and lack of funding

2. Teacher performance

3. Parental empowerment

These themes are explored in what follows:

1. Government oversight and lack of funding

Accountability starts with governments, who are the primary duty bearers of the right to education. However, government workers — whether frontline public sector workers or career civil servants — often have few incentives to deliver high-quality education outcomes. Moreover, mismanaged or underperforming systems are often a shared, entrenched, and thorny challenge for public servants. There is also a dearth of data to track learning gaps that exist within classrooms. Policy and regulatory systems and quality assurance may fail to drive education outcomes.

"I think the government level accountability is really important to get to the inclusive education side."
— Allison Rohner Lawshe, Chief Program Officer, IDP Foundation

A key example of government not delivering on its duties is the failure to provide free access to education. When education is not free, completion rates are low and a greater number of students are out of school. Globally, fewer than 20% of countries guarantee both free and compulsory education for at least 12 years in legal frameworks (see Figure 10).[91] No low-income country makes this provision.

Figure 10
Countries that guarantee free and compulsory education (2015)
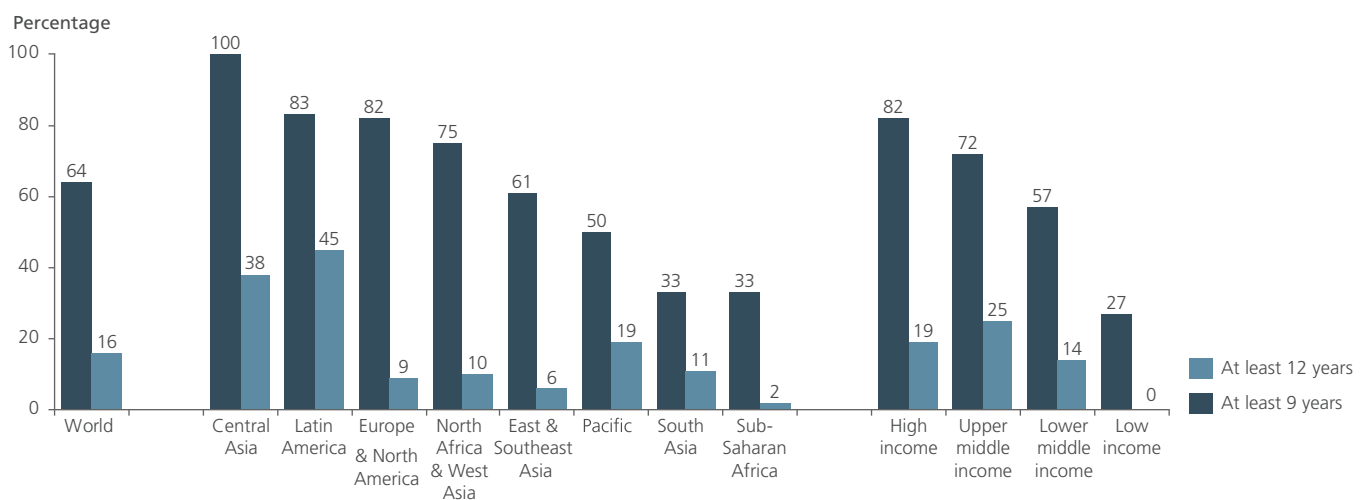
Accountability for education should not be limited to only national or state governments, as greater local autonomy is a prerequisite for strong city-level ownership of urban reforms that incorporate education strategies. An investigation of five cities that display strong learning outcomes (Dubai, Ho Chi Minh City, London, New York City, and Rio de Janeiro) found that inspirational education leadership at the city level was key to the effectiveness of education reform. However, an LSE survey of local government officials from 50 cities in mainly high- and middle-income countries revealed that they largely believe education sector is led by state or national level where they have little or no role to play — which can be detrimental for the state of education in the country.[92]

In some developing countries, high levels of corruption in education and lack of state funding are also reflective of the accountability challenge. In low-income countries, public spending comparatively constitutes a smaller proportion of the total spent. Instances of high corruption provide further challenges in resource-strapped systems. Governments in these countries do not only need to spend more but also need to spend better, ensuring resources are allocated more effectively and equitably. This will also reduce the dependence of these countries on foreign aid, which will be instrumental in insulating them from external shocks that might occur in other countries such as economic downturns, natural disasters, rising prices etc.[93]

> "The overall problem is one of accountability and it often comes from poor curriculum or it could come from teachers not being paid on time."
> — Alina Lipcan, Senior Education Adviser, The Education Outcomes Fund for Africa and the Middle East

Finally, there are challenges in government oversight and management of schooling systems, ranging from ineffective quality assurance to poor systems for teacher payment. School inspections usually rely on evaluating infrastructure instead of assessing other more important drivers of quality.[94] These factors hinder education systems from delivering quality and access.

In countries where the government has shown strong intent and will to act, the education system has seen significant improvement. For example, in Sub-Saharan Africa, interventions such as school fee abolition and school feeding programs have witnessed success in increasing enrollments.[95] In Latin America and the Caribbean, varying policy approaches such as reducing costs through cash transfer programs and reforming curriculum to make content more relevant to the contemporary needs have had positive impacts.[96] In India, the government introduced the Right to Education Act (RTE) to ensure that all children compulsorily receive education from ages 8 to 14.[97]

2. Teacher performance

There are important challenges in supporting teachers and school leaders to be accountable. For example, poor working conditions reduce motivation. Teachers in developing countries often lead oversized, multi-grade classrooms with minimal school infrastructure and inadequate training.[98] Moreover, non-teaching responsibilities shifted to teachers lead to excessive workload. Schools are increasingly giving teachers responsibility for administrative tasks such as documentation and record-keeping, organizing feeding programs and extracurricular activities.[99]

Some suggest driving teacher accountability by linking performance to pay, but the evidence on the effectiveness of such systems has been mixed. Performance-based pay may promote an unhealthy competitive environment, reduce teacher motivation and cause neglect of weaker students.[100] However, methods such as observation, peer feedback, and student evaluations are also viable methods for driving teacher accountability.[101]

An example of increasing educational outcomes through increasing teacher accountability can be seen in the case of Burundi. Despite a huge influx of students, the government was able to train and recruit teachers in large numbers, with 90% of primary teachers receiving two years of teacher training. Burundi has introduced coaching from district supervisors and radio programs or through distance-learning interventions to support teachers. Burundi currently outperforms other Sub-Saharan African countries on education assessments despite being among the poorest countries in the region, with high population growth, periodic crises and bouts of violent conflict.[102]

3. Parental empowerment

Parental involvement is considered a critical predictor of a child's success in education. Not only can an engaged parent ensure that the child attends the school and learns well, but also he or she can participate in supporting the school in achieving its educational outcomes.[103] Parental engagement may be limited to interactions during parent-teacher meetings (and in some cases, these may be absent). Parents have few means to influence the school to act on school-specific issues, such as lack of infrastructure, teacher absenteeism, and poor quality of education. The issue is even more visible in low-income families, where the parents themselves may lack education or time.[104]

There are instances where the government or private actors have tried to increase parental engagement, leading to increased accountability in the education system.[105] For example, the School Management Committee in India acts as a bridge between school management and the community. This initiative has brought strong accountability within schools as school authorities have become answerable to parents and have led to better development of not only students but also of the community.[106] Similarly, the United Nations Relief and Works Agency (UNRWA) in West Bank and Gaza focuses on increasing parental involvement in school activities and fostering a close partnership between schools, households and refugee communities. This has contributed to a shared sense of purpose and collaborative mechanisms for monitoring and support. As a result, UNRWA schools outperformed public schools, delivering the equivalent of one year's additional learning despite the lower socioeconomic status students and lower per-student spending.[107]

Conclusion

Given the variety of challenges that plague the global education system, it is important to take measures to alleviate barriers to successful education provision. While the onus of provision falls primarily on governments, all relevant education stakeholders must be engaged to address these challenges, including the private sector.

The following chapter assesses the rise of privately-run schooling globally, given the sector's potential importance as a contributor to solving global education challenges and creating public goods.

2. Private K-12 schools: A growing trend

Against the backdrop of these challenges in education systems, there is a shift towards private schooling, particularly in developing and emerging markets. Given the increasingly important role that privately-run schools are making in delivery, these challenges are unlikely to be solved by reliance on the public sector alone. To understand how non-state schools may be harnessed and leveraged to improve education outcomes, it is first important to understand how the private sector schools operate. This section will explore privately-run schools: the sector's size and growth, its characteristics, trends in the sector, and the response of investors.

Size and growth of private schooling

Since 2000, private education has been the fifth-largest and fastest-growing segment of consumer spend globally, with this growth set to continue (see Figure 11).[108]

Private education is now a ~USD 1.2 trillion sector,[109] and among education sub-sectors (such as higher education and early years), K-12 represents the highest share of total private spend on education, with an estimated USD 380-400 million market.[110] Household spend on private K-12 schooling can include all expenditures related to schooling, including tuition fees, uniforms, supplies, et cetera. The private K-12 segment includes a range of different school segments and configurations, which are elaborated in Box 2.

While the public sector still dominates education provision, the private sector school now serves one in four children globally, with the sector growing more quickly than the public sector, at

Box 2: Understanding privately-run school segmentation

Private K-12 education comprises a range of organization types and characteristics, and these categories are not mutually exclusive. Schools covered in this study include both single-site institutions and chains of schools operated by large companies:

- Schools can be segmented based on their **profit structure:**
  - For-profit: These schools are operated by private, profit-seeking entities with an objective to generate a positive return for shareholders. Shareholders may include individuals, companies, or investors. Examples of prominent for-profit schools include GEMS Education and Nord Anglia Education. For-profit schools may not be profitable (yet), as in the case of some large for-profit schools serving the base of the pyramid (BOP).

  - Non-profit: Schools operated without shareholder return, in which fees are reinvested back into school operations. These schools can be mission-driven, such as United World Colleges, an international school network that provides values-based education.

  - Non-profit by regulation: These schools are technically non-profit by regulation such as in India and China, which require education institutions to operate as

Figure 11
Segments of consumer spending, by current and forecast growth

Total consumer spend 2018
Trillions of USD

Historic and future growth
Percentage

CAGR ('18-'23)   CAGR ('00-'18)
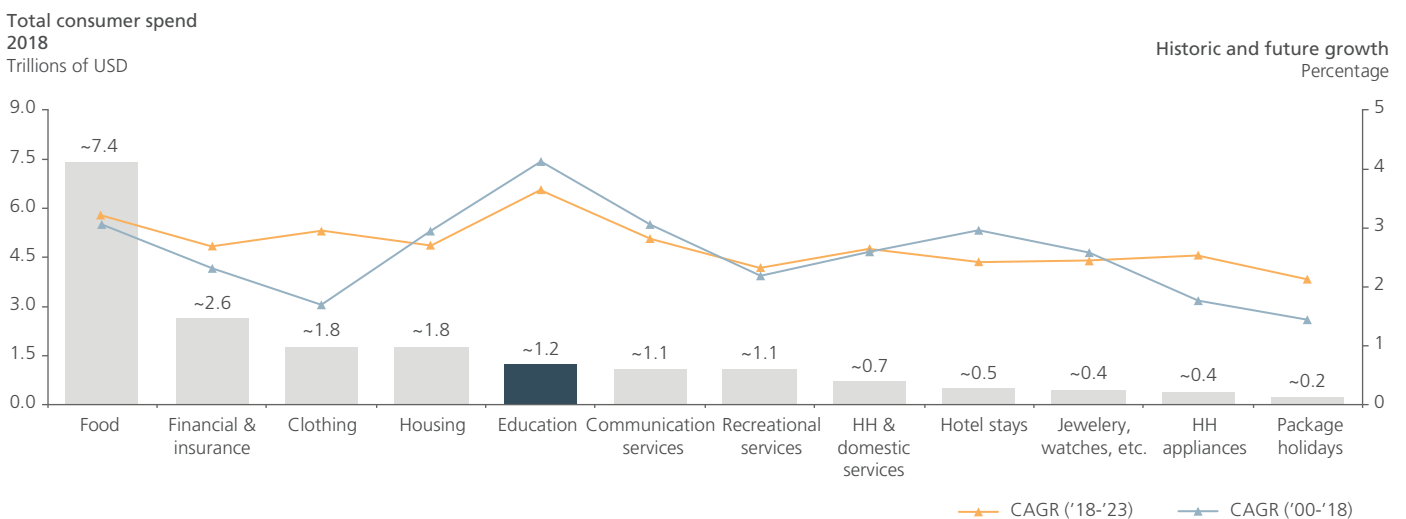
non-profits (in China this is up to Grade 9), but where operating structures allow for-profit parent companies to extract profit.

- Schools teach different **curricula** and are often segmented on this basis:

  – Local curriculum: These schools offer curriculum legislated by the national or state governments, to ensure uniformity of content and standards, such as Delhi Public School Society in India.

  – International curriculum: An international school adopts a curriculum other than the national curriculum of the country. Most popular programs include International Baccalaureate, GCSE (U.K.) and AP curriculum (USA). An example is Singapore American School in Singapore which provides the AP curriculum.

  – Bilingual: These schools generally deliver a single curriculum in two languages (typically the country's national language and English). An example of this is Escola Eleva in Brazil which offers dual-language education in English and Portuguese.

  – Bi-curricular: These schools offer academic programs with a curriculum which is a combination of two curricula, or one which operates two tracks in parallel, with one them usually being an international curriculum.

- Schools may have a **religious affiliation**:

  – Religiously affiliated or denominational schools: These schools place special emphasis on religious education. These are usually run by a religious group, or founders belonging to a particular religion, and serve as institutions to preserve, protect, and promote a religious system and its values. Parochial schools, often used to denote Roman Catholic schools, are private religious schools. An example of such schools are those operated by the congregation of Christian brothers.

3% compared to public school growth at 1% (see Figure 12)[111]. Privately-run schools gained a share of 1% over public sector schools in the four-year period 2014-17.

The growth of private education is demonstrated most starkly when assessing its share gain in emerging markets such as Brazil, Chile, India, Malaysia, Thailand and Vietnam (see Figure 13)[112], geographies with growing middle classes. By contrast, private education enrollment has been relatively more static in richer countries like Singapore, U.K., and Germany.[113]

Figure 12
Total global K-12 enrollment by school type, 2014-17
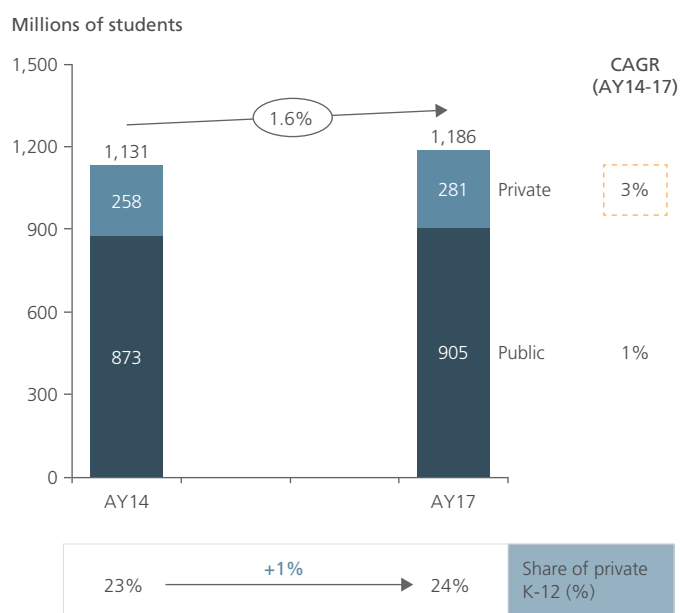
Moreover, this growth is likely to be sustained. There are approximately 1.8 billion students globally in the school-going age cohort, and this number is expected to grow at ~1% year-on-year over the next five years. Asia and Sub-Saharan Africa account for more than 70% of the school-going population globally and these regions are expected to drive growth within the private school market as well.[114] The growth of private education has driven investor interest. Key investment trends are detailed in Annex 3.

Alongside the anticipated growth of the youth population, spending is also expected to be sustained. Even during periods of recession, private K-12 expenditure is typically resilient; families do not cut education spend as they might economize in other areas (see Figure 14).[115]

Drivers of private K-12 demand

While analysis of the underlying drivers of demand for private schooling has nuances by geography, there are six fundamental demand drivers for the growth of private K-12 education:

1. Inadequate public provision: Private provision in K-12 is growing across many developing and emerging markets due to the inadequate provision of public education — either low availability or poor quality. On average, government spending on public schooling as a proportion of GDP is lower in lower-income regions (for example, it is 1.1% of GDP in South Asia and 2.9% in Africa, while levels in Europe and North America

Figure 13
Enrollment share of private K-12 education, select markets, 2007-17

Percentage

Markets with relatively lower rates of growth for private sector participation tend to have higher availability of quality public provision

	Germany	Spain	U.K.	Singapore	Australia	Saudi Arabia	Hong Kong	UAE	Brazil	Chile	India	Indonesia	Malaysia	Thailand	Vietnam
2007	7	33	7	6	29	11	7	67	11	55	36	18	4	18	1
2017	8	33	7	7	33	17	12	70	18	63	44	21	12	25	8

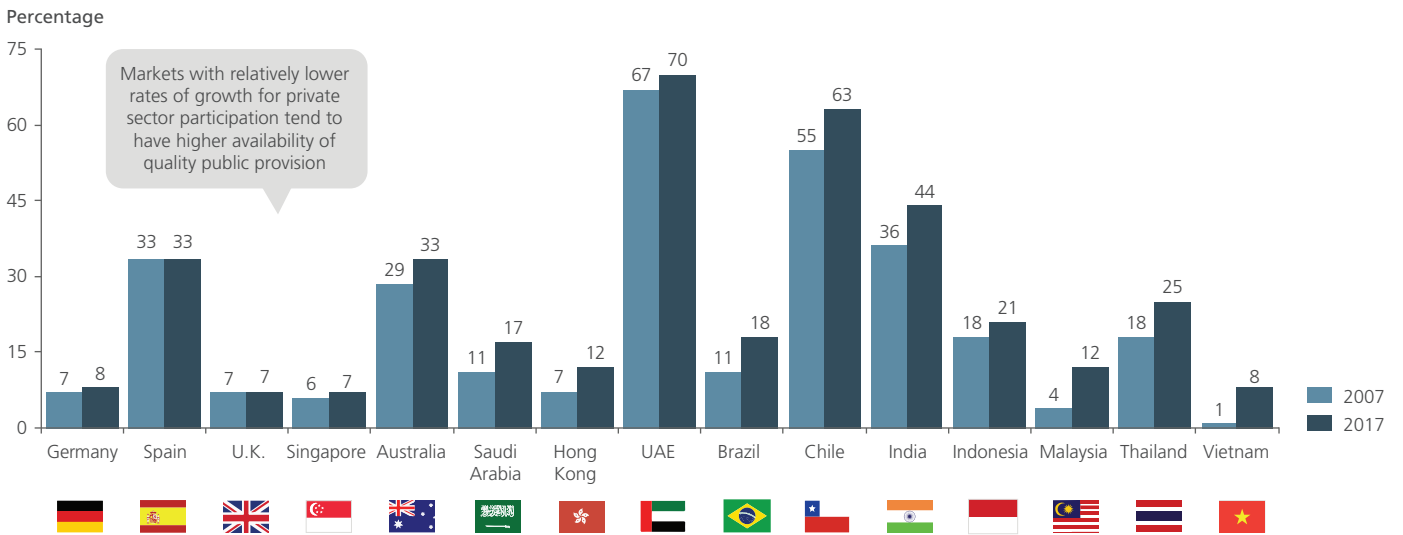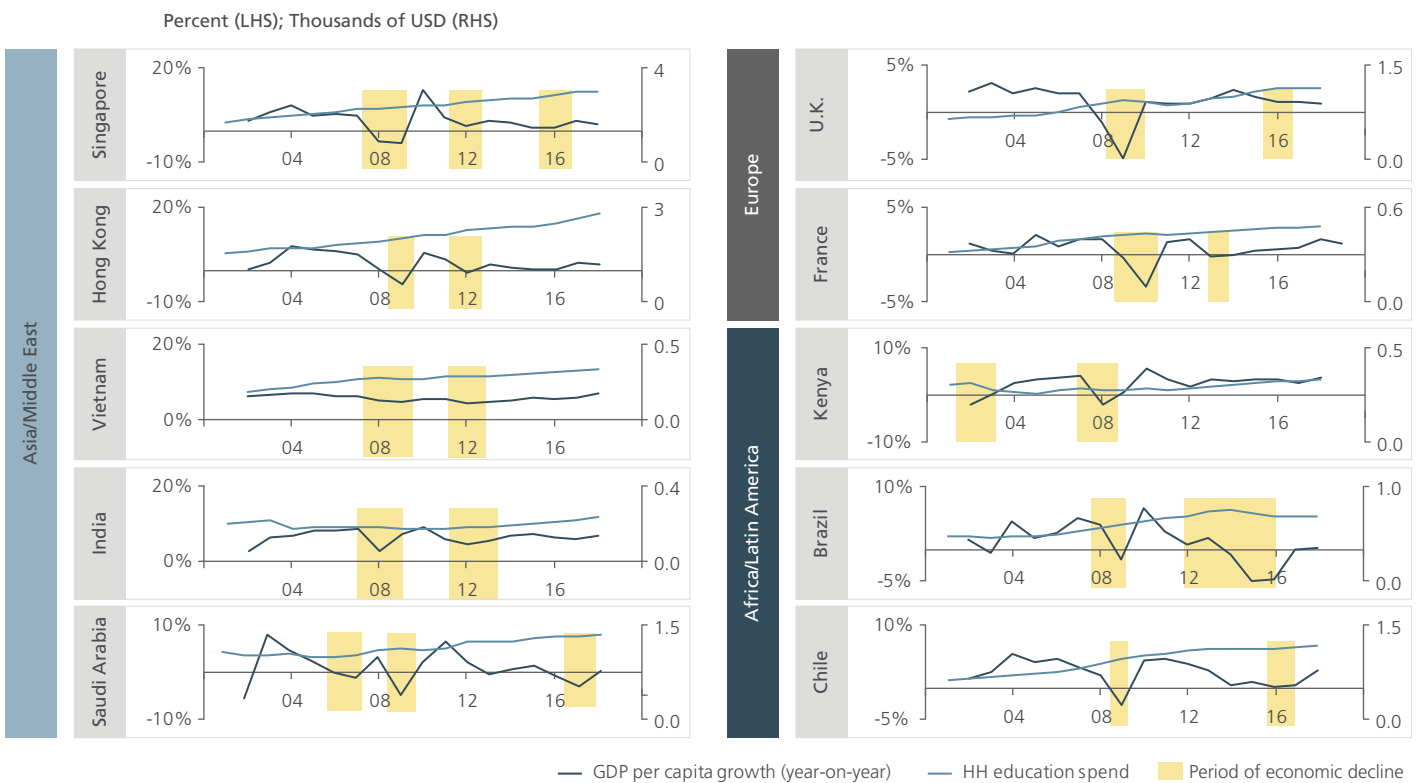## Figure 14
Real GDP per capita growth (year-on-year) and annual real HH education expenditure, select countries

Percent (LHS); Thousands of USD (RHS)

GDP per capita growth (year-on-year)   HH education spend   Period of economic decline

are at 4.3% and 5.1%, respectively).[116] Reflecting this, India, Sub-Saharan Africa, and Latin America account for more than two-thirds of private K-12 enrollment globally.[117] Privately-run schools may have better-trained teachers, especially where teachers require accreditation across all school types and lower rates of teacher absenteeism (e.g. 15% in privately-run schools in Kenya versus 30% in public schools).[118] Privately-run school student-teacher ratios are also often significantly lower than in public schools (see Figure 15)[119], which can be a contributor to achieving higher academic quality in contexts where teachers are well-trained, and may also be a driver of consumer selection of private education. According to the Student Teacher Achievement Ratio (STAR) study funded by the Tennessee State Assembly and the U.S. State Department of Education, an average student assigned to the smallest class scored 8% higher in reading and 9% in math than a student in medium-sized classes.[120]

However, not all privately-run schools present these positive outcomes. For instance, unregulated privatization in some low-income countries like Chile, Ghana and Uganda have caused grave effects such as violations of international human rights law.[121] Further, some low-cost privately-run schools have also been accused of allocating low and high performing students to different exam centers and only publicizing the high-scoring results.[122]

2. **Rising affluence:** As affluence grows, particularly across emerging and developing markets, demand for private

K-12 schooling typically increases, where privately-run schools are perceived as being higher quality than public schools. Increasing domestic affordability will continue to drive demand for quality schools. For example, the number of households with an income of over USD 100,000 in key emerging markets is expected to more than double by 2030 to encompass nearly 14 million students.[123]

3. **Demand for English-medium education:** Asian markets such as China, Vietnam and Thailand have low availability of English-based education in public schools. However, greater English proficiency is directly linked to higher salaries, especially in non-English speaking countries.[124] As families seek to give their children a leg-up in the employment market, English language private education companies are thriving, from language apps to tutoring companies. Privately-run schools are no exception.[125]

4. **Increasing number of expats:** The global population of expatriates grew by 5.8 million between 2013 and 2017 is expected to increase further in the future.[126] For example, in the ASEAN region, Foreign Direct Investment (FDI) rose 10.4% year-on-year between 2000 and 2016, leading to an increased number of expats from across the world and the corresponding growth of a large private international school sector in the region. Expats have unique education needs (e.g. requirement for curriculum of home country) that are typically addressed by international K-12 schools, or they may not have access to local schools.[127]

5. **Focus on student outcomes**: Market research conducted suggests that among key decision criteria for selecting schools, some international school parents prioritize perceived high quality of academics, even over price (as revealed through market research of 270 respondents across multiple geographies by L.E.K. Consulting).[128] Other key selection criteria such as track record of university placement and personalized education services are also driven by academic considerations.[129] Privately-run schools typically position themselves as having the superior academic quality to public schools. In a context in which parent selection is driven by perceptions of quality, privately-run schools are gaining share over public.

6. **Prioritization of holistic "21st Century" education:** Market research suggests[130] international school parents also express a desire for better quality, holistic education, and some parents surveyed indicate that among their areas of concern are an outdated curriculum with no relevance to 21st Century skills.[131] Privately-run schools are increasingly offering and marketing holistic learning as part of the student learning experience, which is driving growth.[132]

Figure 15
Student-teacher ratio, select geographies
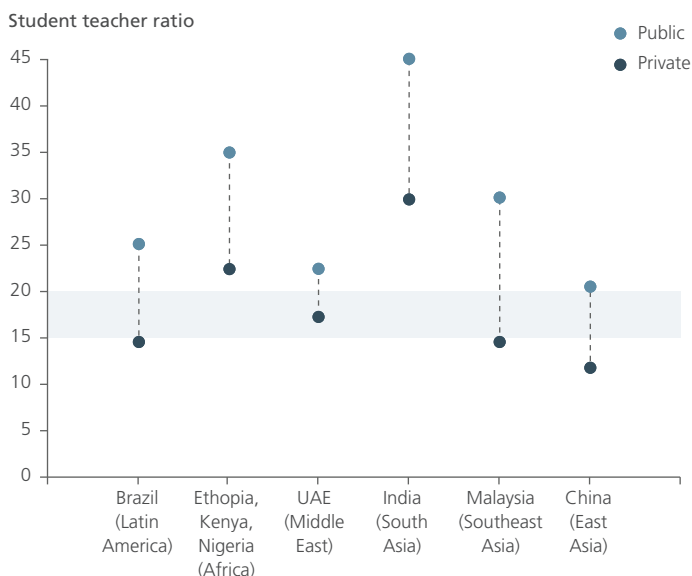
Source: Industry participant interviews, L.E.K. research and analysis, OECD statistics

Figure 16
Estimated revenue scale of K-12 companies with revenue over USD 100M

USD

Indicative

> Inspired acquired ACG Education's school division in Sept 2018 for ~USD 500M

	GEMS	Nord Anglia	Cognita	SABIS	Inspired	Spring Education	Dulwich College Mgmt. Int'l	ISP	Beacon House	Sri Chaitanya	SOMOS	Ryan Schools	Eleva	Maple Leaf	SEB	Narayana
Revenue	~1B+	~900M+	550M+	450M+	450M+ ACG	425M+	240M+	200M+	175M+	160M+	160M+	130M+	130M+	120M+	120M+	110M+
Geography focus	MENA	Global	Global	Global	Global	U.S.	Asia	Global	Pakistan	India	Brazil	India	Brazil	China	Brazil	India
No. of schools (current)	99 (49 in Middle East)	~67	~73	~56	~50	230+	~10	~41	~170+	~349	~28	~130+	~87	~60	~35	~248

Characteristics of the private K-12 sector

Private K-12 is characterized by several key attributes regardless of geography.

First, despite having achieved a considerable scale, the education sector remains highly fragmented. Even within the relatively consolidated segment of international K-12 schools, a USD 20 billion-plus segment, only 20% or so of the market is consolidated with scale actors; the remaining 80% is highly fragmented.[133] Moreover, only a small number of K-12 companies have achieved over USD 100 million revenue scale (see Figure 16).[134] Some of the largest of these companies are featured in Box 3.

"The majority of private schools are not in chains. They are single schools run by local entrepreneurs. Of the kids who are enrolled in private schools, the vast majority are in these schools rather than chains. Therefore, any private sector solution needs to work with this market rather than chains. Chains are easier to invest in and they receive a massively disproportionate share of funding and attention compared with their market share."

— Susannah Hares, Senior Fellow and Global Education Co-Director, Center for Global Development

Box 3: Largest global K-12 privately-run schools companies by revenue

1. GEMS Education: GEMS was founded in the UAE in 1959 by the Varkey Family, as a small tutoring business. It has grown to become the largest global school operator, with over 70 K-12 schools and revenue of over USD 1 billion. It has achieved scale by offering quality education across a range of price points and curricula. GEMS has grown predominantly through greenfield strategy.

2. Nord Anglia Education: A British school brand, Nord Anglia has more than 65 premium schools in nearly 30 countries. The chain offers various curricula, including the U.S. curriculum, a differentiator among other large global school platforms. It has expanded through a mix of acquisition and greenfield strategy.

3. Cognita: Cognita is a family of schools founded in the U.K., with a presence in nine countries across Europe, Asia, and Latin America. The brand has demonstrated strong growth in Asia, fueled by expat demand. With its recent expansion in Latin America, Cognita is now catering to more local students, across a range of price points and curricula.

4. SABIS: Headquartered in Lebanon, SABIS is one of the oldest school platforms, operating in 20 countries on five continents. The company designs its own international curriculum aligned to national standards. Providing education at affordable price points, it has achieved scale through a mixture of greenfield and licensing partnerships.

5. Inspired: A premium school brand with a network of 53 schools on five continents, Inspired has grown purely through acquisitions. It recently acquired ACG Education's school division in September 2018.

6. Spring Education Group: Spring Education Group is a school network providing pre-school and K-12 education in the U.S. and Asia. The group owns multiple brands and has grown through a mixture of acquisition and greenfield strategy. Spring Education also offers an accredited online privately-run school delivering flexible K-12 education. It operates across various price points.

7. Dulwich College: Dulwich is a premium school group founded in the U.K. which has leveraged its brand to build franchises across the globe, predominantly in Asia. The school offers the British curriculum and has recently focused on a dual curriculum offering in China aimed at Chinese locals. Dulwich has grown through a greenfield strategy.

8. International Schools Partnership (ISP): ISP is a British-based school chain delivering K-12 education across a range of price points. The school operates 42 campuses in 10 countries and 12 curricula. ISP has grown through acquisitions.

Privately-run schools can be segmented by price point, each with its own distinct set of characteristics (see Figure 17).

Figure 17
Characteristics of privately-run schools, by fee tier

	Super premium or legacy	Premium	Mid-priced	Budget	Low fee	No fee
	Prestigious older schools trading on brand name	Schools geared towards high-earning parents	Schools catering to upper middle class families	Schools catering to middle class families	Serve educational needs of bottom of the pyramid	Sponsored schools serving economically disadvantaged students
Curriculum	International curriculum	International curriculum	Local/international curriculum	Local/international curriculum	Basic minimum or own curriculum	Basic minimum or own curriculum
Student Teacher Ratio (STR)	• Lowest STRs (<10) • Typically have 1 Teaching Assistant (TA) for 1-2 teachers • Specialized teachers for all subjects	• Low STR (10-20) • Typically have 1 TA for 2-4 teachers • Specialized teachers for all subjects	• Mid-range STR (15-25) • Have both generalist and specialized teachers	• High STR (20+) • Have both generalist and specialized teachers	• High STR • Typically generalist teachers	• For schools which enroll special needs students, STR tends to be low • Otherwise STR is comparable to budget schools
Quality of teachers	• Highly qualified teachers • Typically native English speakers	• Highly qualified teachers • Often native English speakers	• High quality local teachers; senior management may include expats	• Local teachers	• Locally selected • Often exclusively trained for delivery of the program	• Locally selected • Could be specialized if dealing with special needs students
Quality of infrastructure	• High quality infrastructure • Dedicated facilities for each sport, music, arts and other non-academic activities	• High quality infrastructure with select dedicated provisions	• Moderate quality of infrastructure • Very few schools will have dedicated provisions	• Subsistence infrastructure needed to meet necessary operations	• Operate in basic schools, typically with not more than 5-6 classrooms	• Quality of infrastructure is variable but often basic
Key proposition of education offering	• Holistic development, Preparing students for top national and international HE institutes	• Holistic development; preparing students for top national and international HE institutes	• Limited/low focus on non-academic student development; focus on achieving strong results in national HE admissions	• Value for money • Greater focus on academics than public schools	• Better quality than public schools • For some chains, high quality teaching in resource-constrained environments	• Caters to families with either extremely low incomes and/or special needs
Examples	ETON COLLEGE UWC	International Schools Partnership innoventures education GEMS EDUCATION We see genius in every child inspired Aga Khan Education Services		Scholé	OMEGA SCHOOLS Every Child Matters Bridge	EducAid muktangan learning & growing together

While the segments are common across markets, the fee points vary and are strongly correlated to GDP per capita, for example varying from USD 7,000 (budget) to USD 31,000 (super premium) in Singapore, compared to under USD 100 per year (low fee) to USD 6,000 (super premium) in India.[135]

Regulations within private K-12

There are variations in the regulation of privately-run schools by market. Private markets tend to flourish — operating sustainably for operators while delivering high quality for families and equity for society — where the government takes an active role as steward of systems. For examples of different approaches to regulation, see Annex 2. Common areas of regulation include:

1. **Profit-making:** For-profit operations are generally permitted in markets across Southeast Asia, Europe, the Middle East, and the Americas. However, in large private K-12 markets such as India and China (for Grades 1-9), the regulation requires schools to operate as non-profits. Even where profit-making schools are officially not allowed, school owners have identified legal means of profit extraction by adopting suitable legal structures.

2. **Fee growth:** When demand exceeds supply, fee growth is often regulated to ensure that price points remain equitable. For example in Dubai, allowable fee increases are pegged to school performance, as assessed by the market regulator Knowledge and Human Development Authority (KHDA) through annual inspections. In Saudi Arabia, school fees can only increase at two-year intervals, and the increase requires satisfactory justification.

3. **Capacity expansion:** Capacity expansion often requires approval from regulators, especially in smaller countries. Singapore and Hong Kong have limited land parcels that are released by the government periodically for schools to expand. Capacity increase involving additional construction activities require further approvals.

4. **Curriculum:** In certain geographies, there are restrictions imposed by regulators on content or subjects offered. For example, in Saudi Arabia, all private international schools are required to teach Islamic Studies, Arabic and Social Studies. In China, bilingual schools are restricted from administering foreign curriculum/teaching materials during Grades 1-9 (the compulsory education stage).

5. **Foreign investment:** Foreign investment and ownership are usually permitted barring some markets in which full foreign ownership is not allowed and local partners must have a stake in the school. Profit repatriation is typically permitted.

Privately-run schools: strengths and key concerns

Privately-run K-12 schools may have a role to play in addressing the challenges in global education by addressing quality, relevance, and access to education. The private sector can often intervene more quickly and efficiently than the public sector to address education challenges. Experts consistently cited three particular strengths and advantages of the private sector:

1. **Contributions to access:** Privately-run schools can fill critical gaps in access, especially for marginalized groups (e.g. girls, special needs students, rural students, disadvantaged urban/slum-dwelling students).

2. **Innovation potential:** Privately-run schools typically have more flexibility than state schools to innovate and therefore, to potentially support in solving education challenges in access and quality. Whether it is because they have a mission orientation and therefore an imperative to innovate to achieve greater impact, or because they have a profit orientation and therefore an imperative to innovate to achieve improved margins (these factors are not mutually exclusive), privately-run schools are well-positioned to try new things and iterate them.

3. **Accountability drive:** Within privately-run schools, there is typically a closer link between education providers and "consumers" (students and parents). Privately-run schools in PPPs have contractual obligations to the state, while other privately-run schools can only survive if their funders (whether paying parents or donors) see value in their work. This can support cultures and practices of greater accountability for student outcomes.

Additionally, it is important to note that there is often a correlation between increased learning outcomes and higher costs in many privately-run schools. For instance, a study of the Liberian Education Advancement Program (LEAP), one of the world's largest- and most-watched PPPs in education, found that positive learning gains were in some cases accompanied by high costs and negative side-effects such as reduced access to education for some children.[136] While privately-run schools may bolster global education provision, they are also the subject of sometimes intense criticism, and certainly "unscrupulous education providers hamper the overall reputation of the sector."[137] Privately-run schools can in some contexts widen inequality between students of different economic backgrounds since some are fee-paying and/or selective. Moreover, privately-run schools do not always guarantee high-quality provision (even in contexts where they offer better quality than the state). Further, privately-run schools may compete with government schools for students, financial resources, or teachers.

Unlike public schools, privately-run schools may also be vulnerable to financial risks and may be less sustainable than government provision. Their teachers may lack union representation, which can support them to be operationally nimble but compromises job security and, often, pay.

It is essential to be aware of and address these potential limitations of the privately-run schools' sector even as its potential benefits are explored. Further evidence on the efficacy of privately-run school interventions, particularly where these can be delivered in line with state education budgets, is urgently required.

Conclusion

Privately-run schooling is a growing feature of global education, most particularly within education systems (typically in emerging markets) where the public sector has not been able to keep up with growing demand for high-quality education. Privately-run schools have been gaining market share over public schools with these trends set to continue. While recognizing the criticisms of privately-run schools, given the increasingly important role that private education providers are playing in many education systems, they are now an essential player in addressing education challenges and therefore must be engaged as an important part of the education landscape. The next chapter explores the unique contributions privately-run schools may be able to make to public goods and the ways in which they can be supported to overcome barriers to doing so.

3. Understanding contributions of privately-run schools to public goods

Introduction

Given the education challenges addressed (Section 1) and the global growth of privately-run schools (Section 2), the question arises of whether and how they can contribute to solutions. Experts consulted for this study consistently noted that non-state schools have an important role to play in contributing to education systems. What this study aims to uncover is how privately-run schools are moving beyond delivery to fee-paying students and instead sharing practices, knowledge, and benefits more widely in ways that contribute to improving education for all — through the creation of public goods (see Box 1 in Introduction). This is often through an explicit partnership with the state.

To investigate the contribution of privately-run schools to public goods, the study examines eight case studies. The studies were prioritized from a long-list of more than 1,000 education interventions. This list was gleaned from public sources, foundations, and interviewed experts. The case studies were prioritized based on their contributions to public goods and then selected for diversity in scale, nature of intervention, ownership, and geography (see Table 2).

The section that follows explores the case studies in detail, highlighting key drivers for schools to create public goods, exploring the impact privately-run schools have achieved, providing a framework for understanding their contributions, identifying key innovations, and showcasing best practices and examples of their work. Full case studies are available in Annex 1.

Case study features

The case studies represent a wide range of geographies, organization types, and government arrangements (some working in partnership with government and some independent). Three of the case studies are based in Sub-Saharan Africa, two in Southeast Asia, and one each in Latin America, Europe, and North America. Six are non-profit schools and two are for-profit schools. Six are in PPPs while two are not.

Key drivers to create public goods

The eight case studies reveal that there are two critical drivers for privately-run schools to contribute to the creation of public goods: the first being social impact-focused mission and values and the second being financial and/or non-financial incentives.

"There's no denying there are some organizations that are genuinely driven by sense of mission, they want to help solve a bigger problem … [those are] the ones that generally tend to be most collaborative and non-rivalrous."

— *Vineet Bewtra, Alfege Advisory*

Organizations with a social impact mission and values are more likely to aim to deliver public goods. Those with a desire to create impact at a systemic level are more likely to scale public goods and may partner with governments to improve the wider system. Organizations such as The Citizens Foundation (TCF) were founded with a mission to enact impact through systemic change; in following its core mission, TCF has taken an extra step in partnering with the Pakistan government to improve the wider educational system in Pakistan.

"The creation of public good puts [some private schools] on the broader world stage. Being on global conference circuit helps with their status, which they can then leverage in external investment. It is possible that their visibility leverages further aid or bilateral investment."

— *Jonathan Simons, Director of Education, Public First*

Organizations also may create and deliver public goods because of available incentives. Both for-profit and non-profit organizations need incentives for moving into new areas of activity. For some, access to financial or other remuneration is a clear driver to create public goods. These incentives may be in the form of funding from the government for PPPs. For others, upsides such as brand awareness may incentivize the delivery of public goods.

Impact of privately-run schools

Some of the case studies have been able to achieve a higher level of self-reported or externally evaluated impact than comparable government schools, but many are doing so at a significant cost premium to the public sector. These case studies are, by design, a set of world-class programs, and therefore drawing wider conclusions from these examples about the potential of privately-run schools to

Table 2
Case studies assessed in detail

Organization	Geography	Summary	Scale of Impact (since inception)
Bridge International Academies (Program: EdoBest)	Nigeria	Bridge International Academies is an education services group operating in Africa and Asia. In Nigeria's Edo state, Bridge is involved in creating public goods in the following ways: (a) Provision of technology-supported teaching and assessment solutions to streamline instruction delivery and provide real-time feedback and (b) Teacher training; all in government schools.	• Trained 11,000 teachers • Reached 850 schools and 270,000 pupils
ETON COLLEGE Eton College's Tony Little Centre	U.K.	Eton's Tony Little Centre for Innovation and Research in Learning (CIRL) works to improve learning outcomes for young people by spreading Eton's best practices and innovations in teaching pedagogy, learning, and leadership in education through research and advocacy. The Tony Little Centre also conducts leadership training programs for students at Eton in collaboration with partner schools.	• Impact assessment pending
THE CITIZENS FOUNDATION **The Citizens Foundation (TCF)**	Pakistan	The Citizens Foundation runs the Government School Programme (GSP), wherein it adopts primary and middle schools in remote rural areas of Punjab, Sindh and other provinces. Unlike other public-private partnerships, TCF is given the autonomy to manage, hire and train new teachers and principals under some contracts.	• Adopted 350+ public schools • Hired 1,700+ teachers and principals with over 100,000 hours of teacher training
EducAid Learning for life in Sierra Leone EducAid (Program: QEP4E)	Sierra Leone	EducAid is a not-for-profit organization that runs a network of 15 free schools, free training programs for community and government schools, and tertiary programs for their graduates in Sierra Leone. The Quality Enhancement Programme for Education (QEP4E) is a free, multi-faceted training program to train teachers and staff from partner schools in modern, child-centered, holistic, and girl-friendly pedagogical methods and school management best practices.	• 650 teachers and 45 school leaders have been trained • 100 schools and 31,000 children have benefited
Alianza Educativa Alianza Educativa	Colombia	Alianza Educativa is a non-profit organization formed by an alliance of three private schools and a university that operates seven concession (public-private partnership) schools and works on improving curriculum, pedagogy, and management of these schools. Alianza also delivers a training program focused on pedagogy and curriculum for the teachers in its schools and trains teachers in neighborhood schools.	• Runs 7 schools to benefit 8000 students • 130 hours of training in a year for over 350 teachers
RISING ACADEMY PARTNERSHIP **Rising Academy Network**	Liberia	Rising Academy Network, a low-cost private school operator, runs nearly 30 public schools in Liberia under the Liberian Education Advancement Program (LEAP) — a major public-private partnership initiative — and focuses on effective curriculum and rigorous teacher coaching.	• Scaled from 1,100 students in 2016 to 6,500 students in 2018 • Planning to grow from 30 to 87 schools in 2019
KIPP: KIPP (Program: KLDF)	U.S.	KIPP (Knowledge is Power Program) is a non-profit organization that runs a chain of over 240 charter schools in the U.S. Amongst its many programs, KIPP runs KLDF, a school leadership training program in the United States, which has been assessed in detail in this case study.	• Runs over 240 charter schools • KLDF reached 12 million children through 320 participants till date
muktangan learning & growing together Muktangan	India	Muktangan is a non-profit that runs a chain of seven public English-medium schools in Mumbai that follow a constructivist teaching philosophy. Muktangan also trains current and potential teachers on innovative pedagogical methods and classroom management best practices.	• 3,800 students with 130 special need students • Trained 850 teachers so far

Figure 18
Impact of Muktangan

SSC examination results percentage

SSC examination passing rates

Muktangan schools	99.5
MCGM schools	86.0

+16%

Achieving first class or above

Muktangan schools	80.0
MCGM schools	53.0

+51%
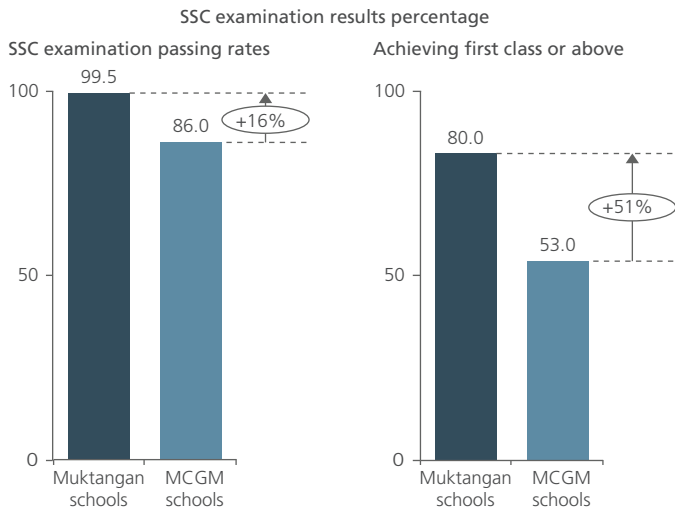
Figure 20
Impact of Rising Academies

Standard deviation in performance of students on standardized tests

■ Non-LEAP public schools
■ Rising schools

	Rising schools	Non-LEAP public schools
Student attainment in math	0.64	0.10
Student attainment in english	0.81	0.27

+0.54%
+0.54%
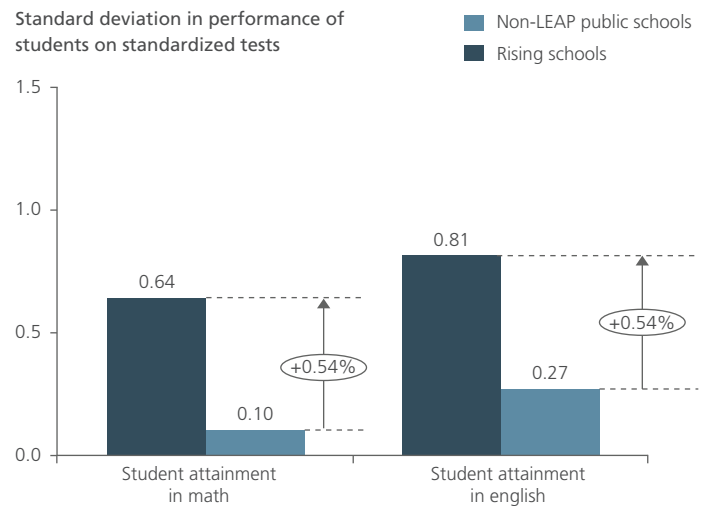
create education impact is not meaningful. Instead, these schools illustrate what is possible in the best programs. It is clear that by making the practices and innovations of these and similar schools publicly available, both the public and private sectors can potentially improve. Below, we highlight the impact of four of the case studies (see Figures 18-21). Some of this impact is self-reported and has not been assessed for potential bias in research

(e.g. selection of apt students for privately-run schools versus public schools).

Muktangan's students outperformed other Mumbai public school (MCGM) students in the State School Certificate (SSC) examination, the public high school leaving examinations. A higher percentage of Muktangan students achieved first-class marks (scoring more than 60% overall) as compared to other public schools.[138]

Figure 19
Impact of EdoBEST

EdoBEST assessment for Grade 3 in July 2018

Percentage

■ Non-program schools
■ EdoBEST

	EdoBEST	Non-program schools
Attendance at end of school day	54	10
Corporal punishment usage	27	43

+44%
-16%
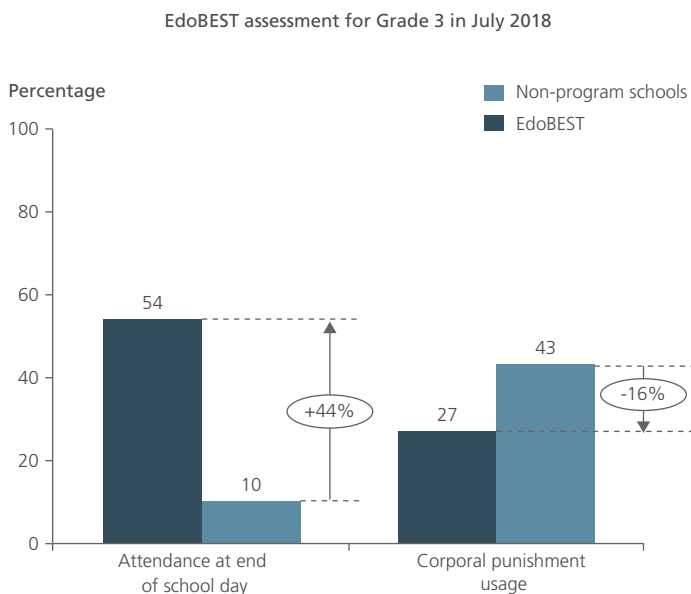
Figure 21
Impact of The Citizens Foundation

Results from TCF's remedial education programme, 2016
Improvement in learning outcomes for Grade 2 in GSP schools

Percentage

■ Midline
■ Baseline

	Baseline	Midline
Urdu	39	74
Math	13	49
English	30	61

+90%
+277%
+103%
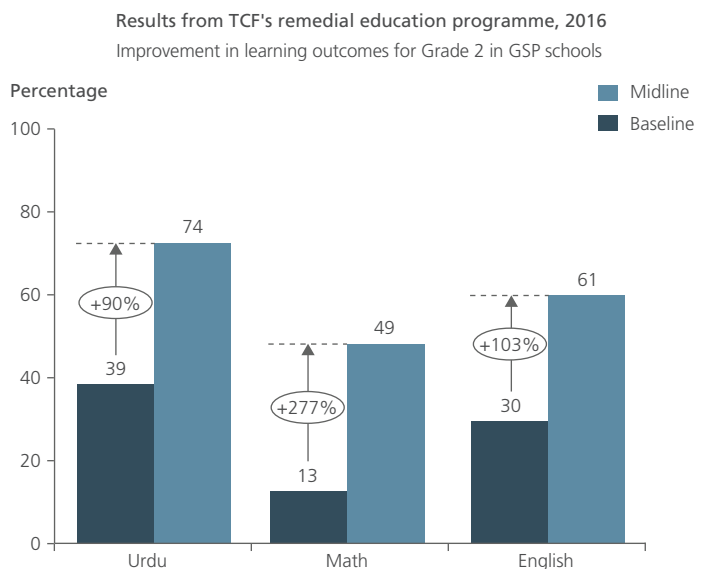
Teacher attendance in 30 EdoBEST schools which introduced new support, training, resources, classroom management techniques and digital attendance systems was found to be 44% higher than in 30 control schools. The incidence of corporal punishment, which was a major concern in Edo, was also lower by 16% in the EdoBEST schools compared to control schools.[139]

The Liberian Government commissioned the Center for Global Development and Innovations for Poverty Action to run a randomized controlled trial to gauge the efficacy of the Liberian Education Advancement Program (LEAP). This trial covered all 93 LEAP schools and measured impact on enrollment and learning, as well as a host of other students, parents, teachers, and school outcomes. Rising's LEAP schools were found to outperform control schools in Math and English by a large margin.[140]

The Citizens Foundation introduced a Remedial Education Program in its government schools in Punjab, under which it offered a "crash course" to boost literacy and numeracy skills. Comparing student performance across baseline and endline, the program helped improve student scores significantly in Urdu, Math, and English.[141]

Framework for privately-run schools' contributions to public goods

The case studies reveal that private sector contribution to public goods can be understood through a framework with five core pillars (see Figure 22): a) curriculum and pedagogy, b) professional development, c) management and governance, d) infrastructure and technology, and the e) full delivery of K-12 education. While some privately-run schools contribute to only one or a few

2. **Curriculum and pedagogy:** Some privately-run schools have developed their own lesson plans and core objectives for each class or grade level, while others have developed their own teaching approach and pedagogical tools. It is observed in the eight case studies that curriculum and pedagogy have been tested by private sector actors and subsequently scaled to the public sector after demonstrating improvement in student learning outcomes.

3. **Professional development:** Professional development comes in the form of resources that support pre-service or in-service training for teachers and school leaders. Private sector actors have invested in developing training and assessment programs for teachers and school leaders, which have been shared widely with other public and privately-run schools.

4. **Management and governance:** Some privately-run schools have developed best practices in school management that have subsequently been shared with the public sector, such as systems for student and teacher assessment, mechanisms for accountability, and tools to monitor student and teacher attendance.

5. **Infrastructure and technology:** Non-state actors have a role in improving facilities and classroom technology to enable learning and school activities.

The following sections highlight the contributions of private sector schools and other actors to public goods, drawing on the findings of case studies. Where case studies deliver public goods in multiple areas, their most distinctive area of contribution is highlighted in each pillar.

Figure 22
A framework for understanding potential contributions by privately-run schools

Full delivery of K-12 education

| Curriculum and pedagogy | Professional development | Management and governance | Infrastructure and technology |
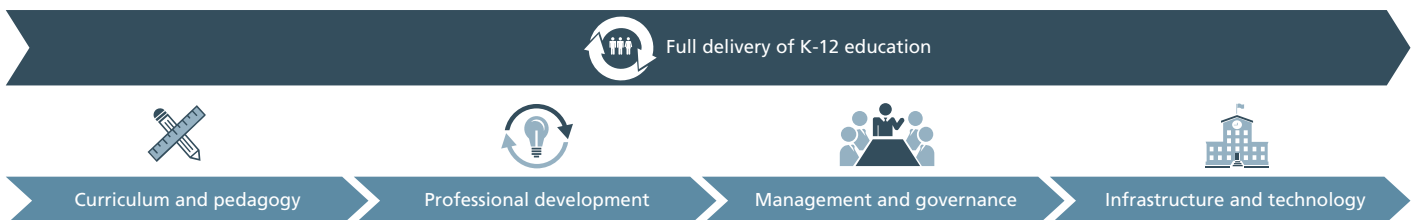
pillars, others contribute to the complete K-12 value chain. This framework is explored in what follows.

1. **Full delivery of K-12 education:** The full delivery of K-12 education implies the provision of core education to students by privately-run schools (as an alternative to purely public provision). Non-state actors may contribute to the full delivery of K-12 education through a public-private partnership (PPP) model or the operation of externally funded, free privately-run schools.

Full K-12 delivery

Education challenge addressed: Access to affordable and high-quality education

Privately-run schools are creating public goods by providing access to education, often with improved learning outcomes (however, this may come at a premium to the cost of delivery within the public system). Sometimes, this includes delivering access and

quality in areas underserved by the government. Privately-run schools may also have a role in demonstrating alternative and innovative approaches to managing delivery end-to-end, often leveraging the same resources government schools would have access to but achieving improved outcomes.

"Private schools are filling in gaps in areas where government school access is insufficient e.g, remote and rural areas in Pakistan and informal settlements in Kenya."

— *Shikha Goyal, Director of Investments, Omidiyar Network*

Case studies

The case examples highlight private sector contributions to the full delivery of K-12 education.

- **Muktangan** is a non-profit operating seven public English-medium schools in Mumbai in a PPP with the Mumbai government, operating from within existing public schools as a separate "track". Muktangan schools are characterized by a constructivist, child-centered educational approach such as attentive classroom practices like arranging students by ability and organizing classrooms by subject. They also operate a teacher training program that works to impart their innovative pedagogical methods and classroom management approaches to teachers.

- **The Citizens Foundation (TCF)** is a non-profit organization running a network of 1,600-plus affordable private schools in Pakistan. In its PPP, TCF has adopted and manages nearly 350 government schools that do not charge fees under six diverse agreements in Punjab, Sindh, and Khyber-Pakhtunkhwa. These schools have historically suffered from poor teacher quality, low enrollment, and low student learning outcomes, but TCF has improved literacy and numeracy and school infrastructure by deploying a remedial program, their own curriculum, and in-house engineers. A recently-established Partnership Schools Design Team is adapting TCF's model for quality to the constraints of the PPP schools, which vary by agreement: small per-child subsidies, government teachers, or government textbooks.

"There are fantastic models that have been employed in government schools that originated from the private sector. Just making education more affordable is one big benefit the private sector can do to improve access and quality."

— *Shobhini Mukerji, Executive Director, J-PAL South Asia*

In addition to the case examples assessed, there are other non-state actors worth highlighting in full K-12 delivery, which is present in regions with no or poor existing public school systems:

- **Akanksha** (India) provides free, high-quality education to economically disadvantaged children through a PPP with the government under which it takes over complete management and operations of public schools.

- **United World Schools' Teaching the Unreached** program in South and Southeast Asia helps establish schools in regions where public schools are absent and trains the local community to operate the school, providing them with fundraising support to ensure long-term sustainability.

- **Gyan Shala** in India runs its own low-cost schools and also operates programs in government schools where it implements its own curriculum and pedagogy. Gyan Shala has also helped create tailored learning materials for use in government schools.

Best practices and innovations in full K-12 delivery

While there were many innovations in K-12 delivery among the models assessed in the case studies, the most distinctive elements addressed issues of access, through equity and inclusion:

- At **TCF,** a shift to an all-female staff in some schools has helped to enable girls' enrollment in schools in some conservative communities.

- **EducAid** has several girl-friendly strategies like white ribbon campaigns and girl power groups that it spreads through the QEP4E program to other teachers to help nurture a supportive environment for girls at the partner schools.

- **Alianza Educativa** has a program called Superaula which has been specially created for students with learning difficulties (see Box 4). Each child receives 40-50 hours a year of dedicated professional support.

- At **Muktangan**, two seats per grade per school are reserved for children with learning disabilities. Furthermore, Muktangan has partnerships with organizations like Umeed, a non-profit focused on developmental disabilities, to ensure relevant, inclusive pedagogy.

Together, the case studies above highlight the role non-state actors can play in the delivery of K-12 education. Through operating free schools or directly managing public schools, the organizations have been able to improve both access to and quality of public provision.

Box 4: Inclusive education

Spotlight on Alianza Educativa

Alianza Educativa is a non-profit concession school operator based in Bogotá, Colombia founded and run by three top-tier private K-12 schools and a private university. In a PPP with the Bogotá Secretary of Education, Alianza runs seven public schools in low-income, under-resourced areas and is expected to grow to 11 schools by 2020. Alianza is unique from other concession/ charter school networks in that it was formed and continues to be a collaborative effort between multiple high-performing private schools. Alianza has also partnered with the Ministry of Education to share some of its best practices with teachers from underperforming primary schools throughout the country.

To address challenges regarding the inclusivity of students with disabilities, Alianza implemented the Superaula program in its schools. This program brings in the best practices from the founding schools to address the problems that students with learning difficulties face including retention and basic learning skills. Believing that if learning problems are not addressed at the onset, students may be potentially left behind, Alianza set up a team of therapists and psychologists who work directly with students. In kindergarten and first grade, when a teacher notices a student with a learning disability, the student is matched with a special education tutor who spends 40-80 hours a year to close the learning gap. Alianza has also recently partnered with the Department of Education and Fundación Saldarriaga Concha to train teachers on inclusive education.

"The main impact some of these schools have had is a signalling effect that in similar environments/ conditions that government schools work in, it is possible to deliver higher quality education."
— Azad Oommen, Co-Founder, Global School Leaders

Curriculum and pedagogy

Education challenge addressed: Poor quality curriculum and ineffective/outdated pedagogy

Both curriculum and pedagogy are often tested by private sector actors and subsequently scaled to the public sector after demonstrating improvement in student learning outcomes.

Case studies

Both Rising Academies and Eton College's Tony Little Centre for Innovation and Research in Learning tackle the challenge of outdated curriculum and ineffective pedagogical techniques.

- **Rising Academies:** Rising implements a proprietary curriculum and pedagogical tools like 'Numbotz' and 'Reading Club', which are remedial programs based on math and reading. These tools help build the foundation of core literacy and numeracy, leading to an increase in student attainment levels.

- **Tony Little Centre for Innovation and Research in Learning (CIRL):** Eton College's CIRL has focused research on 21st Century skills, a topic currently at the forefront of global teaching and learning development that is of increasing importance to Eton College's students. It shares its research among various partner schools and conducts workshops to share new insights and pedagogical techniques.

Best practices and innovations in curriculum and pedagogy

Across the case studies, several organizations have developed innovations in the curriculum:

- **Continuous revision of curriculum:** At **Rising Academies**, students and teacher feedback is regularly monitored and is used to guide modifications to the curriculum to better reflect the needs of students. Similarly at **Muktangan**, Curriculum Understanding and Design Development (CUDD) meetings are regularly held to solicit teacher feedback and the curriculum is reviewed and modified accordingly.

- **Contextualization of content:** Eton's **CIRL** has focused its research on 21st Century skills and aims to promote the skills of critical thinking, communication, and social-emotional awareness. At **Alianza Schools**, curricula called 'Navegar Seguero' and 'Moral and Democracy' help provide socially relevant content to students from lower economic strata and aim to support their holistic development. Similarly at **KIPP** schools, relevant socio-emotional content and extra-curricular activities have been incorporated into KIPP's core curriculum to ensure all-round development of students.

- **Use of local language:** While **TCF** uses Urdu as the medium of instruction in its own schools, is in the process of translating its

content to the Sindhi language, starting with the Early Grades curriculum in the government schools it manages in Sindh, Pakistan to improve the ease of learning for those students.

In addition to innovation in curriculum, the case studies highlight the steps schools have taken to improve pedagogy. Innovations observed in the case studies include:

- **Reorganization of classrooms based on student ability:** At **KIPP** schools, students are grouped based on their abilities to ensure that students with similar learning capabilities are grouped together. The teacher then adjusts the approach and pacing according to the needs of the children, which helps achieve equal learning levels among all children. At **Muktangan** schools, students in the same class are divided into three groups based on their subject aptitude, and instruction is delivered in the method best suited to their learning level. Similarly, **Bridge** employs Cross-Age Ability Grouping wherein it groups students based on their academic skill level to ensure that kids at the same level are equally challenged and that weaker students are given more attention by the teacher. This brings together children of different ages and/or year groups.

- **Personalized learning: KIPP** continuously monitors a child's progress through its data analysis systems and uses student-level insights to customize learning plans for each student. At **Muktangan**, three teachers are deployed in each classroom (versus one in a typical government school), thereby improving the student-teacher ratio and allowing teachers to provide more attention to every child. This, however, is done at a premium to public systems.

- **Scripted lesson guides: Rising** provides semi-scripted lesson guides with specific prompts to enable teachers to better run the classroom. These detailed lesson plans are focused on providing structured, high-quality subject content and proven strategies for delivering effective lessons, aligned to Rising's coaching program. At **Bridge** schools, and in government schools that Bridge supports, tablets are pre-loaded with lesson guides that incorporate small activities that teachers can do to make each classroom a more effective learning environment. In doing so, Bridge can ensure that each piece of content is being taught most effectively, track progress and ensure that the program is aligned across schools.

- **Positive reinforcement learning: Bridge** focuses heavily on the use of positive learning reinforcement as opposed to the use of corporal punishment, an approach it emphasizes through its training program. Additionally, Bridge collects continuous feedback from students to ensure corporal punishment is not being used. Positive behavior management is also adopted at **EducAid** (see Box 5). To ensure a healthier classroom environment, teachers and students jointly develop a code of conduct that identifies positive behaviors students and staff will adhere to in classrooms. The teachers avoid any corporal or humiliating punishment.

Professional development

Education challenge addressed: Lack of trained teachers and school leaders

The private sector can develop evidence-based teacher training and school management best practices to help train teachers and school leaders. Public good in professional development can come in the form of a publicly available teacher training curriculum, a conference for school leaders to learn from one another, or simply the direct training of government teachers and staff. The case studies in this report go beyond training their own faculty to share practices more widely.

Box 5: Positive behavior management and active teaching pedagogies

Spotlight on EducAid

EducAid equips its teachers with methods to use non-violent restorative and positive behavior management, instead of punitive approaches like caning and other forms of corporal punishment. At the beginning of the school year, students and teachers co-develop a code of conduct. Furthermore, schools have introduced Girl Power Groups to foster a girl-friendly environment. By creating a positive learning environment, student-teacher relationships and student learning outcomes have improved.[142]

Teachers are instructed to use active teaching methods such as peer learning and pair work. Some more advanced methods include carousel learning and scaffolded writing. With carousel learning, teachers place a range of academic activities around the room. Small groups of students conduct one activity at a time, rotating after the allocated time until all exercises are completed. Carousel learning provides the opportunity for teamwork, collaborative learning, and learning away from the teacher's direct supervision. With scaffolded writing, students write a longer piece of text with subheadings, question prompts, and sentence starters to provide structure to each sub-section. This supports and accustoms students to writing longer prose independently.

EducAid also shares course outlines and content material developed at their schools with teachers. Prepared content covers exam subjects that can be shared with students so that they can work through the syllabus at their own rate under teacher supervision.[143]

Case studies

- **KIPP:** KIPP runs the KIPP Leadership Design Fellowship (KLDF) under which it hosts various summits, targeting senior leadership of charter schools and public schools networks, as well as representatives from organizations that are involved in leadership selection and development in public schools. KIPP uses these summits as a platform to bring together best work from various organizations involved in the teacher training space onto a common platform (see Box 6).

- **EducAid:** In addition to operating 15 free schools, EducAid runs teacher training programs for community schools, including a teacher quality enhancement program where it trains partner school teachers in modern, child-centered, holistic, and girl-friendly pedagogical methods and school management best practices.

Other organizations beyond those covered in this study include:

- **Global School Leaders** contextualizes best education practices in school management to local education scenarios across the world. In Malaysia, GSL runs monthly workshops in 24 schools training the teachers in school leadership and technology management. In Indonesia, GSL pilot programs targeting the professional development of the principal and leadership teams of 25 low-performing schools.

- **STiR's** core mission is to ignite and sustain the intrinsic motivation of teachers across education systems by building teacher networks, supporting education leaders and teaching key classroom learning principles.

Best practices and innovations in professional development

The case studies demonstrate a range of innovations in approaches to professional development:

- **Decentralized training approaches:** TCF has a centrally devolved structure of training wherein the central training team trains Area Managers, who in turn train principals of the schools they oversee. The school principals then train the teachers in their respective schools. Trainers at all levels are provided detailed training manuals and undergo a 'mock' training, which enables them to take the training forward. Moreover, there is a centrally-led rigorous quality control mechanism in place to ensure that training content is transferred accurately across the cascade. **EducAid** also trains Head Teachers that then trains and oversees other teachers in their own schools. All the Head Teachers are connected by a network for peer-to-peer training. Similarly, **Rising** transforms existing staff members in every school into instructional coaches and prepares them to train and oversee the teachers in the schools under their mentorship.

- **Non-traditional training methods:** Bridge provides immersive, hands-on training to teachers in the EdoBEST program. Teachers are also required to conduct "mock classes", which serve as a means to test their understanding of the teaching methodologies. **EducAid** invites teachers from partner schools for observational visits to its model schools like Rolal which helps them better grasp EducAid's teaching methodologies.

Box 6: Platforms for leadership development

Spotlight on KIPP's Leadership Design Fellowship (KLDF)

KLDF consists of three in-person summits for senior leadership of charter schools and public schools as well as representatives from leadership training organizations. The sessions focus on providing a platform for participants to discuss solutions to problems in education, as well as provide an inside view of how KIPP tackles these issues.

KIPP invites a two-person team from various organizations across the United States for an all-expenses-paid training on generating impact through leadership development, funded through donations. KIPP encourages participants to come in groups so they can carry forward their learnings and implement them in their own schools. This group attendance enables participants to return together to their home schools and work as a team to make changes, which can support implementation.

After an in-depth screening process that consists of a letter of interest and an interview, participants are required to fill out an application (with a letter of support from the organization they are representing) highlighting the issues they identify in education. KIPP uses these applications to ensure the focus of training. Participants get an in-depth look at KIPP's principal

selection, leadership development, and leadership support model over three summit experiences. Participants also have the opportunity to learn about a variety of other innovative school leadership models around the country and join a cohort of reform-minded education leaders.

Management and governance

Education challenge addressed: Lack of effective decision-making and management

The private sector can introduce student and teacher evaluation frameworks, school management practices, and governance structures that can improve performance.

"There are models of outsourcing accountability by bringing in a very highly accountable private sector (NGO) actor with whom you will set benchmarks on an annual basis and together define goals, targets, objectives. What the private sector (NGO) can help address is really the issue of accountability."
— *Amitav Virmani, CEO, The Education Alliance*

Case studies and innovations

- **Bridge International Academies:** In EdoBEST schools, Bridge leverages tablets to digitize student and teacher attendance. This allows critical attendance data to be relayed to the government's data analysis team which utilizes it in real-time to monitor the program and course-correct if needed.

- **Rising Academies:** Rising has school performance managers who track student and teacher attendance and performance regularly to ensure ongoing program iterations and accountability. School performance managers are a key feature of Rising's approach to oversight. Rising monitors schools closely through regular spot-checks, student assessment, technology-enabled data analytics, and rigorous impact evaluation.

- **TCF:** In its PPP schools in Pakistan, TCF leverages a decentralized model with empowered local leadership to improve school management (see Box 7).

In addition to the case studies above, other non-state education actors are supporting interventions in management and governance in schools:

- **The Michael and Susan Dell Foundation** runs Data Driven Districts, a program aiming to increase the effectiveness of data-based management decisions taken by education officials by developing a dashboard to manage and access student data. The dashboards have specific toolsets to ensure quality data is being submitted into the system.

- **Acorn Education** helps in providing back-end administrative support to no-fee public schools in South Africa and is also actively involved in the governance of the schools. Acorn also helps improve the accountability of public school teachers and staff by acting as a third-party quality assurance agency.

Box 7: Decentralized field management

Spotlight on The Citizens Foundation

TCF has hired over 1,700 faculty and staff and implemented models to boost enrollment and learning outcomes across its PPP schools. TCF has adapted its proprietary models and practices, including a train-the-trainer model, to suit schools in rural settings.

TCF's managerial structure featuring decentralized field management has been implemented in its Government Schools Program (GSP) schools. Area Managers (AMs) supervise and train principals with the principal supervising teacher training. The AMs are trained and supervised by a Central Design Team. Each AM typically handles 20-30 schools with an upper cap of 35 schools.

The AM monitors, supports and trains the principals of the schools in the area through regular field visits typically scheduled once every six weeks. Classroom observations are conducted to monitor the delivery of lesson plans. School inventory is scanned for the availability of textbooks, laboratory equipment, and other resources. The manager reports feedback on the school's progress through metrics like students and teacher attendance, to enable immediate intervention.

Teacher and principal training are also carried out in phases. The first phase of ten days involves capacity building and development of area managers. In the second phase, area managers train principals in leadership and teach them to train their school teachers. In the last phase, the principal trains school teachers in effective teaching practices conveyed by the central design team along with providing them with additional resources and lesson guides.

Infrastructure and technology

Education challenge addressed: Inadequate infrastructure

Some public schools continue to lack quality infrastructure and resources, particularly in developing country contexts. Privately-run schools can share infrastructure and technology facilities with public schools or develop innovations that can be adapted to scale in the public sector. However, technology and infrastructure cannot be viewed in isolation and must be coupled with practices that focus on improving student learning outcomes.

"There are examples where private sector education actors developed digital tools and technology which has been implemented in some public schools."
    — Industry expert

Case studies and innovations

- **Bridge International Academies:** Bridge has helped pioneer the use of technology support systems in developing contexts. In Edo State Nigeria, Bridge acts as a teacher training and technology partner for government schools as part of the EdoBEST program, a flagship educational initiative launched in 2018 to transform the public education system in the state. Bridge provides technological infrastructure support systems (tablets, smartphones, proprietary application, and dashboard) to improve accountability and learning outcomes (see Box 8).

- **TCF:** Having developed sufficient capability and capacity in the building and refurbishment of its own schools, TCF helps to refurbish the infrastructure of some government schools in its PPP in Pakistan.

"Technology can be used powerfully both as a tool for driving pedagogical improvement and for driving stronger data and transparency."
    — Aashti Zaidi, Founding Director, Global Schools Forum

Additional findings

The case studies also reveal several learnings around funding, management, and engagement. These findings have helped promote the success of the case study programs. Key insights include:

Box 8: Innovations in technology

Spotlight on Bridge International Academies' EdoBEST Initiative

Bridge has developed proprietary software on simple tablets to address challenges in accountability and pedagogy in Edo State schools. These have several key features:

Teacher guides and lesson planning: The tablets (or e-readers) facilitate teaching by tracking lesson completion. Information on lesson progress is visible to all stakeholders and any changes to the national curriculum can be incorporated in real-time. Lesson guides can also be downloaded two weeks before delivery and will remain on the device for two weeks afterward.

Connectivity and battery life: The tablets/smartphones are built for the low infrastructure social and technological conditions in which they are expected to run (e.g. lack of continuous access to electricity and internet connection). They can run two weeks on a single charge and do not need to be connected to the internet during use. If new content needs to be downloaded and there is no internet connectivity at the school, the headmaster may remotely download the materials onto his or her mobile phone. The content can then be shared wirelessly to teachers' tablets.

Attendance tracking: Teachers are expected to arrive at 7:30 am and to work until 15 minutes after 1:45 pm to handle administrative matters. The tablets record teacher attendance twice a day: once in the morning at 07:30 am, and once at 1:45 pm. The data is made available to both Bridge management and the government for accountability and policy-making purposes.

Enrollment data: Student-teacher ratios were traditionally calculated in Edo State as the total students served divided by the total number of teachers across the whole state. State-wide student-teacher ratios, however, do not reveal the overstaffing in urban areas and understaffing in rural areas. Through a near real-time dashboard with enrollment and staffing data, Bridge can effectively allocate teachers across the state and to enable a consistent student-teacher ratio.

1. **K-12 and social sector experience of founders:** The founding team members of all organizations assessed have had relevant K-12 experience or social sector experience before starting their respective organizations, which has supported efficacy from inception.

2. **Mixed base of funding:** Most of the school initiatives assessed have a mixed base of funding. Many case studies, including the PPPs run or supported by for-profit school groups Rising (in Liberia) and Bridge (across Africa), receive some foundation and corporate donations. Except for Eton's CIRL and EducAid, the schools also receive government funding. Collaborations between funders and government are likely to be a key way to stimulate the creation of more public goods, and schools may need to plan for a mixed revenue model from the outset. This also reveals that donors are likely to have an important role to play in supporting innovations — especially in their early stages — that go beyond typical public sector practices and budgets.

3. **Cost management:** Many of the case studies assessed were concerned with sustainability and efficiency, particularly when operating within PPPs. Both economies of scale and flexibility in operational models were observed. For **Rising Academies**, costs still remain higher than their public school counterparts, though Liberia's expenditure per student ranks 145th out of the 161 countries for which recent World Bank data is available.[144] In Edo, where **Bridge** is the technical and service delivery partner, the program is funded within the state's existing education budget; a blueprint approach for reform without donor or multilateral funding. In terms of operational flexibility, in Sindh, **TCF** operates three different partnership models with the government, in an effort to ensure that expenditures are aligned to funding and that fiscal discipline is maintained.

4. **Stakeholder engagement:** Stakeholders, including government, partners (including corporates and non-profits), teachers, parents, and the wider community, were key to program success at the **Tony Little Centre**, TCF and Muktangan. The Tony Little Centre has collaborated with edtech companies like Emerge Education in the U.K. to test the efficacy of AI-supported learning. **TCF** engages teachers to conduct student recruitment drives in the community, which have proven to be effective. **Muktangan** involves the community by hiring teaching staff from local neighborhoods. In many cases, they don't hold professional accreditation and are trained in-house and encouraged to secure formal teacher training to prepare them for a career beyond Muktangan. Doing this allows Muktangan to enforce its identity as a positive change agent and increase goodwill in the communities it aims to serve.

5. **Decentralized management:** Scale programs like Bridge, Rising and TCF have demonstrated the ability to operate with a decentralized management approach. **Bridge** has a dedicated team of support staff who visit schools to ensure that teachers in schools are teaching well. At the same time, they also use these visits to engage with, and coach teachers and troubleshoot as needed. **Rising** has a team of School Performance Managers who oversee seven to eight schools each and track their performance by collecting necessary information and feedback. The managers deal primarily with the principals and master teachers, who in turn are answerable for the performance of individual school teachers. **TCF** has a decentralized management structure with an Area Manager, principal, teachers and a central design team that coordinates with its immediate counterpart to implement successful training as well as other program features.

Conclusion

Whether it is improving access to education, improving affordability, driving innovation, training educators, implementing a system of accountability, or partnering with the public sector to improve the educational system, non-state actors are addressing challenges in education. Engaging them is likely critical to the future of education; as one observer notes: "Collaborative efforts by multiple stakeholders are increasingly fundamental to develop more focused, innovative and integrated strategies in order to fulfill the Education 2030 Agenda [part of the Sustainable Development Goals]."[145] The case studies assessed for this report illustrate the diversity of contributions and innovations by private sector actors to public goods. The next chapter explores how they can be encouraged to contribute more, with a focus on the role of foundations and donors.

4. The potential role for foundations and donors

Given the global challenges in education, the growth of privately-run schools, and their potential to make positive contributions to wider education systems and practices, there is scope to consider how privately-run schools can play a greater role in creating public goods. Global foundations, impact investors, and donors — including private philanthropists, aid agencies, foundations, and others — can play a role in supporting the development and dissemination of public goods by privately-run schools. In what follows, we explore the barriers to private sector contributions and the potential interventions that can surmount these barriers.

Barriers to private sector contribution

Key barriers limiting privately-run schools' contribution to public goods were identified based on 42 interviews with education sector participants such as school leaders, education experts, foundation leaders, and investment professionals. (see Figure 23). The barriers are explored in what follows.

"Many private schools whether rightly or wrongly distrust immensely the government sector and so are reluctant to share basic information with government like test scores."
    — Norman LaRocque, Principal Education Specialist, Asian Development Bank

Figure 23
Key barriers for privately-run schools to contribute to public goods

Incidence of mentions in interviews (%)

1. **Lack of available resources or financial incentives:** Funding is a key challenge as costs associated with the creation of public goods often deter privately-run schools from providing them. The goal to remain financially sustainable and to focus on impact can often be conflicting for privately-run schools. The lack of sustainable resources (i.e. guaranteed ongoing funding) also presents a constraint on growth and scalability. This is particularly true in resource-poor environments or for low-fee schools that operate on low margins. These schools may not be able to generate enough revenue or margins to support viability while also investing in public goods. For example, a privately-run school operator will not plan to dedicate scarce staff resources to providing training for public schools or sharing curricular resources if it is already resource-limited.

"The biggest barrier is that there is no economic incentive for [privately-run schools] to create public goods. There's certainly no direct incentive and there is also not necessarily any indirect incentive."
    — Azad Oommen, Co-Founder, Global School Leaders

2. **Distrust between the public and private sector:** There is frequently a perceived or actual ideological difference and mutual distrust between the government and privately-run schools, limiting cooperation between the two sectors. Some privately-run schools distrust government and are reluctant to share information. In many contexts, privately-run school teachers lack union representation, which has brought the sector under criticism.

"There's a distrust between public and private sector. I think that the way to address that is through regular engagement before embarking in public-private partnerships, and making the terms of that engagement very clear."
    — Alina Lipcan, Senior Education Adviser, The Education Outcomes Fund for Africa and the Middle East
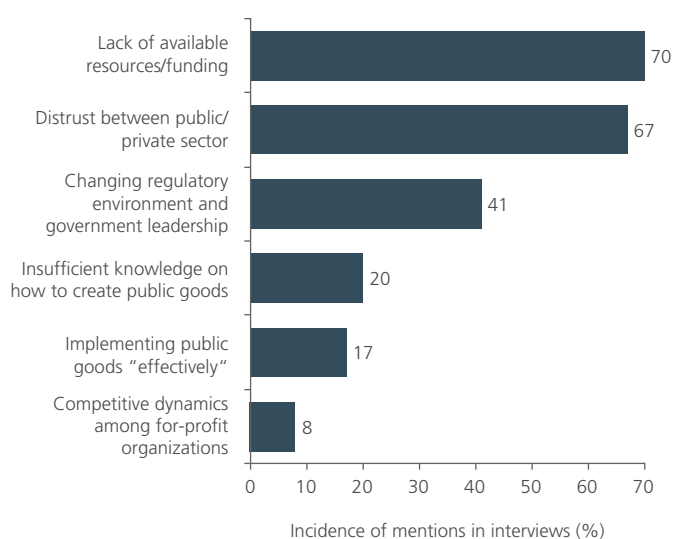
"Private players can often spend a lot of time running away from government because it is rarely seen as a partner, but rather a financial drain or a bureaucratic problem to be solved."

— Gordon Carver, Managing Director, Aboreum

3. **Changing regulatory environment and government leadership:** Schools lack resources to navigate through a dynamic regulatory environment or find their operations at risk given government policy or leadership shifts. Electoral processes mean organizations may need to build new relationships with key decision-makers every few years. Some PPP arrangements (e.g. in the case of Muktangan) are not formalized and are therefore vulnerable.

"When Governments change, political parties typically undo the good that has been done by their predecessors. They consider the work done as more of a threat than an aid to their own development agenda. This cycle repeats itself every 4-5 years preventing development and growth of the system."

— Amitav Virmani, CEO, The Education Alliance

4. **Insufficient knowledge on how to create public goods:** Local "mom and pop" schools, which comprise the vast majority of the sector, may have the intention but not the scale or resources to think about or deliver public goods. Organizations often lack the knowledge or expertise to scale a public good or deliver it effectively. There is limited available evidence on what works in school settings in low-income contexts and still less that is translated to mainstream use.

5. **Implementing public goods "effectively":** There is a need to deliver public goods effectively as it is not sufficient to just offer the public good (as incorrect implementation may yield no net impact). Additionally, as an intervention is scaled or replicated, quality may deteriorate. For example, simply making a complete secondary school curriculum open source will not generate sufficient impact unless there is broader support on how schools can effectively use or implement the curriculum.

6. **Competitive dynamics among for-profit organizations:** For-profit organizations are sometimes hesitant about sharing intellectual property openly as they are concerned a competitor may use it to their advantage.

Key opportunities for funders to surmount barriers

Expert insights and case studies reveal that donors have four key levers for surmounting these barriers and encouraging privately-run schools to deliver public goods (see Figure 24). Discussions with more than 40 global education experts revealed the following four themes.

Figure 24
Key levers for donors to encourage privately-run schools to deliver public goods

| Policy and advocacy | Research, knowledge sharing & showcasing best practices | Networks development | Funding & incentivizing the creation of public goods |
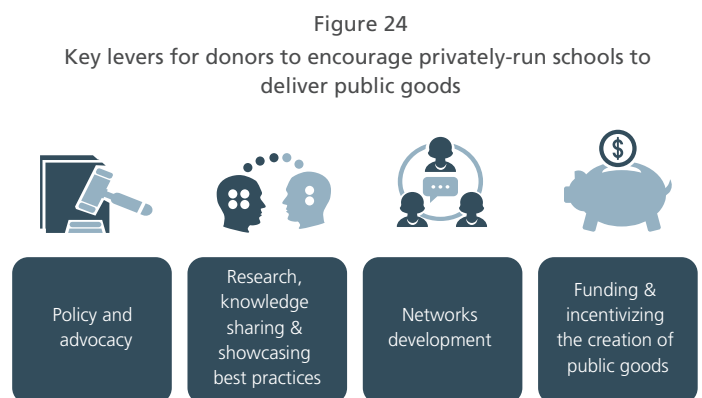
Policy and advocacy

Incidence of mentions in interviews: 60%

As neutral brokers, funders may bridge the divide between state and non-state actors through lobbying, dialogue, and supporting policy development. This can support the development of effective systems for managing and supporting privately-run schools, particularly in contexts where the state may have limited knowledge or resources and where private sector engagement, regulation, and quality assurance require improvement.

"We need to move away from a didactic public versus private debate, and think more progressively about how the private sector can enable wider public system change. Private foundations can support the deepening of this narrative."

— Aashti Zaidi, Founding Director, Global Schools Forum

"Donors could play a role in trying to engage in lobbying and dialogue with governments about the contribution that the non-state actors can take and way they think about education more generally. Helping to build the case for and get funds for PPPs could be another contribution."

  — Industry expert

Options for foundations

- **Lobbying and dialogue:** Foundations can advocate for the role of the private sector with government or provide a platform for private actors to interact with policymakers, such as implementing public-private working groups. Given the oft-cited atmosphere of distrust between privately-run schools and government, forums that bridge this gap are important.

- **Supporting the development and implementation of quality assurance systems:** Many countries have ineffective systems for measuring quality and may look only at inputs and outputs (e.g. number of seats, or graduating children) without assessing outcomes. Further, many systems are not transparent for parents to support school selection or may have ineffective ways to incentivize performance by schools. Effective quality assurance systems that allow transparent and consistent measurement of school outcomes across the public and private systems can incentivize all schools to improve performance and help to highlight where privately-run schools may have lessons to share or could improve.

"There is the option of using 'report cards'. The idea being that within a competitive system, you can see better which schools are performing at what level, and parents are able to send their kids to whichever school they want. By appropriately regulating and designing such a system, issues around education quality, price, and social equity could be better addressed. But if this is not done well, it can also backfire at a system level, as Sweden found."

  — Vineet Bewtra, Alfege Advisory

- **Supporting the development of regulatory and PPP frameworks:** Foundations can leverage global research and best practice to advise governments and support the implementation of effective frameworks for regulating and engaging the private sector to support the delivery of public goods across the value chain, from full delivery to different services.

"Regulatory environments are often not conducive to participation by the private sector… The lack of common regulatory environments for systems is a barrier and many education ministers have a department or office for private schools because it is often considered separate rather than part of the integrated system. That is a limitation. I would imagine for private providers the lack of clarity in regulation is the biggest turn off into getting into a particular market."

  — Harry Anthony Patrinos, Education Practice Manager, World Bank Group

Research, knowledge sharing and showcasing best practices

Incidence of mentions in interviews: 70%

Funders can identify, showcase, and reward best practices and innovations to incentivize the delivery of public goods. They may also share actionable toolkits for school operators or develop research to drive wider sectoral understanding. They can play a role in monitoring and evaluating programs, raising standards for evidence (including through funding randomized controlled trials and systematic reviews) and publishing results (both positive and negative).

"[Donors can] act as an aggregator for innovations that the sector has seen, taking those ideas and making them available publicly."

  — Azad Oommen, Co-Founder, Global School Leaders

Options for foundations

- **Showcasing best practice:** Funders can recognize and showcase approaches that have been successful in creating impact and can serve as an example for others to follow, e.g. through online repositories, reports, blog posts, and case studies. Awards/prizes are also effective in highlighting good practice. This recognition supports the dissemination of best practices and may support worthy organizations to attract the resources they need to scale.

- **Monitoring and evaluation:** Funders can provide assessment services to evaluate the efficacy of projects and help guide funding to the most promising interventions, as well as highlighting what has not worked. Quality of monitoring and evaluation in the education sector is variable and many evaluations focus on outputs rather than outcomes. Funders can support improvements in standards of evaluation that can help to assess what really works and how to support the best possible outcomes and efficiency.

"My view is we need more evidence and to disseminate evidence of what works and doesn't work and make decisions based on information."
— *Harry Anthony Patrinos, Education Practice Manager, World Bank Group*

- **Research to drive sector understanding:** Funders may fund or internally develop research that supports greater knowledge of key education issues and assesses the effectiveness of different interventions and approaches. A key area for intervention is in raising standards for evidence and funding research on what works, particularly in low-income settings, for example, through funding randomized controlled trials, commissioning systematic reviews, and developing evidence gap maps.

- **Actionable toolkits for school operators:** The vast majority of the world's privately-run schools are single-site, "mom and pop" organizations with limited resources or capability to engage with research on what works. Funders can support the adoption of improved practices by merging learning from different models and developing actionable toolkits to support operators.

"I am very supportive of increasing the rigor of academic research, especially if we can make the research relevant for operators, for example, in the form of bite-sized, digestible toolkits and resources that are research-based and implementable by school operators."
— *Aashti Zaidi, Founding Director, Global Schools Forum*

Organizations involved in research, knowledge sharing, and sharing of best practices

- **World Innovation Summit in Education (WISE) Awards:** Qatar Foundation has been running the WISE Awards for the last 10 years. The Awards are one of the most coveted prizes in the sector and help shine a light on innovative practices globally. Each year, WISE funds 12-15 projects in education (both for-profit and non-profit) with small grants (USD 20K) and a global platform and network. The Awards help to showcase effective and emerging practice.

- **Central Square Foundation (CSF):** CSF, based in India, supports and undertakes extensive research to generate insights on educational challenges. It also works in assessing models that work and then helps them to scale through an array of partnerships and programs. For instance, in its partnership with the Bill & Melinda Gates Foundation, CSF has been provided a grant to invest in research and evidence collection to identify tools and approaches to improve student learning outcomes for early childhood education.

- **Center for Education Innovation (CEI):** Run by the international non-profit Results for Development, CEI aims to fill the gap in understanding of the best education practices to help improve access to quality education. It has a database of over 700 education innovations around the world and a directory of potential funders with their areas of interest and funding priorities. Results for Development have more than 50 donors which support its activities.

Networks development

Incidence of mentions in interviews: 20%

Interviewees cited the importance of having places where private sector schools and stakeholders (including communities, think tanks, governments, and other education actors) can come together for collaboration and knowledge sharing. Since most of the K-12 sector is fragmented and not in school chains, solutions need to reflect this through the building of robust support systems for the schooling ecosystem. Networks development can come in the form of funding existing networks or convening new groups, either virtually or in person. These networks may have a role in researching and scaling public goods and in the development and transmission of a solution and best practices.

"Providing networks to help motivate and share resources is something that has a lot of potential."
— *Donny Baum, Research Fellow — Global Education Monitoring Report, UNESCO; Assistant Professor, Brigham Young University*

Options for foundations

- **Networks and knowledge sharing ecosystems:** Funders can play a role in convening actors through supporting existing networks or creating new ones, for example of privately-run school operators in particular regions. Conferences are a key part of network support. Networks also have a role in developing research related to members' work or in implementing new ideas.

- **Convening other funders and investors to develop shared investing approaches:** Consortia of funders are powerful in creating shared accountability and bringing a number of funders to a solution, including funding different parts of an intervention. Donor networks are crucial as donors can share research and their grant philosophies with each other, saving on individual research every organization would need before they go about contributing. Additionally, donor networks can raise funds to levels that can support much larger programs and can connect their grantees with each other.

"To improve standards in the private sector, donors and investors should examine how the single-school market is currently functioning: how are models and best practices shared and spread? Where are proprietors going for resources, investment, information on safeguarding practice and educational inputs? How much heterogeneity is there in the sector in different contexts? Are private schools increasing socio-economic segregation? By rigorously studying these dynamics, it might be possible to improve the sector as a whole. There currently seems to be inadequate effort and resource from donors and investors in really understanding how to engage with this market and that needs to change."
— *Susannah Hares, Senior Fellow and Global Education Co-Director, Center for Global*

Organizations involved in networks development

- **Bill & Melinda Gates Foundation:** The Networks for School Improvement program invests in partnerships between networks of schools and school support organizations that work together to solve common problems by using evidence-based interventions that best fit their needs. Each of the networks uses data to identify a problem, select a strategy to address the problem, set a target for improvement, and iterate to make the approach more effective and improve student achievement.

- **Global Schools Forum:** Global Schools Forum brings together non-state school operators and educational organizations to share and promote best practices and to facilitate a more supportive policy and funding environment. The organization focuses on four core activities: networks and collaboration, expertise and knowledge, shaping and influencing global dialogue, and using and generating data and evidence.

- **Building Equity Initiative:** A Walton Family Initiative, the program has developed a large network of real estate experts, lenders, financiers and technical assistance providers to make resources available to help public charter schools when financing and securing facilities.

Funding and incentivizing the creation of public goods

Incidence of mentions in interviews: 60%

Donor support can fuel the creation and dissemination of innovation by private sector schools. Funding in the form of grants, challenge prizes, loans, outcomes-based funding, and other approaches can support privately-run schools to generate public goods by providing them with the financial security and incentives to innovate. Key ideas noted by interviewees are detailed below:

Options for foundations

1. **Incentivizing inclusiveness (i.e. reaching the unreached):** Funders have an important role in supporting privately-run schools to focus on equity and make education systems more inclusive of all children. Many harder-to-reach populations remain underserved by privately-run schools, and funders can help to widen access through earmarked funds.

"We need private provisions that operate effectively but allows access for more marginalized populations to participate… like children with disabilities and lower income... It is the more marginalized groups who are often left out."
> — *Donny Baum, Research Fellow - Global Education Monitoring Report, UNESCO; Assistant Professor, Brigham Young University*

2. **Incentivizing distribution, growth, or scaling:** Donor support can enable the best ideas to grow, whether that is through embedding approaches within public education systems or supporting strong private sector solutions to scale. Another approach could be buying effective private IP and making it open source.

3. **Incentivizing small schools to create public goods:** Small schools, which dominate the landscape and serve the poorest children in this fragmented sector, typically have the most significant challenges in creating public goods, given that they have neither the financial resources nor, typically, the access to information that would enable them to be positive change agents. Foundations can focus on how to support small schools to test and share innovations.

4. **Incentivizing knowledge sharing:** Foundations can incentivize private players to share information that can potentially help generate public goods.

Guidelines when seeking to support privately-run schools

When seeking to support privately-run schools to create public goods, there are several key guidelines for funders to maximize impact. Education sector experts consulted for this study emphasized these key guidelines.

"Public goods in this space are woefully lacking and this is an important role for donors and investors to take on. For example, establishing a fund for research in the private sector; or a fund that supports innovation and learning in the small-scale private sector would be very useful. It is less useful for global foundations to "pick winners" by investing in internationally-owned school chains, which are unlikely to ever reach large numbers of children. Instead, thinking carefully about how to reach the many, many more children enrolled in the single-school sector is likely to deliver far more impact."
> — *Susannah Hares, Senior Fellow and Global Education Co-Director, Center for Global Development*

1. **Look for catalytic opportunities to donate and aligning with government priorities:** Foundations should identify opportunities that partner with rather than replace the government. To do so effectively, foundations must understand government priorities and identify roles they can have among those. By maintaining a strong relationship with the public sector and playing a complementary role to public K-12 provision, organizations can have greater impact and scale and avoid duplicative efforts already taken by the government. Many of the experts consulted for this study noted that K-12 education is rightly a public sector responsibility and that the private sector should supplement this.

> *"For there to be true public goods and for it to be really scaled, there has to be partnership with government, and to do that effectively means really understanding government priorities and where you can fit in."*
> — *Allison Rohner Lawshe, Chief Program Officer, IDP Foundation*

2. **Consider implementation (and potential challenges) within the public system:** Interventions should be piloted and tested so that they are aligned to public systems. Organizations should also consider the intervention's financial viability and what the role of specific governmental agencies should be in the intervention. In considering how the intervention can be organized around the public system and the budget required for the new capacity, organizations can streamline the implementation and scaling process.

> *"Whatever you pilot and test should be aligned to public systems. But we need to think what would it actually mean for government to take something on and scale it up… Not only to think of the financial viability from the get-go but also to think of what are the elements within that particular ministry… What does it mean in terms of how they are organized, what is their budget required in the ministry to absorb new capacity?"*
> — *Annina Mattsson, Director of Program, Dubai Cares*

3. **Prepare for the long haul and consider sustainability:** Foundations should expect that change will take time. Quick wins can come at the expense of long-term sustainability. To ensure continuity of public goods, donors and funders should consider developing exit plans from what they fund such that partner organizations can become self-sustaining.

> *"If you're an NGO or foundation, you need to have patience and perseverance before you can expect to see change… change takes time. This system is large, and extremely complicated. You will see quick wins but don't expect the system to absorb and sustain those quick wins in a short period of time."*
> — *Amitav Virmani, CEO, The Education Alliance*

Conclusion

Lack of funding continues to be a key barrier for privately-run schools' contribution to public goods as is a distrust between the public and private sectors and a challenging regulatory environment. However, donors have a unique role to play to support privately-run schools to overcome these barriers. Funders and donors' specific strengths in supporting and catalyzing innovation and in showcasing good practice can help lift the standards of the private sector and will encourage more and better engagement by privately-run schools in improving education sector outcomes for more children.

Looking ahead

As this study reveals, privately-run schools are an important and growing part of the global education landscape, serving an estimated 25% of children currently and growing at 3%, versus 1% enrollment growth in the public sector. However, in certain contexts privately-run schools have neither the accountability to the public that state schools do, nor the obligation to provide equitable access, and there are well-founded concerns about what their participation in the education sector means for achieving Sustainable Development Goal 4: Quality Education.

What this study establishes is that privately-run schools can and do make a positive contribution to public goods — in some cases with quality and equity that are an improvement over public sector outcomes. The study showcases in detail eight-strong examples of privately-run schools contributing to solving a range of education challenges.

The key ingredient making it possible for these schools to contribute to producing public goods in many cases is the willing participation and consistent partnership between the public and private sectors. In most of the case examples assessed, the public sector is either a tacit or, more often, an explicit partner in the schools' activity.

Looking ahead, it is this government engagement, often at the local and municipal level, that is most critical to harnessing the potential of the private sector. There are three key areas for attention:

- First is a supportive regulatory environment that provides the right checks on private sector schools while enabling them to operate with an appropriate level of independence and entrepreneurialism. As noted in Chapter 4, distrust between the public and private sector is a barrier to the creation.

of public goods, and a consistently applied regulatory framework is an important part of addressing this barrier. This regulatory framework should be independent of individual policymakers' support or objections and outlast different policy regimes.

- Second, and often related, is an effective quality assurance regime that enables the government to assess privately-run school performance and provide the appropriate incentives for high performance and consequences for poor performance. In some contexts, fee regulation may also be appropriate. Transparent and public reporting of quality assurance provides parents with information to support school choice and incentivizes improvement.

- Third, public-private partnership frameworks are an important enabler of privately-run schools contributing to public goods, as they provide clear incentives for contributing to government objectives and often set clear targets for delivery. They also can be platforms for more significant funding, for example, through leveraging donor funds (as the LEAP PPP in Liberia has done). Outcomes-based funding may have a role to play, potentially through models like social and development impact bonds.

Addressing the world's most stubborn education challenges must be a shared project of the private and public sectors of education — all stakeholders are needed at the table. The opportunity — and the challenge — before us is then to incentivize and channel the innovation potential and nimbleness of privately-run schools while ensuring they contribute in the fullest way to broader education objectives. Bridging the gap between the public sector and privately-run schools is a critical place to start.

Acknowledgments

The study would not have been possible without the thoughtful contributions of case study organizations and individuals with expertise in global education. A full list of interviewees[146] for this study includes:

Interviewee	Designation	Company
Aashti Zaidi	Founding Director	Global Schools Forum
Adam Nichols	Founder & Chief Executive	Scholé
Alina Lipcan	Senior Education Adviser	The Education Outcomes Fund for Africa and the Middle East
Allison Rohner Lawshe	Chief Program Officer	IDP Foundation
Amitav Virmani	CEO	The Education Alliance
Annina Mattsson	Director of Program	Dubai Cares
Azad Oommen	Co-Founder	Global School Leaders
Chris Edwards	Former Head of College	United World Colleges Southeast Asia
Claudio Sassaki	CEO	Geekie
Donny Baum	Research Fellow — Global Education Monitoring Report, Assistant Professor, Brigham Young University	UNESCO and Brigham Young University
Gabriel Sanchez Zinny	Former Director General of Culture & Education	Province of Buenos Aires
Gordon Carver	Managing Director	Aboreum
Harry Anthony Patrinos	Education Practice Manager	World Bank Group
John Rendel	Founder	PEAS
Jonathan Simons	Director of Education	Public First
Laura Brown	CEO	PEAS
Leslie Medema	Head of Academics	Green School
Maina Sahi	Director Strategy, Health & Education, Africa & South Asia	CDC Group
Norman LaRocque	Principal Education Specialist	Asian Development Bank
Owen Henkel	Investment Director	Pearson Ventures
Shikha Goyal	Director of Investments	Omidyar Network
Shobhini Mukerji	Executive Director	J-PAL South Asia
Susannah Hares	Senior Fellow and Global Education Co-Director	Center for Global Development
Vineet Bewtra	Private Advisor	Alfege Advisory

Annex 1: Detailed case studies

Table 3
Case studies

Organization	Geography
Alianza Educativa	Colombia
Bridge International Academies (Program: EdoBEST)	Nigeria
EducAid (Program: QEP4E)	Sierra Leone
Eton College's Tony Little Centre for Innovation and Research in Learning	U.K.
KIPP (Program: KLDF)	U.S.
Muktangan	India
Rising Academy Network	Liberia
The Citizens Foundation (TCF)	Pakistan

Alianza Educativa — Concession Schools[147]

Overview

Alianza Educativa ("Educational Alliance") is a non-profit school operator based in Bogotá, Colombia founded and run by three top-tier private K-12 schools and a private university. In a PPP with the Bogotá Secretary of Education, Alianza runs seven public schools in low-income, under-resourced areas and is expected to grow to 11 schools by 2020. Alianza is unique from other PPP providers because it was formed and continues to be a collaborative effort between multiple high-performing private schools. Alianza has also partnered with the Ministry of Education to share some of the organization's best practices with teachers from underperforming primary schools throughout the country.

Year(s) active: 2001-present

Public good created: Whole-school delivery

Key driver for public good: Public-private partnership

School ownership: Government schools and Alianza teachers/staff

Challenge

The Colombian education system provides unequal access to quality schooling which impacts opportunities later in life.

Policies to make attendance affordable and expand provision through flexible models have already increased gross enrollment but the current capacity of the system is insufficient to accommodate full enrollment. As the World Bank notes, over-enrollment will continue to be a challenge in the coming years alongside a forecasted growth in the population.

A wide portion of the population in rural Colombia continues to migrate to urban areas like Bogotá to escape ongoing turmoil and secure more economic opportunities. There is an undersupply of quality education, particularly in low-income areas in Bogotá.

Scale of impact

The five Alianza schools cater to over 6,500 students annually. With the addition to two new schools, Alianza caters to about 8,000 students as of 2019 with nearly 500 students graduating each year.

The Pioneros Programa Todos a Aprender teacher training program targeted 645 public schools in 22 territorial entities between 2015 and 2017.

Key external stakeholders

1. **Secretariat of Education of Bogotá (SED)** — SED's platform for concession schools allowed non-profits like Alianza Educativa to form and deliver public goods.

2. **Founding private schools and university** — Alianza was formed by three top tier private schools in the Bogotá area — Los Nogales School, San Carlos School and Nueva Granada School (replaced by Gimanasio La Montaña in 2016) — and a premier private university in Colombia, La Universidad de Los Andes. The founding members provide best practices, leadership and resources to Alianza.

Summary

Situation

In 1999, the Secretariat of Education of Bogotá (SED) decided to implement a program called "Concession Schools" to combat the problem of access to formal schooling for the poor and improve the quality of education being delivered in the public school system.

Concession schools target the poorest segment of people who often do not have access to a quality school or education in general. These schools are usually located in the lowest income areas of the city or in areas where demand for education exceeds the supply of public school seats available.

Action

In 2001, three top tier private schools in the Bogotá area — Los Nogales School, San Carlos School and Nueva Granada School (replaced by Gimanasio La Montaña in 2016) — came together with a premier private university in Colombia, La Universidad de Los Andes, to form Alianza Educativa.

Alianza was granted the management of five schools in 2001 until 2014. The contracts were first renewed for 2 years (until 2016) and were then renewed for another 10 years (until 2026). Alianza's schools use the government infrastructure and are allowed to hire their own administrative and teaching staff as well as implement their own pedagogy.

Alianza partnered with the Ministry of Education in a scheme called Pioneros Programa Todos a Aprender (PTA) to share some of Alianza's best practices with teachers from underperforming primary schools throughout the country. Alianza's goal was to share and transfer best practices to enhance teaching practices in the classroom, improving student learning. Teachers received on-site training sessions to strengthen disciplinary and pedagogical knowledge and strategies to track student learning processes.

Impact

All schools run by Alianza rank in the top 10% in the district with three of them in the top four in the state out of approximately 400 schools. Only five students out of 6250 (0.08%) dropped out of schools in the Alianza network in the academic year 2018, compared to a dropout rate of 1.6% and 3.08% for the city and the country, respectively.

Bullying affected just 0.52% of the student population as compared to national averages of 36% (reported at grade five level).

The 16 instructors trained 500 tutors, who in turn trained over 6,000 teachers, reaching over 370,000 students. As a result, the percentage of students in advanced and satisfactory achievement levels increased, while the percentage of students in minimum and unsatisfactory levels dropped at a faster rate than non-targeted schools.

Key lessons

Alianza Educativa demonstrates the ability of multiple private schools to partner with one another to create and deliver public goods. Alianza has become a gateway for its founding member schools to share and disseminate their best practices and effective pedagogy/curricula to the public sector.

Alianza's success has been driven by continued financial support from the government, dedicated leadership from its founding member schools, and comprehensive programs that develop the student holistically, not just academically.

Situation

Description of entity

In 2001, three top tier private schools in the Bogotá area — Los Nogales School, San Carlos School and Colegio Nueva Granada (replaced by Gimnasio La Montaña in 2016) — came together with a premier private university in Colombia, La Universidad de Los Andes, to form Alianza Educativa. This "alliance" created by four private school institutions aimed to improve public provision and could only do so in Colombia by establishing itself as a non-profit organization.

Alianza competed in a public bid for the Concession School Program in Bogotá and was granted sole management of five schools, namely Jaime Garzón School, Miravalle School, Algeria School, La Giralda School and Santiago de las Atalayas School. Alianza continues to run these five institutions in addition to two additional schools as of 2019.

"…This was a group of educational institutions with very, very, good results in the private sector of education. We were invited to a public bid by the city mayor who was very much interested in trying to bring together both the public education sector with the private education sector, thinking that the private experience could help public education. The mayor wanted us to participate in the public bid. One of the requirements was we had to be not-for-profit and we had to be able to show excellent results as a private institution. We participated in the bid, won, got 5 public schools …"
— *Luisa Pizano, Co-Founder, Alianza Educatica*

Key challenge or situation

Colombia experienced an educational crisis in the 1990s with a lack of equal access to quality education. Enrollment in grade school by those in the lowest 20% (by income) was 55% compared to a national average of 75% and an average of 89% among the highest 20%. The Colombian education system provides unequal access to quality schooling which impacts opportunities later in life.[148]

Policies to make attendance affordable and expand provision through flexible models have already increased gross enrollment but the current capacity of the system is insufficient to accommodate full enrollment. As the World Bank notes, over-enrollment will continue to be a challenge in the coming years alongside a forecasted growth in the population.[149]

A wide portion of the population in rural Colombia continues to migrate to urban areas like Bogotá to escape ongoing turmoil and secure more economic opportunities. The result has been a population explosion in cities through Colombia. Subsequently, some school-age youth are out of formal education either due to the unavailability of seats in schools or lack of funding on support programs. The undersupply of quality education continues to persist, particularly in low-income areas in Bogotá. The strain on supply has been further exacerbated by a population boom from Venezuelan migrants relocating to Colombia.[150]

Enabling environment

In 1999, the Secretariat of Education of Bogotá (SED) decided to implement a program called "Concession Schools" to combat the problem of access to formal schooling for the poor and improve the quality of education being delivered in the public school system. Private players were called in to provide education in 25 new concession schools across the city for a 15-year period. The infrastructure was also provided by the government. This initiative was strongly backed by the city mayor, Enrique Peñalosa Londoño (who re-elected in 2015).[151]

Concession schools target the poorest segment of people who often do not have access to a quality school or education in general. These schools are usually located in the lowest income areas of the city or in areas where demand for education exceeds the supply of public school seats available. SED established 25 new concession schools in Bogotá in 1999, which expanded in 2018 to 35 schools. The schools allotted to Alianza are primarily located in the most marginalized parts of the city where the majority of the population lives below the poverty line. In these areas, over 70% of students were found to not meet the standards in Spanish and Math.

The initiative taken by the leaders from the founding schools enabled Alianza to form and operate relatively quickly. The senior management at the elite private institutions decided to come together to share best practices and had a clear vision to influence public provision. The university shared its understanding and research on pedagogical practices and the schools contributed their curriculum and classroom management design.[152]

Action

Description of solution developed

Alianza was granted the management of five schools in 2001 until 2014. The contract was first renewed for 2 years (until 2016) and then for another 10 years (until 2026). Alianza's role in running the five schools within the concession school system has three pillars:

1. **School management:** Alianza's schools cater to around 1,200 students each and offer grades Kindergarten through 11. Alianza runs only one session per day and operates from 7 am to 2:30 pm. Their schools run on a low budget of USD 800 per child annually which is lower than that of public schools. Part of the challenge given by the government is to "deliver quality education at lower cost". Concession school operators use the government infrastructure and are allowed to hire their own administrative and teaching staff as well as implement their own pedagogy. Concession schools

including Alianza schools tend to hire non-union staff with much lower salaries and longer work hours.[153]

2. **Pedagogy and teacher training:** The nearly 300 teachers working for Alianza have over 130 hours of training scheduled in a year, of which nearly 40 hours are on pedagogical training and 35 hours are on curriculum training. Trainers, who are generally ex-Alianza teachers, are brought in specifically to administer each module and conduct on-field observations. Each teacher receives an individual development plan. One key differentiator of this training is that teachers are held accountable for incorporating changes and making improvements to their teaching practice after the training. Experts from the founding schools (Los Nogales, San Carlos and La Montaña) are also brought in to conduct basic professional development sessions along with sessions on "Teaching for Understanding", a pedagogical framework designed at Harvard University.[154]

3. **Curriculum:** In Colombia, there is no standard core curriculum. Schools have autonomy and the school principal often decides the curriculum to be followed. Colombia has a framework to aid the design of a curriculum with a suggested structure, but each school is free to make its own changes. Alianza has experts who are part of committees overseeing the design of and adjustments to the national curriculum. They meet regularly to decide textbooks and pedagogical models to be followed. Best practices from the founding schools of Alianza are collated and are adapted to the public schools along with some proprietary innovations designed by Alianza.[155]

Key features

School management

The Center of Education and Pedagogy (CEP) governs all matters related to the training of Alianza staff and teachers. CEP oversees three weeks of teacher training each year and works on developing teacher capabilities in communication skills, disciplinary skills, professional and personal development of students, pedagogy/didactics, and current issues in education. Various other internal teacher training workshops are held throughout the year and are developed according to the needs of teachers.

Pedagogy and teacher training

In 2017, Alianza partnered with the Ministry of Education to share some of Alianza's best practices with teachers from underperforming primary schools throughout the country in a program called Pioneros Programa Todos a Aprender (i.e.

"**Pioneers Program for All to Learn**"). Alianza's goal was to share and transfer best practices to enhance teaching practices in the classroom, improving student learning. Teachers received on-site training sessions to strengthen disciplinary and pedagogical knowledge and strategies to track student learning processes. In order to reach the different regions, 16 instructors worked with local trainers across regions. The local trainers then deliver the best practices to the teachers in the target schools. Pioneros PTA targeted 645 public schools in 22 territorial entities across the country between 2015 and 2017. The 16 instructors trained 500 tutors, who in turn trained over 6,000 teachers, reaching over 370,000 students.[156]

Curriculum

Alianza has several programs and features centered around a holistic and supportive curriculum tailored to the demographic they service. **Navegar Seguro** (i.e. "Safe Sailing") is a program Alianza started 18 years ago when many students were frequently confronted by challenges in their own community — drugs, violence, crime and teenage pregnancy. Navegar Seguro was specifically designed and implemented in 2002 to address five fundamental topics: development of socio-emotional abilities of students, conflict resolution, construction of a "life project", education on sexuality and prevention of teenage pregnancy, and prevention of consumption of psychoactive substances. The program has been modified to respond to the problems that students are facing today, with the addition of the life project to tackle suicidal tendencies. The students have an hour-long session every week of the academic year to support them in better decision-making. The program has been shared with public schools in regions like Cajicá and Boyacá. Alianza is currently working together with the World Bank and other NGOs to renew the program so that other schools in Bogotá and the country can use it.[157]

A second program, **Superaula**, brings in the best practices from the founding schools to address the problems that students with learning difficulties face — retention and basic learning skills. Alianza believes if these problems are not addressed at the first sign of symptoms, these students may be potentially left behind. Alianza set up a team of therapists and psychologists that work directly with students at the onset. In kindergarten and first grade, when a teacher notices a student with a learning disability, the student is matched with a special education tutor who spends 40-80 hours a year to close the learning gap. Alianza has recently partnered with the Department of Education and Fundación Saldarriaga Concha to train teachers on inclusive education. Superaula reached 587 students with learning difficulties and 48 students with disabilities in 2018.[158]

In another program called **Aprendamos Todos** a Leer (i.e. "Let's All Learn to Read"), Alianza uses the Early Grade Reading Assessment (EGRA) to determine the students' level and designs the intervention using the Inter-American Development Bank (IADB)'s remedial literacy material. In 2018, Aprendamos Todos a Leer reached a total of 1,177 students (the whole student population in Grades 0 and 1 in Alianza's schools).[159]

Lastly, Alianza adopted in its early years a curriculum centered around civic and democratic competencies. This curriculum aims to instill and strengthen the moral compasses of children in conflict-torn environments, helping them to separate right from wrong and to avoid bad decisions of drugs/violence. The same curriculum was soon used by the Colombian Ministry of Education to set national standards and is still in use today countrywide.[160]

Resources required

While Alianza aims to run a low-cost model using only the budget given by the government, additional funding is needed to run some of Alianza's programs. Fundraising helps Alianza bring in an additional USD 100 per pupil annually. Also, Alianza schools occasionally receive in-kind donations from founding schools such as classroom equipment and projectors.

Impact

Results

- **Scale:** The five Alianza schools cater to over 6,500 students annually. With the addition to two new schools, Alianza caters to about 8,000 students as of 2019 with nearly 500 students graduating each year.[161]

- **Standardized examinations:** Over the past ten years, Alianza has consistently achieved standardized test results above the national and city averages. In 2017, the average scores (out of a maximum of 300 points) for the "Pruebas Saber 11" standardized Grade 11 exam in Alianza schools was 285. In comparison, the average in Bogotá and across Colombia was 276 and 258, respectively.[162]

- **Dropout rates:** Alianza achieved a dropout rate of 0.08% in 2018, much lower than the city average of 1.62% and a country average of 3.72%. This attrition was only concentrated on two schools, La Giralda and Atalayas.[163]

- **Teenage pregnancies:** Alianza had a total of six cases of teenage pregnancy (0.19%) out of all students between grades six and eleven, a 54% reduction as compared to 2015.[164]

- **Bullying:** There were a total of 34 cases of bullying (0.52% of the student population) as compared to national averages of 36% (reported at grade five level).[165]

- **Higher education:** Additionally, 62% of Alianza's alumni went on to pursue the higher education field as compared to a national average of 38% and Bogotá's average of 48.3%.[166]

Challenges or obstacles

- **Funding:** A majority of funding that Alianza receives comes directly from the government in the form of a per-student subsidy, which it uses to fund its projects in addition to its schools. The funding that the government gives to Alianza schools is lower than that which public schools receive. As a result, funding to scale projects like teacher training, Navegar Seguro, and Superaula remains a challenge and is dependent on fundraising support.

- **Teacher turnover:** Teachers in concession schools have higher workloads and receive lower pay than teachers in government schools. Also, government school teachers have more job security through tenure, which Alianza school teachers do not receive. Hence, the attrition rate of Alianza's teachers is high.[167]

- **Resistance from teacher unions:** Teacher unions are opposed to the idea of concession schools due to differences in workload and deliverables compared to public school systems. They believe that their job comes into jeopardy given expansion of the concession school network and hence are generally opposed to non-profits running concession schools.[168]

Growth plans

Alianza participated in another bid conducted by the S.E.D. and has been awarded oversight of six new concession schools by 2020. By the end of 2019, Alianza will have assumed management of two of the schools and will start to manage another four by January 2020. Alianza is set to grow from 6,500 students to 11,000 students during that time. In the future, Alianza is looking to grow to other cities in Colombia and to partner with other organizations to replicate their model throughout the country.

Recognition or awards received

For the fourth consecutive year, Alianza schools achieved top rankings by the Secretary of Education of Bogotá. Three of Alianza's schools (Colegio Argelia, Colegio Jaime Garzon, and Colegio Santiago de Las Atalyas) are in the top four of more than 340 public schools in Bogotá. The rankings are based on standardized test scores (Saber tests), school performance indices, school approval rates, a school climate index, and a school citizenship index.[169]

Key lessons

Alianza Educativa demonstrates the ability for multiple private schools to partner with one another to create and deliver public goods. Alianza is unique from other PPP school networks around the world in that it was formed as and continues to be a collaborative effort between multiple high-performing private schools.

Alianza has become a gateway for its founding member schools to share and disseminate their best-practices and effective pedagogy/curricula to the public sector through Alianza schools.

Alianza's success has been driven by continued financial support from the government, dedicated leaders from its founding member schools, and their comprehensive programs that develop the student holistically, not just academically.

By providing adequate financial incentives and a favorable regulatory environment, external stakeholders can further promote the creation of public goods by private school alliances like Alianza.

Bridge International Academies — EdoBEST[170]

Overview

Bridge International Academies is an educational provider and advisor operating or supporting over 1,500 nursery and primary schools across Uganda, Kenya, Nigeria, Liberia and India. In Edo State in Nigeria, Bridge is working as a technical partner of Edo State Basic Education Sector Transformation (EdoBEST), a flagship educational initiative launched by the Edo State Universal Basic Education Board (EdoSUBEB) in 2018 to transform the public education system. Bridge's role is to leverage its prior expertise in technology and teacher training to improve school accountability and learning outcomes. With Bridge's help, comprehensive technology infrastructure and teacher training have been implemented across the entire state, benefiting government teachers, students, and school management. The program is at the forefront of public system education reform in Sub-Saharan Africa; modeling how transformation can be achieved at speed and scale.

Year(s) active: 2018-present

Public good created: Technology infrastructure and teacher training

Key driver for public good: Technical partnership (EdoBEST)

School ownership: Government schools and teachers

Challenge

In Edo, 60% of the population lives below the poverty line.[171] Teacher quality was found to be a major contributor to poor student learning outcomes in Edo State. Many teachers were unable to understand the content of the curriculum, and some fell short on their content knowledge even at a primary school level. There were limited materials and resources for use in classrooms; content was not taught in a grade aligned way and corporal punishment hampered student/teacher relationships.

Additionally, there were few mechanisms for student and teacher accountability. The State Government had limited knowledge of whether teachers or students were present and day to day activity in schools was opaque. As a result, teacher absenteeism was commonplace, as was student absenteeism. Learning outcomes were extremely poor; approximately 1 in 4 Edo children aged 5-16 were illiterate and 1 in 5 innumerate.

Scale of impact

So far, EdoBEST has been implemented in 846 primary schools benefiting 270,000 students in just over one year. The teacher training program has successfully trained over 11,000 government teachers and headteachers in digital skills and core

competencies and has supported the improvement of teacher preparedness and accountability in the Edo State education system.[172]

Key external stakeholders

Godwin Obaseki is the Executive Governor of Edo State. The Edo State Universal Basic Education Board (EdoSUBEB) is chaired by Dr. Joan Oviawe.

Summary

Situation

In 2016, the Edo education board, EdoSUBEB, organized a state of education forum commissioned to identify key challenges in education in Edo state and to brainstorm potential solutions through developing a comprehensive educational strategy.

The outcome of EdoSUBEB's forum was EdoBEST, a flagship education initiative launched in 2018 that aims to transform the public education system and improve learning outcomes through five pillars of work: governance, teacher training and development, community partnerships, infrastructure, and curriculum development. Bridge was selected as a technical partner in EdoBEST.

Action

As a technical partner in EdoBEST, Bridge focuses on two core activities to improve education in Edo State: technology infrastructure and teacher training. Bridge has implemented the use of tablets for teachers and smartphones for headteachers to improve pedagogy, lesson content/structure and school oversight. The tablets create a mechanism for accountability and enable across-grade ability grouping.

New and existing teachers take part in an initial intensive training focused on classroom management, and pedagogy. Teachers are also trained on the use of technology to facilitate lesson planning and delivery as well as classroom management.

Impact

Bridge supported the success of EdoBEST through its technological infrastructure and teacher training and coaching. Together, the interventions improved school teacher quality and accountability and ultimately learning gains for children.

A study commissioned by SUBEB found that students who were attending EdoBEST schools had an accelerated learning phase where in the first two and a half months of the program, they were able to cover the equivalent of 70% of an entire year's worth of instruction in English and 65% in Math.[173]

Although the school day was extended by 45 minutes, nearly 45% of teachers at the Primary 4 level and nearly 80% at the Primary 3 level taught a full day's worth of time as compared to earlier when only 10-13% teachers were present in the class near the end of the day (1:45 pm). Student attendance increased by roughly 22% in the pilot program.[174] There were also reports of children leaving local private schools to join EdoBEST public schools.

Key lessons

Bridge in Edo State highlights the ability of a private sector organization to support the quick transformation of the delivery of education at a system-wide level in the public sector. Traditional thinking that believes public sector reform is slow, cumbersome and incremental has been shown to be out of date by the political leadership in Edo.

By first identifying key education challenges and an appropriate approach (i.e. technology and improved teacher training) to overcome those, programs like EdoBEST promote the development and delivery of public goods by allowing non-state actors to fill in gaps in the public sector. The result is a more efficient and effective use and allocation of public funds.

Situation

Description of entity

Bridge International Academies, founded in Kenya in 2007, is a data-driven social enterprise aimed at providing low-income communities with quality education. Bridge's mission is "to provide millions of children with a life-changing education" which it pursues by providing or improving education to primary and pre-primary students. Bridge adapts to the needs of individual governments and has re-engineered multiple parts of education delivery in the schools it runs or supports, including teacher training and support, lesson delivery, instructional materials, operational support and government capacity building. Since 2007, Bridge International Academies has reached over 750,000+ children across Africa and India, operating in communities living on or under USD 2 a day.[175]

Bridge International Academies is organized into three key functional areas:

1. **Teacher and student:** Bridge develops and delivers digital teacher guides, instructional materials, and teacher professional development training and coaching schemes.

2. **School:** Bridge provides the content, management, evaluation and improvement of independent or state pre-primary and primary schools and offers education technologies along with operational support.

3. **Government and system support:** Bridge offers education consultancy to governments, runs government schools through Public-Private Partnerships (PPPs), provides research and insights, and measures/evaluates success for third parties.

Bridge supports 168 government schools in Liberia; and runs schools in Andhra Pradesh as part of a government infrastructure partnership. In addition, Bridge runs nearly 400 low-cost affordable private schools (LCPS) across Nigeria, Kenya, and Uganda. Within Nigeria, Bridge operates or supports schools in four states: Lagos, Osun, Borno, and Edo, using different operating models in each state. In Lagos and Osun, Bridge runs low-cost community schools. In Borno, Bridge is in a tripartite partnership with the state government and Nigerian Stock Exchange to support government nursery and primary schools.[176]

In Edo, Bridge is working as a technical partner of Edo State Basic Education Sector Transformation (EdoBEST), supporting the government to improve teacher training and development and to boost the capability of all public school teachers. This case study will focus specifically on Bridge's intervention in Edo State to highlight the ways technology may be leveraged at scale across a public system in a developing country context.

Key challenge or situation

Poor literacy and numeracy is a key challenge across Nigeria. A 2016 evaluation of the Nigerian public school system revealed that about 15% of students across the country who were enrolled in schools could not read or write. Out of the students in rural areas specifically, who comprise 70% of the overall student population, nearly 85% could neither read nor write proficiently.[177]

Teacher quality was found to be a major contributor to very low student learning outcomes.[178] Local governments, including in Edo, conducted randomized testing and found that many teachers were unable to understand the content of the curriculum and some fell short on their content knowledge, even of primary school content. A lack of effective teaching techniques and reliance on corporal punishment (used by nearly 45% of teachers) was also observed.[179]

A lack of accountability was also found to be a contributor to challenges in student learning. Little to no pre-existing accountability system existed. As a result, teacher absenteeism was prevalent (~90% were absent at 1:45 pm, i.e., 15 minutes before the end of the school day) as was student absenteeism (~25%). Additionally, student-teacher ratios were high (42:1 in primary, 79:1 in public junior secondary and 53:1 in senior secondary schools) and often uneven across geographies.[180]

Enabling environment

Godwin Obaseki's entry as Executive Governor of Edo State saw increased government and SUBEB focus on building a quality education system for Edo's youth. In 2016, the Edo government organized an education dialogue with a new forum commissioned to identify key challenges in education and to brainstorm potential solutions to develop a comprehensive educational strategy. The forum comprised a wide range of stakeholders including non-profit and private sector education stakeholders across Nigeria and included Bridge International Academies. Through multiple workshops and meetings, the forum identified teacher knowledge, ineffective delivery, teacher absenteeism, and lack of accountability measures as some of the most critical educational challenges impacting learning outcomes in Edo State.[181]

The outcome of state dialogue and forum was EdoBEST, a flagship education initiative launched in Edo State in 2018 that aims to transform the public education system and improve learning outcomes through five pillars of work: governance, teacher training and development, community partnerships, infrastructure, and the local education board. The initiative aims to impact 362,000 children in 1,500 schools over four years and to upskill and retrain over 15,000 fresh and experienced government teachers. Led by Governor Obaseki, EdoBEST garnered support from stakeholders including parents, teaching unions, and community leaders.

"Part of the outcome of that forum was a strategy to drive education reform through leveraging technology. Throughout the conversation of the transformation, the government identified Bridge as comprehensive enough to address the host of challenges they were facing. Our role was to ensure that technology not only drove what happened in the classroom but also enhanced every other strategy from infrastructure mapping to capacity building for the team to effectively use data to address the challenges they were facing."
— Adesuwa Ifedi, VP, Policy and Partnerships for Africa, Bridge International Academies

Bridge was selected as a technical partner for EdoBEST. Bridge was well-positioned to take up this opportunity given its prior work in using technology to drive large scale change and its experience in running schools in Liberia, India, Kenya, Uganda, and other parts of Nigeria.[182]

Action

Description of a solution developed

As a technical partner in EdoBEST, Bridge focuses on two core activities to improve education in Edo State:

1. **Technology infrastructure:** Bridge has implemented the use of tablets for teachers and smartphones for headteachers. The tablets are used to share best practices, improve pedagogy, disseminate lesson plans, communicate and raise accountability.

2. **Teacher training:** New and existing teachers take part in an initial training focused on classroom management, lesson plans and pedagogy. Teachers are trained on the use of technology to facilitate lesson planning and delivery as well as classroom management. Once teachers are back at work they also receive on-going in-class coaching where teachers are observed teaching in their school and are given feedback.

There were four main stages in the development and execution of Bridge's role in EdoBEST:

1. **Data collection and census:** Before operations began, Bridge conducted an on-ground census of all schools to understand the realities of the challenges they face. In doing so, Bridge was able to understand where to best focus its efforts when developing an appropriate strategy and enhancing performance/capacity to improve outcomes.

2. **Launch of the pilot program:** EdoBEST launched a 10-day pilot program that was open for teachers and schools to join voluntarily. Nearly 1,500 government teachers from over 200 schools participated in the program, which showcased new technological innovations, best practices in classroom management, efficient use of lesson planning, and effective pedagogical methods. Around 100 Bridge Nigeria staff helped support the pilot program.

3. **Evaluation and monitoring:** During the pilot program, numerous field and development officers from Bridge were in place to monitor and evaluate the schools weekly. A professional development officer would visit schools every other week to offer coaching and individual feedback. A quality assurance officer would visit every two to three weeks to ensure the smooth delivery of the program. The pilot program also involved government officials who provided additional feedback during the evaluation process.[183]

4. **Expansion:** Following the collection of feedback and re-evaluation, the SUBEB decided to scale up the program to serve a total of nearly 600 schools. The program was further

scaled after six months to serve 846 schools. During the expansion process, Bridge continues to act as a technical partner to the government. Over 80 Bridge staff are based in Edo State to support the implementation of continued teacher training and support.

Key features

There are several key features of Bridge's technology infrastructure and teacher training that have enabled it to create a positive impact as part of EdoBEST.

Technology infrastructure

1. **Teacher guides and lesson planning:** The tablets facilitate the teaching of each lesson by tracking lesson completion. Information on lesson progress is visible to all stakeholders and any changes to the lesson plans can be incorporated in real-time. Lesson guides can also be downloaded two weeks before delivery of the lesson and will remain on the device for two weeks after the lesson is delivered.

2. **Connectivity and battery life:** The tablets/smartphones are built for the socio-technological conditions in which they are expected to run (i.e. lack of continuous access to electricity and internet connection). They can run two weeks on a single charge and do not need to be connected to the internet during use. If new content needs to be downloaded and there is no internet connectivity at the school, the headteachers may travel to a nearby location with the internet to download the materials onto his/her mobile phone. The content can then be shared wirelessly to the teachers' tablets.

3. **Attendance tracking:** Teachers are expected to arrive promptly at 7:30 am and to remain at school for about 15 minutes after 1:45 pm to handle administrative matters before going home for the day. The tablets record the teacher attendance at two different times during the day: once in the morning at 07:30 am, and once at 1:45 pm. The data is made available to both Bridge management and the state government for accountability purposes.

4. **Enrollment data:** Student-teacher ratios were traditionally calculated in Edo State as the total students served divided by the total number of teachers across the whole state. State-wide student-teacher ratios, however, do not reveal the overstaffing in urban areas and understaffing in rural areas. Through a real-time dashboard with enrollment and staffing data, the local government is able to more effectively allocate teachers across the state and to enable a consistent student-teacher ratio.

Teacher training

1. **Cross-Age Ability Grouping:** In Edo, the state government is conducting a trial of an approach called Cross-Age Ability Grouping (CAAG) whereby children are placed in classes based upon ability rather than age. This is important because of the varying ages that children may start school and cultural reasons why they may withdraw and then re-enter the classroom. Similarly, teacher training is specialized by grade and subject and is aligned with national standards. About 10% of teacher training is tailored to the grade level and upper-primary teachers are often split up according to the subject they will be teaching.

2. **Practice time:** The training sessions are designed to minimize lecturing and maximize engagement. Teachers practice the topic learned in the form of group discussion, independent work, or active practice by delivering a mock lesson and receiving feedback from peers and trainers.

3. **Trainer modeling:** Throughout the training, the trainers model each of 'the big four' teaching skills (checking; responding; motivating; technology) by integrating them into their training approach. Trainers follow a training guide, evaluate the teachers' work, and respond with clear feedback, mimicking the classroom environment.

4. **Constant and real-time feedback:** Immediate feedback is given to the teachers, who get a clear idea of what skills they need to improve upon. Besides, the trainers give direct feedback to the Learning and Development team on how well the training is performing. The feedback process continues as the teachers' transition back to the classroom and they become part of an ongoing support network.

5. **Use of technology:** The tablets enable the planning and delivery of lessons and help streamline administrative tasks such as attendance-taking. During the training process, teachers are taught how to effectively leverage technology in the classroom and how to use it in lesson planning.

Resources required

Bridge leverages three main types of resources in EdoBEST:

1. **Learning resources:** This includes timetables, textbooks, study (in-class) and homework material, lesson guides, and teaching content (via tablets). The teacher guides were developed in-house based on the local government curriculum and supplementary course-aligned material is used. Besides, Bridge is also helping government schools

in Edo with resources like flashcards and posters. Over one million physical learning resources for students and teachers have been distributed to schools across Edo State.

2. **Technological infrastructure:** At the core of Bridge's intervention in Edo State is the use of tablets and smartphones given to teachers and headteachers respectively. The tablets are basic low-power devices that function as e-readers. They feature proprietary software developed by Bridge and are essential for data collection and for enabling the tracking of attendance and performance which drives system iteration and learning outcomes.

3. **Human resources:** In addition to teachers and trainers, staff in the technical support and quality assurance team enables the success of the program as do Bridge management who work hand-in-hand with government officials.[184]

Impact

Results

Bridge enabled the success of EdoBEST through its technological infrastructure and teacher training. Together, the interventions improved school teacher quality and accountability. A study conducted by EdoSUBEB in 2018, compared 30 EdoBEST pilot schools with 30 schools in a control group to identify the efficacy and impact of EdoBEST.

- **Scale:** EdoBEST has to date been implemented in 846 schools benefiting nearly 270,000 students. The teacher training program has successfully trained over 11,000 teachers and headteachers in digital skills and competencies, playing its role in the overall improvement of Edo's education system.[185]

- **Academic improvement:** Students who were attending EdoBEST schools had an accelerated learning phase where in the first two and a half months of the program, they were able to cover the equivalent of 70% of an entire year worth of instruction in English and 65% in Math.[186]

- **All-round development:** There was a reduction of 16% in the use of corporal punishment, scolding or belittling of the students.[187] Instead, positive reinforcements were used to ameliorate student behavior.[188]

- **Student and teacher attendance:** Although the school day extended by 45 minutes, nearly 45% of teachers at the Primary 4 level and nearly 80% at the Primary 3 level taught a full day's worth of time as compared to earlier when only 10-13% teachers were present in the class near the end of the day (1:45 pm). Student attendance increased by roughly 22% in the pilot program.[189]

Challenges or obstacles

- **Initial opposition to EdoBEST by teachers' unions:** During the initiation phase, EdoBEST received opposition from teachers' unions who were worried their jobs were at risk because of new accountability and transparency measurements both at an individual and at a school level. However, once the government communicated that no teachers would be dismissed and that teacher training and support would be provided to all teachers, EdoBEST gained their support.

- **Consistent student-teacher ratio:** Maintaining an even student-teacher ratio across geographies continues to be a challenge despite the availability of enrollment and staff data. Teachers are often unwilling to relocate to more rural areas due to personal or logistical reasons. Additionally, rural areas often face a shortage of qualified and trained teachers, who are typically clustered in urban areas.

- **Scaling technology:** Although the technology used in the intervention was designed to overcome challenges in infrastructure (i.e. electricity and internet), the tablets and phones still have the potential to fail and pose an operational risk especially in such a low infrastructure environment. Additionally, further functionality and innovation in classroom technology are limited without significant improvements in infrastructure and internet connectivity.

Growth plans

Bridge has a four-year contract with EdoSUBEB in EdoBEST and aims to continue to improve teacher development and student outcomes in Edo State.

EdoBEST aims to be a model intervention that can be replicated in other parts of Nigeria and elsewhere. While Bridge would like to support other states to deliver programs like EdoBEST, doing so remains a challenge given the fragmented political landscape in the country.

Recognition or awards received

The EdoBEST leadership team, including Bridge, was invited by the World Bank in 2018 as a keynote speaker at USAID's symposium on "Using technology to scale support for teachers and community educators in low-resource environments", presenting their model and its success to over 300 delegates.[190]

The EdoBEST leadership team was also invited to present the program at a keynote address at the 2019 Education World Forum to other education ministers as a template for success in London.

Governor Obaseki, Governor of Edo State, was invited to the United Nations General Assembly 2019 to talk about EdoBEST and education transformation at scale. The Nigeria Union of Teachers (NUT) also bestowed the award of the '2019 Best Performing Governor' to Governor Obaseki.

Key lessons

Bridge International Academies in Edo State highlights the ability for a private sector organization to support the transformation and delivery of education in the public sector by supporting and advising the government and leveraging technology.

Bridge's success was driven by its prior expertise in technology enablement and teacher training in similar contexts across Africa.

Additionally Bridge played a pivotal role in the identification of key challenges and potential solutions working in tandem with the government from ideation to design to delivery.

By first identifying key education challenges and an appropriate approach (i.e. technology, training and support) to overcome those, programs like EdoBEST promote the development and delivery of public goods by allowing external stakeholders to fill in gaps in the public sector. The result is a more efficient and effective use and allocation of public funds.

Further development of national or state education dialogues and forums like the one created by the Governor and the SUBEB in Edo will enable stronger partnerships between the public and private sectors and influence the development of public goods by both sectors.

EducAid — Quality Enhancement Programme for Education (QEP4E)[191]

Overview

Founded in Sierra Leone in 1994, EducAid aims to strengthen the country's education quality. The organization runs a network comprising five free schools, free training programs for community schools, and tertiary programs for its graduates. This case study will focus on EducAid's Quality Enhancement Programme for Education (QEP4E), a joint effort of EducAid and the community of the Port Loko district (without any formal government collaboration). QEP4E enables equality-based learning, disseminates effective pedagogical strategies, and cultivates leadership among 100+ community and public schools to date.[192]

Year(s) active: 1994-present

Public good created: Whole school improvement programs

Key driver for the public good: Social-impact mission and financial incentive in the form of a grant

School ownership: Government and community-owned schools

Challenge

The number of trained teachers in Sierra Leone is among the lowest in the world. A report by the World Bank in 2015 found the percentage of teachers trained and qualified to teach in the country was only 29% of primary school teachers and 37% of junior secondary school teachers.[193]

Enrollment levels of girls are low, particularly in secondary schools. Factors such as child marriage, early pregnancy and cultural biases are barriers that have contributed to the low enrollment rate of 51%[194] and the literacy rate of 38%[195] among girls in Sierra Leone in 2015 and 2013, respectively.

The government's underinvestment in education has led to a shortage of materials, such as textbooks and classroom supplies. A system of accountability is also lacking — schools fail to pay teachers' salaries on time and there is little to no provision for teacher training and monitoring.[196]

Scale of impact

EducAid's team consists of around 60 staff that includes school teaching staff, administrators, and four trainers. Together they have coached nearly 650 teachers and 80+ school leaders. In total, over 31,000 children (of which over 40% are female) have received access to improved education through EducAid's partner schools. While QEP4E concluded in April 2019 having served over 100 schools in Port Loko with additional schools in Tonkolili, Bombali, and the Western Area, a new program with 60 government schools across six districts commenced in October 2019.[197]

Key external stakeholders

1. **Partner schools:** More than 100 primary and junior secondary community and public schools situated mainly in the Port Loko district

2. **Funders:** European Union and other philanthropic donors like The Rockdale Foundation, Allan & Nesta Ferguson Charitable Trust, and others

3. **Government bodies:** Collaboration among Port Loko District Council (PLDC) and PL Education Committee, the Ministry of Education, Science and Technology (MBSSE) and the Port Loko Training Centre (PLTC)[198]

Summary

Situation

In 1994, James Boardman and Swithun Mason founded EducAid. Since 2000, the organization has flourished under the stewardship of Swithun's sister, Miriam Mason. It has scaled from initially offering free education at EducAid schools to providing a variety of programs to students, teachers, and members of the community.

Action

EducAid currently has four key programs organized as functional areas: Free Schools program, Quality Enhancement Programme for Education (QEP4E), Equality program, and Post-Secondary Strategy (PSS) program.[199] QEP4E has grown to become a multi-faceted teacher training program whereby teachers and staff from partner schools are retrained free of cost in modern, child-centered, holistic, and girl-friendly pedagogical methods and school management best practices.[200]

Impact

Through its training with over 80 school leaders on classroom management, respectful relationships, the abolition of corporal punishment, administration, critical evaluation, phonics and child-centered learning, EducAid has empowered its leaders to carry out their roles effectively.[201] Average score for the National Primary School Examination (NPSE) increased by 14.4%. For the West African Examinations Council's Basic Education Certificate Examinations (BECE) taken by junior secondary pupils, the average score improved by nearly 19%.[202]

Key lessons

EducAid exemplifies how a non-state actor can undertake the large-scale quality improvement of a large number of schools sustainably, through community support and without formal government partnerships.

As private donations and a grant from the European Union were QEP4E's primary sources of funding, further investment in similar programs would support the creation and delivery of public goods in the absence of funding or support from the local government.

Situation

Description of entity

EducAid is a non-profit organization, which focuses on developing impactful educational frameworks and best practices with a mission to "provide high quality, holistic education among underprivileged young people to unlock their potential, overcome poverty, improve well-being and build democracy."[203]

In 1994, James Boardman and Swithun Mason founded EducAid as a sponsorship program after visiting Sierra Leone on a university trip. Since 2000, EducAid has transformed into a mission-driven educational non-profit organization under the leadership of Miriam Mason, Swithun's sister.

"My brother came back to Sierra Leone in 1996 and I came the first time in 1997 with his friend to see how that sponsorship program was going and it was clear it wasn't…So then we started working towards me moving out to Sierra Leone to start our first school. At the time I was teaching in the U.K., so I packed my life into a container and got on a plane and came out to start our first school with 20 kids on the back verandah of a rented house."

— *Dr. Miriam Mason, Country Director*

EducAid has scaled from initially offering free education at EducAid schools to now providing a variety of programs to students, teachers, and members of the community. EducAid currently has four key programs organized as functional areas:[204]

1. **Free schools program:** In 2018, EducAid ran four primary, five junior secondary, and two senior secondary schools that combined served more than 1,500 underprivileged pupils annually. The schools provide uniforms, textbooks, and

residential schooling options to reduce barriers to access and uses a curriculum that supports independent study. As of the 2019 academic year, EducAid has handed over to the government a number of its schools in line with the current government policy to provide free education. Rather than running a system in parallel to the government, EducAid decided to give several schools to the government and maintain a few role-model schools as a key component of their school improvement programming. Currently, EducAid runs two junior secondary, two senior secondary and one primary school serving approximately 750 children.

2. **Quality Enhancement Programme for Education (QEP4E):** QEP4E provides free teacher training to raise the quality of teaching in government and community schools. The teacher training is focused on pedagogical best practices, whole school positive behavior management, values-based teaching (including strategies to create a healthy learning environment for girls), and numeracy/literacy knowledge.

3. **Equality program:** EducAid offers a number of programs focused on girls' education and female empowerment. The programs focus on creating a safe and welcoming learning environment for females as well as engaging boys and men in the pursuit of equality.

4. **Post-Secondary Strategy (PSS) program:** PSS focuses on professional development, preparation for tertiary education, and ongoing support for EducAid's alumni network. Additionally, PSS sponsors tertiary education for some students and runs a Development Studies and Leadership course in partnership with the University of Makeni.

This case study will focus on the Quality Enhancement Programme for Education as the key public good created and delivered by EducAid.

Key challenge or situation

Educational access has been and continues to be a challenge in Sierra Leone. Ongoing war and conflict from the early 1990s into the early 2000s wiped out more than 1,200 primary schools and forced 67% of children out of school in 2001 alone. In 2014, the Ebola outbreak further reduced enrollment rates and educational outcomes. For nine months during the outbreak, schools remained closed, stalling learning for 1.8 million children.[205]

The number of trained teachers in Sierra Leone is among the lowest in the world. A report by the World Bank in 2015 found the percentage of primary and junior secondary school teachers in Sierra Leone with appropriate training and qualifications was only 29% and 37% respectively. Poorly educated and untrained

teaching staff often use outdated and ineffective teaching styles that hinder student learning outcomes. Teachers' reliance on corporal punishment has also negatively affected student attendance.[206]

Enrollment levels of girls are low, particularly in secondary schools. Child marriage, early pregnancy and cultural biases have contributed to a secondary school enrollment rate of 51% and a literacy rate of 38% among girls in Sierra Leone in 2015 and 2013, respectively.[207]

Government underinvestment in education has led to a shortage of materials, such as textbooks and classroom supplies. A system of accountability is also lacking — teachers often receive delayed salary and there is little to no provision for teacher training and monitoring.[208]

Enabling environment

EducAid's initial intervention in Sierra Leone occurred at a time when educational access was severely impaired. In its initial years, EducAid operated with little government involvement and received funding directly from private donors outside the country.

"I never saw military action here because I came in July 2000, 2 months after the last violence in Freetown. So it was into that context that we started and of course hundreds of youngsters had already lost access to education. Very quickly the 20 children we started with grew in number."

— Dr. Miriam Mason, Country Director

EducAid designed its Quality Enhancement Programme for Education (QEP4E) to address the issues of undertrained teachers and school management in Port Loko. The program started informally in 2012 as a workshop held by EducAid at the request of the Ministry of Education and the local Roman Catholic mission in Port Loko to train teachers and staff in 13 primary and 13 junior secondary schools.[209]

Action

Description of solution developed

While the Ebola epidemic hindered the program through school closings, the European Union delegation in Sierra Leone and other private donors in 2014 requested that EducAid formalize the QEP4E program and awarded the organization a grant to do so.

QEP4E launched in April 2015 and grew to become a partnership with 72 primary and 23 junior secondary schools in Port Loko.[210]

QEP4E has grown to become a multi-faceted teacher training program whereby teachers and staff from partner schools are retrained free of cost in modern, child-centered, holistic, and girl-friendly pedagogical methods and school management best practices.[211]

Throughout the development of QEP4E, various community members, organizations and governmental agencies have been involved. The European Union, Port Loko District Council (PLDC), Port Loko Education Committee, and the Ministry of Education, Science and Technology (MBSSE) have assisted in funding and scaling activities. The Port Loko Teacher's College (PLTC), EducAid's teachers and staff, and leaders across the wider community have contributed to the operational activities of the program.[212]

While QEP4E concluded in April 2019 having served over 100 schools in Port Loko with additional schools in Tonkolili, Bombali, and the Western Area, a new program with 60 government schools across six districts commenced in October 2019.

Key features

QEP4E improves education at partner schools by focusing on teacher and school management training through several activities such as:

1. **Training institute:** Port Loko Teacher's College (PLTC) trains government lecturers, with workshops with PLTC's teaching staff underway to improve the quality of teacher education and training provided by the college. The goal is to improve the teaching capabilities of PLTC lecturers and therefore their students adequately prepare them for teaching upon graduation.[213]

2. **In-situ workshops:** The program holds regular workshops at the training centers of the model schools — Rolal and Maronka — and EducAid's other schools. It invites teachers from partner schools to observe the student-teacher interaction and train in the teaching methodologies developed by EducAid.[214]

3. **Follow-up workshops:** Experienced EducAid teachers provide on-going mentorship support to partner schools. The mentors visit the mentee schools at least once per term in addition to having phone calls each week. Follow-up workshops help address implementation challenges and

enable the collection of progress data. In the new program commencing in October 2019, mentors will be allocated to clusters of schools.[215]

4. **Headteacher training**: QEP4E provides training in improved behavior management and EducAid pedagogies to headteachers. All headteachers meet twice per term for leadership training in observing lessons, providing feedback, encouraging staff, and ensuring the implementation of new ideas. Additionally, they have access to a free helpline connecting all headteachers and EducAid's education team.[216]

5. **School management training:** Apart from working with school leaders or headteachers, QEP4E also works with the school management committees to re-enfranchise them and ensure they know their rights, roles, and responsibilities in providing governance support.[217]

6. **Quality control:** EducAid's education team drives quality control to ensure schools are following minimum standards. The team establishes expectations during the first meeting with all of the stakeholders. At the end of each activity, the team reviews all participants' (including EducAid's) adherence to the agreed expectations. It conducts quality checks through spot-checks on attendance registers, as well as troubleshooting conversations during fortnightly calls, among other activities.[218]

EducAid's teacher and school management training further focuses on a number of key topics reflected in EducAid's mission and vision:

1. **Positive learning environment:** The training program equips teachers with methods to use non-violent restorative and positive reinforcement, instead of punitive approaches like caning and other forms of corporal punishment. At the beginning of the school year, students and teachers develop a mutually agreed-upon code of conduct. Furthermore, schools have introduced Girl Power clubs to foster a girl-friendly environment. By creating a positive learning environment, student-teacher relationships and student learning outcomes have improved.[219]

2. **Active teaching pedagogies:** Teachers learn to use active teaching methods such as peer learning and pair work, completing missing words in a text, as well as ranking and categorizing objects based on a common theme. Some more advanced methods involve:

   - **Carousel learning:** Teachers place a range of academic activities around the room. Small groups of students conduct one activity at a time, rotating after the allocated time until all exercises are completed. Carousel learning provides the opportunity for teamwork, collaborative learning, and learning away from the teacher's direct supervision.

   - **Scaffolded writing:** Writing a longer piece of text with subheadings, questions prompts, and sentence starters to provide structure to each sub-section. This supports and accustoms students to writing longer prose independently.

3. **Literacy and numeracy:** Teaching content and dictionaries are provided to teachers to support numeracy and literacy skill development in English, which is typically their 2nd or 3rd language.

4. **Curricular content:** EducAid shares course outlines and content material developed at their schools with teachers. Prepared content cover exam subjects that can be shared with students so that they can work through the syllabus at their own rate under teacher supervision.[220]

Resources required

EducAid's presence across a large school network requires a significant ongoing level of resourcing, including:

- **Financial:** Funding goes toward reimbursement of travel and food costs for the teachers attending the training in addition to other programmatic and operating expenses. Thus far, EducAid has not received any formal funding from the local government for QEP4E. The main funding for QEP4E comes from a 4-year grant from the European Union (55%), with the remainder coming from individuals and charitable organizations in the United Kingdom, Europe and the United States such as The Rockdale Foundation, Allan & Nesta Ferguson Charitable Trust, and others.[221]

- **Physical resources:** Training centers at schools with food and lodging facilities for in-situ training. Mentors, teacher trainers and volunteers are required for back-office assistance and program activities. The program also provides books, radios and learning materials to teachers.

- **Intellectual resources:** EducAid has developed teaching content and methodologies as well as student learning materials, which have evolved over the years to support the QEP4E program.

Impact

Results

EducAid staff and trainers collect data and feedback. In addition to government-provided data on standardized tests, independent randomized control trials have also helped in data collection.

1. **Wide-scale of impact:** A team of 60 staff that include school teaching staff, administrators, and four trainers has trained nearly 650 teachers and 80+ school leaders. In total, over 31,000 children (of which over 40% are female) have received access to quality education through EducAid's schools.[222]

2. **Academic improvement:** Average scores for the National Primary School Examination (NPSE) increased by 14.4%. For the West African Examinations Council's Basic Education Certificate Examinations (BECE) taken by junior secondary pupils, the average score improved by nearly 19%.[223]

3. **Discouraged corporal punishment:** An independent evaluation of QEP4E found that of the children interviewed, 71% had noticed a reduction in or end to corporal punishment.[224]

4. **More empowered school leaders:** Through their training with over 80 school leaders on classroom management, the abolition of corporal punishment, administration, critical evaluation, phonics and child-centered learning, EducAid has empowered the leaders to carry out their roles effectively. Observable changes included improved and respectful relationships with staff, community, and parents along with an improved delegation, transparency and performance management. This, in turn, helped in improving staff attendance and discipline.

5. **Improved prospects for girls:** Average NPSE results saw a nearly 26% increase in girls' results during 2017-19 (compared to about 14% overall). For the BECE, there was an estimated 28% increase for girls (compared to about 19% overall). Average girls' attendance at primary schools grew from 42% in 2016 to 72% in 2019 while the attendance of girls in secondary school increased from 39% to 60%. Most importantly, the retention rate for girls after the transition from primary to junior secondary schools grew from 40% to 70% at the same time.[225]

6. **Higher student and teacher attendance:** In primary schools, average pupil attendance increased from 50% in 2016 to over 80% in 2019, while primary staff attendance increased from 60% to 75% in the same period. Similarly, in junior secondary schools, average pupil attendance increased from 40% to 80% and teacher attendance increased from around 50% to nearly 90%.[226]

Challenges or obstacles

1. **Limited data availability:** Data from the National Primary School Examination and Basic Education Certificate Examination is not available at national or provincial levels and data at school level is deemed unreliable due to widespread problems in administration and false marking. This poses a problem in performance tracking and accountability.

2. **Limited funding and government support:** Securing funding continues to be a challenge. Additionally, salary delays and lack of effective coordination have also affected collaboration with PLTC.

3. **Lack of infrastructure:** Logistical, communication and administrative challenges have emerged due to the wide geographical spread of the schools. The poor condition of transport and other services in Sierra Leone has also posed problems to the mobility of teachers and volunteers involved in the training.

4. **Social and cultural barriers:** Social barriers continue to discourage teacher training attendance and female access to education. Teachers often expect payment for attending training and females are often restricted by familial obligations and unable to attend school.

Growth plans

In September 2018, newly elected President Julius Maada Bio officially launched the free quality pre-primary, primary and secondary education program for government and government-assisted schools. As part of the program, the annual budgetary allocation to education increased to 21% of the national budget. The government's new focus on education enables EducAid to work more closely with government agencies to improve government schools.

EducAid's current focus is to scale the QEP4E model to six other districts and eventually run pilots nationwide under the Education Innovation Challenge 2019. This QEP expansion will focus on digital technology, data evidence, and feedback from stakeholders like school management committees and community teaching advocates for ensuring the sustainability of initiatives. Pilot projects to explore the effectiveness of QEP in Freetown and Yele will continue in parallel.[227]

Recognition or awards received

Lumley School achieved the second-best WASSCE results in the country in 2016 and 2017.[228]

EducAid was also amongst three operators selected for the tier 1 of the Education Innovation Challenge 2019. However, operators had to bring their own funding to the project.

Key lessons

EducAid's QEP4E demonstrates the ability for a non-profit, private sector actor to improve educational quality in the community and public schools through training and management of teachers and school leaders. EducAid demonstrates how non-state actors can create successful education interventions through community support, with or without formal government partnerships.

QEP4E's key driver of success has been the focus on respect across all relationships across the school community, including the voluntary community involvement in upholding standards and demanding improved teaching methodologies, which holds active teaching, girl-friendly, independent, learning and positive restorative strategies in high regard. The program's activities and the lesson guides emphasize a school model with equal opportunities and a well-charted code of conduct that keeps the students and the teachers motivated to learn and teach.

As QEP4E mainly relied on funding from private donors and a grant from the European Union, further investment in programs such as QEP4E would support the creation and delivery of public goods in the absence of funding or support from the local government.

Eton College — Tony Little Centre for Innovation and Research in Learning (CIRL)[229]

Overview

Established in 1440, Eton College is a leading independent non-profit private boarding school in the United Kingdom, serving about 1,300 boys annually in Grades 8 through 12. In May 2015, Eton founded the Tony Little Centre for Innovation and Research in Learning (CIRL), a research center and innovation hub set up to share Eton's best practices and to identify the latest innovations in teaching and learning. It is currently focused on making research on social-emotional learning more easily accessible and translatable to the classroom and does so by partnering with universities and other schools and promoting reflective teaching and learning practices amongst Eton staff.[230]

Year(s) active: 2015-present

Public good created: Educational research and innovation center

Key driver for the public good: Internal and external funding as a strategic priority of Eton

School ownership: Private non-profit

Challenge

Currently, many curricula in schools focus on academic outcomes and do not sufficiently emphasize soft skills like socio-emotional skills, perseverance, discipline and values. Additionally, there is a lack of substantial research on social-emotional learning that can be translated and adopted by teachers in the classroom. The result is an inherent mismatch between the availability of innovative methods in education and their implementation in schools.

Scale of impact

The center's impact evaluation is expected to be conducted in 2020 and to be presented in a public report by 2021. The metrics to understand the scale of impact of CIRL include the number of successful projects, publications, and conferences conducted by CIRL along with an estimate of direct and indirect student and teacher beneficiaries through its partner network. CIRL will frame this under the Theory of Change methodology that links the stated aims of the center to short-term and long-term results of the center.[231]

Key external stakeholders

1. **Eton College:** It hosts the center and provides various physical resources including teachers, researchers and students, and intellectual as well as financial resources.[232]

2. **Partner schools and universities:** Universities like University College London, organizations like Ivy House and Chartered College of Teaching, as well as partner schools in the U.K. participate in CIRL's conferences, programs, and school visits and contributes to the research it collects and disseminates. CIRL has also partnered with Harvard's Research Schools International, Oxford University, and the Jubilee Centre for Character and Virtues at the University of Birmingham.[233]

3. **Edtech platforms:** CIRL is working with edtech platforms from Emerge Education, Century Tech, etc. to pilot innovative AI-based digital education technologies at Eton.[234]

4. **Foundations and donors:** CIRL works with educational foundations like the Peter Cundill Foundation on educational projects for outreach. It also receives funds and donations for its operations.[235]

Summary

Situation

With 21st Century learning becoming an immediate focus for schools, the demand for social-emotional learning and technology-based innovation is high. Respondents to a 2018 survey from the IFC-World Bank identified social and emotional skills and digital skills as the most important skills for the future workforce.[236]

Over the past decade, Eton has been shifting toward more innovative, evidence-informed educational methods to match the rapid changes globally in education. Eton has continued to incorporate neuroscience and cognitive psychology into teaching practices and to identify new opportunities in technology and artificial intelligence within education.

Action

Eton College founded the Tony Little Centre for Innovation and Research in Learning (CIRL) in May 2015 to improve learning outcomes for young people by sharing and refining Eton's best practices and innovations in teaching pedagogy, learning and leadership in education.

CIRL's founding vision is to place Eton at the forefront of school education by partnering with universities, schools, and researchers internationally to ensure awareness about the most promising research findings and innovations in education and translate them into practice. Since then, its mission has been to achieve the aforementioned visions by aligning with an eight-fold approach of reflection, evaluation, research, collaboration, innovation, professional development, personalized learning, and outreach.

Impact

CIRL has organized conferences and discussions with school leaders around evidence-based practices on 21st Century skills. Established forums like the ResearchEd National Conference and Boarding Schools Association Conference have become major platforms for knowledge dissemination.

CIRL has also been involved in research on Eton's teaching practices along with experiments on pedagogical methods published in the *Eton Journal for Innovation and Research in Education*.

CIRL has conducted professional development workshops for its own teachers as well as its partner schools. It has collaborated with Ivy House in London for a leadership program for schools, which will be implemented later this year. CIRL will also be launching the Eton x LAE Leadership Institute to develop leadership skills at Year 12 pupils from both schools.

Key lessons

Operating in a developed country context, CIRL's contribution to public goods has primarily taken the form of thought leadership on 21st Century learning. Through partnerships, publications and conferences, the Tony Little Centre continue to promote research on social-emotional learning and effective pedagogies focused on holistic student development.

CIRL models an approach that other top-tier schools may be able to replicate. Operating as a knowledge hub at Eton, it has been able to draw on Eton's knowledge and best practices while working with academic researchers to identify other promising approaches.

Situation

Description of entity

Eton College is a leading independent not-for-profit private boarding school for boys in the United Kingdom established in 1440 by King Henry VI. Eton serves around 1,300 students in Grades 6 through 12 annually with a holistic educational approach that emphasizes extra-curricular and community service activities.[237]

Some of Eton's key programs include:[238]

1. **Eton Innovations:** Eton works on innovations and insights to improve teaching and learning for Eton students, and to prepare them professionally for future careers. Aside from CIRL, these innovations include a teacher training program that encourages Eton's staff to share best practices, and Eton

Online Ventures, an initiative to work alongside technologists, entrepreneurs and educators to develop new and exciting approaches to education.[239]

2. **Educational initiatives:** Eton has been involved in several educational initiatives involving partnerships with both public and private institutes across U.K. Notable is the London Academy of Excellence (LAE), the first Sixth Form College to be set up under the U.K. government's Free Schools scheme. Eton is one of the seven independent schools (including Brighton College, Forrest School, etc.) sponsoring LAE and is responsible for the delivery of A-Level English. Teachers from both Eton and LAE have also organized visits with one another to observe teaching and to share expertise in various subjects. Eton also supports the Holyport College with its educational expertise, and is part of the Independent and State Schools Partnership (ISSP) along with six other local state schools that aim to improve pupil self-esteem, raise pupil aspirations, and improve professional practice across the schools through school collaborations, workshops, and mentoring.[240]

3. **Scholarships and bursaries:** Eton provides need-based fee remissions and scholarships to financially assist around 25% of its students.[241]

Key challenge or situation

- **Need for 21st Century education:** Currently, a good deal of curriculum available in schools focuses on academic outcomes and does not sufficiently focus on soft skills like socio-emotional skills, perseverance, discipline, and values. Schools need to prepare students for a fast-changing, increasingly automated, and the information-saturated world through supporting them to acquire creativity, critical thinking, communication and collaboration alongside character skills such as kindness and empathy. However, the alignment and integration of these values with the academic curriculum and assessment is difficult and complex. There is a lack of substantial research on social-emotional learning that can be translated and adopted by teachers in the classroom. This has led to obstacles in the way of integrating 21st Century education with the school curriculum, which can only be solved through research and innovative practices.[242]

- **Inadequate platforms for sharing best practices:** There is a lack of resource centers to spread new research findings in education on a large scale and to ensure their adoption by educational institutions. The result is an inherent mismatch between the availability of innovative methods in education and their implementation in schools. Effectively scaling new methods when existing methods are delivering

satisfactory academic outcomes continues to be a challenge, as motivation to change is low. Furthermore, the translation of academic theory into successful classroom practice is slow without the help of school research centers that are capable of providing implementation knowledge and support.

Enabling environment

- **Eton's excellence in conventional education:** Eton College has a solid reputation as one of the world's leading schools and has had success in leveraging traditional educational methods. Over the past decade, Eton has been shifting toward more innovative, evidence-informed educational methods to match the rapid changes globally in education. Eton has continued to incorporate neuroscience and cognitive psychology into teaching practices and to identify new opportunities in technology and artificial intelligence within education.[243]

- **Previous collaborations:** Eton had experience working in collaboration with other schools through its work with the ISSP, which aimed to improve pupil self-esteem, raise pupil aspirations, and improve professional practice across member schools.[244]

- **Demand for social-emotional and tech-based education:** With 21st Century learning becoming an immediate focus, the demand for social-emotional learning and technology-based innovation is high. Respondents to a 2018 survey from the World Bank identified social and emotional skills and digital skills as the most important skills for the future workforce.[245] According to a report from The Collaborative for Academic, Social, and Emotional Learning (CASEL), an organization that provides leadership and guidance to educators on the topic of social and emotional learning, 97% of school principals state the need to teach social-emotional skills in school, with only 35% of schools already doing so. This indicates schools' need for additional support in implementing social-emotional learning curricula. Technology-based education is also being highly sought after with schools spending £900 million (USD 1.2 billion) per year on it.[246]

Action

Description of solution developed

With an interest in developing a center of excellence, Eton College founded the Tony Little Centre of Innovation and Research in Learning (CIRL) in May 2015 to improve learning outcomes for young people by sharing and refining Eton's best practices and innovations on teaching pedagogy, learning, and leadership in education.

CIRL was named after Eton's headmaster, who conceptualized and developed the center and laid out its priorities for the future. He involved all the stakeholders of the college including the governing body and management team, the students, and their parents.

Eton granted operational space to CIRL and provided initial funding. Eton's established reputation enabled CIRL to raise a total of £1.3 million from alumni and other benefactors. Eton was also able to link its teaching faculty and students to the center, which was an important factor in delivering effective research. CIRL started in a block of seven renovated rooms housed in a 100-year old building at Eton.

CIRL's founding vision is to place Eton at the forefront of school education by partnering with universities, schools, and researchers internationally to ensure awareness about the most promising research findings and innovations in education and translate them into practice. Since then, its mission has been to achieve the aforementioned visions by aligning with an eight-fold approach of reflection, evaluation, research, collaboration, innovation, professional development, personalized learning, and outreach.[247]

Key features

- **21st Century education:** CIRL organizes conferences and discussions with school leaders around evidence-based practices on 21st Century skills. Forums like the ResearchEd National Conference and Boarding Schools Association Conference have become important platforms for knowledge dissemination. CIRL has also commissioned BrainCanDo to run a large scale project across 12 schools to deliver a one-term course on resilience to Year 9 pupils. CIRL hopes the findings from this course will allow them to more widely share best practices on teaching character. Additionally, CIRL is in the process of creating taxonomy of character skills.[248]

- **Research and publications:** At the college level, CIRL is involved in research on Eton's teaching practices along with experiments on pedagogical methods published in the Eton Journal for Innovation and Research in Education. CIRL has employed a Researcher-in-Residence to build CIRL's research literacy and research capacity based on CIRL's Strategic Plan for Research 2017-19, which aims to collate evidence-based practices on pedagogy and learning. CIRL collaborates with universities like University College London and Winchester to develop the research and publications made publicly available on CIRL's website. CIRL is also a part of a peer-reviewed journal Impact and supports MESH, an organization developing free online resources for teachers and policymakers.[249]

- **Innovation projects and experiments:** CIRL works alongside edtech companies like Emerge Education to help implement apps and platforms at Eton. It is conducting a trial of Century Tech's sophisticated AI platform across the Math, Science and English curriculum. CIRL has also enabled trials of 'blended learning' (learning which takes place partly online and partly in the schoolroom) and the use of different online platforms for this. In terms of pedagogy, CIRL offers training to teachers and boys in such evidence-based innovations as 'interleaving' and 'spaced repetition'. Interleaving involves mixing multiple topics during learning, and spaced repetition involves reviewing information at gradually increasing intervals. CIRL has also taught boys, trained teachers and researched the impact of the Growth Mindset. In terms of curriculum design, CIRL collaborated with Ian Warwick (Director of London Gifted and Talented) to propose a redesign of part of its curriculum using 'dynamic exploration', including interdisciplinary work, project-based learning and independent learning.[250]

- **Professional development programs:** CIRL conducts professional development workshops for its own teachers as well as its partner schools. It has collaborated with Ivy House in London for a leadership program for schools, which will be implemented later this year. CIRL is also working with the Chartered College of Teaching to promote research literacy among teachers. There are also programs in place that allow senior leaders from other schools to visit Eton and to use its facilities for teaching and professional development. Apart from actively engaging partner schools in professional development opportunities, CIRL also partially funds some professional development programs.[251]

- **Impact evaluation:** CIRL identifies methods for impact assessment of current and new practices. CIRL also conducts evaluations across the school by gathering baseline data on the various teaching and learning tools that it introduced at Eton with the potential to influence the adoption at other schools.[252]

Resources required

- **Physical resources:** CIRL's physical center is supplemented by Eton's school infrastructure and other resources like its online web platforms and the *Eton Journal for Innovation*.

- **Intellectual and human resources:** CIRL has access to Eton's intellectual resources in the form of previous educational experience and research. Moreover, it has access to students and teachers who are important research participants. CIRL is currently run by one Director and a post-graduate researcher-in-residence. The Director, Jonnie Noakes, is a member of Eton's teaching staff who splits his time between CIRL and his regular teaching duties.

- **Financial resources:** CIRL is funded by Eton and private benefactors, who donated £1.3 million (USD 1.7 million) by donors alone prior to its setup. Eton funds the center annually.

Impact

Results

Given CIRL and its initiatives are relatively new, impact data are still being collected and analyzed. CIRL will undertake an impact evaluation of the last 5 years for compilation into a report in March 2021. This will be done in collaboration with Professor Chris Brown of Durham University. The researchers will assess CIRL's engagement with teachers and students within and outside of Eton in two phases.[253]

1. **Phase 1:** This will use a mixed-methods approach to assess the impact of professional development workshops, experimental trials of pedagogical and innovative practices internally at Eton.

2. **Phase 2:** This will use a mixed-methods approach to assess the large-scale impact of CIRL's work in engagement with published outputs, blogs, journal, conference and talks with partner schools.

Other metrics to understand the scale of impact of CIRL include the number of successful projects, publications, and conferences conducted by CIRL along with an estimate of direct and indirect student and teacher beneficiaries through its partner network. CIRL will frame this under the Theory of Change methodology that links the stated aims of the center to short-term and long-term results of the center.

Challenges or obstacles

Given CIRL's work typically has long-term effects, the recording of impact and progress is a challenging and slow process, especially for pedagogical projects that involve changing the way teachers teach. This, in turn, affects its ability to demonstrate return on investment in the short term.

Implementation challenges arise when teachers are reluctant to replace their old teaching methods with new ones, especially when existing methods are yielding satisfactory results. The dissemination of actual practice is particularly challenging given teachers' demanding work schedules.

Additionally, as the benefits of character education typically involve difficult to measure outcomes like social-emotional awareness, discipline, and perseverance, it can be difficult to convince donors about their efficacy.

Growth plans

CIRL has multiple projects in the pipeline over the next two years. The Resilience Project aims to identify ways to boost student resilience in school, at home, and in their community. The Cyber Wisdom Development Project aims to research ways to educate students on cyber awareness.

CIRL will also be launching the Eton x LAE Leadership Institute to develop leadership skills at Year 12 pupils from both schools. Engagement and collaboration with more partner schools will also be a key focus for the dissemination of CIRL's ideas and research findings. CIRL will plan to involve students from partner schools as well.

Recognition or awards received

CIRL was featured in a report named 'Schools for the 21st Century' published in The Week Independent Schools Guide.[254]

CIRL was recognized by the Leaders Magazine for its work on character education.[255]

CIRL has been referred to as a nerve center for communications between Eton and other schools and education organizations by the Times Educational Supplement (TES) in one of its articles.[256]

Dr. William Richardson, then General Secretary of the Head Masters' Conference, wrote in 2018 that 'The Tony Little Centre has established itself as a highly significant reference point for developing thinking across independent schools and beyond.'

Key lessons

Eton College and CIRL demonstrate the ability for private schools to collate and disseminate new innovations and practices in education.

Operating in a developed country context, CIRL's contribution to public goods has primarily taken the form of thought leadership on 21st Century learning. Through partnerships, publications and conferences, CIRL continues to promote research on social-emotional learning and effective pedagogies focused around holistic student development.

CIRL models an approach that other top-tier schools may be able to replicate. Operating as a knowledge hub at Eton, CIRL has been able to draw on Eton's knowledge and best practices while working with academic researchers to identify others.

CIRL's key drivers of success have been its funding and support from Eton College and Eton's established reputation. Additional donors, the commitment of Eton's educators and researchers, and its partner schools have all enabled CIRL to translate research into practice.

KIPP Foundation — KIPP Public Schools and KIPP Leadership Design Fellowship (KLDF)[257]

Overview

KIPP (Knowledge is Power Program) is a non-profit public charter school network in the United States that operates over 240 schools across 20 states and the Washington D.C. KIPP has grown to become the largest charter school network in the United States and is distinctive among other charter school providers given its support and training programs targeted toward alumni, students, and educators inside and outside of the KIPP network. Many of KIPP's best practices have been shared through their leadership development program, KIPP Leadership Design Fellowship (KLDF) and have subsequently been adopted in other public, private, and charter schools.

Year(s) active: 1994-present

Public good created: Whole-school delivery and leadership development program

Key driver for the public good: Lack of quality schools in lower-income areas; Dearth of well-trained school teachers and robust leadership

School ownership: Private non-profit

Challenge

In 58 of the 100 largest cities in the United States, at least three-fourths of non-white students attend majority low-income schools. These low-income schools often have access to less funding and consequently often deliver lower-quality education.

Teacher licensing varies across different parts of the U.S. The licensing of teachers is dependent on the State Education Board, which varies significantly from state to state.

There are few systems in place to train and develop existing teachers in the public school system and to mold them into suitable candidates for leadership positions.

Scale of impact

KIPP charter schools educated over 100,000 students in 2017-18 across 242 schools across the U.S.

Since 2011, the KIPP Leadership Design Fellowship (KLDF) has cumulatively served over 315 participants from over 110 organizations (estimated to impact over 11.8 million children).

Key external stakeholders

1. **Government:** U.S. Department of Education

2. **Donors:** Doris and Donald Fisher Foundation (DDFF), The Walton Family Foundation, Robertson Foundation, Arthur Rock and Toni Rember, Reed Hastings (CEO of Netflix), and others

3. **KLDF participants:** Local school districts, state departments of education, leadership training and education organizations (e.g. Teach for America), and charter management organizations (e.g. Achievement First)

Summary

Situation

With the passing of the charter law bill in 1988 by President Bill Clinton and its subsequent inclusion in the Improving America's Schools Act (1994), charter schools gained momentum in the '90s when charter school chains like KIPP and BASIS were founded.

Donald and Doris Fisher, co-founders of Gap Inc., were among KIPP's initial donors, providing seed funding to aid the organization's expansion. The seed funding enabled KIPP to expand quickly.

Action

KIPP uses a data-driven instructional approach and continuously monitors a child's progress. KIPP schools also use a modified in-house built curriculum KIPP Wheatley (with help from Great Minds) for teaching English and a nationally recognized curriculum (Eureka Math by Great Minds) for teaching Math to its students.

KLDF consists of three in-person summits for senior leadership of charter schools and public schools as well as representatives from leadership training organizations. The sessions focus on providing a platform for participants to discuss solutions to problems in education, as well as provide an inside view of how KIPP tackles these issues.

Impact

KIPP exceeded the national average across all grade levels on the percentage of students meeting or exceeding growth targets in 2017-18 representing fall-to-spring growth based on Northwest Evaluation Association (NWEA)'s Measures of Academic Progress (MAP) assessment.

KLDF measures success based on two metrics: satisfaction and value addition; obtained through surveys conducted at the end of every summit and at end of the program. In 2017, 97% of fellows said their experience was "Extremely Valuable". Additionally, 100% said they "would recommend the program to others."

Key lessons

KIPP has grown to become the largest charter school network in the U.S., expanding from solely operating charter schools to now providing training and support programs for alumni and educators.

The KIPP case study highlights an example of a charter school operator creating a scalable model of charter schools and providing leadership training based on best practices developed in their own schools.

Situation

Description of entity

KIPP (Knowledge is Power Program) runs a chain of charter schools and training programs across the United States. KIPP schools are tuition-free, public charter schools open to all students, using a lottery only when enrollment is at capacity. KIPP is funded through federal, state, and local grants in addition to supplemental funding through private donors. KIPP's mission is "to create a respected, influential, and national network of public schools that are successful in helping students from educationally underserved communities develop the knowledge, skills, character, and habits needed to succeed in college and the competitive world beyond"[258].

KIPP started in 1994, when Mike Feinberg and Dave Levin, two Teach for America corps members, decided to open a new school to disseminate education using innovative teaching techniques. Mike and Dave were inspired by their colleague, Harriett Ball, who developed a chant that kept young students engaged and excited while learning numeracy. Harriet's teaching method, with some modifications, was adopted directly in KIPP. In 1995, Mike and Dave opened two new middle schools, one in Houston and one in New York City under the KIPP brand. Both schools went on to be among the highest-performing schools in their communities by the end of 1999.[259]

From its initial schools, KIPP has since scaled to encompass four core programs:

1. **KIPP charter schools** — KIPP runs 242 tuition-free, inclusive schools. The schools use a combination of in-house developed and established curricula.

2. **KIPP School Leadership Programs (KSLP)** — As part of the KIPP School Leadership Programs (KSLP), KIPP runs six selective professional development programs that train and develop school leaders, assistant principals, and teachers within the KIPP system. The programs include the KIPP Leadership Design Fellowship, Fisher Fellowship, Successor Prep Program, Leadership Team Program, and Teacher Leader Intensive Course. The sixth program, the KIPP Leadership Design Fellowship (KLDF), focuses on professional development and the dissemination of KIPP practices outside the KIPP system.

3. **KIPP School Summit (KSS)** — KSS is KIPP's internal training program which includes an annual gathering of all KIPP teachers and staff. KSS provides subject specialized training and professional development in a group setting led by qualified instructors. Additionally, teachers have access to a variety of high-quality online instructional toolkits that can be accessed anytime. Teachers can also share innovative learning techniques and seek guidance for classroom situations across KIPP schools on their online platform, KIPP Share.[260]

4. **KIPP Through College** — KIPP has support programs in place called 'KIPP Through College' where alumni are supported by college counselors to choose the right college, obtain financial aid, navigate legal paperwork, and offer any other administrative help that a child might need to get into and succeed in college.

This case study will focus on KIPP charter schools and KLDF.

Key challenge or situation

- **Unequal access to quality K-12 education:** A majority of the students in 83 of the 100 largest cities are kids of color. In all but three of those 83 cities, at least 50% attend a school where a majority of their peers are poor or low-income. In 58 of those cities, at least three-fourths of non-white students attend majority low-income schools. These low-income schools often have access to less funding and often consequently deliver lower-quality education. KIPP's enrollment across its network predominantly comprises ethnic minorities in under-resourced communities.[261]

- **Inconsistencies in teacher quality:** Teacher licensing varies across different parts of the U.S. The licensing of teachers is dependent on each State Education Board, which means that standards vary significantly from state to state (some requiring a full content test with differently scored sub-tests for elementary teachers are compared to others which do not require teachers to pass a content test). The per-pupil spend also varies from state to state, resulting in disparity in teacher salaries from state to state.[262]

- **Lack of training for teachers transitioning into leadership roles:** In existing public schools, the appointment of the headteacher is based on experience in terms of the number of years or based on educational qualifications. There are few systems in place to train and develop existing teachers in the public school system and to mold them into suitable candidates for leadership positions. There is limited teacher professional development available.[263]

Enabling environment

- **Shift toward charter schools:** The concept of charter schools in the United States emerged in the 1970's, when it was thought that a private entity running a public school might achieve better results than that of the existing public school system; however, the value proposition of public schools (free for all and inclusive) would remain. With the passing of the charter law bill in 1988 by President Bill Clinton, and its subsequent inclusion in the Improving America's Schools Act (1994), charter schools gained momentum in the '90s when charter school chains like KIPP and BASIS were founded. The Improving America's School Act was centered on various reforms and provisions for innovations like education technology, charter schools, bilingual and immigrant education funding, and emphasized providing extra help to educationally disadvantaged students and holding schools accountable for their performance. The law allocated USD 11 billion to the program, parts of which helped fund charter school growth.[264]

- **Founders' pedagogy and mission:** Before KIPP was founded, its founders had already developed teaching strategies that were centered on making learning fun through experiential activities. Their focus was not only on pure academics but was also on character development and preparing better citizens. They would do so by inculcating a sense of mutual respect among students and teachers, removing harsh punishments, and rewarding good behavior/students' dedication to academics.[265]

- **Seed funding:** Donald and Doris Fisher, co-founders of Gap Inc., were believers that low-income levels among LatinX and African-American populations should not deter deserving, bright young minds from having access to quality education. They were among KIPP's initial donors, providing seed funding to aid the organization's expansion. The seed funding enabled KIPP to expand quickly.

Action

Description of solution developed

KIPP charter schools

KIPP's regional offices train school principals, recruit teachers, and provide operational support. Schools affiliated to KIPP pay a licensing fee to the KIPP Foundation (equal to one percent of revenue in the first year of operation and three percent in subsequent years). KIPP as a foundation retains the right to withdraw the use of its name if it determines that a school is not meeting the network's standard.[266]

The Foundation bears many of the costs of the initial phase of starting up a school along with being in charge of operations like scouting out new locations and training new principals. KIPP headquarters also provides operational support in the form of advice on human resources management, legal issues, procurement and budgeting. KIPP principals receive a year of salaried training from KIPP. Principals-in-training spend six weeks at Roosevelt University in Chicago to receive formal training and then shadow a principal at an established KIPP school. The remainder of the year is spent preparing their new school for opening. New principals are coached and mentored in the first few years of operation or a school.[267]

Approval from a charter school authorizer — typically a district school board, university, or state department of education — is required before any KIPP schools begin operations to ensure that the school is living up to the commitments in its charter and complies with relevant federal, state, and local requirements.

KIPP has tried to grow in communities that have felt a need for a KIPP school in their neighborhood. They do extensive surveying to be better able to understand the unique needs and demographics of the locality to set up a sustainable KIPP school successfully.

KIPP Leadership Design Fellowship (KLDF)

KLDF consists of three in-person summits for senior leadership of charter schools and public schools as well as representatives from leadership training organizations. The sessions focus on providing a platform for participants to discuss solutions to problems in education, as well as provide an inside view of how KIPP tackles these issues. All summit costs including materials, meals, accommodation and travel are paid for by KIPP, up to a maximum of USD 400 per participant.

KIPP charter schools

- **Open enrollment:** KIPP operates inclusive and non-selective schools, which means every applicant has an equal opportunity to be a part of the KIPP system. KIPP takes in applications every year, and a lottery system is used to decide admissions in case the number of applicants exceed seats.[268]

- **Regional management structure:** Although the funds and other key administrative procedures are looked over by the central KIPP foundations, the regional centers have autonomy in how they want to run the KIPP curriculum and deliver its mission, accounting for regional adaptations.[269]

- **Pedagogy:** KIPP uses a data-driven instruction approach and continuously monitors a child's progress to personalize learning.

- **Resources:** KIPP also has an established online resource library covering a wide variety of topics from basic academics to leadership and character development. This provides the "KIPP family" with access to quality content for learning inside and outside the classroom.

- **Curriculum:** KIPP schools use a modified in-house built curriculum KIPP Wheatley (with help from Great Minds) for teaching English and providing college prep and a nationally recognized curriculum (Eureka Math by Great Minds) for teaching Math. This curriculum is focused on combining relevant content with innovative pedagogy for optimal results. More than 50 other public charter schools (including e.g. Aspire Public Schools, Freedom Preparatory Academy and Memphis Business Academy networks) use KIPP Wheatley.[270]

KLDF

- **Groups of two:** KIPP invites a two-person team from various organizations for free training summit on generating impact through leadership development. KIPP encourages participants to come in groups of two so that they can carry forward their learnings and implement them in their own schools.

- **Modeling program to context:** After an in-depth screening process that consists of a letter of intent and an interview, participants are required to fill out an application (with a letter of support from the organization they are representing) highlighting the problems they identify in leadership development. KIPP shapes the focus of the training to reflect the challenges highlighted in these applications.

- **Insider view of KIPP:** Participants get an in-depth look at KIPP's principal selection, leadership development, and leadership support model over three summit experiences. Participants also have the opportunity to learn about a variety of other innovative school leadership models around the country through their interactions and join a cohort of reform-minded education leaders.[271]

Resources required

- **Financial resources:** KIPP has a mixed funding model with public funding from the U.S. Department of Education and local/state governments. KIPP was recently awarded an USD 87 million grant to open 52 additional schools.[272] Additional funding to support KIPPs programs such as KLDF comes from philanthropic organizations and companies. These include the Doris and Donald Fished Fund (USD 60 million+), Robertson Foundation (USD 25 million+), Arthur Rock and Toni Rembe (USD 25 million+), and the Bill & Melinda Gates Foundation (USD 10 million+), among many others.[273]

- **Human resources:** KIPP staff is organized at the school, region, and national levels. Regional staff oversees schools within a particular region/state. Dedicated personnel also staffed to plan and execute KLDF.

- **Infrastructure:** KIPP is responsible for the identification of a suitable site for the school and the signing of its lease. The infrastructure for the schools (i.e. technology, furniture, etc.) is also procured by KIPP. For KLDF, accommodations and summits are held in hotels in the respective cities.

Impact

Results

Charter schools

- **Scale:** As of the 2019-20 school year, KIPP educates over 100,000 students across 242 schools.

- **Student and teacher retention:** 87% of students attending KIPP schools returned to KIPP for the next academic year. 72% of KIPP Teachers and 86% of KIPP school leaders returned to KIPP for the next academic year.

- **Academic improvement:** KIPP exceeded the national average across all grade levels on the percentage of students meeting or exceeding growth targets in 2017-18 (representing fall-to-spring growth based on Northwest Evaluation Association (NWEA)'s Measures of Academic Progress (MAP) assessment.

KLDF

- **Scale:** Since 2011, the KIPP Leadership Design Fellowship (KLDF) has cumulatively served over 315 participants from

over 110 organizations (estimated to impact over 11.8 million children). This year's program (the 7th edition) saw 142 applicants from 66 different organizations; over 65 applicants are expected to be accepted into the program.[274]

- **Satisfaction and value addition:** KLDF measures success based on two metrics: satisfaction and value addition; obtained through surveys conducted at the end of every summit and the end of the program. In 2017, 97% of fellows said their experience was "Extremely Valuable". Additionally, 100% said they "would recommend the program to others."[275]

Challenges or obstacles

Charter schools

- **Difference in state regulations:** Regulations for charter operators vary from state to state and are influenced by politics. In some states, additional support is offered to charter school operators in the form of subsidies and favorable regulation.

- **Support for charter schools:** National polls have shown recent declines in support for charter schools, especially from Democrats. Ongoing efforts to demonstrate the positive impact of charter schools aim to increase bipartisan support for charter schools.

KLDF

- **Mix-match of context:** KLDF participants tend to come from various backgrounds, with different contexts in the form of school operations and management, mission and values. While the program aims to have participants share the many situations that schools face and best practices to address them, not all practices may be universally applicable.

- **Impact assessment:** Metrics currently used for evaluation are self-reported. KLDF does not yet have in place a metric to measure the impact of the best practices shared among participants (e.g., evidence of student learning improvement based on changes made post-KLDF). Such metrics would help provide concrete feedback on the scalability of teachings and utility of KLDF.

Growth plans

Charter schools

- **Alumni support:** KIPP has created an Alumni Impact Department aimed at providing additional support to KIPP alumni during and after college. KIPP is piloting new programs to support students through college — using AI to send reminders to students over the summer to make sure required financial aid forms are filled out and other documentation required for college is on track. Additionally, KIPP is partnering with colleges to ensure their students have adequate support systems. KIPP also plans to expand an accelerator program that helps students who have graduated to get acquainted with and navigate the job market. The program ensures that students from low-income and under-represented backgrounds have equal access to jobs and career opportunities.

- **Expansion to newer cities:** KIPP plans to expand enrollment by 23,000 students in New York, Houston, New Orleans, and grow new schools in other states using a recent Charter Schools Program Grant from the federal government that will provide USD 86 million over five years to create 52 new schools. KIPP has also recently acquired a few poorly performing schools; part of the grant will go toward improving the curriculum and improving the teacher training/management of those schools.

KLDF

- **Number of summits per KLDF program:** Feedback from the last six fellowships has shown the demand for additional summits or a year 2 of the fellowship. KLDF is considering introducing a fourth summit depending on funding/grant availability.

- **More touchpoints between and after summits:** The three summits span six months with an extended break in between each summit. Some participant feedback indicated they wanted more connections in between summits. As a result, KLDF is planning to run check-ins via calls in between each summit and after the program ends.

Recognition or awards received

Ten KIPP schools in the Los Angeles area were awarded National Blue Ribbons in 2017 by the U.S. Department of Education for exemplary academic success and significant progress in closing the achievement gap for low-income and minority students.[276]

In 2010, KIPP was a winner in a USD USD 650 million federal grant competition hosted by the Department of Education known as Investing in Innovation. KIPP was one of the largest winners, receiving USD 50 million.[277]

In 2019, KIPP was awarded an additional USD 86 million in a Charter Schools Program Grant from the Department of Education.

Key lessons

KIPP has grown to become the largest charter school network in the U.S., expanding from solely operating charter schools to now providing training and support programs for alumni and educators.

The KIPP case study highlights an example of a charter school operator creating a scalable model of charter schools and providing leadership training based on best practices developed in their own schools. Together through its charter schools and KLDF, KIPP addresses the challenges of lack of inclusive access to quality education and disparate teacher preparedness.

Both programs benefit stakeholders throughout the entire K-12 value chain. Additional funding in charter school networks would allow charter schools to further invest in developing pedagogical and managerial best practices, influencing educators not just in their schools but also in the wider community.

Muktangan[278]

Overview

Muktangan is a non-profit that runs a chain of seven public English-medium schools in Mumbai through collaboration with the Municipal Corporation of Greater Mumbai (MCGM). In addition to running its schools, Muktangan focuses heavily on training current and potential teachers, equipping them with innovative pedagogical methods and classroom management best practices. What differentiated Muktangan is a hub and spoke model of education whereby the model of education is made for the community, by the community. Muktangan relies primarily on community support and external funding and has been able to affect wider change over the past sixteen years by disseminating its educational model through the Muktangan Education Resource Centre (MERC). Recently, Muktangan has helped develop teacher-training programs at local teacher colleges and is working with the local government on training government school teachers.[279]

Year(s) active: 2003-present

Public good(s) created: Whole-school delivery (Preschool to Grade 10) and teacher training

Key driver for the public good: Public-private partnership

School ownership: Government-owned schools with Muktangan teachers/staff

Challenge

A lack of proper training and ongoing professional development for teachers continue to be a challenge in India. Poorly trained teachers often have limited subject knowledge and rely on outdated pedagogical methods.

Standard school curricula used in government schools do not develop creativity or critical thinking skills; instead, schools emphasize rote learning and preparation for final exams.

Private schools often deny entry to special needs students or students drop out due to inadequate support or facilities. State schools generally do not have adequate funds to accommodate students with special needs.

Scale of impact

Muktangan's schools educate nearly 3,800 students annually with more than 130 special needs students among this group. Muktangan employs more than 500 community teachers, and its three-year teacher training program (one-year pre-service and two years in-service) educates close to 75 trainees each year, with over 850 teachers trained so far.[280]

Key external stakeholders

1. **Funders:** MacArthur Foundation, MAITRI Trust, and Muktangan Education Trust

2. **Government:** Municipal Corporation of Greater Mumbai (MCGM)

3. **Teacher colleges:** Maharashtra State Council of Educational Research and Training (MSCERT), Tata Institute of Social Sciences, and others[281]

4. **Other non-profit organizations:** Singapore International Foundation, Maharashtra Dyslexia Association, Antarang, UMEED, etc.

Summary

Situation

Muktangan founder Elizabeth (Liz) Mehta became aware of the key challenges facing the Indian education system through her prior work at the Aga Khan Foundation. Liz realized that building teacher capacity with community engagement and developing schools as resource centers could be promising solutions to educational challenges she witnessed.

The Paragon Charitable Trust provided initial funding to Muktangan to cover startup costs. By engaging with leaders in the community early on, Liz and her husband Sunil Mehta were able to get the support of the MCGM, which provided the space for starting up a preschool and, later, offering the spaces that house Muktangan's schools today.

Action

Muktangan runs seven public schools from Preschool to Grade 10 through a unique partnership with the MCGM. Muktangan runs the schools, leading teacher recruitment and training, while MCGM provides the school facilities as well as some classroom materials. Muktangan's in-house teacher education program helps to train and develop mostly female members of the local community to become quality, student-friendly teachers.[282]

Integration of best practices and expertise from Muktangan's teacher education and school programs, the Muktangan Education Resource Centre (MERC) act as a repository of pedagogical expertise where innovative leadership and teacher learning approaches are tested and incorporated.[283]

Impact

In the 2017-18 Secondary School Certificate (SSC) Examinations, Muktangan schools secured a passing percentage of 99.5% compared to an overall average of about 86% for MCGM schools with nearly 80% of Muktangan students securing first class or above compared to the state average of 53%.[284]

Muktangan has supported its teachers in academic and professional development, with 90% of Muktangan teachers attaining additional qualifications through distance learning. Muktangan schools have a student retention rate of over 96%, significantly above the national average of 62% for government schools.[285]

Key lessons

By providing free education to underprivileged students, offering pre-service training to teachers in the community, and sharing best practices to other schools free of charge, Muktangan demonstrates the ability for a non-profit organization to offer public goods in collaboration with government entities.

Compared to government schools, Muktangan's model exemplifies how student outcomes can improve through additional investment and funding in teacher training and teacher support staff.

Muktangan's key drivers of success have been constant dialogue and cooperation between the public and private sectors and its hub and spoke model.

Situation

Description of entity

Founded in Mumbai in 2013 by Sunil and Elizabeth (Liz) Mehta, Muktangan is an initiative of the Muktangan Education Trust (formerly Paragon Charitable Trust) in partnership with the Municipal Corporation of Greater Mumbai (MCGM). Muktangan runs a chain of seven English-medium municipal schools from Preschool to Grade 10 in addition to an education resource center.[286]

Muktangan was started by founders Liz and Sunil Mehta, who sought to provide an educational offering in underserved Mumbai communities. They initiated their work with a small trust and began a dialogue with the local community, who supported the idea of using community women as teachers in a preschool, Muktangan's first offering.

"I had gone past retirement age and my husband had a small trust from his family's failed textile mill. My husband and I thought — why not use money to do educational implementation? We had just gotten a new social worker and sent him into a 'basti' (i.e. slum) where all the textile workers were living. What could we do to help them with the money from the Trust? One morning we were sitting at this table with members of the basti and leaders from every political party. We asked if they could give us six women educated past Grade 10, whom we could develop into early childhood teachers. Because we couldn't find a physical space in the community, we were offered a top floor at a local municipal school with a leaky roof because of the monsoon."
— Liz Mehta, Founder

Muktangan initially started as a single preschool, and now runs seven MCGM schools up to Grade 10, an in-house teacher education program, an education resource center with pedagogical and curricular best practices, and several community outreach programs focused on teacher development and school management.

Muktangan provides an inclusive, student-centered, and community-based model of education to children from underserved communities. Its mission is "to evolve sustainable, replicable and inclusive models of quality child-centered teacher education and school programs in partnership with marginalized communities and to advocate them to the larger system." Muktangan's values focus on critical thinking, reflection, openness to change, respect, and equity and have a vision of "learning and growing together".[287]

Key challenge or situation

A lack of adequate training mechanisms continues to be a challenge in India. Poorly trained teachers often have limited subject knowledge and rely on sub-standard rote pedagogical methods. Teachers certified twenty years ago continue to teach with outdated methods; subsequently, innovative pedagogies are not widely adopted in classrooms.[288]

Additionally, there is a lack of professional development programs offered and schools do not emphasize teacher accountability. As a result, teacher absenteeism and the use of corporal punishment continue to persist across some public and private schools in India.

There is also a dearth of innovation in K-12 curriculum in government schools. Standard school curricula used in government

schools do not focus on creativity or critical thinking skills; instead, schools emphasize rote learning and preparation for final exams.

Despite the Right to Education (RTE) and the Right of Persons with Disability (RPWD) Acts mandating education inclusion, the problem persists, especially among students with special needs. Barriers to entry for special needs students include denial of entry into private schools, or inadequate support and facilities leading to dropouts. Other persistent issues include a rigid curriculum, untrained teachers with low awareness of student disabilities, and unrealistic expectations of performance. State schools generally do not have adequate funds to accommodate students with disabilities.[289]

Enabling environment

Founder Liz Mehta became aware of the key challenges facing the Indian education system through her prior work at the Aga Khan Foundation across India. As Project Director of a national school improvement and development program, Liz realized that building teacher capacity with community engagement and developing schools as resource centers could be promising solutions to educational challenges she witnessed.

The Paragon Charitable Trust, set up by Sunil's father in 1966, provided initial funding to Muktangan to cover startup costs. Despite the access to funding, however, the availability of physical space for schools became a barrier. By engaging with leaders in the community early on, Liz and Sunil were able to gain support from MCGM, which provided the space for starting up the Muktangan preschool and later the spaces that house the schools today. Ever since the organization's inception, the relationship between Muktangan and MCGM has been symbiotic – with Muktangan providing teacher training and schooling to local students and MCGM offering adequate spaces to house the schools. Furthermore, Liz and Sunil relied on community engagement to recruit potential teachers and students who were interested in being part of the first Muktangan preschool.[290]

Action

Description of solution developed

Having witnessed the success of Muktangan's educational approach in its preschool, parents and members of the community influenced Muktangan to expand and serve more teachers and students in the Mumbai area. The MCGM approached Muktangan for a pilot project to set up a fully English medium school, which soon became a formal PPP. Following this, Muktangan set up six additional English medium schools.[291]

Currently, Muktangan focuses on three key activities that support its core mission of offering student-centered education and teacher training:

1. **School program:** Muktangan runs seven public schools from preschool to Grade 10. Its own management runs the schools, leading teacher recruitment and training, while MCGM provides the school facilities as well as some classroom materials. Enrollment into the schools is open to the public, but due to space constraints, the school selects students through a blind lottery process with some spots reserved for students with special needs.[292]

2. **Teacher education:** Muktangan's in-house teacher education program helps train and develop mostly female members of the local, under-served community to become quality, student-friendly teachers.[293]

3. **Muktangan Education Resource Centre (MERC):** An integration of best practices and expertise from Muktangan's teacher education and school programs, MERC acts as a repository of pedagogical expertise where innovative leadership and teacher-learning approaches are tested and incorporated. Additionally, MERC works with various government agencies and non-profit organizations like Antarang and UMEED to deliver additional teacher development programs and workshops to the community.[294]

Key features

Several key features drive success across Muktangan's three main activities:

School program

- **Classroom setup:** Muktangan organizes its Grade 1-10 classrooms by subject. Classrooms are decorated with cut-outs, posters and paintings pointing out to key concepts of that subject. After each class, students move to their respective classrooms for the next subject. The preschool class is divided into zones or corners like the Home Corner, Quiet Corner, Art & Crafts Corner, and Science Corner, which the kids can explore based on their interest.

- **Teaching groups:** For Grades 1-8, the schools divide students into three groups based on their ability levels. Each group has 15 students with one teacher catering to them. The groups change according to subjects, as the ability level of an individual student may be different across subject areas. The teaching groups provide a more effective and lower student-teacher ratio that enables teachers to personalize the lesson delivery according to each student's needs.

- **Learning Resource Group (LRG):** Muktangan schools incorporate the idea of inclusive access to education by enrolling differently-abled students. The LRG department constitutes a strong team of special educators and dedicated

community teachers that provide several individually adapted learning support interventions to students across the seven schools. To provide the best intervention support to its students, Muktangan has collaborated with UMEED and the Maharashtra Dyslexia Association to provide continuous training support to the LRG team.[295]

Teacher education

- **Teacher recruitment:** Muktangan recruits teachers from the nearby communities and trains them through a year-long pre-service teacher education program. Candidates are typically female members of the community with mixed educational backgrounds. An initial screening based on English assessment screens out 40% to 50% of the candidates. The remaining undergo personal interviews, group discussions and orientation programs, from which trainers choose the most suitable candidates who are then inducted as trainees into either the Foundation Course for primary school or the Early Childhood Education for preschool programs.

- **Initial teacher training:** Teachers undergo a five-and-a-half-day weekly training session to help them construct a strong theoretical understanding in areas such as child development, emergent literacy, math, critical thinking, inclusive practices and personal educational beliefs. The trainees simultaneously observe two students during their 400 hours of internship two days of the week within Muktangan schools. Trainees present their observational case study to their allotted mentors after which they graduate to teach at Muktangan schools or any other external school.

- **Ongoing teacher training:** The teaching staff at Muktangan receives continuous classroom support from the experienced subject faculty and weekly Curriculum Understanding Design and Development (CUDD) meetings to strengthen their concepts. They also attend Lesson Development Meetings (LDM) and continuous English proficiency sessions. Muktangan runs professional development training during student holidays and ad-hoc sessions designed to expose teachers to the latest developments in education.

MERC

- **Partnerships with community organizations:** MERC disseminates Muktangan's innovative methods through its outreach programs by refining the existing pedagogy and curriculum based on feedback from its schools. MERC offers professional development opportunities for teachers and educators of other schools and NGOs. Through the Active Constructivism Oriented Teacher Education project (ACOTE), MERC has worked in partnership with the Maharashtra State Council of Educational Research and Training (MSCERT) to set up an integrated, action-oriented, teaching-learning network between ten colleges that offer a Diploma in Elementary Education. Each college has five satellite schools, which Muktangan helped to revamp with a new curriculum. Muktangan has also reformed the curriculum for certification and diploma in Early Childhood Development at Tata Institute of Social Sciences.[296]

Resources required

Muktangan leverages a combination of resources offered by MCGM in addition to resources supported by private donors and the wider community.

- **Physical resources:** Muktangan schools currently operate in spaces provided by MCGM in the G-South Ward of Mumbai. The government also provides school bags to all students with items including uniforms and books. The state supplies electricity and utilities.

- **Human resources:** Muktangan relies on a wide range of educators, teachers, and support staff who are predominantly recruited from the community itself; currently, Muktangan comprises over 450 full-time teachers and 50 part-time teaching staff. It is supported by a resource team that is 5-7 members strong. Government regulations require teachers to be qualified with a collegiate degree and collaboration with TISS provides the Bachelor of Vocational studies degree for trainees. Additionally, some external organizations like Antarang and UMEED have helped Muktangan with the professional counseling of their students.

- **Financial resources:** The Muktangan Education Trust is the main body that supports the Muktangan initiative. There are other philanthropic donations from foundations like the MacArthur Foundation and MAITRI Trust as well as CSR support of companies and financial institutions. Given the student-teacher ratio of 1:15 across all Muktangan schools, the costs incurred on personnel is high.

Impact

Results

- **Scale of impact:** Muktangan schools enroll nearly 3,800 students annually, comprising around 130 special needs students for the current year. They employ more than 500 community teachers. Muktangan's three-year (one-year pre-service and two years in-service) teacher training program trains more than 85 trainees each year with over 850 teachers developed thus far. Over 75% of the trained teachers are absorbed within Muktangan schools and the rest have gained

employment at other schools or NGOs. MERC has also indirectly impacted over 68,000 students by offering continuing professional development to more than 2,800 teachers.[297]

- **Student outcomes:** In the 2017-18 Secondary School Certificate (SSC) Examinations, Muktangan schools secured a passing percentage of 99.5% compared to an overall state average of 86.4% for MCGM schools. 78% of Muktangan students secured a first-class or above compared to the state average of 53%. 23 special needs students also passed the exams with the highest score being 78%.[298]

- **Student retention rate:** Muktangan schools have a student retention rate of over 96%, which is significantly above the national average of 62% for government-mentored schools across any medium.[299]

- **Student-teacher attendance:** The average student and teacher attendance at Muktangan schools are 92% and 94%, respectively, which are both higher than the average for state schools.[300]

- **Teacher quality:** 90% of Muktangan's teachers have upgraded their academic and professional qualifications through distance learning.

Challenges or obstacles

- **Infrastructure:** Limited classroom space has restricted the student intake of Muktangan schools. Each school has the capacity to serve about 45 students per grade level. Despite high demand from the community, Muktangan is unable to increase enrollment without securing additional school spaces from the MCGM.

- **Funding:** While Muktangan operates a separate track in government schools with the government's blessing, it is not in a formal PPP with government and is reliant on donor funding. However, the availability of interested external funders has been a constant challenge as Muktangan has matured as many donors are increasingly seeking to sponsor young, emerging organizations.

- **Operating cost:** Muktangan's positive student outcomes are driven in part by its low student-teacher ratio. However, the low student-teacher ratio comes at the expense of a high per-student cost of ~USD 660 per year (INR 47,000; calculated at an exchange rate of INR 71.26 to USD 1 on the date September 26, 2019).[301]

Growth plans

While Muktangan has no future plans to directly scale to more municipal schools, it aims to share its model through outreach and advocacy programs with the state government and other institutions. Muktangan will continue to partner with government agencies, policymakers, and external organizations to further disseminate its best practices.

In a new project with MCGM, Muktangan will directly assist in the training of some government school teachers with Muktangan's pedagogy and approaches. Ongoing initiatives include collaboration with Singapore International Foundation and a revamp of TISS's curriculum, which will soon be complete. Partnerships will be an important part of the outreach and growth plans.

Recognition or awards received

Muktangan won the "The Award of Most Committed NGO of the Year 2014" by Early Childhood Association (India) working for "Young Children and their Education".[302]

Muktangan was awarded the Platinum Seal (champion level), 2016-17 by Guide Star India for transparency and public accountability.[303]

Key lessons

Through providing free education to underprivileged students, offering pre-service training to women in the community, and sharing best practices to other schools, Muktangan's example demonstrates the ability for a non-profit organization to offer public goods in collaboration with government entities. While Muktangan operates at a higher cost per student than do government schools, its model exemplifies how student outcomes can improve through additional investment and funding in teacher training and teacher support staff.

Muktangan's key drivers of success have been constant dialogue and cooperation between the public and private sectors and its hub and spoke model. Through its strong working relationship with the MGCM, Muktangan sparked change initially through its self-managed schools and training for its own teachers, and now through its reach to other government schools and teachers across the Greater Mumbai area.

Muktangan positively and directly impacts stakeholders across the education value chain through its holistic and multifaceted approach to teacher training and school management. Furthermore, Muktangan has strategically leveraged partnerships with other organizations and government agencies to support its schools and spread its best practices.

Further investment in organizations like Muktangan would enable small-sized non-state actors to work on replicable educational models, which the government can deploy across state schools.

Rising Academy Network — LEAP Schools[304]

Overview

Rising Academy Network (Rising), a low-cost private school chain, operates nearly 30 public schools in Liberia under one of the world's most ambitious Public-Private Partnership (PPP) programs, the Liberian Education Advancement Program (LEAP). Rising has been distinctive among operators because of its improved curricula, detailed teacher guides, intensive teacher coaching and training, and effective school management. Many LEAP schools have adopted some of Rising's approaches, including its curriculum. Rising has been able to reduce operational costs to a level close to half that of the average across all operators.

Year(s) active: 2016-present

Public good created: Whole-school delivery (Primary)

Key driver for public good: Public-private partnership

School ownership: Government schools and teachers

Challenge

Liberia faces several challenges within the education provision. It lags behind most other African countries in education access and quality, with only 44% of children of primary school age enrolled in primary school.[305] In addition, Liberia also faces a challenge of over-age children who instead of being in primary school are stuck in the Kindergarten/Early Child Development grades. As a result, the percent of students who are physically out of school is much lower at 16%.[306]

The Liberian education system is also characterized by low government spend (USD 50 per child), poor teacher quality, lack of accountability, and high inequality in public education provision between rural and urban areas.[307] School resources are sub-standard, yielding low educational outcomes.[308]

Scale of impact

Rising grew from reaching 1,100 students in five schools in its first year (2016-17) to 29 schools and 6,500 students in its third year (2018-19). This year, the Liberian Government has asked Rising to scale its work to 87 schools.

Key external stakeholders

1. **Government:** Liberian Education Ministry officials at both the national and local levels, and the Liberian Education Advancement Program (LEAP) team.

2. **Advisors:** Education Partnerships Group (a spin-off from the U.K. school network, Ark, that advises governments on how to strengthen their education systems) and Social Finance, a non-profit organization that partners with the government, the social sector and the financial community to find better ways of tackling social problems. Both advisors provide support and strategic advice on program design and contracting, fundraising, financial management, and performance monitoring.

3. **Community:** Rising needed the support of parents, communities and Parent-Teacher Associations in making several changes, from extending the school day to finding accommodation for new teachers.

4. **Other operators:** LEAP has been involved with eight other operators including Bangladesh Rural Advancement Committee (BRAC), Bridge International Academies (BIA), Liberia Youth Network (LIYONET, later renamed to UMOVEMENT), More Than Me, Omega Schools, Rising Academies, Stella Maris, and Street Child.

Summary

Situation

In the face of entrenched challenges following civil unrest and the Ebola outbreak of 2015, Liberia's education system was severely underperforming. The Liberian government responded by launching a large-scale PPP in 2016 named the Liberian Education Advancement Program (LEAP, formerly Partnership Schools for Liberia). The program's objective was to tackle low-quality education in public schools and to improve access to education by allowing non-state actors to directly manage public schools and implement practices that would enable positive student learning outcomes. The pilot program officially began in September 2016, with eight for-profit and non-profit providers. In its first year, the program included just 94 primary schools out of 2,375 in the country (4% of primary schools in the country).

One of the providers for LEAP, Rising Academies, is a low-cost school chain founded in 2014 in Sierra Leone with a mission "to create schools that open doors and change lives".[309] Rising had pre-existing connections in Liberia through the philanthropic activities of a founding partner organization, the Solon Foundation. When LEAP invited Expressions of Interest, the Education Partnerships Group, which was advising the Government on the design of the program, approached Rising to participate.

Action

Rising Academies had tested and honed its school model in Sierra Leone before launching five schools in LEAP in September 2016. Rising has a sustainable growth model and seeks to provide high-quality education at an affordable cost, through improved

curricula, including detailed teacher guides for every lesson, intensive teacher coaching and training, and effective school management through data and a tech-enabled field team.

The organization extended the same resources to its network of PPP schools in Liberia (which numbered five schools in Year 1 and 29 schools in Years 2 and 3). During this time, Rising has been able to achieve not only strong academic results but also a higher level of cost-effectiveness compared to its peers. Its current cost per pupil of USD 62 is significantly less than the PPP LEAP average of USD 122[310]. Further, Rising schools have switched from using smart devices to a paper-based approach to lower their costs.

The Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) continually track student literacy and math performance. Rising's field teams of Schools Performance Managers also use other tools, including a 'SchoolSnapshot' school monitoring rubric to track attendance, safety and curriculum adherence.

Impact

Rising grew from reaching 1,100 students in five schools in its first year (2016-17) to 29 schools and 6,500 students in its third year (2018-19). This year, the Liberian Government has asked Rising to scale its work to 87 schools.

The midline report for the LEAP PPP in 2017 showed strong results in specific areas for Rising. The school's student retention was nearly 95%, compared to control schools with roughly 90% retention. Attendance rates have also significantly improved, standing at nearly 58% for students in Rising schools and about 68% for teachers, while attendance rates at public schools are 28% and 25%, respectively.

Key lessons

Rising Academies' work with LEAP illustrates how non-state educational actors can improve access and educational quality at public schools while disseminating practices, lesson guides, and curricula that can be adopted throughout education systems.

Rising's key drivers of success have been:

1. A curriculum that emphasizes literacy and numeracy skills

2. Teacher coaching and training that incorporates the use of Master Teachers

3. Tracking of student learning outcomes to ensure efficacy

4. A culture of feedback to ensure teachers and students are held accountable for learning

Situation

Description of entity

Founded in Sierra Leone in 2014, Rising Academies operates ten high quality, affordable private schools in the country. It also runs 29 government schools in rural Liberia under the Liberian Education Advancement Program (formerly Partnership Schools for Liberia).

"As a founder, my interest was in whether there was something that I could do to help address the global learning crisis, partly because I had seen the consequences of it while previously working inside governments in Africa."
— Paul Skidmore, CEO

Rising Academies opened its first school in Sierra Leone in April 2015 to serve families looking for high-quality education at an affordable cost. Prior to this, it provided emergency education to children during the Ebola epidemic.

Rising Academies' organization is broadly divided into key functional areas: academics, including the school model, curriculum, teacher training and development, school oversight, data and analytics, and operations and finance.

Key challenge or situation

Liberia faces several challenges within the education provision. It lags behind most other African countries in education access and quality, with only 44% of children of primary school age enrolled in primary school.[311] In addition, Liberia also faces a challenge of over-age children who instead of being in primary school are stuck in the Kindergarten/Early Child Development grades. As a result, the percent of students who are physically out of school is much lower at 16%.[312]

The Liberian education system is also characterized by low government spend (USD 50 per child), poor teacher quality, lack of accountability, and high inequality in public education provision between rural and urban areas.[313] School resources are sub-standard, yielding low educational outcomes.[314]

Compounding the issue of access and low government spend is stark inequality in the education system. Majority of the country's wealth and economic resources are concentrated in Montserrado County, where the country's capital is located. As a result, quality

education is typically not available in rural areas in Liberia, which lack adequate infrastructure and qualified teachers.

Following a protracted civil war of 14 years that ended in 2003, years of unrest ensued which led to rapid deterioration of the education system. The war destroyed 70% of the schools. Furthermore, Liberia was at the epicenter of the Ebola crisis in 2015 that decimated many institutions and constricted the trained workforce, including teachers, school leaders, and civil servants.[315]

Subject experts have described teachers to be lacking in sufficient formal education and basic skills, while deeming teaching environments void of basic infrastructure and resources, with little or no system of accountability.

Enabling environment

In the face of entrenched challenges following civil unrest and the Ebola outbreak of 2015, Liberia's education system was severely underperforming. In 2015, Liberia's President Ellen Johnson Sirleaf requested that the new Education Minister, George Werner, develop a structure to significantly improve the education system and to do so in a manner that ensured scalability. Werner responded by launching a large-scale PPP in 2016 named the Liberian Education Advancement Program (LEAP, formerly Partnership Schools for Liberia). The program's objective was to tackle low-quality education in public schools and to improve access to education by allowing non-state actors to directly manage public schools and implement practices that would enable positive student learning outcomes.

The pilot program officially began in September 2016, with eight for-profit and non-profit providers including Bangladesh Rural Advancement Committee (BRAC), Bridge International Academies (BIA), Liberia Youth Network (LIYONET), More Than Me, Omega Schools, Rising Academies, Stella Maris, and Street Child. In its first year, the program included just 94 primary schools out of 2,375 in the country (4% of primary schools in the country). In its second year, the program doubled to including 200 primary schools in the country (~8% of primary schools in the country).

One of the providers for LEAP, Rising Academies, is a low-cost school chain founded in 2014 in Sierra Leone with a mission "to create schools that open doors and change lives"[316]. Rising had pre-existing connections in Liberia through the philanthropic activities of a founding partner organization, the Solon Foundation. When LEAP invited Expressions of Interest, the Education Partnerships Group, which was advising the Government on the design of the program, approached Rising to participate.

Action

Description of solution developed

Rising Academies had tested and honed its school model in Sierra Leone before launching five schools in LEAP in September 2016. Rising has a sustainable growth model and seeks to provide high-quality education at an affordable cost, through improved curricula, including detailed teacher guides for every lesson, intensive teacher coaching and training, and effective school management through data and a tech-enabled field team.

Rising's solution in Liberia features three key characteristics:

1. **Curriculum and pedagogy:** Rising Academies adapted the curriculum and pedagogy it developed in Sierra Leone to the Liberian context, focusing on literacy and numeracy. Additionally, it provides lesson guides with instructional content and specific directions to adequately prepare teachers for instruction. Guides focus on general teaching skills, managing classrooms, checking for understanding, and asking important questions.

2. **Continuous monitoring and assessment:** Rising ensures regular data collection and analysis to support both students and teachers, as well as to track the program's progress. For example, if Rising detects any ongoing issues in the curriculum, the schools incorporate consequent changes in the content and lesson guides for current teachers and the pre-training of the next batch of teachers.

3. **High accountability:** The school cultivates accountability throughout its model; for instance through the appointment of Master Teachers, high performing teachers selected and trained to observe the teaching staff and provide coaching. Rising's scale up from 5 to 29 schools was partially attributed to its strong results.

Key features

Several key features drive Rising's success:

1. **School duration:** Rising extended its school timings by about 2.5 hours, from a school day ending at 12:00 noon to one ending at 2:30 pm, to use the additional time to focus on numeracy and literacy skills. Other operators also extended hours, and in light of the program's early successes, The Ministry of Education eventually adopted this change by extending the school day of every public elementary school by around two hours from the 2017-18 academic year.

2. **Teacher training:** Rising field supervisors deliver a weeklong pre-service teacher training program at the beginning of each school year, with inputs and oversights from the central academics team. The goal is to prepare teachers to deliver the curated content effectively. The training program also allows teachers in different schools to get to know and learn from one another.

3. **'Master Teachers':** The program requires selecting a Master Teacher from among each school's teachers (based on their pedagogical skills and their ability to provide feedback and coach others) and training them in using lesson observation rubrics. Master Teachers coach other teachers through weekly interactions and observations. They also manage the academic life of Rising schools, including the delivery of the right curriculum materials to teachers and remedial interventions.

4. **Performance management:** Rising tracks assessments externally through the RCT and internally through student assessments each term (every three months), and provides results to a dedicated data analytics team to assess. This has helped track student outcomes and drive quality control on an ongoing basis. Rising appoints School Performance Managers, comprising dedicated Rising Managers, to oversee 5-8 schools each and conduct weekly visits to produce data reports, called 'SchoolSnapshot', that help track key drivers of learning. These include student and teacher attendance, child protection routines, school safety and hygiene, student and teacher behavior, fidelity to the curriculum and timetable, and teaching quality. Tracking learning drivers helps to ensure consistent quality and ongoing course correction. The pre-service teacher training then draws on learnings to refine the approach and incorporate insights on issues faced by students and teachers.

5. **School leadership:** Rising's team works closely with its school principals to develop leadership capability. School Performance Managers provide principals with simple checklists, routines and timetables to help them in the efficient organization and management and coach them on using student and teacher attendance data for effective follow-ups.

6. **Cost-effective model:** Rising's focus on low-cost schooling is evident through its significant cost reduction in per-child cost from USD 270 in its first year to USD 62 in its second year. In the second year of the program, the LEAP average was USD 122 with some competitors as high as USD 205. The lowest cost observed among operators was Street Child's average of USD 40 per pupil[317]. Rising's efficient costs are possible through a combination of a lean central overhead and a well-trained, tech-enabled field staff which, when scaled up from five schools to 29, can provide significant economies of scale while still maintaining quality.

7. **Proprietary curriculum:** Rising's curriculum includes high-level lesson guides focused on comprehensive phonics and numeracy instructions, along with specific prompts on good pedagogical practices. It has yielded promising student outcomes. Other features include a Reading Club, a remedial literacy program comprising a mixture of phonics and simple read-aloud tasks, which the Master Teacher delivers directly to student groups sorted by their ability level. Numbotz is another tool aimed at improving the student mastery of foundational math concepts. It requires going through easy levels of subtraction and addition and then through an advanced level of multiplication operations during a timed, high-energy daily exercise. Other operators like More Than Me have adopted Rising's curriculum model to improve their results.

Resources required

The program requires human resources in the form of staff, school teachers, and Master Trainers. There are several other resources that the project leverages:

- **Organizational intellectual property:** Rising deploys proprietary curriculum tools and lesson plans which have been adapted to the Liberian context. It also leverages its own monitoring and assessment tools.

- **Educational infrastructure:** The program works in government schools and is able to use state-provided furniture and books. Adaptations of switching from tablets to a paper-based delivery approach as well as other experimental improvisations were suited well for the rural Liberian context and enabled cost savings.

- **Financial resources:** Like other LEAP operators, in the first three years of the program Rising was paid out of a pooled fund under a funding formula that provides USD 50 per student per year or USD 60 per student per year for schools in the most disadvantaged areas. Contributions to this pooled fund came from a number of prominent philanthropic foundations, including UBS Optimus, LGT, Mulago Foundation and Vitol Foundation. As a company, Rising's principal investor and shareholder is Solon Capital Holdings, a West Africa-based investment company backed by the U.K.'s CDC Group.

Impact

Results

Student outcomes data are available for all LEAP schools through a randomized control trial conducted in collaboration between the Center for Global Development, IPA, and two PhD researchers from the University of California, San Diego[318]. The Government also monitors the programs through third-party and self-reported

data provided by operators and triangulates it through occasional field visits.

- **Scale:** Rising grew from reaching 1,100 students in five schools in its first year (2016-17) to 29 schools and 6,500 students in its third year (2018-19). This year, the Liberian Government has asked Rising to scale its work to 87 schools.

- **Retention:** The midline report for the LEAP PPP in 2017 showed strong results in specific areas for Rising. The school's student retention was nearly 95%, compared to control schools with roughly 90% retention. Retention between years was marginally better in Rising Schools.

- **Attainment:** At Rising, student attainment has increased by 0.75 standard deviations on literacy and by 0.95 standard deviations on numeracy. Across all operators, attainment has increased by 0.55 and 0.54, respectively, indicating that Rising has achieved better outcomes than both other providers and control schools.[319]

- **Attendance:** Attendance rate has significantly improved, standing at nearly 58% for students in Rising schools and about 68% for teachers, while attendance rates at public schools are 28% and 25%, respectively.

Challenges or obstacles

- **Scaling:** The adoption of the Sierra Leone program into the Liberian context was a challenge for Rising. Rising's Liberia schools are primarily rural, while its Sierra Leone schools are primarily urban. Additionally, the program runs pre-K-6 schools in Liberia, while at the time its schools in Sierra Leone were all junior secondary schools (Rising has subsequently extended their offering in Sierra Leone to include primary schools). Additionally, the short turnaround time was a challenge as the PPP contract was approved in July 2016 with a September 2016 school start date.

- **Human resources:** The Liberian Government retains responsibility for employing and paying teachers. There have been delays in adding new teachers to the government payroll, leading to some teacher dropouts from schools run by the program. A delay in salary payment by the government has also led to challenges with teacher retention.

- **Government:** The organization initially encountered some distrust and skepticism from local education officials who had been involved in the program's design. Building effective working relationships at the local level remains an ongoing priority. The continuity of the program and the stability of its funding has been unpredictable, in part due to the election of a new government with new policy priorities.

- **Societal:** In some of the communities where Rising works, community attitude is an obstacle due to historical and religious differences that have de-valued secular western education.

Growth plans

The Government of Liberia has extended LEAP for the fourth year and has asked Rising to expand its operations to an additional 58 schools. In the long-term, discussions are ongoing between the Liberian Government and its donor partners about the possibility of transitioning LEAP into an outcomes-based funding mechanism.

Recognition or awards received

Rising Academies was one of three providers to be awarded the top "A" rating by the Liberian Ministry of Education for its strong performance in Year 1 of LEAP and may potentially scale up to 87 schools by the end of 2019. Rising's work in Liberia was also featured in a Financial Times Weekend Magazine Cover Story by David Pilling on Partnership Schools for Liberia.

Key lessons

Public-Private Partnerships like LEAP demonstrate the ability for the private sector to improve access and educational quality in an environment with relatively low governmental barriers and some economic incentives through cost subsidization. Rising Academies specifically embodies an example whereby a non-state actor can improve access and educational quality at public schools while disseminating practices, lesson guides, and curricula as a public good shared with the government and other operators.

Rising's key drivers of success have been its curriculum which emphasizes literacy and numeracy skills, teacher training which incorporates the use of Master Teachers, tracking of student learning gains to ensure efficacy, and a culture of feedback to ensure teachers and students are held accountable. Further investment in organizations like Rising Academies would enable non-state actors to provide higher-quality education cost-effectively with the potential to scale.

The Citizens Foundation — Government Schools Programme (GSP)[320]

Overview

The Citizens Foundation (TCF) is a professionally managed, non-profit organization running a network of 1,600+[321] schools in Pakistan. In its Government Schools Programme (GSP), TCF has partnered with provincial governments under diverse PPP agreements to adopt and effectively manage more than nearly 350[322] government schools that have traditionally suffered from poor teacher quality and low student learning outcomes. TCF has been able to succeed by having a strong management system, teacher training, and curriculum tailored to the requirements of each province. This case study will focus on the GSP.

Year(s) active: 1995-present

Public good created: Whole-school delivery (Primary)

Key driver for the public good: Public-private partnership

School ownership: Mixed — 1. Public schools with government teachers. 2. Public schools with TCF teachers. 3. TCF schools with TCF teachers with operational funding by the government

Challenge

Pakistan has the second-largest population of out-of-school children with 23 million as of 2015.[323]

Learning levels of enrolled students are low in Pakistan. The ASER study in 2018 showed that 82% of the class 3 children could not read a story in Urdu. 88% of class 3 children could not read class 2 level sentences and 55% of children enrolled in class 3 could not do two-digit division.[324]

On an average, teacher qualifications are low as only 59% of teachers have a bachelor's degree; the rest have either a primary teaching certificate (PTC) or just a Certificate of Teaching (CT).[325]

Scale of impact

GSP involves more than 300 schools. It has enabled the refurbishment of more than 160 among these. It has also accounted for the hiring of more than 1,700 teachers and principals with over 100,000 hours of teacher training conducted so far.[326]

Key external stakeholders

- **Government:** Government of Punjab and Sindh along with other provincial governments are involved in the different

contracts. Additionally, the Punjab Education Foundation (PEF) and Sindh Education Foundation (SEF) are the main intermediary government organizations involved.[327]

- **Business:** Where TCF has the autonomy to prescribe syllabus outside of the relevant government's textbook board, TCF uses syllabus from private publishers such as the Oxford University Press, in addition to its own syllabus.

- **Non-profits:** TCF uses the Pratham Foundation's ASER tool in their remedial education program. The tool has been adapted for the Pakistani context by Idara-e-Taleem-o-Agahi (ITA). In addition, TCF uses syllabus by the Literate Pakistan Foundation in the remedial program.

- **Donors:** TCF has a large and diversified funder base consisting of local and diaspora philanthropy, corporate and family foundations, and governments. It counts 20,000 donors around the world to date. There are registered, tax-exempt, fully audited fundraising organizations in seven countries including the U.S., U.K., Canada, Australia, Italy, and UAE, with a volunteer presence in 30 cities across the world. Corporate and foundation donors have included: Coca-Cola, Pepsi, Target Foundation, Qatar Foundation, Citi Foundation, Standard Chartered Bank, Skoll Foundation, Dubai Cares, JP Morgan Chase Foundation, Barclays, Shell, Siemens, Merck Family Foundation, UBS Optimus Foundation, and many more. TCF's public sector donors include the Punjab government, DFID, New Zealand, Australia, Japan, and others.

Summary

Situation

TCF began as a non-profit running five schools in the underprivileged areas of Karachi after a group of six Pakistani businessmen envisioned a goal of building 1,000 schools in urban slums and rural communities to provide quality education for the poor.

In April 2016, the Government of Punjab announced the lease of 5,000 schools to private operators in a PPP program. The governments of Sindh and other states followed suit with the rollout of similarly structured PPP programs to improve the condition of primary schools.

Action

TCF's Government School Programme (GSP) started in April 2016 with the adoption of 250+ primary (Grade Pre-K to 5) schools in remote rural areas of Punjab. In the Punjab PPP, TCF had the autonomy to manage, hire and train new teachers and principals.

TCF subsequently scaled in other provinces; it was awarded 14 elementary, middle and lower secondary schools in Sindh by the Sindh Education Foundation (representing the Sindh government). The program now covers more than 300 schools across five provinces.[328]

Impact

The ASER evaluation tool for remedial education showed tremendous improvement in English, Urdu and Mathematics by 103%, 90% and 257%, respectively in 2017.[329]

Average enrollment per school in government schools has more than doubled from 47 to 101 students.[330]

Before GSP, the adopted government schools had consistently low student achievement as observed through low scores on the government-administered Quality Assessment Test (QAT) (below 20%). Within a year of taking over, TCF was able to turn around these schools such that 60% of them were able to clear the passing threshold specified by PEF, which requires that more than 75% of sampled students secure a passing score in the PEF-administered Quality Assurance tests.

Key lessons

The Government Schools Programme (GSP) run by The Citizens Foundation exemplifies the ability of a non-profit organization to offer public education provision through PPPs with various provinces in Pakistan. By first creating and running its own affordable schools, TCF was able to develop best practices in the management and delivery of K-12 education that it then adapted to the constraints and policy environment of government schools. At the heart of TCF's model is an entrepreneurial culture, an organizational structure resembling a corporation, systems for delivering quality education developed through research on best practices around the world, adapted to the local context, and performance management through data. Combined with financial support from international donors and the subsidies from the government, TCF has developed a sustainable model of full school delivery that can be replicated in other contexts.

Situation

Description of entity

Founded in 1995, The Citizens Foundation (TCF) is a professionally managed, non-profit organization running a network of 1,600+ schools in Pakistan along with multiple community development programs. TCF began with five schools in the underprivileged areas of Karachi after a group of six Pakistani businessmen envisioned a goal of building 1,000 schools in urban slums and rural communities to provide quality education for the poor.

TCF aims to 'Remove the barriers of class and privilege to make the citizens of Pakistan agents of positive change'. TCF has scaled from initially offering highly subsidized education at TCF schools to now providing a variety of programs to students, teachers, and members of the community.[331]

Independent fundraising organizations in seven countries including the U.S., U.K., Canada, Australia, Italy, and UAE and volunteers in over 30 cities across the world sustain the nearly 1,300 schools that TCF owns and manages. TCF also has an additional nearly 350 schools in partnership with the provincial governments in Pakistan, with PPPs rapidly expanding. Most of these schools are co-funded by philanthropy.

TCF currently has four key programs organized as functional areas:[332]

1. **School program:** TCF runs about 1,300 flagship affordable schools across all the provinces of Pakistan and deploys its own child-centered curriculum and textbooks. The schools employ only female faculty and feature standardized teaching guides and workbooks, strong school leaders supported by female field managers with credentials in quality education management, teacher education to strengthen their knowledge of the subjects they teach, internal assessments reflecting Bloom's Taxonomy and independent external testing, as well as university/professional preparation for students.

2. **Government Schools Programme (GSP):** TCF has partnered with the provincial governments in a PPP to adopt and effectively manage the public schools that have traditionally suffered from poor teacher quality and low student learning outcomes. In GSP, TCF hires and trains the teachers and school management. Additionally, TCF refurbishes the infrastructure and runs a parallel remedial education program to improve the foundational skills of the children, as per need.[333]

3. **Community development program:** TCF offers several programs focused on adult literacy and vocational training to empower women and communities. Aagahi is one such literacy program for women in rural areas and urban slum communities that teaches them how to read and write.[334]

4. **Volunteer and alumni development program:** TCF organizes university counseling and test preparation classes for alumni and supports them through scholarships to secure admission in top-tier universities in Pakistan and around the world. It also offers internships, volunteering programs, youth mentoring and career counseling for students across the country.[335]

Given the scale of TCF's Government Schools Programme (GSP), the case study will focus on GSP as one of the key public goods delivered by TCF.

Key challenge or situation

- **Access to education:** Pakistan has the second-largest population of out-of-school children with 23 million as of 2015 (Nigeria being the first). This population comprises students aged 5-16 who are primarily from remote rural areas and urban slums.[336]

- **Low quality of learning:** Learning levels of enrolled students are low in Pakistan. The ASER study in 2018 shows that 82% of class 3 children could not read a story in Urdu. 88% of class 3 children could not read class 2 level sentences and 55% of children enrolled in class 3 could not do two-digit division.[337]

- **Low government spend:** Pakistan's government spends less than 2% of its GDP on education as opposed to UNESCO's recommendation of at least 4%. Its schools typically have infrastructure issues, overcrowded classrooms, and a shortage of qualified teachers.[338]

- **Shortage of trained teachers:** 59% of teachers have a bachelor's degree; the rest have either a primary teaching certificate (PTC) or just a Certificate of Teaching (CT). Schools in remote locations also have a shortage of teaching staff, resulting in a reliance on multi-grade teaching.[339]

Enabling environment

- **Initial funding and diversity of team:** The physical capital required to set up the initial five schools came from the six founders who were all businessmen and executives of their respective companies. To develop the organization, the founders recruited former military officers with adequate operational skills to manage the nationwide set-up and scaling of the initial schools in remote locations. The initial team also recruited additional former C-level executives to accelerate TCF's expansion and also benefited from the expertise of one of its founders, an established architect, who influenced the architectural design of TCF schools. Global chapters were subsequently established in major areas with Pakistani diaspora (i.e. Dubai, U.S., U.K.) to bring greater international exposure to TCF and tap into a wider pool of donors.

- **PPP programs in education:** In 2010, education became a fundamental constitutional right under Article 25A of Pakistan's Constitution. Meanwhile, the provincial governments of Sindh and Punjab issued new acts and amendments — the Punjab Public-Private Partnership Act 2014 and the Sindh PPP (Amendment) Act 2015 — which provided a framework for public financing of services through transparently procured partnerships. In April 2016, the Government of Punjab announced the lease of 5,000 schools to private operators. The governments of Sindh and other states followed suit with the rollout of similar PPP programs to improve the condition of primary schools. Private school networks and individuals could now operate government schools at scale backed by subsidies that would at least cover part of their costs.[340]

Action

Description of solution developed

TCF achieved its goal of 1,000 schools in 2014 and saw the emerging PPPs in education as an opportunity to kickstart its Government Schools Programme (GSP). The engagement started in April 2016 with the adoption of primary (Grade Pre-K to 5) schools in remote rural areas of Punjab and has now scaled to about 310 government schools in Pakistan.

The Punjab GSP was a PPP with the Government of Punjab through Punjab Education Foundation (PEF) as the intermediary under which TCF would be given the autonomy to manage, hire and train new teachers and principals. TCF's mandate was to address the low enrollment, poor results and teacher absenteeism with its own teaching and learning program, supplementary materials and training methods.

TCF subsequently scaled in other provinces; it was awarded 14 elementary, middle and lower secondary schools in Sindh by the Sindh Education Foundation (representing the Sindh government) and another 30+ school units under the Sindh Basic Education Programme. TCF is also running second-shift schools in the Nowshera district of Khyber Pakhtunkhwa province in a five-year partnership with the Education department of the provincial government. Additionally, it manages five government schools in the Baluchistan state.[341]

The modes of partnership with the different provincial governments differ by state with three key models in place:

1. **Lease contract model:** This is a simple model of public school adoption with a certain subsidy paid per child to TCF. TCF can then hire and train new staff but must use the curriculum and assessment model prescribed by the government.

2. **Concessional contract model:** TCF has negotiated a contract with the Sindh government to establish and run 500 new low-cost private schools, receiving a per-child subsidy in return from the government. TCF will maintain ownership

over the building, curriculum and management. The first school has already been constructed and made operational.

3. **Management contract model:** The third model is based around the Sindh Basic Education program where consolidated schools have been built by USAID and TCF is responsible for managing the government teachers and resources.

Key features

TCF has hired over 1,700 faculty and staff members and implemented some of its tested administrative and academic models to boost enrollment and learning outcomes across partner schools. TCF has adapted its proprietary models and practices, including a train-the-trainer model, to suit schools in rural settings. The following features have enabled GSP to succeed.

1. **Remedial education program:** TCF adapted the accelerated learning program Aaghaaz using syllabus from the Literate Pakistan Foundation and launched it in their government schools. The program uses the ASER tool and replaces the usual course lectures of all grade students for about 8-10 weeks to help students achieve competencies in core Urdu and English literacy as well as numeracy.[342]

2. **Decentralized field management:** TCF's managerial structure has been implemented in GSP schools. Area Managers supervise and train principals and teachers at the schools itself. The Area Managers are supervised by a regional management team, and supported and trained by design and implementation teams in the Head Office.

3. **Teacher and principal trainings:** The training is carried out in phases. The first phase of ten days involves capacity building and development of the area managers. The second phase is taken up by area managers training principals in leadership followed by equipping them to train their school teachers. In the last phase lasting for four days, the principal trains the school teachers in effective teaching practices and orients them to new policies, and use of additional resources.

4. **Area Managers:** Each Area Manager typically handles 20-30 schools with an upper cap of 35 schools. The school manager monitors, supports and trains the principals of the schools in the area through regular field visits typically scheduled once every six weeks. Classroom observations are conducted to monitor teachers' delivery of lesson plans. School inventory is scanned for the availability of textbooks, laboratory equipment, and other resources. The manager reports feedback on the school's progress on school visit form which includes indicators and rubrics on academic and administrative processes in the school and enables intervention where needed.

5. **All-women staff:** TCF aims to ensure gender parity across all its schools — flagship or government. TCF has some all-girls schools among its GSP schools. Since most of the GSP schools are in remote rural communities, the presence of all-women staff during the enrollment drives are effective in convincing even the most orthodox parents about TCF's standards around girls' safety.

6. **Language-based curriculum:** TCF has developed its own curriculum along with supplementary guides and workbooks for the teachers and students respectively. It has also invested in Math, Science and English language resources for the students. The curriculum and the textbooks are mostly tailored in Urdu which is the first language for a major proportion of the population. TCF has been able to implement its curriculum with its own textbooks in the Sindh schools while in Punjab, it uses its guides and worksheets to supplement the government prescribed curriculum.

7. **Internal quality assessments:** TCF is in the process of developing quality assessments for the GSP schools and has an assessment related to teacher quality. TCF's Quality Assurance team manages such activities through a centralized assessment system and stores the results for report generation and future planning.

Resources required

- **Physical and human resource:** TCF works in government school buildings in the provinces of Punjab, Sindh, KP, and Balochistan. Additionally in Sindh, it also works in the mega-schools constructed under SBEP by USAID. Under most arrangements, TCF hires female teachers and principals from communities and trains them to teach in these government schools. Textbooks, supplementary training guides and additional learning materials are provided by TCF in the schools based on the contract. TCF also relies on its own volunteers and directly employed area managers.

- **Intellectual:** TCF uses the syllabus and textbooks prescribed by the government in the Punjab government schools supplemented by teachers' guides. In Sindh, TCF uses its own curriculum and textbooks along with its own testing machinery. TCF also uses the ASER (Annual Status of Education Report) tool as an indicator of success.

- **Financial:** TCF's GSP schools are partially funded by the provincial government. Out of a total of 1200-1600 PKR incurred per child per month, a subsidy of 800-1600 PKR (depending on grade level) is provided in Sindh whereas, in Punjab, the state covers around 700 PKR per child. TCF makes up for the shortfall from unrestricted donations that it receives, mostly from local and diaspora philanthropy.

Impact

Results

Data on impact is gathered through internal assessments conducted by TCF as well as external government assessments. The Quality Assessment Test (QAT) is conducted by the Punjab Government for Grades 2-5 students and independent evaluations are also used.

- **Scale of impact:** The GSP has led to the refurbishment of 160+ schools out of 350+ adopted schools. It has also accounted for the hiring of 1,700+ teachers and principals with over 100,000 hours of teacher training conducted so far.[343]

- **Outcomes of the remedial education program:** The ASER valuation tool for remedial education showed tremendous improvement in English, Urdu and Mathematics by 103%, 90% and 257%, respectively. 2nd grade literacy increased from 4% to 46% in the first year of the program.[344]

- **Student enrollment:** Average enrollment per school in government schools has more than doubled from 47 to 101 students. This has been driven primarily through enrollment drives by the TCF team and its all-female faculty, most of whom are recruited from the local community.[345]

- **QAT and board results:** Before GSP, the adopted government schools had consistently low student achievement as observed through low scores on the government-administered Quality Assessment Test (QAT) (below 20%). Within a year of taking over, TCF was able to turn around these schools such that 60% of them were able to clear the passing threshold specified by PEF, which requires that more than 75% of sampled students secure a passing score in the PEF-administered Quality Assurance tests.

Challenges or obstacles

- **Medium of instruction:** Based on research regarding the medium of instruction, TCF has chosen to use Urdu as the language of its textbooks, running counter to the trend of schools shifting to English - a foreign language for most Pakistanis. While Urdu is the national language, many mother tongue languages continue to be spoken at home. As a result, non-Urdu speaking students may experience additional learning difficulties. TCF's textbooks are in Urdu and they have developed their own curriculum to teach English as a foreign language called Learning English with the Iqbals. However, they are beginning to develop mother tongue curricula based on their intensive research on mother tongue based multilingual education (MTB-MLE).

- **Unreliable government assessments:** The external government assessments conducted through QAT and board examinations are rote-based and do not adequately measure the critical thinking skills nor check for understanding. Additionally, many past exams are available in the market that teachers and tutors use to help students memorize answers. The data available through government assessments are not ideal as a means to evaluate student performance.

Growth plans

An important near-term priority for TCF is also improving the quality of education in its schools and this includes several interventions, including a model school that focuses on play-based, early childhood education (and replicating this across the network) and exploring mother tongue based multilingual education which will involve developing a multi-lingual additive formula for moving a child from mother tongue to the national language to English over the course of education through curriculum design, recruiting and building teacher capacity, and community engagement.

TCF is planning to experiment with multi-grade teaching in its partnership schools. In schools with as few as 60 students, a lesson plan catering simultaneously to at least two grades can be created. The plan will have the same opening and concept building content but differentiated exercises according to the grade level.

TCF is planning to introduce its curriculum and textbooks to other schools and systems in the education sector. It also plans to share with them its teacher guides and supplementary learning materials for teacher training. They also intend to scale their Teacher Competency Test (TCT) to the GSP schools.

Recognition or awards received

The Economist has called The Citizens Foundation (TCF) "perhaps the largest network of independently run schools in the world." The UN Girls Education Initiative (UNGEI) has published a case study about TCF entitled, "Best Practices in Girls' Enrollment in Pakistan." UNESCO has also published a profile of TCF's female literacy program designed for mothers' of TCF students that now reaches 17,000 women and girls every year. TCF is also a Skoll Awardee and Schwab Foundation Social Entrepreneur.

TCF has also received several international awards, including:

- 2017 — UNESCO Confucius Prize for Literacy

- 2016 — Top 10 finalists for The Organization for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) prize

- 2015 — Schwab's Social Entrepreneur of the Year

- 2014 — Ramon Magsaysay Award, informally thought to be the "Nobel Prize for Asia"

- 2013 — Skoll Foundation Award for Social Entrepreneurs[346]

- 2011 — Clinton Global Initiative

- 2010 — World Innovation Summit for Education (WISE) Award by the Qatar Foundation[347]

Key lessons

The Government Schools Programme (GSP) run by The Citizens Foundation exemplifies the ability for a non-profit organization to offer public education provision through PPPs at scale in contexts that are diverse in terms of their politics and governance.

By first creating and running its own affordable schools, TCF was able to develop best practices in the management and delivery of K-12 education. TCF has been able to reach a significant scale and continues to grow, despite already being one of the largest non-state actors in the world running government schools through a PPP.

At the heart of TCF's model is an entrepreneurial culture, an organizational structure resembling a corporation, systems for delivering quality education developed through research on best practices around the world, adapted to the local context, and performance management through data. Combined with financial support from international donors and the subsidies from the government, TCF has developed a sustainable model of full school delivery that can be replicated in other contexts.

Annex 2: Examples of regulations for private K-12

● Favorable regulations   ● Mildly unfavorable regulations   ● Unfavorable regulations

1. South Africa

		Regulations	Favorability
Licensing	Regulatory body	• Department of Basic Education (Provincial) • Umalusi — Council for Quality Assurance in General and Further Education and Training	-
	Validity	• Accreditation is indefinite	●
Investment	For-profit operations	• For-profit operations are allowed • Not-for-profits can apply to the Department of Social Development for subsidies (for land and operating expenses)	●
	Foreign ownership	• 100% foreign ownership of schools is **allowed**	
	Profit repatriation	• For-profit operations are **allowed** in South Africa and 100% profit repatriation is allowed	
Operations	Enrollment growth	• No restrictions • Not more than 1.5 children per sq. m.	●
	Fees and fee growth	• Private schools are allowed to set their own fee without approval. No cap on annual fee growth is enforced	●
	Curriculum	• No restrictions, provided students are well equipped to take the national curriculum examination	●
	Teachers	• Teachers must be qualified and registered with South Africa Council of Educators (SACE)	●
	Nationality mix	• No restrictions by law, schools might impose internal restrictions	●
	Capacity expansion/adding new sites	• *Capacity expansion*: Permission from town council is required • *New sites*: Separate approval/registration is required for each new site	●

2. Bahrain

		Regulations	Overall Assessment
Licensing and school setup	Regulatory body	• The **Ministry of Education (MoE)** is responsible for regulating private schools offering national curricula. The Directorate of International Education, an organ of the MoE, regulates schools offering international curricula	●
	Duration	• Depends on a case to case basis, but takes **around 0.5-1 year** after obtaining accreditation from the respective supervisory body for the curricula to be offered	
	Licensing criteria	• Accreditation is compulsorily required before application for a license/permit • MoE license needs to be renewed every 2 years. From Grade 3 onwards, schools require two licenses for provision of co-educational schooling	
Investment	Foreign investment	• Bahrain allows foreign investors to establish a private educational institution with 100% foreign ownership	●
Operations	For-profit operations	• For-profit mode of operations is **allowed. Profit repatriation** is also permitted	●
	School capacity and fee increase	• **Fee increases are heavily regulated.** In 2018, there was a freeze imposed by the government on fee increments for private schools. Select high performing private schools (14 out of 73 private educational establishments) were allowed to increase their fee up to 5% for the AY19 session	●
		• Capacity increase of the school is regulated based on the built up area of the school. Each school should have the capacity to provide at least 1.5 sq. m. per student in classroom area, and 2.5 sq. m. per student in common areas	
		• Additional capacity required MoE approval, and schools have to justify expansion needs	●
	Student nationality and curriculum	• There are no restrictions on student nationality in private schools • MoE mandates local students be offered Bahraini Social studies/Arabic compulsorily. In international schools such students are to be offered a bilingual track with these subjects	●

3. Costa Rica

		Regulations	Overall assessment
Licensing and school setup	Regulatory body	• **The Ministry of Public Education (MoE)** is responsible for regulating private and public schools in Costa Rica. The **CoIS (Council of International Schools)** is a non-profit association of international schools and post-secondary institutions which provides educational accreditation, teacher and leadership recruitment services, links to higher education, governance assistance and help with starting new schools.	●
	Duration	• Depends on a case to case basis, but takes **around 0.5-1 year** after obtaining accreditation from the respective supervisory body for the curricula to be offered	
	Licensing criteria	• Accreditation is compulsorily required before application for a license/permit	
Investment	Foreign investment	• Costa Rica allows foreign investors to establish a private educational institution with 100% foreign ownership	●
Operations	For-profit operations	• For-profit mode of operations is **allowed. Profit repatriation** is also permitted	●
	School capacity and fee increase	• No caps on fees • No subsidies for private schooling • Schools have all the rights to increase the fee and capacity as per the market conditions	●
	Student nationality and curriculum	• Mandatory national curriculum is in place for both types of schools • There are no restrictions on student nationality in private schools	●

4. India

Regulation	Favorability for private schools	Commentary
School licensing	●	• Department of Education (DoE) is the licensing body. Necessary permissions required to open a school (such as fire safety, sanitary, building plan etc.) • Typical duration depends on case to case, but normally does not exceed 3-4 months
Fee regulation	●	• Each state has its own fee regulation act which defines the permissible fee hike and structure • Average permissible fee hike across states is 10%, but some states have also set a precedent for zero fee hike
Teacher salaries	●	• 7th Pay commission is applicable to Central Government employees only and some states have incorporated it • Teacher salaries in private schools is lower than that of public schools • Although CBSE by-laws state that salaries should not be less than those of State Government, the level of enforcement for this law is low.
Capacity addition	●	• Schools need to take permission from DoE (State) to add capacity or sections to the schools. Approval for an updated license takes about one month • Schools affiliated to CBSE/ICSE need to conform to the necessary area norms listed in the by-laws
Curriculum	●	• Strict guidelines need to be followed to get affiliation of a top education board such as CBSE. The school needs to follow the prescribed syllabi and books (NCERT)
For-profit operations	●	• Private organizations have to tie up with a trust or a charitable society to open a school. However, operating through management companies is common practice
Right to education (RTE)	●	• Under the Right to Education act (RTE), private schools are required to reserve 25% seats for students from economically weaker sections • These are non-fee paying students and the schools receive partial compensation (i.e. a proportion of the tuition fee) from the government for enrolling these students • RTE enforcement varies according to state with Karnataka and Delhi having high enforcement levels • In the next 4-5 years, all states will have medium to high compliance levels

Annex 3: Investment trends

Investment trends in private K-12

Given the rise of private K-12, it is unsurprising that it has attracted significant interest from investors. Between 2015 and 2018, investors deployed approximately USD 11 billion major reported deals in the K-12 sector globally (see Figure 25).[348] Most capital was deployed in the U.K., given that this is where many of the large privately-run school chains are headquartered.
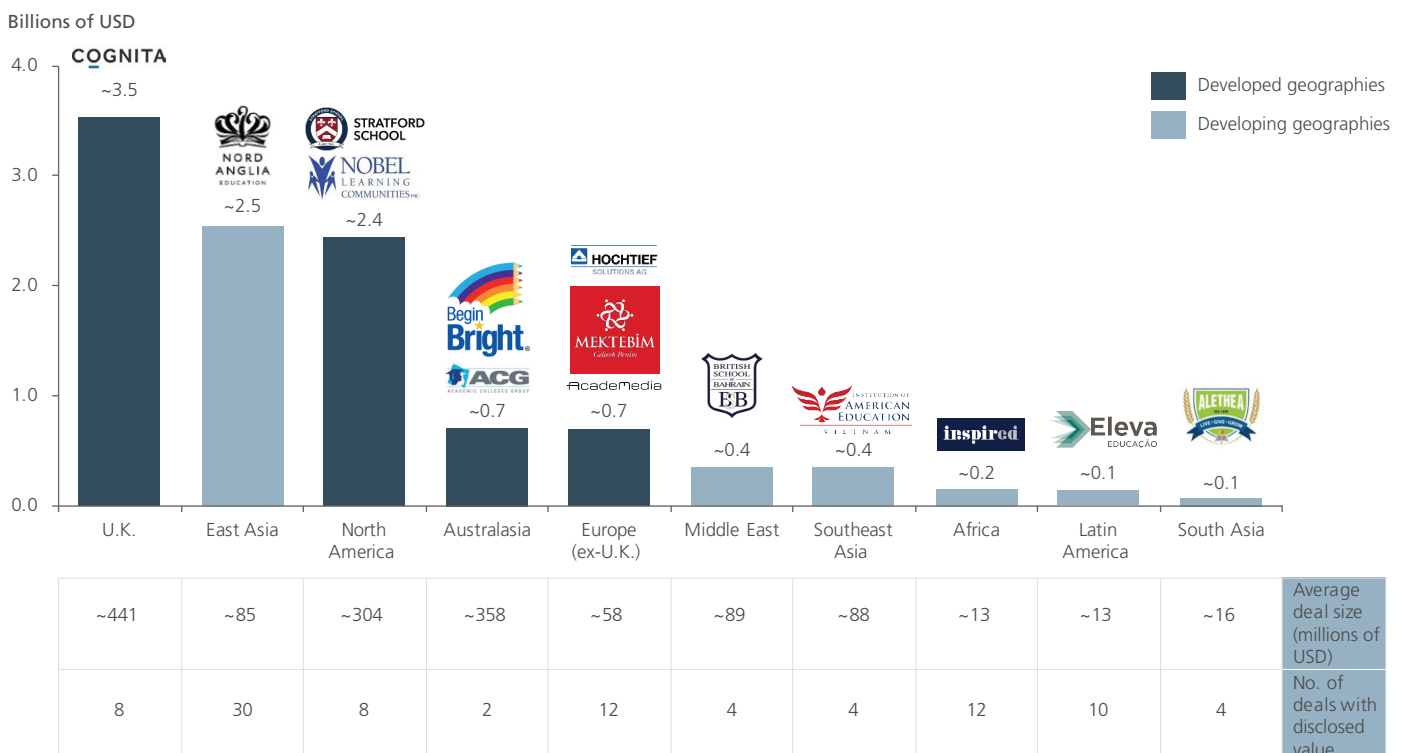
Privately-run schools have seven salient characteristics that make them attractive for investment by both profit-seeking and impact investors:

1. Potential for impact: Many investors are now seeking to make "ESG" investments — investments with environmental, social, and corporate governance returns. Given its inherent links to social impact, education delivers against these objectives.

2. Resilience and strong growth: The education sector has high emerging market-style growth, with the stability of developed markets.

3. Long-term revenue visibility: Students stay with private K-12 schools for up to 13 years, resulting in strong revenue visibility.

4. Barriers to entry: Barriers to entry are high because of regulations, capital requirements, land availability and lead time to create credible local brands, creating an advantage for incumbents.

5. Real price growth: Fees grow at a premium to inflation resulting in pricing power.

6. Non-discretionary spend: Parents prioritize education spending, and price by itself is not amongst the top selection criteria when choosing a school.

7. Negative working capital: Parents pay fees in advance while operating costs are incurred subsequently.

8. Operating leverage: As schools ramp up, margins expand as costs grow more slowly than revenue.[349]

As a sign of investor confidence in schools as an investment prospect, there has been a significant increase in the valuations of K-12 assets over the past six years. The average EBITDA multiple of K-12 assets has grown by over 8-12 times between 2013 and 2018.[350]

Figure 25
Total deal value in K-12, by region (2015-18)

	U.K.	East Asia	North America	Australasia	Europe (ex-U.K.)	Middle East	Southeast Asia	Africa	Latin America	South Asia	
	~441	~85	~304	~358	~58	~89	~88	~13	~13	~16	Average deal size (millions of USD)
	8	30	8	2	12	4	4	12	10	4	No. of deals with disclosed value

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Low income: GNI per capita less than USD 0.1K; Lower middle income: GNI per capita between USD 0.1 – 3.9K; Upper middle income: GNI per capita between USD 3.9 – 12K; High income: GNI per capita more than USD 12K

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147 Unless otherwise indicated, all case study content is derived from interviews in August and September 2019 with Beatrix Helena Girlado, Development and Projects Coordinator, Pablo Jaramillo, Director General, and Luisa Pizano, Co-Founder of Alianza Educativa.

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