CDC
Investment works

Framework

Maximising the impact of education investments

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Disclaimer

Foreword

The Sustainable Development Goal (SDG) for education is to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". The deadline is 2030 and the clock is ticking.

If we examine what has been achieved in global education during the last two decades there is certainly evidence of progress, especially in enrolling children in school. Enough progress? No, there is more to do even on enrolment, especially in conflict zones. And is current provision around the world 'inclusive and equitable'? Not remotely. And is it 'quality'? Again not remotely.

If the global community is serious about delivering the education SDG not only will it have to work harder, it will also have to work smarter. For example, it will need to move beyond the tired old ideological debate about public versus private; instead it will need to examine the growing evidence base and learn which combinations of public and private work best and in which circumstances. Ministers of education instead of just asking themselves "How do I improve my public education system?" should ask "How do I ensure every child and adult in my country gets the skills they need to thrive in the 21st century?" And "How do I ensure that education is inclusive and equitable and of high quality?"

Providing quality education will always be a top priority for governments. It will demand substantial public investment sustained over time, not least to ensure that primary education is available free at the point of use for children and families and that people can access opportunities for lifelong learning. It will also require that governments set the rules for the system – in the jargon, the regulatory framework. But carrying out these two tasks does not mean that governments need to be the monopoly provider of education. As in many health systems, there are advantages in bringing in a range of providers, not for profit and for profit, alongside government. The key is then to hold all education providers, whatever their governance arrangements, to account for the quality of what they provide for students and the outcomes they deliver.

CDC's Education Impact Management Framework provides an excellent basis for assessing the impact of an investment in education. It is thorough and practical and will make sure that anyone who uses it makes a comprehensive assessment of their impact. Crucially, it looks not just at institution level impact but also at impact on the system as a whole. As a result, it will help us all to move beyond the zero-sum thinking which has bedevilled the education debate for so long. In short, the Education Impact Management Framework is timely and worthwhile. I congratulate CDC on its development and commend it to everyone involved in improving education across the globe.

Sir Michael Barber,
Co-Chair, Centre for Public Impact

Executive summary

Sustainable Development Goal 4: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"

We believe that access to good quality education is a fundamental human right, and that national governments are the custodians of education systems. We also recognise that there is no education system in the world without contribution of the private sector in some shape or form. Education systems in developing countries tend to rely more on the private sector. As such, we believe it is critical that private sector companies participating in education systems are held to account for their positive and negative impacts at system level as well as institution level.

The benefits of education are clear. Improvements in education stimulate macroeconomic growth, increase individuals' lifetime earnings, and are associated with better health and broader social outcomes. Yet, not enough people are able to reap those benefits. Access to quality education is still largely determined by socioeconomic status and location. Even after several years of schooling, millions of people lack basic literacy and numeracy skills and are often ill-equipped to excel in a 21st century workplace.

Private actors, for profit and not for profit, play an important role in education systems, with roles spanning from basic suppliers to direct provision. This private sector participation can have significant positive impacts, but also carries significant risks. Investors and companies need a tool to assess positive and negative impacts of private education companies.

This framework is grounded in a desire to identify all impacts in potential CDC education investments, and then to maximise the positive impact of CDC portfolio companies over time. But the hope is that it will also be of use to other companies and investors. It is the product of an extensive evidence review and comparative assessment of other frameworks, conducted by the National Foundation for Educational Research, and then consultation and a peer review process with over 40 experts from investors, companies, academics, governments, NGOs and think tanks. The detailed methodology and experts consulted are set out in the annexes.

The 5 key design choices in this framework are:

1. Applies to all types of education providers
2. Identifies positive and negative impacts
3. Identifies impact at system level as well as institution/learner level
4. Considers the impact of education on economy and society although it is hard to measure
5. Makes room for judgment calls by not allocating weightings or scores to different impacts

The framework provides guidance for investors to pick what is important to them. Metrics for continuous monitoring can flow out of this process, however, this is not the focus of the framework. It is not suggested here to monitor all categories on a continuous basis, but to apply judgment. Investors must be mindful of collecting too much or too little data. Applying the framework should create value for investors and investees. Having a measurable positive impact should translate into tangible business value for companies and therefore investors.

The report is structured as follows:

- Section 1 describes the current state of play for private capital in education.
- Section 2 is the focal point – setting out the Education Impact Management Framework, and the detailed indicators to consider under each impact area.
- Section 3 is a practitioner's guide to help investors and companies use the Framework.

The Education Impact Management Framework, and the detailed impact areas and indicators, will help investors and companies identify and assess the impacts of education investments, and help to maximise positive and minimise negative impacts over time.

This is just the start of the journey. With the help of the wider education community, the indicators and metrics suggested here will be improved over time and enhance the practice of identifying, measuring and enhancing impact, for the benefit of learners globally.

What do we mean by private education?

Private education includes core education (pre-primary up to higher education as well as Technical and Vocational Education and Training), and ancillary services (supplementary education, student finance, institutional finance, publishing and teacher training).

It also includes private for-profit and private not-for-profit providers, and providers contracting directly with learners, as well as providers contracting with institutions.

01

State of play for education investors

The benefits of education are clear

Individuals benefit substantially from more and better education. Over a person's life, each additional year of schooling typically results in a 8–10 per cent boost in earnings.[1] Quality matters more than years of schooling: one standard deviation in test results can be associated with 8–12 per cent higher earnings for individuals.[2] There is deep and extensive evidence that adult learning fosters a greater level of wellbeing, especially in older adults; an increase in life satisfaction and positive changes in mental wellbeing.[3]

There is a direct link between education levels, individual productivity and economic growth. The strongest positive impact on growth is found when learning and skills, rather than years of schooling, are measured: a difference of one standard deviation on test performance is related to a 1 per cent difference in annual growth rates of GDP per capita.[4] Higher rates of education can be associated with lower rates of crime,[5] better population health[6] and lower rates of societal conflict.[7] These benefits are often transmitted across generations.[8] At the national level, lifelong learning is key for pushing out the industry profitability frontier, gains in national output, employment levels, tax revenue and innovation.[9]

Yet, not enough people are able to reap those benefits

Despite significant improvements, access to education varies significantly between high income and low income countries. Astonishing progress in education has been made in recent decades. Tens of millions of children in Africa and Asia have benefitted from a dramatic increase in access to all levels of education.[10] However, progress has been flat since 2012 and gaps remain: it is estimated that in 2018, 263 million youths were not in school.[11] More than half of children and youths lacking access to education live in low and middle income countries.[12]

Within countries, access varies between different groups and the most disadvantaged are often underserved. In all countries, the income and education levels of parents are one of the biggest indicators for success. Adult education can positively influence educational achievement of children and children's health.[13] Learning inequalities between rich and poor students begin early and grow wider over time.[14] Characteristics such as gender,[15] disability, ethnicity and location often determine access and learning outcomes.[16] Affordability is another key barrier to access, an engineering degree in India for example costs between $7,000–14,000, whereas an online degree is about $250–300. However, online education has yet to find widespread acceptance by students as well as employers due to, among other things, perception of low quality, lack of digital skills and connectivity challenges as well as regulatory hurdles.

Even those with access often do not receive high quality education. Globally, 617 million children and youths do not meet minimum proficiency levels in reading and maths, and 80 per cent of these young people come from low and lower middle income countries (although these countries are only home to 60 per cent of the global school-age population).[17] Yet some countries such as Ghana and Vietnam have improved learning levels (measured by international test scores) over recent years.[18] This shows that improvements are within reach.

The role of private capital in the system

There is no education system in the world that is not supported by the private sector. Even in countries where core provision, such as schools and universities, are largely or entirely funded through general taxation, and delivered by public institutions, the private sector still plays a large role through ancillary provision, such as education publishing. The private sector also plays a role in almost all countries in corporate training, further education and supplementary education. While not defined as 'education businesses', private businesses also act as suppliers to public education – for example, construction, maintenance and catering.

Education systems in less developed countries tend to rely more on the private sector. Direct provision of schooling accounts for around 10 per cent of total provision in OECD countries, around 21 per cent in sub-Saharan Africa and around 30 per cent in South Asia.[19] Tertiary education and vocational skills training is dominated by the private sector in most countries. Government spending on education varies significantly across countries, but is on average significantly lower in less developed countries. For example, median government spending per student in sub-Saharan African countries is just $208 for primary education and $412 for secondary education. In South Asia, median education spend is $451 for primary and $665 for secondary.[20] This is a fraction of what the UK spends on a per pupil basis: around $6,300 at primary school and $8,000 at secondary school.[21] Governments and international donors tend to focus their resources on primary education, with then much smaller budgets across pre-school, secondary education, TVET and higher education.

Significant new investment is needed in education systems beyond investment levels today. There is rising demand for education overall in low and middle income countries driven by population growth and an increasing number of students progressing to higher levels of education. The online education market in India for example could rise to 3.5 million users in 2021.[22] International financing for education in low and middle income countries will need to increase by an annual average of $49 billion between 2012 and 2020 to meet needs.[23] It is estimated that private capital could contribute as much as $16–18 billion over the next five years to fill some of those gaps.[24]

Investors require a tool to weigh positive and negative impacts of their education investments

Evaluating positive impact of private sector education is difficult. Private provision can take pressure off governments and the private sector can sometimes have more flexibility to test and scale new approaches. However, the question is not whether the private or public sector is better, but how all players in the system can contribute to and ultimately achieve universal access to quality education.

There are risks attached to private provision of education. There is significant variability in quality, and there is little evidence that the private sector is on average operating at higher quality than the public sector. There is little regulation of educational technology (or 'edtech') products and among all forms of education there is often a lack of rigorous evidence of learning outcomes. Generally, learning outcomes in private schools are similar to state-run schools, once pupil characteristics and prior test scores are controlled for.[25] Driven by commercial returns, rather than public benefit, there may be little incentive for private companies to target harder-to-reach, costlier groups unless there is a clear business case. Private companies may compete for the highest quality professionals and students, with a potential negative impact on public provision.[26] And companies do go out of business, which presents risks to continuity of learning if there is an overreliance on any one provider.

In making good investments in education, the key is to understand all the potential impacts, both positive and negative, and then make a judgment as to how they weigh up against each other. Yet, there are few publicly available frameworks focused solely on helping investors to think through the impact of their education investments. Many investors use a mix of publicly available or bespoke sector-agnostic impact assessment tools or think through impact on a case-by-case basis. We surveyed over 20 tools and approaches in the space (see Annex 3). This framework does not seek to replace existing approaches but rather add to the discussion. The next section sets out a framework of how to assess and measure impact in education companies.

02

Design of the framework

Few tailored impact frameworks are available to education investors

The education sector has a long tradition of thinking through social impact. Education is a public good and providers largely operate in a regulated environment. Therefore, reputable education providers need to think deeply about their social impact. At the same time, investors, especially in education, are increasingly concerned with measuring and increasing the impact of their investments.

Yet, there are few frameworks to help providers and investors think through impact in the education sector. A number of companies and investors take a sophisticated approach – often on a company-by-company basis, or by using a mix of publicly available or bespoke sector-agnostic impact assessment tools. Approaches often focus on direct impacts at the institution/company level only (that is, how many people are served and what is the quality of education). Some impact measurement tools have also been criticised for focusing only on positive impacts, not allowing for negative impacts, distortion of results and 'cherry-picking'.[27]

Applying the framework should create value for investors and investees. Having a measurable positive impact should translate into tangible business value for companies and therefore investors. There are many ways in which this framework could help, for example by accessing underserved customer segments, improving government relations, enhancing a company's brand, providing a competitive edge, reassuring current learners, customers or parents by reporting on efficacy, attracting and retaining talented employees and helping to secure future investments by demonstrating efficacy and impact.

For investors, the framework can be used across the lifecycle of an investment:

1. Sector mapping or strategy setting

- Framework and evidence review can help determine high impact sub-sectors
- Framework may help to be cognisant of impact trade-offs

2. Due diligence

- Evaluate all potential impacts and make evidence-driven investment decisions
- Develop due diligence and data requests
- Clarify impact expectations with companies

3. Portfolio management

- Monitor impact
- Support companies to make the most possible impact through joint action plans on priority areas

4. Exit

- Evaluate impact as part of responsible exit

5 important design choices

1. Applies to all types of education providers
2. Identifies positive and negative impacts
3. Identifies impact at system level as well as institution/learner level
4. Considers the impact of education on economy and society although it is hard to measure
5. Makes room for judgment calls by not allocating weightings or scores to different impacts

Five important design choices have been made in putting this framework together.

The result of these choices is a tool that aims to be **exhaustive in identifying impact categories**. Not all of these will apply to all companies or all forms of education. Some indicators will apply across multiple impact categories, and companies and investors should use their own judgment in weighing up different impacts (positive and negative, institution level and system level, educational and economic/societal).

The framework provides guidance for investors to choose what is important to them. Metrics for continuous monitoring can flow out of this process, however, this has not been the focus of the framework. It is not suggested here to monitor all categories on a continuous basis, but to apply judgment. Investors must be mindful of collecting too much or too little data. Relevant indicators may be plenty; quality data for those indicators may not be. Some providers have good systems of data collection, but few will have systems that embrace all the framework's categories. Investors should focus on two to four key metrics that capture the heart of the business. The chosen metrics should be integrated within a company's existing systems and in line with commercial decision-making.

The aim is to substantiate impact judgments with evidence and data, rather than base it on purely anecdotal feedback, and to contextualise this with comparisons with peer companies in the relevant market. Evidence is not equal, and there is a hierarchy of evidence – from having the right systems in place (measuring inputs) to evidence of long-term results (measuring outcomes or impact).

This framework does not aim to replace existing approaches but rather add to the discussion. It is written by investors with an investment audience in mind. The framework and indicators are based on a substantial evidence review, conversations and feedback from over 40 stakeholders (see Annex 1 for more on methodology). At the time of publication, the Education Impact Management Framework is the only publicly available tool that assists with due diligence and impact assessment and also provides suggested indicators.

Measuring impact as a journey

Over two-thirds of impact investors measure only the positive impact of their investments and most of those are measuring impact purely on the output level.

There is a risk that the user leans towards cherry-picking impact, that is, overclaiming impact on areas where good data is available and disregarding areas where evidence is harder to find. The surplus of potentially relevant indicators, coupled with the scarcity of quality data, could lead to inference of impact or, put another way, wishful thinking. Ultimately the usefulness of this framework is limited by how careful the existing evidence is judged and trade-offs are balanced.

This framework aims to promote a more nuanced understanding of impact in the education space. By monitoring negative impacts and externalities as well, investors can get a broader understanding of the complete impact of their activities.

Investors may operate in data-poor environments, especially around efficacy. Often, without an analysis considering counterfactuals (which would require an experimental design), precise conclusions about causal outcomes cannot be drawn. Therefore, in absence of experimental analysis, using the framework may be limited to structured, qualitative methods. The framework therefore provides the basis for a nuanced and predominantly qualitative assessment, supported by quantitative data where available.

The value of the framework is as much, if not more so, in the process of applying it. It serves as a tool for engagement and to start a conversation with the company, to take them on a journey to best practice, and ideally to significantly increase their impact over time.

03

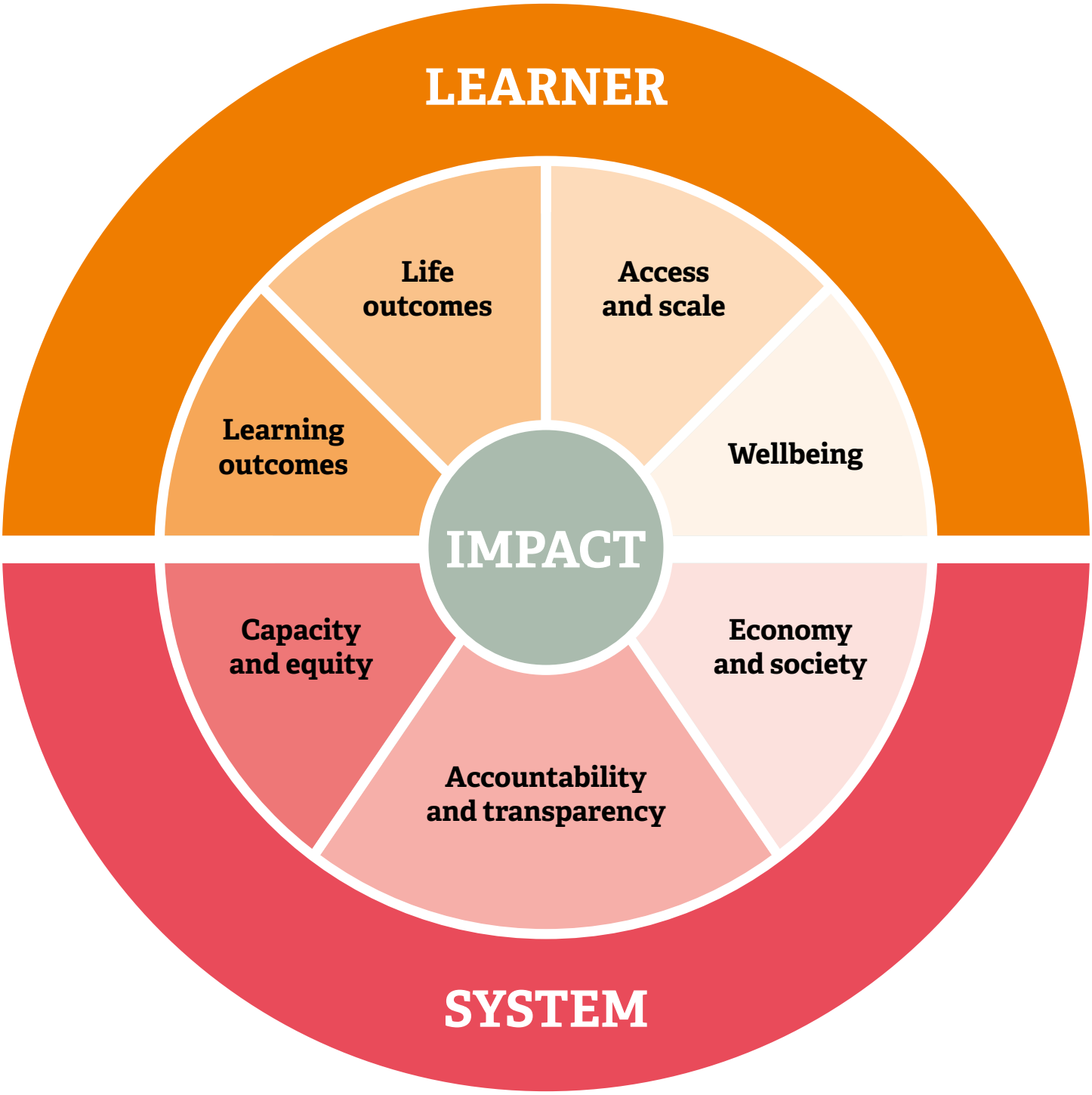
The Impact Management Framework

The Education Impact Framework is split into two parts: learner and system.

Learner refers to impact that directly affects the person (learning, life outcomes, accessibility and wellbeing).

System refers to impacts that accrue to the wider education eco-system. Access and affordability are both learner and system impacts. On an learner level, it relates to whether someone will be able to access this institution; on a system level we focus more on whether this specific form of education is in addition to government provision and at what price point.

This section defines each of the seven categories and presents a range of sub-categories and metrics to assess under each.



Learning outcomes

"Extent to which the learner improves knowledge and skills levels"

Learning outcomes can be varied, including knowledge, motor skills, logical reasoning, problem solving, critical thinking, creativity, and social and emotional skills.

In assessing whether learning occurs in an institution, the gold standard is to measure improvement of individuals or a cohort over time and ideally against a control group. However, this is challenging in some sub-sectors, and time-consuming and costly in most instances. As such, investors rely on proxy indicators, including both inputs and outputs.

Quality of teachers

- Education level and experience of teachers
- Churn of teachers
- How regularly teachers are observed and data on teacher quality from observations
- Attendance data of teachers

Quality of learning materials and infrastructure

- Quality of learning materials and evidence of testing and improving learning materials
- Content creation team (size of team, qualifications, experience) and amount of money invested in content creation
- Quality of, and amount of money invested in, other infrastructure that is relevant for learning (such as laboratories, libraries, equipment)
- Partnerships that speak to quality of learning materials and infrastructure

Time spent on learning

- Number of contact hours with teachers per week for each student and/or student–teacher ratio
- Attendance data of students
- When assessing a learning product (such as a coaching app), how many hours per week a product is used for

Learner performance

- Performance of students on internal and external exams and how this has changed over time
- Value add to students through education (measured by assessing trajectory on entry, then progress against this over time)
- Performance of students and/or value add to students compared with a control group

Student feedback

- How regularly student surveys are administered and participation rate
- Net promoter score and other survey data
- Other student feedback (such as likes or rating on 'app stores')
- Renewal and retention rates

Governance

- Quality of system in place to govern and systematically improve quality of learning
- Evidence from external and internal inspections, regulatory approvals or certification

Negative impact occurs if students are performing worse than if they had not accessed this form of education. This is hard to demonstrate. A safe assumption is that if the quality of inputs is significantly worse than that of other providers, the risk for negative or no impact is high.

Life outcomes

"Extent to which learning results in improved socioeconomic outcomes for the learner"

Life outcomes of a student include monetary outcomes, such as lifetime earnings or job security, and non-monetary outcomes, such as health benefits, happiness and confidence.

Assessing life outcomes is difficult, because of the time lag, and the difficulty in attribution. Therefore the focus in this section is on breaking down these life outcomes into concrete smaller steps and then where possible assessing the contribution of the institution to that step.

Progression within the education system

- Completion/drop-out rates
- Progression rates to the next stage of education and quality of institutions accessed

Relevance to life outcomes

- Relevance of learning to the job market (including degree of involvement of industry in designing or delivering content) or to entrepreneurship
- Specific support in gaining access to the next stage of education, or the job market
- Focus on life skills (such as financial management, confidence)
- Continued support post graduation (such as alumni groups)

Direct impact on employability and wages

- Internships/work experience while studying
- Placement rates (normally expressed as a percentage of those seeking work)
- Retention rates (note that low retention rates may not necessarily be negative if workers move on to higher paid jobs)
- Salaries on graduation (or salaries on graduation compared with salaries on entry – for adult learning)
- Return on investment (salary, or change in salary, divided by cost of learning)
- Student/employer feedback on impact on career
- Number of students starting their own businesses

Direct impact on non-monetary outcomes

- Impact of the work of an institution in areas with particular issues (such as crime, extremism) and evidence of lower incidence among learners
- Student/parent feedback on impact on non-monetary outcomes (such as health, confidence, happiness, security)

Negative impact occurs if the return on investment for students is negative – for example, if drop-out rates are high. There is also the risk of short-term positive impacts, that turn negative in the long term. For example, if a large number of students are placed initially but end up unemployed in the long run, or the level of education threatens links with families or communities.

Access and scale

"Extent to which access to learning is increased and at what scale"

If we have established that an institution or product has a positive impact on learning and life outcomes, to establish the extent of this impact we need to understand whether the students would otherwise have had access to that level or quality of education, and at what scale (how many students are benefitting from this).

When measuring impact, volume is usually considered with the aim of reaching the largest amount of people in the most self-sustainable and cost-effective way. The category explicitly excludes a judgment on equity, or how easy or hard it is to serve a particular group – this has been allocated to the system level.

Access

- Availability of format/specialisation of learning at all in the relevant geography (geography could be as narrow as walking distance or as broad as continental)
- If it is available, whether it is available at an equivalent quality
- Where it is available at an equivalent quality, whether it is available at an equivalent price
- Affordability: price of the institution benchmarked by household income in an area

Innovation

- Innovation that increases quality for a given cost
- Innovation that reduces cost for a given quality

Scale

- Number of students learning through the institution or product
- Potential to increase this scale
- Number of students served per dollar invested (cost efficiency)

Potential for **negative impact** here is more about the extent of the positive impact and whether the threshold of the investor for reaching a required number of students is met. Risks to impact that can impede access on the individual level are affordability and a high price point compared with the average income in an area.

Wellbeing

"Extent to which a safe and supportive environment is provided for learners and staff"

An environment that promotes the wellbeing of learners and staff is a prerequisite to achieve any impact goal. Wellbeing in this framework encapsulates physical safety, and emotional wellbeing (and within that, child protection). Wellbeing includes the voice of learners regardless of gender or disability or other identity markers.

Physical learning environment

- Compliance with local and internationally recognised standards on building and equipment safety (such as IFC Performance Standards)
- Fire safety (physical as well as process and system)
- Design of education facilities, such as lighting/water and sanitation infrastructure
- Compliance with national legislation on size and quality of learning environment

Emotional wellbeing and protection

- Pre-service and in-service background checks on adults working directly with children
- Policies and systems to identify and deal with issues of bullying (including online), data protection, mental health, harassment, substance abuse, rape, suicide and counselling for students away from home
- Security of learners (through assessing security protocols, including to/from place of instruction)
- Evidence of learner voice being listened to and acted on (through student council, grievance mechanisms)

Job quality

- Adherence to local and international laws and labour standards
- Staff wellbeing and satisfaction, through staff surveys

Governance

- Systems in place to escalate issues of student and staff wellbeing
- Evidence of recording, investigating and acting on issues

Note: *CDC designed a publicly available toolkit for the education sector to help investors follow key environmental and social guidelines. The toolkit also includes more information on job quality guidelines.* [*https://toolkit.cdcgroup.com/sector-profiles/education*](https://toolkit.cdcgroup.com/sector-profiles/education)

There is significant potential for **negative impact.** Every company will face some issues during their operations, but threats to physical safety, if not quickly remedied, would likely be a red flag for investors. A demonstrable lack of concern and systems to reduce the likelihood of, and act on, issues around emotional wellbeing and child protection would also be worrying. Given the severe reputational risk that transgressions in this category may bring, it is paramount that investors spend time performing due diligence in this area thoroughly – ideally with expert support.

Capacity and equity

"Extent to which the company improves effectiveness and increases capacity and equity of the overall education system"

A provider's ability to have a positive impact on the overall education system can be assessed in terms of how far its services align with the needs of the local population and government.

The system's capacity can be enhanced through both volume and the provision of more specialised and scarce forms of education. If done at sufficient scale, private sector institutions may help free up government resources. These resources could then be directed to other parts of the education system. In assessing the extent of a positive or negative contribution, it is important to analyse equity, and whether the institution or product is helping to serve parts of the education system that are harder or easier to reach.

Impact on public sector provision

- Number of students reached
- Partnerships or contracts with public sector
- Extent to which institution 'skims' best students from the public sector and judgment on whether this has a net positive or net negative impact on other students in the public sector
- Value of company's investment into the overall education system (public or private)
- Extent to which institution takes pressure off public sector provision

Impact on stock of quality teachers

- Recruitment of teachers from the public system
- Number of diaspora teachers who return to the country to work for the company and/or bring in expatriate expertise (with context in mind, external talent can either displace local workforce or stimulate knowledge transfer)
- Number of new teachers trained and at what quality
- Internal training and quality improvements of staff and teachers
- Whether exiting teachers work in the public system

Equity, inclusion and affordability

- Income bracket of students/families
- Price of institution benchmarked against other providers offering similar quality education
- Geographical location, religion, gender, disability, ethnicity
- Availability otherwise of that form or specialisation of education

Negative impacts occur if the company is sourcing most of its teachers from the public (state) system without an equivalent counter-balancing contribution, such as training new teachers, bringing back teachers from abroad or exiting teachers returning to the public system. Another potential negative impact can be through 'skimming' the brightest students from the public system, and reducing the peer learning effect. The evidence on this is however mixed; a case-by-case view on the impact on the public system is needed.

Accountability and transparency

"Extent to which the company complies with national laws and regulation, and engages positively with other stakeholders"

The focus is on accountability at the system level. The key here is to look at the relationship with national governments that are responsible for the education system, but also the institutions' interaction with other actors in the education system.

Compliance with national laws and regulations

- Compliance with all government standards (such as curriculum, teacher qualifications, infrastructure and facilities, learning outcomes)
- Where public governance and regulation of private sector providers is weaker, providers should seek out voluntary systems of oversight and accreditation, and their investors should take a particularly active role in monitoring impact

Transparency and data sharing

- Availability of information on strengths and weaknesses of business to the public
- Information sharing with regulators and policy makers
- Meeting local and international standards around transparency, including in publishing learning outcomes

Engagement with other stakeholders in the education system

- Engagement with local and national governments
- Delivery of government priorities
- Responsible member of the wider education system, engaging well and fairly with other public and private sector institutions

Negative impact occurs through non-alignment with national standards. For example, not using an approved curriculum could have negative consequences for learners if it affects their ability to transition or progress within the system.

Economy and society

"Extent to which the company contributes to broader economic and societal outcomes"

Quality education and skills providers are essential in addressing the shortage of skilled workers. The provision of job-related training and whether the skills taught correspond to the needs of the economy and businesses is paramount when optimising for the positive impact of education. This category forms a view of how the company performs on a macro level on these metrics as opposed to changing life outcomes, which is accounted for in the learner category.

Supply of relevant skilled labour to the economy

- Engagement with the government and companies, to understand and then focus on skills needs
- Impact of the company on the flow of skilled labour entering the workplace
- Impact of the company on the stock of skilled labour already in the workplace
- Evidence of success of previous learners in the workplace (such as retention, promotions and taking on leadership positions)
- Keeping students in-country who would otherwise have studied abroad and likely stayed abroad
- Enabling both parents to return to work or stay in work, when this would otherwise not have been an option

Contribution to local economy

- Scale and diversity of employment opportunities for local people, and to what extent these individuals have other local options
- Number and value of contracts with local suppliers
- Tax paid to government
- Use of the company's land or buildings by the community or local businesses
- Research generated that helps businesses commercially
- Partnerships with local businesses
- Teaching/fostering of entrepreneurship, and any spin-off businesses coming from the company
- Other companies being attracted to the local economy by the presence of this institution

Other societal impacts

- Contribution of the company to improve/erode social cohesion
- Contribution of the company to promote population health
- Contribution of the company to foster civic participation

Negative impact can occur if the education is irrelevant to economy and society. A company that churns out poorly prepared students or adds significant numbers of graduates to an oversubscribed industry can add to national unemployment rates and fuel discontent.

04

How to use the framework

While the framework is designed to be useful in data-poor environments, increasing the accuracy, independence and amount of data collected can positively influence the quality of judgments.

To assess potential impacts under the various categories of the framework, a large part of the analysis can be done through conversations with the company, supplemented by data provided by the company, and referencing calls with key stakeholders (government, other providers, civil society, students and teachers).

However, there are certain judgments for which external support can be helpful:

- A specialist to assess quality of education (such as someone from a regulator or quality of education background in that particular sub-sector)
- A commercial due diligence provider to source market-level data, and comparisons to peer companies in the relevant market so as to contextualise the data and evidence
- A legal due diligence provider can help with judgments on adherence to law and government standards
- An environmental and social due diligence provider can help with judgments on student and employee wellbeing

After gathering all the data, a five-point scale for each of the impact sub-categories can help in providing an aggregate view:

Significant

- Significantly positive impact beyond other peer companies in the relevant market

Positive

- Positive impact in line with other peer companies in the relevant market

Neutral

- No evidence of positive or negative impact

Negative

- Evidence of negative impact

Red flag

- A negative impact so significant that it would likely preclude making the investment

The framework is set up to make judgments on the sub-category level and deliberately does not offer a way of combining these judgments into an overall judgment on net impact. The business may have positive impacts, such as scale or superior learning results, that far outweigh other categories showing neutral impact. Similarly, there might be a negative impact so significant that it would rule out making the investment irrespective of the extent of other positive impacts.

Next we present a case study to demonstrate how the framework can be applied to inform investment decision-making.

Case study

Stylised case study based on CDC's application of the framework in due diligence processes to guide investment decision-making

Our impact thesis:

Supporting the expansion of one of the fastest growing mobile education providers, helping to improve learning outcomes and the life chances of millions of learners

Significant
Significant positive impact beyond other peer companies in the relevant market

Positive
Positive impact in line with other peer companies in the relevant market

Neutral
No evidence of positive or negative impact

Negative
Evidence of negative impact and potential red flag

This is a stylised case study of how the framework could be applied to inform decision-making surrounding a potential investment in the education sector. We assess a hypothetical learning app aimed at primary school-aged children in West Africa. The founder grew up in Nigeria with learning disabilities. Whilst working in the family business, she started to put short learning videos on the Internet to help her nieces and nephews study. The videos were soon downloaded thousands of times. This led to the development of a learning app. The app, originally developed three years ago by a team of five, offers a video platform for pre-recorded lectures from teachers and interactive games and has been downloaded millions of times – including by teachers in remote areas. The product appears to have potential to generate positive returns from both a commercial and impact perspective. It uses a 'freemium' business model where parents, children and teachers can download the app for free, but can upgrade to a paid subscription to unlock features such as analytics and advanced content. The content is easy to understand and speaks specifically to children with learning disabilities. The founder is looking to raise significant capital to expand the product into different languages and geographies including partnering with global entertainment brands to roll out across Africa.

As part of our due diligence process, we would put together an assessment of expected and actual impacts of the investment, aiming to be as data-driven and objective as possible. Our assessment would be context-specific with a particular focus on learning outcomes and safeguarding issues.

Data collection would entail a mix of background research and primary data gathering through visiting the company and speaking to senior management, learners and parents (if applicable). We might also commission an independent assessment of parts of the framework such as wellbeing or learning outcomes with the help of specialised consultants.

The result would produce an assessment on whether the product is expected to generate positive impacts and whether these impacts are large enough and likely to be sustained over the life of our investment.

As part of the due diligence we would also identify areas for improvement and develop an action plan together with the company to address potential shortcomings.

Learning outcomes

Overall: **Positive**

Evidence of supporting factors expected to contribute to positive learning outcomes. However, unclear whether there is a direct causal link between app usage and learning. We would encourage testing this assumption through an impact evaluation (e.g. a randomised control trial)

- **Pedagogy and teacher quality:** Heavy investment into teaching excellence and to make content easy to understand.
- **Quality of learning materials:** Content team of over 50 teachers. Award-winning learning videos; 10 per cent of budget spent on content creation, good user interface.
- **Feedback:** Parental survey with over 2,000 respondents: 85 per cent very satisfied or satisfied; net promoter score of 60. Two-thirds very likely to renew subscriptions; high willingness to pay. Currently unclear whether student feedback is collected.
- **Performance and time spent:** Data that students spend around 30 minutes per day on app on average. App collects feedback on learning performance instantly, and this data provides suggestive evidence of improved learning, but outcomes not benchmarked against independently verifiable tests. Roughly half of parents self-report learning improvement for children.
- **Risk:** Independently verified evidence on learning gains missing. No corporate governance to oversee quality and learning.

Life outcomes

Overall: **Neutral**

No evidence of impact on life outcomes due to lack of measurement but we believe that the app overall makes a positive contribution to student lives by increasing confidence and love of learning.

- **Progression within education system:** Designed to help students progress in school and achieve better grades and pass tests, no external evidence collected by company. We advise an approach to tracking these outcomes.
- **Direct impact on employability:** Engagement with app and introduction to e-learning may make students more engaged with the digital workplace of the future. No direct evidence measured.
- **Socioeconomic Impacts:** Students report increased confidence. Positive and encouraging messages that stimulate a love of learning for the student is a core design feature of the app.
- **Risk:** Neutral or no impact on life outcomes assumed due to lack of measurements.

Access

Overall: **Positive**

Significant scale. We estimate it is accessible to students at a price point that seems affordable for the top 40 per cent of the population.

- **Access:** Ensures broad access (can be downloaded from anywhere). Limiting factors for access: affordability and English language ability. Standard freemium account[28], paid upgrade at $100 per year. Average household income of parents in the top 40% of the country for the paid subscription. This indicates broad user base within the middle class. Financing solutions available for poorer households. Income background of users of free product yet to be studied.
- **Scale:** 2 million downloads within the past six years in over 50 cities and almost 200,000 users upgraded to paid subscription. The scale is rarely seen in education companies.
- **Innovation:** Market leader with one of the most innovative learning products with a number of copy cats in the market. Significant intellectual property by company, reduces cost of teaching by a factor of 10 and allegedly increases quality (albeit without evidence).
- **Risk:** Product not available in vernacular languages, and price point may prevent the most needy students from accessing the product. Further due diligence is needed on financing arrangements.

Wellbeing

Overall: **Neutral**

Lack of policies to protect minors and current data and privacy policy are risk areas. Overall, no unethical sales behaviour observed.

- **Job quality:** More due diligence needed to be able to come to a fair judgment, but some negative comments on social media (e.g. the website Glassdoor).
- **User protection:** Adequate transparency and disclosure throughout sales cycle; clear complaint resolution mechanisms. Company should seek consent for data collection from users more explicitly.
- **Risk:** Concern that company does little proactively to minimise risks to its users and may not be up to speed with forthcoming data protection regulations. Lack of policies for protecting children. Risk that job quality of staff is low; need to review human resources policies and procedures.

Capacity and equity

Overall: **Positive**

Reach of the product indicates a positive impact on broader education system. Company has started to engage with national public education departments and charities to feed data on learning outcomes to policy makers.

- **Impact on public sector provision:** Complimentary to state run school system, can be used alongside lessons.
- **Impact on stock of quality teachers:** No evidence of negative impact on stock of quality teachers in-country. Company has started to hold seminars with local public school teachers on engaging and fun teaching methods for maths and science and how to integrate the product into classroom teaching.
- **Equity and Inclusion:** App can be downloaded from anywhere. Offline product available in areas with poor connectivity. Scale of access a significant positive factor (over 80 million downloads). Product competes with the private tuition market, which is often only accessible to high income earners in the country.
- **Risk:** Product not available in vernacular languages. Some students and parents lacking access to smartphones and/or lacking digital skills may not be able to use the product.

Accountability and transparency

Overall: **Neutral**

In line with all curricula and government agendas to stimulate e-learning, more can be done to share data with schools and public policy makers to improve educational content in the public sector at scale. Engagement with public system and training teachers has just commenced at a small scale. Company could take a leadership role in best practice in e-learning for minors.

- **Compliance:** Compliant with national e-learning regulations and in line with national curricula.
- **Transparency and data sharing:** Data sharing with public authorities or regulators can be expanded; positive data sharing.
- **Engagement with other stakeholders:** Does deliver on government priority to improve access to education, but more partnerships could be established.
- **Risk:** No harm observed, but more scope to share learnings and data with regulators and public policy authorities to improve national curriculum or teaching.

Economy and society

Overall: **Neutral**

By providing familiarity with e-learning at scale and stimulating a love for learning, the app is expected to indirectly contribute to the talent pool of the future economy. However, no direct, positive causal impacts on the economy and society can be attributed to the product.

- **Supply of relevant skilled labour to economy:** Focus on maths and science can be viewed as leading students to STEM (science, technology, engineering and maths) careers.
- **Contribution to local economy:** Not applicable/no evidence.
- **Other societal impacts:** None observed so far. Potential for further studies.
- **Risk:** No risks to economy or society observed.

Overall, we encourage to move forward with the investment from an impact perspective. This will come with the condition that the business agrees to an independent and rigorous assessment of learning outcomes through a randomised control trial or other systematic studies. We would also work with the business on strategies to expand content in vernacular language and help on geographical expansion to underserved markets.

Annex 1: Methodology

A flexible approach was applied to develop the Education Impact Management Framework, modelled on the methodology used for developing a similar tool for the health sector.[i] The framework is based on a literature review including academic evidence, a comparative assessment of other frameworks, interviews with investors, businesses, academics and other stakeholders and CDC experience. We went through the following phases:

- Phase 1: Collecting and reviewing evidence (academic and experience based)
- Phase 2: Developing the framework
- Phase 3: Peer review and testing the framework

Phase 1: Collecting and reviewing evidence (academic and experience based)

A literature review on the impact of private providers of education services in low and middle income countries was conducted. The review covered multiple kinds of evidence, including qualitative, quantitative and mixed-methods studies, as well as policy reports and other grey literature. The review set the groundwork by allowing the research team to consider (1) the evidence related to the impact of the private education sector in low and middle income countries, (2) the diversity of players involved in the educational landscape of low and middle income countries, and (3) the kinds of impact categories relevant for inclusion. The themes were further explored through focus group discussions within CDC and extensive expert stakeholder interviews. Interviewee profiles are included in Annex 3

Phase 2 – Developing the framework

The framework was developed through a six-month iterative process to generate, test and challenge the draft structure, based on the requirements of our investment process. The product was tested through the due diligence of several proposed investments (tertiary education, online app, vocational skills training company). This led to a further revision of the structure, the impact categories and proposed metrics. The framework was created considering CDC's mission to optimise for economic growth through building the skills base that a country and employers need to be successful in the 21st century. This focus resulted in the inclusion of economy and society in the framework, despite caution that macroeconomic impacts are challenging to measure.

Phase 3 – Peer review and testing the framework

The framework was then presented to over 40 contributors, investors and experts for peer review. Feedback of this round resulted in the final framework at hand.

Annex 2: Resources

There are limited publicly available resources for assessing the impact of private sector education investments. Current resources include due diligence tools, impact assessment tools and sector indicators. At the time of publication, this Education Impact Management Framework is the only publicly available tool aimed at investors that assists with impact due diligence and assessment, including suggested indicators. Below is an overview of the resources that were used in putting together this framework.

Due diligence and assessment tools

IFC – Education Investment Guide: A Guide for Investors in Private Education in Emerging Markets

- Provides an overview of preliminary considerations for commercial and academic due diligence of an education investment
- Indicates key questions and what to look for when such institutions are being appraised

IFC Employability Tool

- Diagnostic tool for helping tertiary education institutions understand how well they are preparing graduates for the job market
- Measures main factors in learning, retention, graduation and placement rates to assess an institution's effectiveness
- Intended to support investee companies to improve value for students through the self-assessment tool

Global Innovation Fund Practical Impact Assessment

- An impact metric developed for project selection and appraisal, to credibly report long-run expectations to donors, to track portfolio performance and that balances rigour with practicality.
- Measures breadth of impact, depth of impact and probability of success, while incorporating risk.

NESTA Standard of Evidence

- Developed to understand how confident the investor or business is in the evidence provided to show that an intervention is having a positive impact.
- Provides five academically recognised levels of rigour, while managing to ensure impact measurement is appropriate to the stage of development of a variety of different products, services and programmes.
- Aims 1) to inform screening of investments for potential impact, 2) to develop an impact plan, and 3) to determine future funding decisions.

B-Lab Impact Assessment

- A tool a company can use to measure its impact on its workers, community, environment and customers
- Provides standards of social and environmental performance, benchmarks on corporate impact and tools to help businesses improve their impact.

More than Measurement: A practitioner's Journey to Impact Management

- An approach developed by Skopos Impact Fund and Bridges Ventures to assist impact investors in achieving impact goals by managing their assets.

Impact Management Project

- The norms established under the Impact Management Project provide a shared definition of impact and the type of data that would be expected to be found in any good impact framework and impact report.
- The norms also provide a logic for sharing data about impact goals and performance across increasingly complex value chains.
- Its content and resources describe and illustrate the norms agreed by over 2,000 practitioners globally.

World Bank Framework for Engaging the Private Sector in Education

- The System Assessment and Benchmarking Education for Results report from the World Bank outlines a framework for effective school provision, recommending autonomous schools, a competitive environment, informed parents and a strong accountability system.
- It also shows how the private sector may help to support this model of effective provision.

Indicators and assessments

Indicator resources

- World Bank Education Statistics
- UNESCO Institute of Statistics education data
- OECD Key Indicators on Education
- Sustainable Development Solutions Network Sustainable Development Goals Education Indicators
- IRIS and Harmonized Indicators for Private Sector Operations (HIPSO) education investment indicators

Learning outcomes assessment tools

- IDELA International Development and Early Learning Assessment
- Systems Approach for Better Education Results (SABER) on student assessment systems, teacher performance, school autonomy and accountability, engagement of private sector
- Battelle for Kids, P21 Partnership for 21st Century Learning
- Collaborative for Academic, Social, and Emotional Learning (CASEL) tools for measuring social/emotional learning

Annex 3: Authors and contributors

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Endnotes

1 Montenegro and Patrinos, 2013

2 UNESCO, 2016. Estimates based on results from more than 10 studies in U.S., UK and 10 African countries.

3 Schuller, 2017

4 Hanushek and Woessman, 2015

5 Machin, 2011

6 Jamison/Schäferhoff, 2016

7 Agbor, 2011

8 Solon, 1999

9 Stieglitz, 2015

10 UNICEF, 2015

11 UNESCO/UIS, 2018

12 UNESCO/UIS, 2018

13 Schuller, 2017

14 Rose, 2016

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18 World Bank, 2018

19 Caerus Capital, 2017 and OECD, 2011

20 World Bank, 2017b

21 Institute for Fiscal Studies, 2018

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23 Steer, Gillard et al, 2015

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27 Social Impact Investment Taskforce, 2014

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