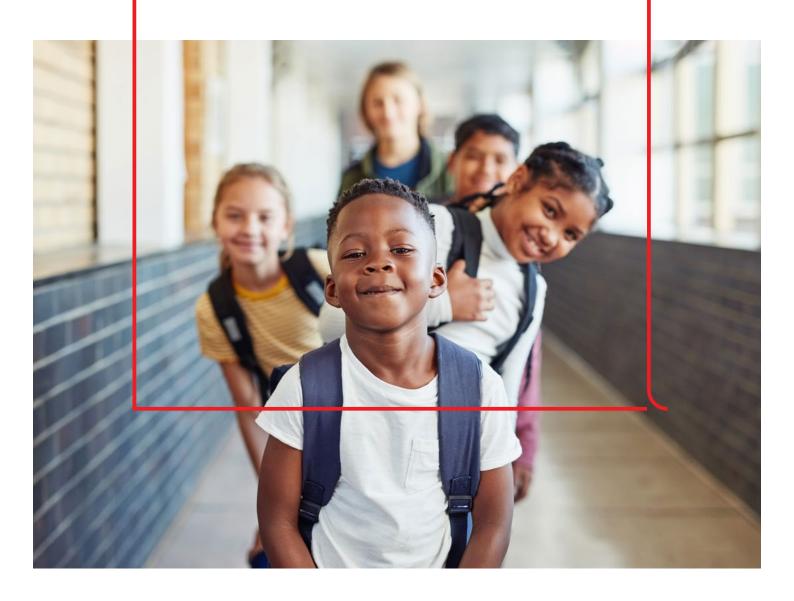


Learning for life

A guide for philanthropists and changemakers to bring quality education to all



How to navigate this guide

The following sections will help you consider the part you'll play in providing inclusive and equitable quality education and lifelong learning opportunities for all.

Understanding the challenges

An overview of key educational needs and challenges.

Taking action

Solutions and real-life examples, including case studies and interviews with experts and changemakers.

Looking beyond philanthropy

Explore different ways to achieve impact, for example, by investing in innovative finance solutions.

Working together

Expert tips on collaborating to overcome global education challenges.

Getting started

How to start your philanthropic journey.

What this guide does (and doesn't) do

Providing quality education for all is a huge global concern, and far too complex to explore from every angle in one guide. Instead, this guide shines a light on some of the biggest challenges and key promising solutions available to you, all of which reflect our firsthand experience working in the field. We hope this guide ignites your passion for bringing inclusive and equitable lifelong learning to the world.

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Foreword

The COVID-19 pandemic led to an unprecedented disruption in education systems, affecting the most vulnerable children the hardest and exacerbating existing problems and inequalities. Yet, it also brought an increased appreciation and awareness of the important work of teachers, of the key role of parents, and of the multiple functions that schools fulfill in providing for the academic learning, health, and well-being of children and youth.

As it shed light on existing deficiencies in the education system, the pandemic also opened an enormous opportunity to rethink education design and delivery. And it has created a sense of urgency and a desire to collaborate towards the construction of a more inclusive and resilient education system.

For philanthropists, education has consistently been a top priority (being the second most targeted sector by cross-border philanthropy), and philanthropic support has traditionally played a key role in financing education in developing countries. In the current context, where the economic and health crisis is posing a serious threat to education funding, the role of private philanthropy is even more crucial and there is a distinct opportunity to make it more catalytic.

Philanthropists can leverage on their unique competitive advantages, mobilizing their networks and keeping their funding flexible to support the innovation capacity of governments and educators. Philanthropy can work with governments to pilot promising, scalable initiatives that can lead to wider reform and to the much-desired transformation of education systems, at the same time generating usable knowledge that can be applied in multiple settings.

Whether you are an experienced philanthropist in education or someone who is seeking to explore and understand the main challenges in education, we hope this guide will assist you in your efforts. We hope you find inspiration in these pages as well as clear, useful information on how you can transform such inspiration into impactful action. We look forward to helping you navigate the challenges and explore the best ways to address them. We wish you a passion-filled and impactful journey.

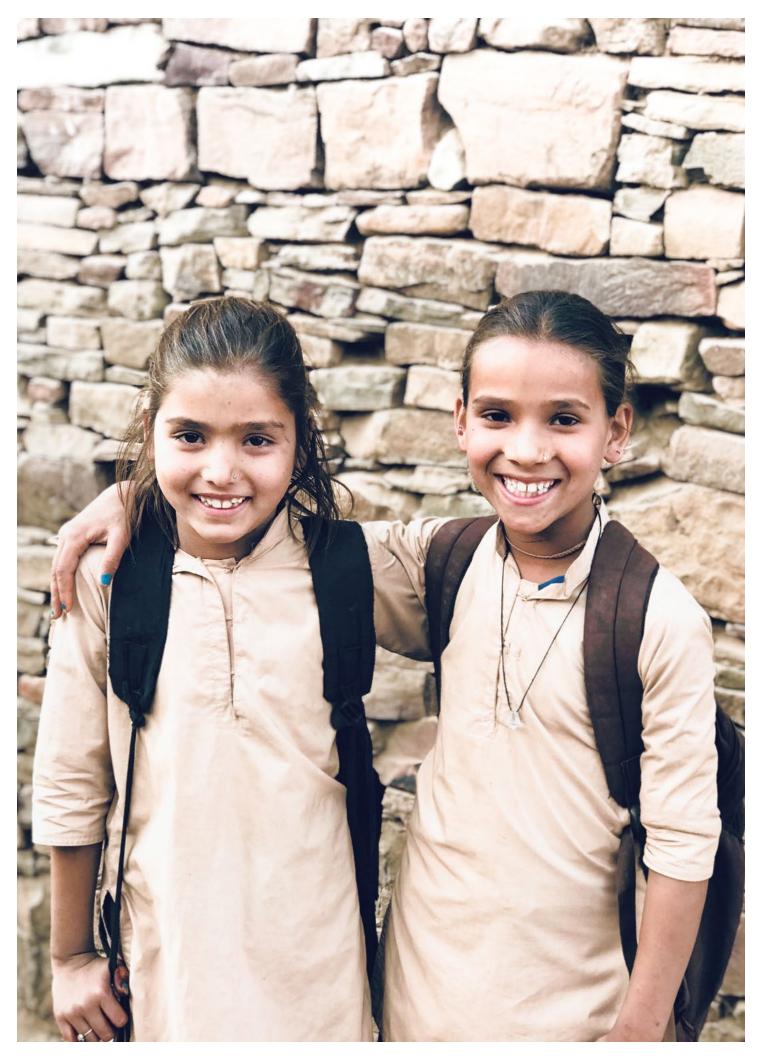
Your UBS Philanthropy Team

¹ OECD Centre on Philanthropy – Data and analysis on global philanthropy for development, OECD Centre on Philanthropy.

"Live as if you were to die tomorrow.
Learn as if you were to live forever."

Mahatma Gandhi





About SDG 4 – education

United Nations Sustainable Development Goal 4:

Quality education

- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Help people acquire the knowledge and skills they need to exploit opportunities and participate fully in society.
- Provide children and youth with the nurturing environment they need to fully realize their rights and capabilities through safe schools, and cohesive communities and families.2



In 2015, the United Nations adopted 17 Sustainable Development Goals (SDGs). The goals strive to inspire everyone to achieve a better and more sustainable future for all by 2030. SDG 4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

What will success for SDG 4 look like? If we achieve the goal, by 2030, we'll be looking at a world where everyone has equitable access to:

- quality early childhood development programs, setting up students for success at school
- primary and secondary education that lead to better learning outcomes, including universal literacy and numeracy
- technical, vocational and tertiary education, providing people with lifelong learning opportunities, and the skills needed for quality employment and entrepreneurship
- education that's free from discrimination, as a result of creating inclusive and safe schools
- education that provides people with the knowledge and skills needed to create a more peaceful and sustainable world.

But the world isn't on track to reach the goals. To get there, developing countries alone need to fill an average funding gap of 2.5 trillion US dollars³ – every year. And the COVID-19 pandemic has sent countries further off track. For SDG 4, the UN considers the pandemic's impact on schooling to be a "generational catastrophe."

Solving the world's educational challenges will also help solve other SDGs:

- Achieving SDG 4 triggers upward socioeconomic mobility (SDG 8) and is key to escaping poverty (SDG 1)4.
- Education promotes peace, builds positive social connections, and provides the tools people need to solve problems peacefully (SDG 16).5
- Providing women and girls with access to quality education contributes to advances in women's empowerment and shapes attitudes of both girls and boys towards gender equality (SDG 5).6
- Children in school are less likely to be affected by child marriage and child labor (SDG 5 and 8).7
- Educated people tend to live healthier lives, which is especially true for women and their children (SDG 3)8.
- Education promotes positive attitudes and behaviors towards environmental issues and can give people the capacity they need to adapt when natural disasters destroy their livelihoods (SDG 13, 14 and 15)9.

Goal 4, United Nations; Department of Economic and Social Affairs.

Unlocking SDG Financing: Findings from Early Adopters. United Nations. Education data highlights (2021), Global Partnership for Education.

Mwaniki, C. G. The role of education in promoting peace. Global Partnership for Education.

Girls' education, UNICEF.

The Relationship between Child Labour and Child Marriage: A Discourse Analysis, 2021, August.

Vladimirova, K., Le Blanc, D. (2015), How well are the links between education and other sustainable development goals covered in UN flagship reports? A contribution to the study of the science-policy interface on education in the UN system.

Ibidem

At a glance

Education can be a path to prosperity and social mobility, but the increasing gaps between the advantaged and the disadvantaged must be urgently addressed.

Barriers to access.

258 million children worldwide are out of school. 10



Out-of-school children are disproportionately located in low, lower-middle income, and conflict-affected countries1



Children from the poorest 20% of households dominate the out-of-school populations and are far less likely than higher-income children to ever enrol¹²



Children with disabilities are 2.5 times more likely than their non-disabled peers to have never been in school¹³

Disruptions.

Disruptions in a child's schooling can cause significant and lasting harm to learning.



The longer children are out of school, the more likely it is that they won't be able to return and their learning will regress14

¹⁰ New Methodology Shows that 258 Million Children, Adolescents and Youth Are Out of School. (2019).

¹¹ Global Education Monitoring Report, Inclusion and education: All Means All. (2020). UNESCO. (Page 27)

¹² Reaching the marginalized, p.61. (2010). UNESCO.

Global Education Monitoring Report, Inclusion and education: All Means All. (2020). UNESCO. (Page 71)
 The Global Cost of Inclusive Refugee Education. A joint World Bank-UNHCR report. January 2021.

Gender.

Globally, there are now equal numbers of boys and girls in school. 15 Unfortunately, there are still big differences at the country level.



Equal numbers of boys and girls have only been achieved in:

countries for primary education

countries

for lower secondary education

countries

for upper secondary education16



In conflict-affected countries, twice as many girls are out of school compared to global averages¹⁷

Poor learning.

of children in low- and middle-income countries were unable to read and understand a simple text by age 10, even before the pandemic. 18



In Sub-Saharan Africa, the figure was closer to



Due to COVID-19, the percentage of children in low- and middle-income countries unable to read and understand a simple text by age 10

from 53 to



Globally, household wealth is a major predictor of poor achievement²¹

¹⁵ Equity, GEM Report SCOPE.

¹⁶ Ibidem.

¹⁷ Mind the Gap Report, Arora, A. (2022, January 27)

¹⁸ The State of Global Learning Poverty. 2022 Update.

¹⁹ Alicia Herbert, Jaime Saavedra, Leanna Marr & Robert Jenkins, The urgent need to focus on foundational skill (2021, November 4), World Bank Blogs.

The State of Global Learning Poverty. 2022 Update.

²¹ Global Education Monitoring Report, Inclusion and education: All Means All. (2020). UNESCO. (Page 27); Arora, A., Are Children Really Learning? Exploring foundational skills in the midst of a learning crisis (2022b, May 23), Unicef Data.

Key takeaways

What's most important to keep in mind when looking to improve quality education for all? Here's what we found:



Prioritize equity and quality

- Focus on children that are at risk of exclusion from education as a result of factors such as gender, poverty, disability, displacement or other characteristics.
- Support programs backed by evidence for improving outcomes particularly for the most disadvantaged.
- Ask for the measurement of performance across different groups of children, particularly those failing to reach minimum standards, to understand who is/isn't benefitting and why.



Work across sectors

- Address issues that can affect children's ability to learn, such as nutrition, health, and emotional well-being.
- When possible, prioritize interventions that combine structures and services across sectors (e.g., health and education) to provide holistic support and create lasting change for the most vulnerable children.



Scale cost-effective solutions

- Rather than reinventing the wheel, leverage on existing evidence on cost-effective approaches to improve learning. Support the scaling of such approaches.
- Support research that can help build further evidence on promising interventions for which rigorous, actionable evidence is in short supply.



Support governments

- Prioritize interventions that align with the government's agenda.
- Fund initiatives that build capabilities within governments and are led by them.



Think about scalability from the start

• When supporting interventions in early stages, make sure that they are designed and planned for scale from the outset (i.e., that consideration is given to the actors that need to be involved to achieve scale, including government; and to the capacity that the systems in which programs operate need to support growth, including budget and human resources constraints, among others).



Extend support to caregivers

- Recognize the key role that caregivers – at home and school – play in children's learning.
- Support innovation and build evidence for approaches that address the settings that influence children's lives, and improve outcomes for both children and caregivers.



Empower teachers

- Invest in teachers and support their well-being, recognizing their crucial role in transforming education systems.
- Support teachers' professional development, protect their creativity and enable the conditions so they can attend the diverse learning needs of their students.



Collaborate with others

- Join an existing collective to combine resources, roll out proven solutions and increase impact.
- If an issue is not currently being addressed, join forces with others to propose a solution.



Support key milestones

• Support life-course programs that empower children at pivotal moments in their educational journey, particularly the foundational years (early childhood and primary education) and transitions across settings and educational levels.



Leverage on innovative financing

- Leverage on outcomes-based funding to deliver learning outcomes at scale.
- Invest in sustainable investments that put money to work for good while aiming to provide returns comparable to traditional investments.



Lewis Hamilton

Seven times Formula 1 world champion and Education activist "There are a lot of people around the world that don't have the opportunities that some of us had, the opportunity that I had, to learn. That needs to change. I really wanted to be great at something. I think we can all be great at something. It's down to you and to your families to help you find what that is. When you find it, grab onto it, harness it and try to build on it, because there's no limit to how great that can be."



Iqbal Khan Co-President UBS Global Wealth Management

and President UBS EMEA

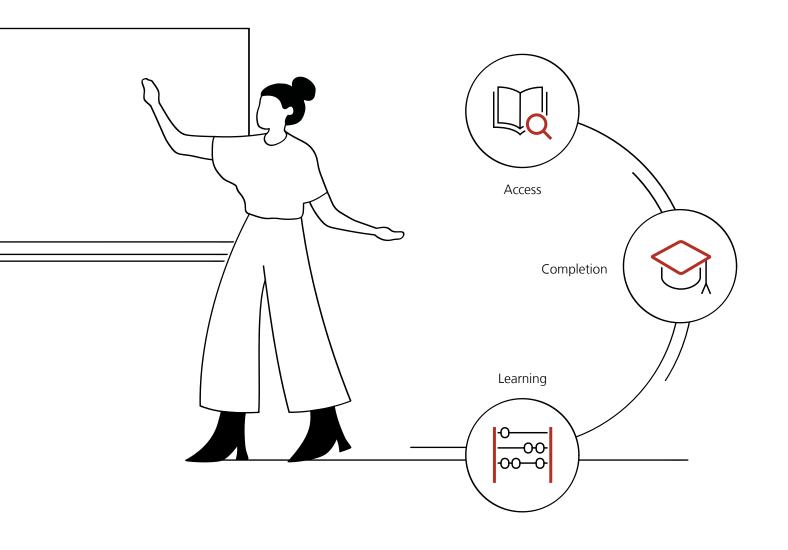
"Everything begins with education. People who can read and write have the building blocks for a successful future and the opportunity to develop themselves further. Yet an estimated 258 million children, adolescents and youth (17% of the global total) are not in school, and the number out of school in sub-Saharan Africa is growing, according to UNESCO estimates.

I firmly believe that private capital has an instrumental role in funding quality education initiatives, particularly with the uptake of investments with positive societal impact. I'm also passionate about the organization Room to Read, a UBS Optimus Foundation grantee, which gives girls and boys a kick-start in life through education"

Understanding the challenges

It's easy to think of education as one road leading to one destination. And it's easy to imagine that everyone stays on that road from childhood to adolescence, progressing through pre-schools, schools, colleges, universities and even adult learning.

But that road is blocked for many. And they have no choice but to disrupt their education journey and the opportunities that arise from receiving a quality education. How has the world reached this point? Let's explore the issues and challenges...



01.1 Getting into education

The world has come a long way in providing access to education. Today, most children have access to basic education (primary and lower secondary education), and each new generation is spending more time in school than the previous. This progress has been particularly fast and widespread in low-income countries.²² And it's been even more rapid for girls. Worldwide, there are now equal numbers of boys and girls in school, although there are still big differences between countries.²³

Too many barriers still remain

Despite this progress, 258 million children worldwide are still out of school.²⁴ And some groups of children face persisting barriers to education. For example, children with disabilities are 2.5 times more likely than their non-disabled peers to have never been in school.25

There's also a big geographic divide in educational opportunities. In Europe and North America, nearly all children and adolescents are in school. But in Sub-Saharan Africa, around 20% of primary-age children and 40% of adolescents (aged 11 to 14) are out of school.26

Acute inequalities also exist within regions, where wealth influences people's chances of attending school. For example, in central and southern Asia, adolescents from the poorest households are six times more likely to be out of school than their peers from the richest households²⁷. These disadvantages accumulate over the course of the "education trajectory" (the path individuals take through different educational stages) – and they affect the poorest children. The result? In low and middle-income countries, barely any children from poor households are educated beyond upper-secondary school.²⁸

258 mn children worldwide are out of school

59 million primary-age children 199 million secondary-age children

²² World Development Report 2018: Learning to Realize Education's Promise. (n.d.). World Bank.

²³ Equity. (n.d.). GEM Report SCOPE.

²⁴ New Methodology Shows that 258 Million Children, Adolescents and Youth Are Out of School. (2019).

Global Education Monitoring Report, Inclusion and education: All Means All. (2020). UNESCO, p. 90.
 Global Education Monitoring Report, Inclusion and education: All Means All. (2020). UNESCO, p. 278.

²⁷ WIDE Education Inequalities.

²⁸ Equity, GEM Report SCOPE

Uneven progress

Looking at the global picture, there are now equal numbers of boys and girls in school. But looking at the picture from a national perspective, it's a different story. Unfortunately, equal numbers have only been achieved in:



equal numbers of boys and girls in school

Educational inequalities can also affect boys. Two-thirds of countries see boys suffering extreme disparity in accessing tertiary education (education for people above school age, such as college and university). And this trend has been exacerbating over time.29

Layers of disadvantage can build up and affect the most vulnerable. For example, in conflict-affected countries, twice as many girls are out of school compared to global averages.³⁰ Poverty, location and gender also combine to block people's access to education. For instance, the traveling distance between poor families' homes and schools often dictates whether or not their children will be educated. That's especially true in places where social norms and safety concerns make it hard for children (particularly girls) to travel far from home.³¹

Challenges start early

Barriers to education affect children early in life. Globally (but mostly in low and lower-middle income countries), 349 million children below primary school entry age lack access to early childhood programs.³² The challenge is greater for families with children aged up to three, with high costs and a lack of childcare policies preventing access. This denies young children a crucial educational stepping stone, blocking the chance to gain skills that enable them to flourish in primary school and beyond.

Did you know?

Fragile and conflict-affected countries are glaring exceptions to the global boom in schooling.33 Around half of all out-of-school primary-aged children live in these countries.34

²⁹ Equity, GEM Report SCOPE.

³⁰ Mind the Gap Report, Arora, A. (2022, January 27); Transforming education for internally displaced children – data lead the way. Evidence for Action; UNESCO Institute for Statistics. Children out of school, primary – Fragile and conflict affected situation.

³¹ World Development Report 2018: Learning to Realize Education's Promise, p.63. (2018). World Bank.

³² Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital. (2021, March 4). World Bank.

³³ World Development Report 2018: Learning to Realize Education's Promise. (2018). World Bank

³⁴ UNESCO Institute for Statistics. (2022). Children out of school, primary – Fragile and conflict affected situations. Data. World Bank



Defending education

George Kronnisanyon Werner Minister of Education, Liberia, 2015 to 2018

How did conflict affect education in Liberia?

Conflict caused severe challenges in accessing education, including school closures, destroyed educational infrastructure and teacher shortages. And it displaced families and endangered livelihoods, which means sending children to school was no longer a priority or an option.

Before the 1980s, the Liberian educational system was the envy of many. But it collapsed after more than a decade of conflict, with many teachers and school administrators losing their lives. We're still recovering. I think, if we're lucky, fixing our educational system will take as many years as it took to destroy it.

Schools are reopening following the COVID-19 pandemic. What lessons were learned from the Ebola crisis to ensure the most vulnerable children can access schools?

Ebola struck Liberia in 2014. It caused more than six months of school closures and learning losses, and disrupted our efforts to move on from a long and damaging civil war. I was commissioned to open schools safely: I toured the country to better understand the conditions and concerns of our communities.

To get children back in classrooms, we needed to reassure the school community (including students, parents, guardians and teachers). We needed to make them feel confident that school conditions were safe enough for children to return, and that proper health protocols were in place. To reduce the impact of trauma

Philanthropic giving unlocks, catalyzes and inspires major benefits for those most in need. Government financing tends to be slower and tied to complex conditions. But children most in need of equal access to quality education don't have time to wait. Philanthropy can ignite widespread positive change by providing flexible resources, pushing for accountability, and helping leaders realize their ambitions.

on children, their families and teachers, we also trained staff on the basics of psychosocial support. And we learned that, if implemented correctly, these solutions could endure beyond the crisis and help us build more resilient systems.

During our visits, I regularly heard that people wanted change, not just going back to how it was before. They wanted actual learning to take place in schools. The crisis revealed opportunities to rethink different aspects of education, for example, how we could make school infrastructure safer and more suitable for girls. As schools reopen, we need to create viable social safety nets for society's most vulnerable: girls and the physically challenged.

How can philanthropy ignite positive change in education?

Philanthropic giving unlocks, catalyzes and inspires major benefits for those most in need. Government financing tends to be slower and tied to complex conditions. But children most in need of equal access to quality education don't have time to wait. Philanthropy can ignite widespread positive change by providing flexible resources, pushing for accountability, and helping leaders realize their ambitions.

In fact, philanthropy has been key in overcoming the harm of civil war. For example, the Liberian Educational Advancement Program (LEAP) (a publicprivate partnership led by the Liberian Ministry of Education with support from philanthropic funders such as UBS Optimus Foundation and LGT Group) has accelerated access to quality education. The partnership achieves this by providing schools with examples of educational excellence to learn from and replicate.

01.2 Struggling to graduate

It's vital that people have the opportunity to complete each stage of their educational journey. Yet many factors have combined to prevent millions of children from completing continuous periods of education.

> Globally, 85% of children complete primary school. But this decreases at higher educational levels, with 73% of adolescents completing lower secondary school, and only 49% completing upper secondary school.35 Children from low-income families face greater barriers to finishing their education, with only 28% of the poorest children in low-income countries completing their primary education. There are also challenges in upper-middle-income countries, with 77% of the poorest children making it to the final grade in primary school, compared to 97% of their wealthiest peers.36

Leaving school too early

At primary school level, children gain the foundational skills they need to learn and participate successfully in society. Yet, 60% of those leaving school during primary education do so during the first three grades. As children need at least four years of education to acquire basic literacy, 37 too many children are at risk of lacking basic skills. This is a big problem in low-income countries, where more than half of the poorest people fall below the minimum four years of education38.

Only **28**% of the poorest children in low-income countries are completing their primary education

¹⁵ Global Education Monitoring Report Inclusion and education: All Means All. (2020).

³⁶ WIDE Education Inequalities, UNESCO.

³⁷ UNESCO, More Than One-Half of Children and Adolescents Are Not Learning Worldwide.

³⁸ WIDE Education Inequalities, UNESCO.

Did you know?

Poor menstrual hygiene management has contributed to high rates of school absenteeism, repeated school years, and school dropout among adolescent girls. Factors relating to this include:

- inadequate school infrastructure
- a lack of sanitary products
- insufficient education (such as information and advice)
- restrictions imposed on girls during menstruation.

For instance, in rural Peru, beliefs and taboos surrounding menstruation lead many girls to stay home during their period, which often results in them dropping out of school. In a study of 600 girls in India, 65% reported that menstruation affected their daily school activities, with pain, anxiety and shame causing them to miss classes and tests.39

The risk of dropping out

Although enrolled in school, disadvantaged⁴⁰ students consistently report a weaker sense of belonging in school than their more advantaged peers⁴¹. Absenteeism is an enormous challenge – even in high-income countries, where disadvantaged students are at higher risk of being out of school for long periods, despite being on school registers⁴². This can lead to children disengaging from school and being at higher risk of dropping out of education.

Many children and adolescents spend too much time trying to complete educational levels. For instance, in Haiti, 17% of 19-year olds are still in primary school while, in Liberia, 25% of 23-year olds are still in secondary school.⁴³ Many of these children feel alienated due to being significantly older than their peers. So they're more likely to repeat education levels and drop out of school permanently.

Education disrupted: COVID-19

Even before the pandemic, disadvantaged children and young people were already struggling to stay in school. But the school closures during the pandemic put them at risk of never returning. Various pandemic-related factors have driven disadvantaged learners away from school, including financial constraints, pressure to get jobs and perform household chores, and learning loss.⁴⁴

Other health crises have shown that girls – particularly adolescent girls – tend to be most affected, 45 as they're more likely to experience pressure to perform household chores, and to be married off. A study in Kenya of the hardestto-reach adolescent girls found that 29% of girls had dropped out of school during the pandemic. More than half of these girls dropped out because they were, or had recently been, pregnant.46

³⁹ Vashisht A, Pathak R, Agarwalla R, Patavegar BN, Panda M. School absenteeism during menstruation amongst adolescent girls in Delhi, India. J Family Community Med. 2018 Sep-Dec;25(3):163-168. doi: 10.4103/jfcm.JFCM_161_17. PMID: 30220845; PMCID: PMC6130156.

⁴⁰ Disadvantaged children are children at risk of education exclusion as a result of sex, location, poverty, disabiity, ethnicity, language, migration, displacement or other characteristics

⁴¹ Publications – PISA. (2019). OECD.

⁴² Global Education Monitoring Report. Inclusion and education: All Means All. (2020).

⁴³ GEM Report SCOPE.

⁴⁴ UNESCO COVID-19 Education Response. (2020). UNESCO.

⁴⁵ Stefania Giannini, UNESCO Assistant Director-General For Education, & Anne-Birgitte Albrectsen, Chief Executive Officer, Plan International. (2021, June 16). Covid-19 school closures around the world will hit girls hardest. UNESCO.

⁴⁶ Kwauk, C. D. S. (2022, March 9). What do we know about the effects of COVID-19 on girls' return to school? Brookings



Back to school

Harry Anthony Patrinos

Practice Manager, World Bank Group, Europe and Central Asia

The World Bank Group provides governments with a wide range of financial products and technical assistance, and helps countries share and apply innovative knowledge and solutions to their challenges.

How did school closures during the pandemic harm children's learning?

Even short disruptions in a child's schooling can cause significant and lasting harm to learning. These learning losses may cause greater long-term impacts, especially for the disadvantaged. Some countries managed to limit pandemic-related learning losses. However, recent research shows that school closures often have a large, persistent and unequal effect on learning. Online education is an imperfect substitute for in-person learning, particularly for children from low-income families. Early reviews based on limited data from high-income countries suggest they have suffered large learning losses and inequality.

What role can parents, guardians and communities play in ensuring children complete school?

They have a very important role to play. To keep students engaged, they need to stay focused on children's work, and make sure they're reading and attending classes. Schools also need to regularly inform them of progress and provide resources to engage their children.

How can we help educators keep children in school?

We need to create programs to compensate for the lost learning time; focus on foundational skills in reopened schools to ensure continuity; and implement accelerated learning programs.

How can we make schools resilient to crises, such as the COVID-19 pandemic?

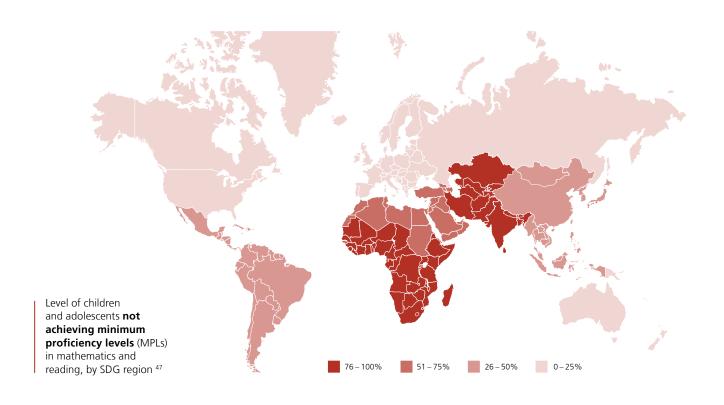
Invest in digital education. To keep children engaged, learning and enrolled, schools need interactive tools that they can deploy during school closures. Children also need supported and engaged teachers to educate them when they return to class.

What advice would you give a philanthropist looking to solve these challenges?

Invest in online, one-on-one, personalized, and "high-dosage tutoring" (one-onone tutoring or tutoring in very small groups).

01.3 Schooling without learning

The world was experiencing a severe learning crisis even before the COVID-19 pandemic – with more than half of children and adolescents worldwide unable to gain basic reading and numeracy skills.



262 mn

primary-age children reach the last grade of primary school without achieving minimum reading proficiency levels

The problem of poor-quality schooling

The biggest cause of poor learning is rooted in education systems that fail to produce learning. Most non-learners today are in school, and many of those students have studied for several years. An estimated 262 million primary-age children reach the last grade of primary school without achieving minimum reading proficiency levels.⁴⁸ Causes include⁴⁹:

- poor educational foundations that leave children ill-prepared to learn in formal school
- a lack of high-quality teachers
- poor school management
- teaching methods that progress much faster than children's learning pace⁵⁰
- educational resources that haven't kept pace with increased demand.

⁴⁷ Transitions from School to Work, New York: United Nations Children's Fund (UNICEF), 2019.

⁴⁸ More than half of children and youth worldwide 'not learning' — UNESCO (2018, April 22), United Nations Sustainable Development.

⁴⁹ World Development Report 2018: Learning to Realize Education's Promise, World Bank.

⁵⁰ Pritchett Lant & Beatty Amanda, Harvard University, The Negative consequences of overambitious curricula in developing countries (2012) | Unesco IIEP Learning Portal. UNESCO

Rising enrollment levels have contributed to greater heterogeneity in students' learning levels within classrooms.⁵¹ And many schools and teachers follow overambitious curricula that fail to match students' diverse needs. Additionally, many teachers struggle to access adequate training, and find themselves teaching in overcrowded classrooms. Take the case of Sub-Saharan Africa which, in 2019, had an average of only 65% of primary teachers with the minimum required qualifications, and one trained teacher for every 58 students at primary level⁵² – making quality teaching interactions hardly possible.

International comparison

Countries like Albania, Colombia, Peru and Qatar have seen average improvements in students' reading, math, and science performance in the Programme for International Student Assessment (PISA)*. And countries like Mexico, Brazil, and Indonesia have significantly increased enrolment rates in secondary education and maintained or improved their average performance in this test.

This shows that providing increased access to schooling doesn't necessarily lead to decreased quality in education.⁵³ For instance, Brazil now has federal policies that seem to be delivering positive results, including increased and more equitably distributed education funding; increased qualification requirements for teachers; and a new quality assurance program.⁵⁴

Unfortunately, the general picture is one of little progress, even in high and upper-middle-income countries. This reflects in the percentage of 15-year olds not achieving reading proficiency in OEDC⁵⁵ countries, which increased from 19% in 2003 to 22% in 2018 (the year for which the latest PISA⁵⁶ test results are available). In non-OECD countries, the number of adolescents not achieving reading proficiency is an appalling 49%. This percentage has essentially stayed the same in recent decades.57

Did you know?

The long interruption in schooling due to COVID-19 is driving significant learning loss.60 In India, 92% of students "lost" (previously learned but forgot) at least one language ability, and 82% lost at least one math ability from one year to the next during the pandemic. Globally, the loss will be greater for the most disadvantaged, widening the already enormous inequities in education. Almost all the technologies that schools used to educate children when closed required electricity. Yet, in 28 countries, only 65% of the poorest households have access to electricity.61

Diverse learning needs and inequalities

Wealth is the biggest predictor of differences in learning outcomes between groups. For example, a child in the lowest wealth guintile is 16% less likely to gain foundational reading skills than a child from the highest wealth quintile.58

However, a study of data from 109 countries found that learning levels vary widely – even among students with similar backgrounds and situations. In fact, learning differences among students of the same school, sex and wealth drives half the learning inequality within countries.⁵⁹ This shows the need to reshape classroom instruction so it can reach each and every student in the class.

52 The persistent teacher gap in sub-Saharan Africa is jeopardizing education recovery (2021, July 28), UNESCO.

⁵⁴ OECD, Brazil: Encouraging Lessons from a Large Federal System (2010)

⁵⁷ Global Education Monitoring Report Inclusion and education: All Means All. (2020).

⁵¹ Global Education Monitoring Report Team, Pratham Resource Centre. (2020). Teaching at the Right Level: From concern with exclusion to challenges of implementation, UNESCO.

⁵³ OECD, "Which countries have improved and which countries have declined in performance over their participation in PISA?," in PISA 2018 Results (Volume I): What Students Know and Can Do, OECD Publishing, Paris (2019). DOI: https://doi.org/10.1787/cf74dac9-en.

⁵⁵ OECD – the Organization for Economic Cooperation and Development is an international organization of 38 countries that works to build better policies.

⁵⁶ PISA – the OECD's Program for International Student Assessment. PISA is a test that measures 15-year olds' ability to use their knowledge and skills in reading, mathematics and science to meet real-life challenges.

⁵⁸ Arora, A., Are Children Really Learning? Exploring foundational skills in the midst of a learning crisis (2022b, May 23), Unicef Data.

⁵⁹ Joao-Pedro-Azevedo, & Diana-Goldemberg, Learning for All: Within-country learning inequality (2020, November 12), World Bank Blogs. ⁶⁰ Saavedra, I. G. A. J., We are losing a generation (2022, March 9), Brookings; Banerji, R., 'Learning loss' in the pandemic, explained: The case of elementary schools in Karnataka (2021, September 21), The Indian Express; COVID:19 Scale of education loss 'nearly insurmountable', warns UNICEF. (2022, January 23). UNICEF.

⁶¹ Unequal access to remote schooling amid COVID-19 threatens to deepen global learning crisis. (2020, June 4). UNICEF.

Strong foundations

Igbal Dhaliwal

Global Executive Director, The Abdul Latif Jameel Poverty Action Lab (J-PAL)

J-PAL is a global research center working to reduce poverty by ensuring that scientific evidence informs policy. J-PAL conducts randomized impact evaluations to answer critical questions in the fight against poverty.

Why are foundational skills crucial for learning progression and why were children failing to acquire them even before the pandemic?

Mastering foundational skills, including basic literacy and numeracy, is key to providing students a foundation from which to absorb more complex knowledge. Yet in many low- and middle-income countries, teachers are required to teach and complete very demanding curricula, even when students often lack foundational skills, with low flexibility to reorient content or instruction to help students catch up. These children are often taught not at a level at which they can learn, but rather, at an aspirational level far above what children falling behind are able to digest.

As curricula progress in complexity year by year, those children that have failed to master the basics often fall behind and stay behind. Therefore, students' learning is not only limited by a lack of inputs (like school facilities, learning materials, or financial resources) or lack of incentives for teachers. Rather, the overly ambitious and standardized curriculum employed in schools often inhibits student learning.

Results from rigorous evaluations across different countries indicate that when instruction is reoriented and tailored to students' learning levels rather than simply to a single universal curriculum, test scores in reading and math improve. This approach, known as "Teaching at the Right Level," works by frequently assessing children and offering instruction that corresponds to their current level of knowledge, grouping students by knowledge rather than by age or grade level. It has proven to be one of the most effective, and cost-effective, approaches to improving learning and reorienting education systems toward focusing on learning outcomes.

How can philanthropists support evidence generation in a way that is contextually appropriate and is not confined to impact evaluations?

Growing the practice of evidence-driven decision-making is key to improving education systems at scale. Philanthropists can play a major role in this systemslevel change by providing core support for research organizations to turn evidence into policy. In the case of J-PAL, philanthropic support has been instrumental in allowing us to open our seven regional offices, which in turn has allowed us to develop deep connections with local governments and communities and build the capacity of government officials and practitioners to understand and use rigorous evidence in their decision making.



For example, our rigorous evaluation of Indian NGO Pratham's work demonstrated the success of their "Teaching at the Right Level" (TaRL) approach and Pratham raised resources to massively scale itself up in India. Since then, we have worked with many governments in Africa to assess whether TaRL is likely to work in their context, and subsequently pilot and scale the approach, which has now reached more than 60 million students throughout India and Africa. More recently, we have been working on applying lessons learned through TaRL to summer tutoring programs in the United States, among other contexts.

Philanthropists are in a unique position to leverage their networks and resources to spur partnerships between evidence-to-policy catalysts and governments. With relatively small investments, these partnerships can have an outsized influence on development outcomes due to the reach of governments.

If you were to give one piece of advice to a philanthropist, what would it be?

Philanthropists have a key role to play in ensuring that SDGs are achieved through evidence-informed policies and programs. By providing critical core support to evidence-to-policy catalyst organizations, you can help ensure that the most effective and cost-effective education interventions benefit students.

01.4 Context matters

Quality education alone won't ensure all children can learn. The environments in which children live and learn also need to change.

Health and learning

Research shows that pre-school health and nutrition affect children's ability to learn.⁶² Stunting (impaired growth and development) results from inadequate nutrition and repeated infection during the first thousand days of a child's life. It also causes irreversible long-term effects in children, including poor physical and cognitive development.



Did you know?

The probability of having foundational reading skills decreases for children whose parents don't attend school meetings, or live in homes that lack child-oriented books.63

⁶² Arora, A., Are Children Really Learning? Exploring foundational skills in the midst of a learning crisis (2022c, May 23), UNICEF Data.

⁶³ Ibidem

162 mn children under the age of five suffer from stunting

Globally, 162 million children under the age of five suffer from stunting. 64 By the time they enter school, malnutrition will have diminished their potential for learning. And they will carry this disadvantage into adulthood.

Other health problems can also severely harm children's learning as they age. Intestinal worms – a pervasive health problem in the developing world – can have devastating effects. It's estimated that over 835 million children need treatment for intestinal worms. The worms enter children through water or soil contaminated with feces. This reduces children's absorption of nutrients, making them too sick and too tired to attend school and concentrate in class.65

The lasting harm of toxic stress

Toxic stress (the body's response to lasting and serious stress when lacking support from a caregiver) can permanently harm children's bodies and brains⁶⁶. When a child frequently experiences strong adversity – such as chronic neglect, violence and growing burdens arising from the family's poverty – and adults do not help them to respond adequately, their stress-response systems lock into a constant state of alert. This seriously harms their memory and ability to learn.⁶⁷

Parental involvement and learning environments

Parental involvement and home environments influence learning in children's early years and beyond. Children in poor households with parents or quardians of limited formal education are less likely to progress through the school system.⁶⁸

The COVID-19 crisis highlighted how, for too many children, home conditions are unsuitable for learning. Many homes lacked a computer, the internet or even space to study.⁶⁹ And caregivers faced enormous barriers to supporting their children's learning. This was particularly true for working parents and guardians on lower incomes, and those who lacked the knowledge to adequately support their children. So it's expected that the learning losses arising from COVID-19 will be greater for children from disadvantaged families.⁷⁰

Did you know?

Stunted individuals earn an estimated 20% less as adults compared to non-stunted individuals. At an aggregate level, stunting can reduce a country's gross domestic product by up to 3%.71

Safety, N. A. F., Global nutrition targets 2025: stunting policy brief (2014, December 30), WHO.
 Abdul Latif Jameel Poverty Action Lab (J-PAL). 2020. "Deworming to increase school attendance." J-PAL Evidence to Policy Case Study. Last modified February 2020.

⁶⁶ Center on the Developing Child, What Are ACEs? And How Do They Relate to Toxic Stress? (2020, October 30), Center on the Developing Child at Harvard Úniversity.

⁶⁷ National Scientific Council on the Developing Child. (2005/2014). Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3. Updated Edition.

⁶⁸ Reaching the marginalized (2010), UNESCO.

⁶⁹ Safety, N. A. F. (2014, December 30). Global nutrition targets 2025: stunting policy brief. WHO.

⁷⁰ Rafael De Hoyos, Mitigando el impacto del COVID-19 sobre los aprendizajes (2020, May), Www.Rafadehoyos.Com.

⁷¹ Safety, N. A. F., Global nutrition targets 2025: stunting policy brief (2014, December 30), WHO.



Getting off to a good start

Cecilia Vaca Jones Senior Advisor to the CEO, Bernard van Leer Foundation

The Bernard van Leer Foundation works worldwide to ensure that babies, toddlers and the people who care for them have a good start in life. Its mission is to improve opportunities for all young children, especially the millions growing up in disadvantaged social, economic and environmental circumstances.

How does the care economy (all types of paid and unpaid caregiving) support disadvantaged children, parents and guardians?

Young disadvantaged children worldwide face significant barriers to healthy development, such as poor access to healthcare, healthy nutrition and stimulating learning environments. Quality early childhood education and caregiving nourishes and stimulates children's bodies and minds, and supports parents and guardians in their role of caregivers. Services that support parents, guardians and caregivers from disadvantaged groups are instrumental in promoting healthy children and societies.

The care economy's main role is to ensure the most disadvantaged families can access a network of social services that enable positive social mobility (moving from lower to higher social status).

What are the biggest challenges facing the care economy?

The pandemic showed the world how much we depend on the care economy. It's clear that the current situation can't continue. The paid and unpaid work of millions of caregivers - especially women - remains unrecognized, underprioritized and underfunded globally.



Governments, the private sector and funders should support the care services that are so vital to our lives, and the healthy and inclusive development of society. We need a major shift in political agendas, laws and policies, and better access to quality care services. Assigning an economic value to unpaid caregiving would highlight caregivers' enormous contribution to society. Governments need to see unpaid caregivers as a crucial part of their economically active populations.

What challenges and opportunities can cultural differences present for those creating support programs for parents?

The behavior of parents and guardians affects child development significantly. Challenges arise when programs ignore the profound impact of culture on that behavior. That's why we apply a behavioral science approach to our programs.

For example, we tap into the power of culture. Culture can be a great source of support for parents and guardians. It can embrace everything from traditional games, stories and lullabies to family histories, festivities and daily habits. We also consider diverse languages in our support programs. For instance, we want minorities to feel empowered to use their native languages.



⁰² Promising Solutions

We'll only solve the world's learning crisis if philanthropists, governments and organizations work together.

Here's how you can collaborate with likeminded people and take your efforts to the next level...

02.1 How to give children a head start

The earlier we start working with children (especially those facing higher risks of exclusion and falling behind), the better the learning outcome. Remedial education (educational interventions aimed at closing learning gaps) tends to require more resources and effort, because learning always builds on previous foundations.⁷²

What can you do?



Provide integral support

During the first years of life (starting in the mother's womb), brain development is extremely sensitive to experiences. Children's experiences of factors like caregivers' love and protection, and their living environments, will shape their brains for better or worse – and determine their future health, learning and behavior.73

Evidence strongly suggests that society should view prenatal health, early childhood nutrition and emotional wellbeing as mainstream education issues. because they can profoundly and irreversibly affect a child's ability to learn. 74

So efforts must cover every sector and area of children's early lives, including their emotional and physical health, social skills, and cognitive capacities. Each of these areas emerge in the early years, and are vital for children to succeed in school, the workplace, and the wider community.⁷⁵

Did you know?

Nobel Prize-winning American economist, Professor James Joseph Heckman, said that every year, early childhood education delivers a 7% to 10% return on investment. This is based on better school and career achievements, and reduced remedial education, health and criminal justice system costs. 76

⁷² Brain Architecture (2019, August 20), Center on the Developing Child at Harvard University.

⁷³ Interview With Dr. Jack Shonkoff, Julius B. Richmond, FAMRI Professor in Child Health and Development Director, Center on the Developing Child at Harvard University. (2008). Center on the Developing Child.

⁷⁴ Reaching the marginalized, p.58. (2010). UNESCO.

⁷⁵ Brain Architecture, (2019, August 20), Center on the Developing Child at Harvard University.

⁷⁶ Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy (2017, February 15), The Heckman Equation.



Supporting the adults in children's lives

From birth throughout childhood, humans depend on adults to take care of them. But to support disadvantaged children in their early years, we also need to support the adults in their lives. Because a positive relationship with a caregiver is one of the biggest factors in reducing the harm of severe adversity.

You can support programs that provide caregivers with the skills they need to responsively care for children and assist their learning. You can also support innovation and build evidence for approaches that address the settings that influence children's lives, and improve outcomes for children and caregivers.⁷⁷

Poverty is strongly linked to poor learning outcomes. So a significant opportunity for you is to support programs that address disadvantages rooted in poverty. These include programs that provide opportunities in upward social mobility, and incentivize parents, guardians and children to invest more in education.⁷⁸ For example, programs might focus on educating parents, enhancing the social networks of vulnerable families (such as connecting them to different services and communities), and providing affordable childcare to enable parents (especially mothers) and guardians to go to work.

Supporting tertiary education

Giving low-income students access to quality tertiary education is key to helping people earn more and escape poverty. Tertiary education not only improves the lives of students. It can also improve the lives of students' family members, as many students may be caregivers, either now or in the future.

You can support access to tertiary education by funding scholarships or backing alternative financing solutions, such as income share agreements (ISA).

ISAs give students access to tertiary education, regardless of their situation. A student doesn't need to provide collateral to enroll. Instead, the ISA's investor provides upfront funding for the student's study costs. In return, the student commits to pay the investor a percentage of their future income over a specified time.

If you decide to invest in an ISA, it's important to make sure it's fair and focused on the student. For example, ISA providers should provide students with clear information, and ensure they understand their financial commitments before signing a contract. Financial training can also help students prepare for their future repayments.

Did you know?

Cost is one of the biggest barriers to childcare. Around 92% of women in low-income countries earn low and irregular income from the "informal" economy" (work that's typically not regulated or protected by the state). This makes it almost impossible for them to afford childcare services. It's also an issue in high-income countries. For example, in the United Kingdom, the average cost of childcare for children aged below three is 33.7% of the net family income of an average family with two wage earners.79

⁷⁷ Sarah Kabay And Rebecca Smith, Improving Outcomes for Young Children and Parents in Key Stages of Development. www.Poverty-Action.Org.

⁷⁸ Servaas Van Der Berg, Poverty and education (2008), UNESCO.

⁷⁹ Devercelli, A. and Beaton-Day, F., Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital (2020), Washington DC, World Bank.



Bringing childcare to communities

Sumitra Mishra Executive Director, Mobile Creches

Mobile Creches promotes early childhood care and development to stakeholders at national, state and local levels. It does this by providing and supporting services, enhancing capacities and creating campaigns.

How does Mobile Creches reach marginalized communities?

Mobile Creches has worked with marginalized communities of migrant workers and their children since 1969. Our quality childcare solutions come in the form of a mobile creche and daycare program for children aged between six months and eight years. Our mobile creches are daycare centers based temporarily in construction sites where parents and quardians work. We currently run mobile creches in cities across 14 Indian states, and reach more than 870,000 children.

Mobile Creches provides children with regular health services, adequate nutrition, and early childhood learning opportunities. Our partnerships with parents, communities, employers, civil society organizations and government agencies enable us to reach the most marginalized.

How has Mobile Creches helped shape India's early childhood development policies?

In the 1970s, we played major roles in conceptualizing India's flagship Integrated Child Development Service (ICDS) Scheme, and launching the first national scheme for creches for children of working mothers. Over the decades, our early child development (ECD) leadership and experience have found their way into legal maternity and childcare entitlements, including labor and food security laws.



We were also part of the drafting committee for the national Early Childhood Care and Education (ECCE) policy, which was adopted in 2013. We played a pivotal role in gathering expert voices to create an inclusive, equitable policy that would pave the way for quality ECCE provisions. And during the passage of the Right to Education Act in 2019, we helped ensure that ECD and education remained as an enabling clause within the act, even when children aged under six were excluded from their fundamental right to education.

More recently, Mobile Creches and our partners led the way in making sound technical submissions during the formation of the National Education Policy 2020. The policy focuses on the importance of ECD, and commits to universal quality ECCE provisions for children under eight.

How can philanthropists help improve access to ECD?

They can do this in three ways. First, help increase supplies of ECD services – because this will lead to greater demand. Before parents and guardians decide to use ECD services, they need to see the good they can do for their children. Second, help produce better evidence that enables governments to understand the need to change policies, especially in low and middle-income countries where data is lacking.

Third, make ECD a core part of your business' focus on environmental, social and governance (ESG) issues. Supporting ECD can benefit many areas of people's lives, from health and education to climate justice and humanitarian action. Investing consistently in early childhood is good for business, good for developing people, and good for transforming society.

Building hope and dignity

Coleen Stevens Porcher Executive Director, Power of Two

Power of Two is a community-based organization that works with Black and Brown families in New York City, connecting them to community supports and resources to help them heal from the root causes of trauma, to promote positive parenting so children can thrive, and to strengthen community cohesion.

How can families and communities support child development, particularly in the early years?

The first thousand days of a child's life are crucial to their growth and wellbeing. A young child produces over a million neural connections each second. And their experiences up until the age of three drive executive functioning and socialemotional skills that last a lifetime.

Research shows that when caregivers give children a stable, nurturing environment, those children gain the tools they need to grow and thrive. That's also the case when young children experience adversity, for example, living in communities affected by racial and economic inequalities, or experiencing abuse and neglect. A nurturing relationship between children and caregivers can cushion the impact of toxic stress that would otherwise harm their potential.

We must ensure caregivers can provide this care by supporting the physical and mental wellbeing of the whole family. This work begins with enhancing and reinforcing the natural abilities of caregivers to look after their children.

What role do partnerships play in Power of Two?

They're key to our approach. Power of Two focuses on the power of relationships. We understand the importance of cultivating fruitful, equitable and respectful partnerships. We value partners that communicate openly, bring their experiences to the table, put their networks and resources to work for good, and understand the impact of family support beyond metrics and reports.

What dos and don'ts should philanthropists bear in mind when partnering with organizations?

Do...

- provide opportunities to collaborate throughout the partnership
- offer your expertise
- keep proposal and reporting lift manageable for organizations.

- assume supported communities are helpless, weak or beneath you
- limit your time to respond to requests or provide information
- subscribe to hierarchical stereotypes that have harmed the culture of philanthropy.





Supporting early childhood development

Bolor Lorinet and Pierre Lorinet Co-founders, Lorinet Foundation

Lorinet Foundation supports pioneering, impactful and sustainable initiatives that promote education, employment, and access to clean water and energy for vulnerable communities in Mongolia, South East Asia, and France.

How would you define a "quality" early children childhood development (ECD) program? Are there any regional differences?

Quality in ECD isn't based solely on the numbers of children enrolling in kindergarten. It involves many factors, such as how caregivers engage with their children in the early years; the ways children learn and teachers teach; and the quality of nurturing environments.

For example, in Mongolia, the kindergarten enrolment rate in the capital city of Ulaanbaatar is high. But the city's kindergartens still suffer from congested classrooms and poorly prepared workforces.

Sustainable impact begins with acknowledging the fact that it is work of a lifetime. It's an ongoing process, not a journey that ends in one place.

So there isn't one definition of quality ECD. However, our programmes in Mongolia focus on key elements of quality childcare, such as expanding access to age-appropriate learning, helping parents and caregivers provide responsive care, and enhancing systems for developing the workforce.

How do you identify promising organizations?

Sustainable impact begins with acknowledging the fact that it is work of a lifetime. It's an ongoing process, not a journey that ends in one place. All our programs aim to have a lasting impact on people's lives. We try to ensure that:

- our partner organisations work effectively and efficiently
- communities take part in and own the programs
- wider education systems adopt and scale the programs.

So our assessment process is simple. We work with organisations with evidence of past success or a desire to deliver real impact. We consider the potential of their solutions and the organizational capacity to drive social change.

How should philanthropists approach supporting ECD?

Philanthropists should view early education as one vital part in the big picture of learning. The brain develops faster during a person's early years than any other stage of life. So philanthropists should realize their efforts will do more than deliver immediate educational results – they will also provide long-term social and economic benefits. This impact can be huge for low-income, disadvantaged and at-risk children.

But the problems are vast. And the financial resources needed to solve them are scarce. So philanthropists should be willing to invest in trialling and developing innovative programs, and generating evidence to support new solutions.

What advice would you give a philanthropist looking get involved in ECD?

Be open to learning from previous efforts, collaborate with other philanthropists, and combine your funds to invest in proven scalable ECD solutions.

02.2 How to improve educational journeys

Many vulnerable children are late to start their educational journeys, or experience barriers along the way. We must not fail them. Together, we can open new roads for children to explore opportunities in school, work and society.

What can you do?



Support accelerated education programs

Children who have been out of school for some time often struggle to return. Many are too old or unwilling to return to school alongside younger children. And most have big gaps in their learning that make it hard to succeed in school.

Data shows that children who leave school for around a year have, on average, 15% lower rates of foundational reading skills than those who stay in school.80 The situation is far worse for children who have been out of school for several years.

Did you know?

The average length of time children are forcibly displaced is 17 years – longer than most children would typically spend in school. Displaced children miss an average of four years of education. The longer children are out of school, the more likely it is that they won't be able to return; their learning will regress; and they will experience exploitation, violence and poverty in their lifetimes

But accelerated education programs (AEPs) can help to bridge these gaps. AEPs are flexible, age-appropriate programs that enable children to catch up on their education. The programs:

- teach children in ways that match their levels of cognitive maturity
- enable children to acquire certified competencies for basic education (primary and lower-secondary school level)
- enable children to transfer smoothly into formal schooling.81

You can:

- support and fund efforts to gather evidence about the design and implementation elements that make AEPs successful
- fund the most cost-effective AEPs nationally and globally. There's an enormous opportunity for philanthropists to provide ongoing funding for cost-effective AEPs that deliver long-term support for marginalized groups.

⁸⁰ Arora, A., Are Children Really Learning? Exploring foundational skills in the midst of a learning crisis, (2022d, May 23) Unicef Data.

⁸¹ Accelerated Education. INEE. 2017, October 2.

Learning in Lebanon

Caitlin Baron CEO, The Luminos Fund

The Luminos Fund provides transformative education programs to thousands of out-of-school children, helping them catch up, integrate into local schools, and prepare for lifelong learning.

Why did you bring the Luminos education program to Lebanon?

Luminos expanded its education mission to Lebanon in 2017 amid the Syrian refugee crisis. The United Nations High Commissioner for Refugees (UNHCR) estimated that 7,000 Syrians were fleeing their homes each day, and many escaped to Lebanon. Even today, Lebanon remains at the forefront of one of the worst humanitarian crises of our time, and hosts the highest number of displaced persons per capita in the world. More than half of these displaced people are children. And more than half of these children are out of school due to displacement, poverty and other barriers.

We were confident our education model could help these children. Luminos creates joyful and safe learning environments for children facing crisis, poverty and conflict. We've helped over 172'957 out-of-school children across Sub-Saharan Africa and the Middle East reintegrate and catch up. And research shows that our students go on to complete primary school at twice the rate of their peers. Since 2017, we've helped thousands of refugee children in Lebanon restart their education and catch up, while working in line with the Lebanese national curriculum.

What's behind your success in Lebanon?

We offer back-to-school and homework support programs for refugees. We also offer psychosocial support programs, like art therapy, to help children process the trauma they've experienced. Key factors for our success in Lebanon include our:

- data-driven approach
- flexible working methods that adapt to changing local conditions
- collaborations with parents, guardians and local organizations to support children's learning and wellbeing.

Why do you provide social-emotional learning (learning that focuses on developing skills to manage emotions, achieve goals, and maintain supportive relationships)?

The last few years have been challenging for children. But those we serve were already facing hardship. We know children learn best with their heads, hands and heart. So we focus on social-emotional learning and supporting children holistically. In Lebanon, art and music therapy are important components of our work.

Collaborating with governments is crucial for successfully integrating children in school. What's your approach to working with governments? Working with governments is essential for achieving lasting impact. To help vulnerable children catch up, we collaborate with governments wherever we work. These collaborations vary based on the location. In Ethiopia, for example, the government is adopting our model and rolling it out nationally. We're overjoyed that our program and approach can impact children both in government classrooms and the classrooms we manage.

What's the cost-effectiveness?

Cost-effectiveness analysis compares the relative costs to the outcomes (effects) of two or more courses of action. Finding whether a program is cost-effective can be done by comparing alternative ways of achieving the same objective, to identify that with the lowest cost. Or alternatively, by comparing two or more approaches with similar costs to discover which achieves the better outcome.





Accelerated Education. 10 principles for effective practice

The Accelerated Education Working Group (AEWG) 10 Principles for Effective Practice aim to clarify the essential components of effective accelerated education programmes (AEP). Each principle contains evidence-informed best practices which can be viewed as a series of key actions or indicators to support the design, implementation and evaluation of accelerated education work.

Exploring alternative routes

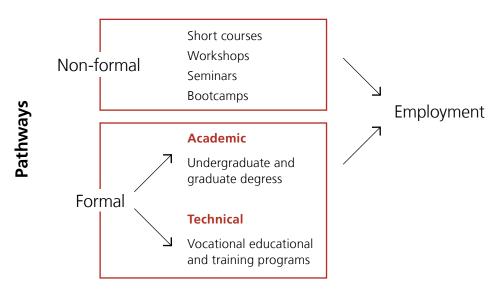
Adolescents who have dropped out can face many barriers to returning to school, including:

- unaffordable costs of formal education
- potential lost income as a result of focusing on studying rather than work
- failing to meet entrance requirements for further education because they haven't completed lower-secondary education.82

These young people need other ways to access learning and succeed in work and society. You can support alternative routes that provide young people with the skills and certificates they need to find decent work. These alternatives should also teach foundational skills to those who lack them and, ideally, focus on skills that can apply across many different industries. This will ensure young people gain the skills needed to adapt to changing labor markets.

Building vital life skills

Foundational skills (basic literacy and numeracy) are crucial for children to progress in school. But efforts should go beyond supporting academic skills. Social-emotional skills are just as vital, because they enable children to set goals, manage their behavior, build positive relationships with peers and teachers, face challenges resiliently, and process information⁸³. Because socioemotional and academic skills are mutually reinforcing, approaches that go beyond academics are particularly important for children that are left behind in access and learning.84



Formal education definition: http://uis.unesco.org/en/glossary-term/formal-education Non formal education definition: http://uis.unesco.org/en/glossary-term/non-formal-education

⁸² Transitions from School to Work, New York: United Nations Children's Fund (UNICEF), 2019.

⁸⁴ Assessment of socioemotional skills among children and teenagers of Latin America, (2021, June), UNESCO.

Strong foundations

Shanti Rigger

Education Coordinator at the International Rescue Committee (IRC)

Emma Gremley

Senior Director, Education at the International Rescue Committee (IRC) The IRC works in more than 40 countries and over 20 US cities to help people affected by humanitarian crisis to survive, recover and rebuild their lives.

Why is socio-emotional learning particularly important for out-of-school children to reintegrate into school and to thrive in school and life?

Socio-emotional learning provides children with the tools to be well and succeed in life. It is particularly important for children in and from crisis contexts who have faced war, poverty, displacement and/or violence. These experiences can lead to a toxic stress response, which disrupts healthy brain development and has short- and long-term impacts on children's mental and physical health, behavior, relationships, and ability to learn. When refugee children are allowed to return to school, they need a place where they can feel safe and thrive. It has been shown that creating a safe environment, a Healing Classroom, for children and strengthening their socio-emotional skills, mitigates the effects of adversity by providing children with the skills to focus, regulate their emotional responses, positively interact with others and cope with stress and challenges.

How is socio-emotional learning key to build back better from COVID-19?

COVID-19 has left a mark on many children due to the lack of positive personal interactions and individual support during school closures. This was often exacerbated by precarious family circumstances or caregivers being away at work. The effects of the pandemic range from psychosomatic complaints, lack of exercise and malnutrition to major abnormalities in socio-emotional development. Through explicit socio-emotional instruction, children are supported in processing information in a focused manner, remembering better, controlling impulses and emotions, interacting with others, solving problems, and facing challenges with perseverance – all preconditions to being able to learn. However, many of these issues were a struggle for children prior to the COVID-19 pandemic as well. So, building back better will mean focusing on the mental health and socio-emotional needs of all children going forward.

How can socio-emotional learning be successfully integrated into the classroom?

To enable socio-emotional learning, a safe and stabilizing environment is needed – this is something that every teacher can foster as part of their regular teaching. Healing Classrooms promote children's sense of control, sense of belonging, feelings of self-worth, positive peer relationships, personal attachments, and intellectual stimulation. Through reliable routines, consistent rules, inclusive play, mindfulness practice as well as community and caregiver involvement children can experience stability amidst the chaos of crisis.



What are the most critical evidence gaps in the field and how can philanthropy play a role to support evidence generation?

Socio-emotional learning for displaced or disadvantaged children as well as teacher professional development to that effect are under-researched topics overall. There is not yet enough evidence on the kind of contextualization of materials to different contexts that is needed, as well as the necessary dosage of activities. Existing measures of socio-emotional learning outcomes are often not fine-grained enough to adequately capture children's well-being or the effects of socio-emotional interventions on their literacy and numeracy skills. Philanthropy can play a role in supporting the development of reliable, low-cost, easy-to-use measurement tools that teachers can use regularly.

02.3 How to improve learning outcomes for all

Standard one-size-fits-all improvements to learning won't be enough to improve education for everyone. To really make a difference, we need to understand the diverse challenges children face – and implement targeted approaches to solve them.

What can you do?



Go beyond "average"

The education sector talks a lot about average scores and improvements. True, it's important to measure averages. Because they give us an overview of current situations. But they don't give us the full picture. And they can mask inequities that affect the most disadvantaged children.

Take the case of Colombia, where average test scores between 2006 and 2018 improved significantly. But the number of students lacking basic knowledge also increased. How did this happen? General improvements in learning for high-achieving children had boosted the national average, despite worsening outcomes for some groups of children.85

So while it's good to see average improvements, averages cannot show us if low and high performers are equally improving. To improve education for everyone, we need to measure and track changes in performance for all children – particularly those failing to reach minimum standards.

To achieve this, you can:

- invest in the infrastructure needed to continually measure the achievements of disadvantaged children
- fund bigger and better measurement systems within organizations. Funders can encourage organizations to shift from solely measuring average improvements (which can mask how some programs may be largely beneficial for some, but detrimental to others), to tracking performance across different groups of children. By understanding which students benefit from their interventions, which students do not, and why, organizations can truly assess the impact of their programs and gain valuable insights on how to improve them.

⁸⁵ Joao-Pedro-Azevedo, & Diana-Goldemberg, (2020a, October 22), Learning for All: Beyond an Average Score. World Bank Blogs



Support adaptive learning

"Adaptive learning" approaches – in other words, methods that teach according to students' learning levels and needs, are increasingly proving to be cost-effective teaching methods for low and middle-income countries.86 Some of the most promising approaches work by grouping and teaching students by their learning needs rather than their age. They also dedicate time to teaching basic skills rather than following a rigid curriculum.

These approaches are promising alternatives to one-size-fits-all teaching methods that fail to meet children's diverse needs. Education technology that tailors content to students' learning levels has also proved to be promising. 87

Philanthropists can support and help rollout proven adaptive learning approaches. And these efforts might be key to helping the most disadvantaged catch up on the learning they've lost due to the pandemic.

What does "outcome" mean?

An outcome is the result you wish to see from your work. They're the result of "inputs" (such as books) and "outputs" (like the number of children completing a course). In education, "outcomes" and "learning" are often interchangeable words – because learning is always the ultimate goal of education.

⁶ Cost-Effective Approaches To Improve Global Learning, (2020, October), World Bank.

⁸⁷ Abdul Latif Jameel Poverty Action Lab (J-PAL), "Tailoring instruction to students' learning levels to increase learning." (2019), J-PAL Policy Insights. Last modified January 2019.



Supporting rural areas

Professor Yaojiang Shi Center for Experimental **Economics for Education** (CEEE)

The CEEE aims to raise the quality and effectiveness of education policy and projects throughout China. It does this by conducting research and training to help other academic research teams, government officials, NGOs and foundations understand the importance of evidence-based action and the core principles of evaluating impact.

How does the CEEE use evidence to improve education nationally?

As a research institution, the CEEE is committed to exploring effective ways to support education in poor rural areas. We research approaches to alleviating poverty. And we use the findings to stimulate the actions and policies of government and the education sector to make education more equitable. We focus on meeting social demand; combining academic research, advocating policy and social action; and exploring low-cost and effective ways to solve problems.

How does CEEE address educational differences in rural and urban China?

Education quality is unequal between urban and rural areas. To close the gap, we encourage targeted, replicable and sustainable policy improvements. We analyze data to see what programs work and why, then share the results with policymakers – who then replicate proven effective programs.

For example, our research showed that 30% of rural students suffer from iron deficiency anemia. A simple nutritional intervention can reduce this anemia and improve academic performance. We submitted four policy briefs regarding our findings to the central government. Since 2011, the state has invested 16 billion yuan every year to implement the "nutritious lunch program," which benefits 33 million poor students.

As another example, we surveyed poor rural areas of northwest China and found that more than half of children up to the age of three had not reached their full cognitive development potential. Working with the National Health Planning Commission (now called the National Health Commission), we visited homes and created parenting centers for parents of infants and toddlers. Both approaches aimed to improve parenting behaviors and help parents develop their children's cognitive, language, motor and social-emotional abilities. The National Health Commission has now introduced policies to expand early childhood develop programs nationally.

Teaching through technology

Joe Wolf Co-founder and CEO, Imagine Worldwide

Imagine Worldwide's mission is to empower children everywhere with the literacy and numeracy skills they need to achieve their full potential – through technologyenabled (tech-enabled), child-directed learning solutions.

What are the benefits and risks of tech-enabled learning? How can we capitalize on the benefits and mitigate the risks?

In the Nyarugusu Refugee Camp in Tanzania, one of the places we work, there is only one teacher for every 165 students. In such context, tech-enabled learning helps overcome many educational barriers, including a lack of classrooms, learning materials and quality teachers. There are three main benefits of tech-enabled learning:

- Tailored to students. Every child is different. Education technology can be tailored to every child's strengths, needs and experiences, and enable them to progress at their own pace. This helps children engage with their education, and feel more in control of their learning.
- Available to all. Students can access a wealth of high-quality learning content, and aren't limited to using materials from one teacher. Educators can also update and share learning materials guickly and easily.
- More effective teaching. Tech-enabled learning gives educators time to work with students who need more support, without slowing others down. Student progress data also helps educators target their work efficiently and effectively.

Our technologies aren't standard one-size-fits-all solutions. We tailor the software to the unique needs of the students by working closely with our partners. That's why we give our partners a leadership role in designing and implementing the solutions.

How does Imagine Worldwide use technology to deliver personalized learning?

Our tablet-based learning solutions work everywhere – whether students are at school, home or elsewhere. They don't need an internet connection. And because they're charged via solar power, they don't need an electricity supply.

The software provides a full research-based curriculum that adapts to student learning levels. Children drive their own learning in daily thirty to forty-minute sessions. Each unit costs \$10 per child per year – and this price is declining.

To summarize, our software gives students access to personalized learning that builds their foundational literacy and numeracy skills — even in severely underresourced areas with large classes, inadequate teacher training, and limited learning materials.



Can your solutions measure more than "average" levels of progress?

Yes, our solutions measure each student's progress. This means we can provide students with a more personal and engaging learning experience than solutions based solely on the average class levels. With personalized learning, high and lowperforming students progress more quickly. This also accelerates progress for the middle of the class.

02.4 How to promote lifelong learning

Adopting a life-course perspective means recognizing that all stages of a person's learning trajectory are closely intertwined with each other, as learning is a continuous, progressive process that always builds on previous foundations. Thus, enabling children to succeed in school (and in life) cannot be the result of short-term, siloed interventions; instead, it requires a long term, coordinated, and systemic plan to support children continuously throughout life and strategically, in key moments along their educational trajectories.

> Looking at education from a life-course perspective reveals how poor outcomes emerge, grow and stretch across generations. It shows why you must provide early backing and generation-spanning support for "life-course" solutions. And these solutions must enable children to become lifelong learners – recognizing that education lasts a lifetime, and comprises formal, informal, and even unstructured forms of learning.

What can you do?



Support key milestones in children's lives

To increase the chances of positive outcomes, you can support life-course programs that empower children at pivotal moments in their lives.

- Early years. The foundations of educational success are established in children's early years. You can support programs that begin in the prenatal period (supporting mothers) and continue throughout early childhood (supporting children and caregivers).
- **Primary education.** Before children can grasp more complex learning, they first need to master foundational skills in their primary education. This is also the stage where we can put low-learning children back on track by supporting them to acquire basic literacy and numeracy skills.
- **Transitions.** Transitions refer to children moving from one educational level or setting to the next. Disadvantaged children tend to struggle more during these transitions, for example, because they lack the skills needed to succeed in the new environment. You can support programs that help children transition smoothly. You can also support policies that make educational materials consistent and complementary across different levels. This will help ensure that educational levels build on previous levels.88

⁸⁸ OECD, Starting Strong V: Transition from early childhood Education and care to primary education (2017), OECD Publishing, Paris, p.23.



Support skills for lifelong learning

It's impossible to send children from school into the world with every skill they need to succeed. To keep up with rapidly changing technologies, societies and labor markets, people need to continually gain and improve skills beyond their school years. To be able to do this, children must become "lifelong learners." This requires social-emotional skills that make them adaptable and resilient to constant change. 89 You can support programs that develop and nurture these lifelong social-emotional skills. They might also help build evidence on developing, assessing and measuring those skills.

Giving more than money

When it comes to achieving SDG 4, money goes long way. But you can offer even more: your time, talents and passion. Here are some of the many ways you can volunteer:

- 1. Attract funding and support by letting the world know about your cause. For example, attend events, give talks and meet with educational leaders.
- 2. If you run a business, give your staff the opportunity to work with local communities on solving educational challenges. For example, offer paid work days for your staff to volunteer.
- 3. Help youngsters through the tricky transition from school to work. For example, review their applications and practice job interviews together.
- 4. **Help socially disadvantaged** young people keep up in school and find decent jobs. For example, provide advice, support and a sympathetic ear for the challenges they face.
- 5. Register as a volunteer at **job fairs** where you can meet, speak and share experiences with young people about career opportunities.

⁸⁹ Emilee Irwin, Joe Pickerill, & Brendan Desetti, Lifelong Learning (2020), Inter-American Development Bank.

Unlocking student potential

Yuri Belfali

Head of early childhood and schools, Organisation for Economic Co-operation and Development (OECD)

The OECD is an international organization of 38 countries working to create better policies.

Why is it important for children to have positive experiences when starting school?

Positive school experiences and quality learning help children get off to a strong start. Despite socio-economic disadvantages, some students can achieve high levels of learning. The Program for International Student Assessment (PISA) shows that one-in-ten disadvantaged students is a high performer in their country, indicating that disadvantage isn't destiny. Good school environments and support from teachers and families positively impact students' learning journeys – and build their confidence, motivation, and enjoyment for learning.

How can schools provide the best-possible start for new students?

Schools and teachers can make children feel at home in their new environment. This will enable children to develop supportive trusting relationships with teachers and other pupils. This is particularly appropriate for early childhood education, where supportive relationships between teachers, students, and parents are key to quality learning.

How can schools help children transfer smoothly from one education level to the next?

Schools should focus on making schools ready for children – not making children ready for school. But this isn't the sole responsibility of schools. Local leaders can also ensure that transitions reflect local needs, diverse cultural and socio-economic backgrounds, and families' expectations.

Additionally, equity is a challenge for transition. To overcome this, schools could support children from disadvantaged backgrounds as they move from one education level to the next. To understand the challenges and create the right solutions, it's important for schools to work with parents and forge closer bonds with marginalized communities.



We must teach essential skills of motivation, conceptual thinking, critical thinking, creativity and curiosity rather than asking students to copy text from a chalkboard. To ensure children are confident and motivated, we need to take them on a more engaging journey and integrate these skills very strongly into the learning experience.



Motivating children to learn

Sharath Jeevan Founder of Intrinsic Labs

and STIR Education

Intrinsic Labs helps organizations and leaders worldwide solve motivational challenges in education. STIR Education supports education systems that motivate every child, teacher and official to learn and improve.

Why should education systems focus more on socialemotional skills?

The world of work is moving to one way with automation, and a lot of the core of work going forward is going to be social-emotional skills because technical skills are going to become more and more automated. So how do we prepare young people and children to succeed in that world? I don't think education systems have embraced these huge changes. We've got to change how educators teach and create powerful role modeling.

What can the education system do?

Some teachers still believe that only certain types of children can learn and succeed. But that's not true. A lot of STIR's work is about supporting educators towards recognizing that education must move away from focusing on a few talented students to realizing the potential of everyone in the class. We must teach essential skills of motivation, conceptual thinking, critical thinking, creativity and curiosity rather than asking students to copy text from a chalkboard. To ensure children are confident and motivated, we need to take them on a more engaging journey and integrate these skills very strongly into the learning experience.

How can philanthropists help?

I think philanthropists can help in three ways:

- 1. Create space for leaders to reflect on the purpose of their education systems. Many are bright, dynamic people. But they're trapped in structures that don't work. Philanthropists can help them find answers to important questions. For example, is the current system achieving its purpose? Is that purpose correct? And if not, how can we refocus the system without wiping out progress so far?
- 2. Introduce new ways of thinking philanthropists can provide a strong sense of where the world of work is heading.
- 3. Create tools to help leaders make system-wide changes. For example, STIR Education's approach is a powerful tool that not only works with children to build their creativity but works with teachers, school leaders all the way up to government.

New approaches for a changing world

Kathy Hirsh-Pasek

Senior Fellow, Center for Universal Education The Brookings Institution

Helen Shwe Hadani

Fellow

Center for Universal Education The Brookings Institution Brookings is a nonprofit public policy organization based in Washington, DC. The organization conducts in-depth research that leads to new ideas for solving social problems locally, nationally and globally.

What do children need to become lifelong learners?

Evidence shows that a narrow approach to education won't prepare children for success in school and life. But a "breadth of skills" approach (teaching a wide range of skills needed for a changing world) teaches in ways that match how human brains learn. This makes learning more active, engaging, meaningful, socially interactive, iterative, and joyful for students and teachers.90

So what skills do children need to thrive in today's rapidly changing world? They need more than adequate numeracy and literacy – they need skills that help them engage in independent lifelong learning. These skills are commonly known as the "6 Cs" framework: collaboration, communication, content, critical thinking, creative innovation and confidence.91 Each skill builds on the other, creating a strong platform for children to learn and develop.

How can schools better prepare children?

Th "6 Cs" framework guides the content of what children should learn to be better prepared. This framework was co-inspired by thought leaders in business and child psychology and aligns the skills needed to thrive in school, work, and beyond. The principles of "playful learning" (an educational approach that promotes curiosity, creativity and joy) can guide how children should be taught. Research reveals that playful learning better engages students while respecting their cultural values. 92 This research can also shape policies that enable schools to provide inclusive learning environments that promote wellbeing and development.

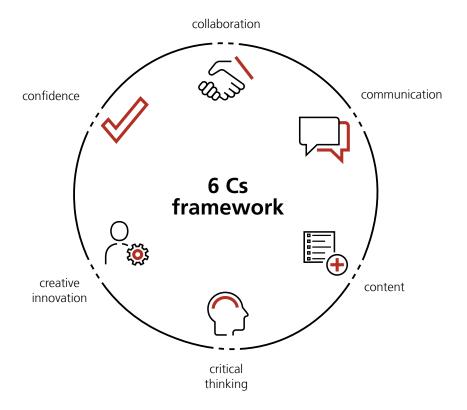
Teacher training should focus on incorporating playful learning and the 6 Cs in schools. This will put teachers in control of their own training; highlight the importance of partnerships between schools, parents and guardians; and enable schools to focus on teaching essential skills for the twenty-first century.93 Education systems must also create new and scalable ways to assess these skills individually and collectively.

⁹⁰ Hirsh-Pasek, K., Zosh, J.M., Golinkoff, R.M., Gray, J.H., Robb, M.B., & Kaufman, J., Putting education in "educational" apps: Lessons from the science of learning. Psychological Science in the Public Interest, 16, 3-34, (2015).

⁹¹ Golinkoff, R. M., & Hirsh-Pasek, K., Becoming brilliant: What science tells us about raising successful children (2016), American Psychological Association.

⁹² Hirsh-Pasek, K., Golinkoff, R., Nesbitt, K., Lauderbach, C., Fifer, G., Blinkoff, E. (2022) Making schools work. New York: Teachers College Press

⁹³ Winthrop, R., Barton, A., Ershadi, M., & Ziegler, L. (2021, September). Collaborating to transform and improve education systems: A playbook for family-school engagement. Brookings Institution.



How can schools be more inclusive and meet the needs of the most vulnerable students?

Developing students' 6 Cs makes education more equitable. It's a low-cost way to give students the skills they need to become critical thinkers and problem solvers. Playful learning and the 6 Cs also accommodate a wide range of student interests, cultural experiences, and knowledge from students' homes, communities and schools. So education is no longer about how well children do in their tests. It's about empowering children to be happy, healthy, thinking, caring and social human beings - and to become collaborative, creative, competent and responsible citizens of tomorrow.94

⁹⁴ Hirsh-Pasek, K., Hadani, H.S., Blinkoff, E., & Golinkoff, R.M. (2020, October 28). A new path to education reform: Playful learning promotes 21st-century skills in schools and beyond. Brookings Institution, Policy 2020.

02.5 How to scale solutions

To change education for good, philanthropists need to support solutions that can scale and impact as many lives as possible.

What can you do?



Take solutions to the world

- Adapt and replicate a successful solution. If a solution works well in one place, why not try it elsewhere? You will need to find ways to retain processes that work across contexts, while adapting the solution to suit local needs and resources.
- Get government backing. Governments are major players in education.95 They have the power, resources and reach to rollout solutions nationally. Furthermore, they are key to ensure that quality interventions can reach the most disadvantaged. If you want to work towards equity in education, working with governments is key. And if you want governments to adopt your solution, you'll need to work closely with them and align to their policy agenda. You might also work with a government department to demonstrate an innovative solution's value and feasibility. Or you might influence governments by campaigning for policy change.
- Make it commercially viable. Designing a solution that generates returns can attract funds from investors – and make your solution more likely to obtain predictable flows of funding and grow. But before investing, investors will need to feel confident that your solution can provide them with returns.

Designing for growth

Are you involved in designing a solution for an educational challenge? You'll need to build in an ability to scale from the start. Try to design the solution to:

- 1. Respond to the needs of the community, not the implementer.
- 2. Involve local stakeholders especially teachers, who will be key to expanding the solution.
- 3. Grow without incurring excessive costs (look carefully at the solution's effectiveness, cost efficiency, and potential rising costs as the solution grows).
- 4. Adapt easily to new locations, needs, cultures and more.

⁹⁵ Susannah Hares, & Jack Rossiter, The State of Global Education Finance in Seven Charts: An Update (2021, September 9), Center for Global Development, Ideas to Action,



Provide funds to expand solutions

Looking to provide a solution with the funds it needs to scale? Your options include:

- **Unrestricted giving**. This involves not restricting how an organization uses the funds you've given. Instead, you trust the organization to use the money as it wishes to achieve the biggest-possible impact. To ensure your money will work hard, you'll still need to carefully assess the organization before donating (due diligence).
- **Financing the middle phase.** The middle phase is when an intervention has been piloted and proved promising, but has not yet been implemented at a wider scale. Promising interventions often struggle to find funding for this critical stage. Your funding for this phase can help to fill this gap and enable a solution to succeed and gain wider acceptance.96
- Preparing organizations to seek outcomes-based funding (where investors provide an organization with upfront funds with the potential of receiving returns later if previously set targets are reached): To attract investors, organizations will first need a strong monitoring and evaluation system to demonstrate a program's impact. You can support these organizations by helping put such systems in place.



Collaborate to scale

Partnerships can be key to address complex problems, as they bring the resources, expertise, and networks of different stakeholders together, working towards a common goal.

In education, public private partnerships (PPPs) are being increasingly recognized as a means to increasing the availability of educational opportunities for all. PPPs are arrangements between the public and private sector for the delivery of services and facilities. They have the potential to expand education systems in a more efficient, flexible, and effective way.

For instance, private or non-state school operators can assume the management and responsibility for delivering education interventions in some state schools, but under the supervision of the state, which can in turn be responsible for guaranteeing the quality of education.

Jenny Perlman Robinson And Rebecca Winthrop With Eileen McGivney, Millions Learning Scaling Up Quality Education In Developing Countries (2016). The Brookings Institution.

Strengthening education systems

Kate Dooley

Chief Executive Officer, Education Partnerships Group (EPG) EPG is a non-profit consultancy that supports governments in low and middleincome countries to shape and strengthen their education systems.

To scale impact, why is it so important to work with governments?

Only governments can sustainably scale impact nation-wide. As the guarantor of quality basic education for all, they design and implement policy, develop curricula, set standards, run public schools, regulate non-state schools and train teachers. While an educational organization might be piloting a new approach in, say, 150 schools, the government is already running tens of thousands of schools.

So to fully understand and address the goals and challenges in education systems, EPG focuses on building long-term relationships with governments. To scale approaches nationally through government systems, the approach must be relevant to the government's agenda for change and designed for the right context.

How can piloting (testing) a new education policy make a government more likely to adopt and scale it?

In our experience, to scale successfully, pilots must involve the government from the start. This ensures the pilot fits with the government's context, systems, needs and constraints, so that scaling would be feasible.

Let me give you an example. In 2019, EPG supported United World Schools (UWS) and the Cambodian Ministry of Education, Youth and Sport (MoEYS) in a pilot transition of five UWS schools to government management. There is little experience globally transitioning schools back to government management, so this presented many challenges. For instance, we had to ensure limited disruption to schools, staff and learners, and adherence with all government policy and regulations. We brought our experience on how governments work and helped UWS to understand relevant policies and regulations they would need to adhere to. An example of this was understanding government policy regarding teacher and other staff resourcing, which was different to the way UWS staffed their schools (for example they had a librarian and some teaching assistant roles that are not provided for in government schools). Identifying these differences, we guided UWS to engage with government officials to identify pathways for some of their staff into government-funded roles to ensure as many staff resources could be retained at each school as possible, limiting disruption to the school and learners, as well as supporting ongoing employment for these staff.

We also advised government on how they would need to prepare to be ready to take over managing these schools. In 2020, a memorandum of understanding (MOU) was signed between UWS and the ministry. The ministry inspected the five schools before the transition and this led to the schools integrating fully into government education. In early 2021, MoEYS became responsible for managing and financing the schools.



How can philanthropists best support government efforts?

Governments must navigate and manage large, complex and constantly evolving education systems. So they're looking for philanthropic partners who understand those systems, respect their goals, and can provide resources and solutions that meet their actual needs.

For example, governments often need support diagnosing challenges, generating and using evidence, designing solutions and, most importantly, moving from policies to fully implemented programs.

Governments often understand where their core problems lie but have either a) insufficient resources to fund in-depth research or analysis, b) inadequate skills within their ministries of education to undertake the research or analysis, or c) both. These challenges hinder their ability to deeply analyze problems and in the absence of this deep understanding, the wrong solutions might be deployed, wasting limited resources and tackling the wrong problems.

Furthermore, reviewing deeply how the system itself is holding back progress in education is too often overlooked entirely. So there is a lot of technical research, but insufficient attention to how outdated, duplicative or contradictory legislation, policy and practice across the system gets in the way of best practice. So our point of view is that a good diagnostic also (in addition to technical matters) considers the wider system and is specific about where system factors such as policy and regulation and the roles of all actors in the system play a role in causing problems, and where they can be part of the solutions.



Teaching at the right level

Dr. Rukmini Banerji CEO, Pratham Education Foundation Pratham Education Foundation is an innovative learning organization focused on improving education in India. As one of the country's largest non-governmental organizations, Pratham focuses on high-quality, low-cost and replicable interventions to address gaps in the education system.

How has the learning crisis affected India?

Although enrollment levels are very high in India, half of all children enrolled in grade five can't read a simple story or solve two-digit subtraction problems. Schooling isn't translating into learning. Schools are usually organized by age and grade. And teachers follow curricula that get progressively difficult. If a child doesn't gain foundational skills early in primary school, the child falls behind and then the likelihood of "catching up" is low. This problem became even worse during the pandemic.

How does Pratham solve this problem? And what challenges has Pratham faced scaling the solution?

"Teaching at the Right Level" (TaRL) is Pratham's solution for helping children acquire foundational skills in a quick, durable and frugal way. The approach:

- uses a simple one-to-one tool to assess children's current level of learning
- groups children by their current learning levels rather than their age or grade
- uses appropriate learning activities and materials in each group to help children progress

With TaRL, children aged seven and over progress quickly. The approach can help governments and communities address poor learning at scale. Often, it is difficult for systems to move away from traditional education methods.

There's no such thing as a one-size-fits-all solution. For a program to work, it needs to be owned locally and tailored to the location. And it's importantly to repeatedly refine the program to ensure it fits a particular context. Most of all, everyone needs to keep believing that local people and governments can achieve large-scale change.

Fortunately, that's changing. A growing body of positive evidence and experience from countries using TaRL is encouraging governments and funders to embrace the approach, especially since the pandemic.

What lessons have you learned from scaling your programs across different contexts?

There's no such thing as a one-size-fits-all solution. For a program to work, it needs to be owned locally and tailored to the location. And it's importantly to repeatedly refine the program to ensure it fits a particular context. Most of all, everyone needs to keep believing that local people and governments can achieve large-scale change.

What role has philanthropy played in scaling Pratham's impact?

From the start, philanthropic partnerships have helped Pratham evolve its vision to ensure every child is in school and learning. This philanthropic support has allowed us to innovate, experiment, take risks, learn, share evidence globally and implement solutions at scale.

What advice would you give a philanthropist seeking to scale educational solutions?

Look at tried and tested approaches, like TaRL, which has worked with millions of children. It's our best bet for giving children an opportunity to catch up and unleash their potential.

Philanthropy is often focused on micro challenges such as building new schools or training teachers, and many good things come out of such interventions. But I see great potential in broadening the scope and also thinking of education to be more than just schooling, but instead, the effective accumulation of capabilities in society.

Treating education as more than just schooling

Ricardo Hausmann

Founder and Director of the Growth Lab at Harvard University In your work, you emphasize the importance of collective know-how for the development of modern, complex and diverse economies. Can you elaborate?

Humans make the things they want to consume, whether it is shelter, food, healthcare, transportation, finance or entertainment. But to make these goods and services you need to know how to make them. But that is a lot of knowhow: it does not fit in a single head. The growth of know-how at the societal level has not been based mainly on everyone knowing more. It is based mostly on individuals knowing different. Your dentist tends not to be your lawyer. Poor societies tend to know how to make a few simple things. Rich societies make many more things and among them things that are really hard to make because they involve a lot of know-how that requires very large and diverse teams of people cooperating. So we see development as the process through which societies develop the capacity to do more and more challenging things. We try to figure out what can be done to accelerate this process.

How do you see the role of education policy in the development process and as part of a broader growth strategy? How can education policy (from early education/ primary school) support the built-up of collective know-how and the transition to a complex economy?

Educational policy broadly conceived faces several challenges. Much of the world – but not all – has figured out how to increase school attendance significantly. Fewer have been able to make sure that children actually learn in school. A lot of effort needs to go to figure out how to improve school quality. But clearly what schools can teach is only a small fraction of what an effective worker needs to know to



do many of the jobs that the economy requires. That is why the transition from school to work in many countries involves sky-high rates of youth unemployment. Economies demand know-how that cannot be easily acquired in schools. It needs to be acquired through learning by doing on the job.

What is your advice to philanthropists interested in promoting inclusive growth through education level intervention?

Philanthropy is often focused on micro challenges such as building new schools or training teachers, and many good things come out of such interventions. But I see great potential in broadening the scope and also thinking of education to be more than just schooling, but instead, the effective accumulation of capabilities in society. This includes also the capabilities of governments to perform their functions more effectively and to facilitate collective learning in modern societies. In today's world, individuals prosper if they can contribute their skills and know-how to larger teams and organizations. Hence, an important stepping stone for inclusive growth is connecting people to modern, complex production. In many places, this requires building the capacity for such production in the first place. There are many areas in which philanthropic support could be catalytic in this regard: This includes supporting open societies, engaging diasporas as we have done in the case of Albania and Colombia, but also investing in our understanding of the processes that facilitate know-how accumulation. Many have pointed out that giving a fish to a poor person is good, but teaching them how to fish is better. I would add that we are not very good at teaching how to fish so interventions that make us better fishing teachers are even more powerful. Such interventions are often less tangible, but they bear great potential for shared prosperity in today's world.



Looking beyond traditional philanthropy

Philanthropy can do much to help solve the world's educational challenges, but with a USD 2.5 trillion annual funding gap to achieve the SDGs, philanthropy doesn't reach the required funding scale. Private markets and investors can play a role, but often don't reach the most vulnerable.

Bringing together philanthropy, private markets and the social sector can provide a route to achieving financing solutions that work at scale towards providing everyone with equitable access to quality education.

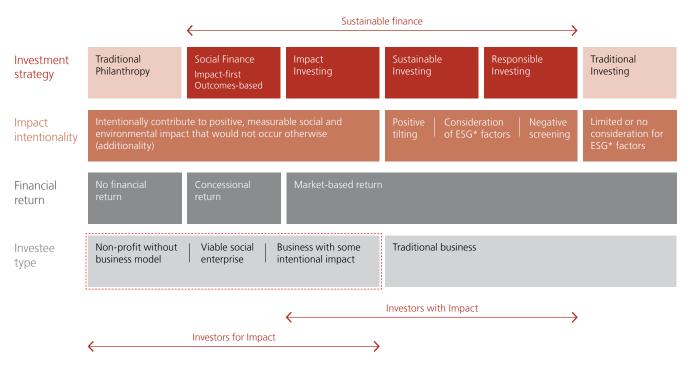
03.1 Social finance

While it is crucial to attract more capital to address social and environmental issues, deploying it effectively to achieve better results is equally essential. Properly channeled, private capital can spur innovation in providing quality education outcomes.

> In recent years, social finance has become an increasingly popular approach to achieving better educational results, tackling the causes of problems, putting people at the heart of solutions, measuring results rigorously and transparently, and expanding proven local solutions nationally and internationally.

> Social finance can take various forms, ranging from equity (such as investments into social enterprises), to providing loans to students or schools, and all the way to outcomes contracts, where funders only pay for learning results once they are achieved. Important in all these instruments in social finance is the focus on impact and results that should drive financial returns (and not the other way round).

Social enterprises and non profits targeted by social finance



^{*}Environmental, Social and Governance

Source: Adapted from Bridges Scectrum of Capital and EVPA Spectrum of Impact Stretegies

Scaling up these approaches can be done through the use of blended finance. Blended finance is simply the addition of a layer on a financial instrument that enable philanthropists or governments and private investors (organizations with different objectives) to invest alongside each other while achieving their own objectives (whether financial return, social impact, or a blend of both). As an example, philanthropists can provide the first loss in an investment fund, which reduces the risk and then allows a more risk averse investor, such as a pension fund, to invest its capital.97

How the private sector can engage in education

In the right context, the private sector can do much for educational organizations by providing financial resources and knowledge, focusing on strengthening and improving education and making it accessible and equitable for everyone. Arushi Terway, Private Sector Approaches Lead from NORRAG at The Graduate Institute, Geneva (IHEID) provides her views on private sector engagement in Education:

Private sector investing into education

Arushi Terway

Senior Lead Research Associate, NORRAG

How can philanthropy help the world achieve SDG 4?

In the last two decades, the number of philanthropic organizations prioritizing education has increased. Substantially many philanthropists in emerging economies are working on local solutions.

Philanthropy is often valued for the funds it provides to achieve the SDGs. And philanthropists can take more financial risk than government agencies. While governments might face challenges committing money and resources to new projects, philanthropists are freer to invest in innovative educational solutions.

What should philanthropists consider before engaging in educational projects?

There are increasing numbers of fee-based private schools aimed at low-income households. Many parents believe such schools can provide their children with a better education and higher social status than free public education. Their popularity has attracted financial and policy support from philanthropists seeking to solve global poverty.

So I suggest that, before investing in fee-charging schools, philanthropists ask themselves some questions. For example, who is being excluded from these initiatives and why? Should families carry the biggest burden of paying for education? Can they afford it? Examining these issues might reveal that fee-based private schools aggravate educational inequity without solving the challenge of poverty.

In which area do you think philanthropists' investments would be most helpful?

I think philanthropists could make a significant impact by supporting social enterprises that create and test innovative educational solutions. For example, they might help support sustainable financing models for social enterprises that provide free services to the poorest households.

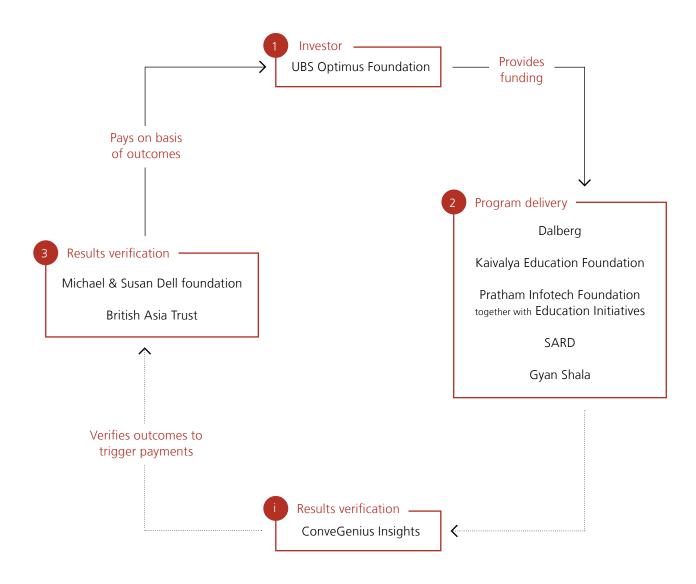
⁹⁷ Blended Finance. Convergence.

Shifting into paying for education outcomes

Improving literacy and numeracy in India

The Quality Education India development impact bond (QEI DIB) aims to improve literacy and numeracy skills for approximately 200,000 children in India. The bond is helping to scale proven programs and transforming the way India funds and delivers education.

The QEI DIB is a compelling alternative to traditional philanthropy because it incentivizes organizations to achieve results. The bond focuses on learning outcomes, using the money invested in it to achieve maximum impact. This gives the bond the potential to improve education and the lives of many thousands of children throughout India.





How does it work? The QEI DIB is a "results-based" solution. This means its "outcome funders" (Michael & Susan Dell Foundation and the British Asian Trust) only pay for successful results. If target outcomes aren't achieved, the funders don't pay. The target outcomes are agreed at the outset and independently verified. The bond's investor, UBS Optimus Foundation (the grant-making foundation of UBS) provides the funding that implementing partners need to deliver educational solutions. If the solutions achieve their target outcomes, the investor receives its initial investment and a return of up to 8%. Dalberg (a global group of change makers) manages the bonds performance, while educational assessments company, Convegenius Insights, independently verifies the results. The implementing partners are the Kaivalya Education Foundation, Gyan Shala, Society for All Round Development, and Pratham InfoTech Foundation.

The QEI DIB has exceeded targets:

- Almost all implementing partners have performed exceedingly well.
- Children covered by the QEI DIB are learning twice as fast as those in nonparticipating schools.
- QEI DIB is helping students improve proficiency levels in language and mathematics.

The following elements led to the bond's the strong results:

- Data-driven decisions by partners focused on achieving positive results.
- Results-driven cultures within the partner organizations.
- The funding is related to outcomes, not activities, which enables education providers to make better decisions on improving solutions.
- A dedicated performance manager helps build capacity and systems for education providers.

The QEI DIB is a great example of how outcomes based programmes can achieve strong results and further build the track record UBS Optimus Foundation has in Outcomes contracts.



Enabling Africa's demographic dividend

Batya Blankers

Co-founder and CEO, Chancen International

Chancen International is a non-profit organisation that provides ethical, fair and responsible finance for young people in Africa to access quality tertiary education.

Low and lower-middle-income countries, including those in Africa, are experiencing a huge and growing demand for tertiary education. What are the barriers to providing that education?

One of the biggest barriers is a lack of money. In 2016, the Education Commission estimated that 25 billion US dollars is needed to meet the demand for financing tertiary education in Africa. This amount sits on top of scholarships and other government-backed student loans - many of which have proven to be unsustainable.

Students struggle to access loans for tertiary education. Microfinance services don't have the financial resources to help. Traditional banks often don't get involved, because they view the loans as too small and risky. And accessing traditional bank loans is especially hard for women and people from lower-income families, because they typically can't provide collateral to guarantee loans.

How does the Chancen ISA (income share agreement) help students?

The Chancen ISA is a lending solution that doesn't require collateral from students. Students sign fair and ethical contracts to repay a percentage of their Be patient. Fair and ethical student lending requires longer periods of investing. But the generation-spanning social and economic benefits that arise from your investment make it worth the wait.

salaries over a set number of years when they graduate. The approach evaluates each student's future potential in terms of credit risk, rather than assessing traditional factors like their current assets and financial situations.

We make sure students and their champions fully understand their financial commitment to the Chancen ISA. For example, we explain the key elements of the contract through a series of workshops and videos. Students only start repaying when their earnings exceed a minimum income level. We cap monthly repayment percentages at 20%, and calculate maximum repayment amounts at market rates to protect high earners.

We have criteria targets to serve traditionally excluded populations. To date, in Rwanda, more than 75% of our customers are women, and 45% come from rural areas. We also work with local regulators to ensure we comply with consumer protection laws. Additionally, we advocate for stronger policies that support fair and ethical financing for students.

What advice would you give a philanthropist looking to support student financing?

Be patient. Fair and ethical student lending requires longer periods of investing. But the generation-spanning social and economic benefits that arise from your investment make it worth the wait.

Blending profit and purpose

Aunnie Patton Power

Social finance expert, angel investor and author of "Adventure Finance: How to Create a Funding Journey That Blends Profit and Purpose"

Which areas of education would benefit most from social finance?

Many areas of education can benefit from funding that's patient, long term and flexible – such as investments in educational infrastructure and high-growth, tech-enabled startups. Funders who want to maximize their impact should look at the financial needs of for-profit and non-profit social enterprises, and design funding strategies that help those enterprises achieve their growth and impact goals.

What types of social finance are particularly suited to education?

I believe "impact-linked finance" (where achieving social outcomes can reduce the cost of capital) is well suited to education. It ensures that educational enterprises focus on achieving impact as well as being financially sustainable. By incentivizing entrepreneurs to maximize impact, social finance focuses their minds on ensuring learners achieve positive results.

You've launched a collective for female angel investors. What advice would you give investors who are considering supporting female entrepreneurs?

Get money out the door! In my experience, new investors – particularly female ones and including myself – suffer from imposter syndrome (believing you're not as competent as others perceive you) and analysis paralysis (struggling to make decisions due to over-thinking problems).

This results in waiting forever for the perfect investment to walk through the door, or spending too long going through due diligence before investing.

Female entrepreneurs are also less likely than their male counterparts to make grandiose statements about their goals. So don't dismiss those that are pitching realistic projections.

What advice would you give a philanthropist looking to invest in education?

You don't need to make all-or-nothing choices on what you do. For example, it's not simply about choosing between giving money to cause and expecting nothing back, and investing in startups and expecting to receive returns. There are so many opportunities to provide patient, affordable and accessible funding that achieves a major impact, such as recoverable grants, below-market loans, redeemable equity, guarantees and more. By exploring the space between mainstream impact investing and traditional philanthropic giving, you can incentivize founders and funders to make a bigger difference.



03.2 Sustainable investing

Another important tool is available to investors seeking to improve learning: sustainable investing. This approach enables you to match your investments to your values and goals. And investors can include sustainable investments in their investment portfolios. Because not only do the investments aim to achieve impact – they also aim to provide competitive financial returns.

Sustainable investing comes in two main forms:



Impact investing

Impact investing aims to directly deliver a positive and measurable impact that wouldn't occur if you didn't invest. The investor's money creates real change. For example, investors that want to improve access to quality education might choose an impact investment supporting organizations that are expanding learning opportunities in developing countries.



Sustainability-focused investing

Sustainability-focused investing supports organizations that address environmental, social and governance challenges in their operations, and provide impactful products and services. For example, investors might invest in education technology companies, student loan providers, school facilities firms, and organizations that provide staff with lifelong learning opportunities.

Exploring investment opportunities

Sustainable investing can involve anything from investing in equities and bonds, to providing venture capital and private equity for educational organizations. Whichever route you choose, it's important to invest in well-run organizations with the potential to grow and provide returns. At UBS, we're seeing an enormous rising demand for educational facilities that governments might struggle to satisfy. So the market for private education is likely to expand fast.

Offline education institutions require high upfront capital expenditures for their physical space, so online solutions find innovative ways ramp up to scale. As most companies in the education sector tend to have predictable underlying demand and stable cash flow, investors would usually consider education investments countercyclical, but would still account for risks coming from specific regions and technologies.

And philanthropists can go beyond investing directly in education. They might also invest in other areas that influence learning outcomes – such as efforts to alleviate poverty, improve nutrition and strengthen healthcare services.

Targeting investments in key areas

Sustainable investing enables philanthropists to invest their money in areas of education that match their values and goals. Here are some examples:

Did you know?

According to various studies by UNESCO, an extra year of schooling raises earnings by up to 10% a year, and enables a more diverse and skilled workforce.



Providing quality education for all. This might involve investing in companies that, for example, provide education services and infrastructure (such as facilities and equipment), and education technologies that reach children in remote communities. But investors should remember that, as demand for education grows, rising costs and competition for school places could perpetuate problems for the poor. So it's important to make sure schools don't become unaffordable for lower-income households.



Ensuring access for girls and women. This is key to empowering societies and economies. Girls who receive an education are less likely to marry young and more likely to lead healthy, productive lives. They earn higher incomes, participate in decisions that most affect them, and build better futures for themselves and their families.



Lifelong learning and re-skilling. Education helps reduce income inequality and improve career prospects in a world that increasingly depends on the services sector. Investors might support this area by investing in companies that, for example, provide training on social and emotional skills, workforce skills, and modern technologies. However, investors should make sure they're investing in programs that properly measure impact and provide economic opportunities for students and their communities.

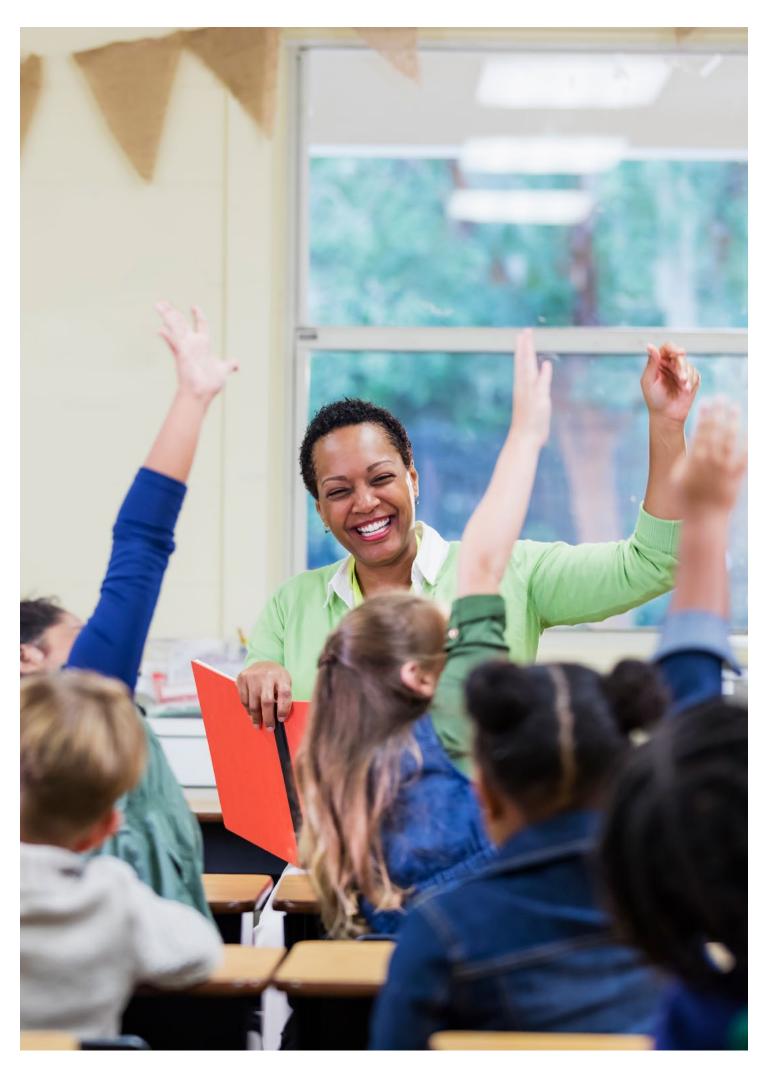


School infrastructure. Decent facilities, infrastructure and technologies (for example, online courses and digital classrooms) are vital for delivering high-quality education. Investors might support this area by investing in, for example, realestate investment trusts that own, develop, build and manage school facilities and housing; and providers of education technologies, data services and partnerships.



Educational technologies. Modern technologies are crucial to improving access to education. Dedicated solutions (sometimes called "software-as-a-service" or "Saas" solutions) can, for example:

- be tailored to individual students' needs and learning speeds
- deliver traditional courses, such as college degrees for people in the workforce
- provide accessible training on critical subjects like financial literacy, preventing sexual violence and alcohol responsibility
- support learning for students with disabilities, for example, through games and simulations.



Output <p

Tackling the world's learning crisis will also help to tackle global poverty, kick-start economic growth, and lead to a happier, healthier and more peaceful planet.

Ready? Let's get started...

04.1 Ten tips to get started

1. Reflect

Think about your values and priorities. What motivated you to focus on education? What assets and expertise can you put to work, for example, money, time, networks and skills?

2. Research and understand

Think about the issues you'd like to address and research them, for example, by browsing online, reading reports, talking to experts, and attending webinars or conferences. Consider where your support is most needed and find out what other people and organizations are doing already.

Define, refine and focus

Philanthropists and organizations that make the biggest difference are those that have clearly defined an issue and focused their resources on finding an effective approach or solution. Defining, refining and focusing on an issue will help you shape your vision. It will also clarify why you're getting involved, how you're providing support and who will benefit from your efforts.

4. Turn your vision into a plan

Consider how you can maximize your impact. Set clear goals and create your logic model (words or diagrams describing your activities and goals). This will help you understand how the resources you use (inputs), can trigger activities and outputs (results), which generate outcomes (actual changes) that maximize your impact.

5. Use the right charitable vehicle

A vehicle is only a means to reach your goals. You can choose from many different types of charitable solutions, including foundations, charitable trusts, donor-advised funds and even giving directly to a charity. Pick a solution and approach that are right for you and your vision.

6. Be brave and think big – there are no rewards without risk

Ensuring quality education for all is a task of enormous proportions. So, step up and rise to the challenge. Try new approaches, learn along the way, adapt your plans as you go, and gather evidence at every step. Proving your work is successful will help you attract more investors and expand your efforts.

7. Measure, learn, adapt and share

Seasoned philanthropists understand the importance of asking hard guestions about their own efforts. They also use qualitative and quantitative measurements systems that are ethically, culturally, and financially appropriate. If you're willing to share your insights, even better – you'll really be advancing the cause.

8. Collaborate with others

Collaborating with others will achieve more because you can combine your resources, expertise and influence.

9. Think beyond philanthropy

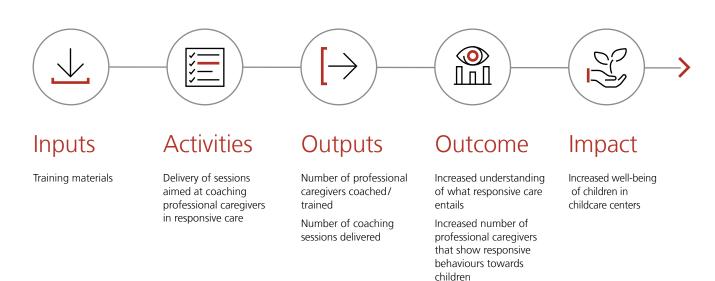
There are many paths to making a difference, and they can all complement each other. Awarding grants is one. Social financing in the form of equity or loans is another. Or you could look into engaging personally with a cause, setting up your own venture, and investing sustainably.

10. Enjoy the journey

No one has ever achieved greatness without being passionate and enthusiastic. So, make your philanthropy a rich, rewarding and pleasurable experience.

Theory of change

Example: Coaching program for professional caregivers at an early care center. The objective is to develop the capabilities of caregivers to engage in responsive care with children, enhancing children's capabilities to adequately respond to stress.



04.2 Changing the system

Only by working together will we give everyone access to quality education – but first, we must deal with the root causes of the problems that led us here. Because until we solve those causes, we'll always be trying and failing to fix malfunctioning education systems. Let's look at ways you can examine those causes, collaborate with others and change education for good.

Understand the big picture by:

- identifying how the key players and structures currently operate, and how they might work together
- assessing how each player can change the system
- exploring whether they want to maintain or change the system
- checking if someone has already responded successfully to the problem and whether you could replicate and build on what they've done.

Start changing the system by:

- bringing players together to plan a new strategy and actions
- changing processes to achieve your goals
- making sure everyone involved is jointly accountable for achieving goals and advocating solutions.



04.3 The power of collectives

Collectives are groups of key philanthropic players from various sectors collaborating to solve issues on a big scale.

> Starting a new collective isn't always the quickest, easiest or best approach for delivering impact. So why not join a collective that already exists?

This allows you to:

- access their resources and expertise
- invest in scaling up solutions that have already proven successful.

Taking part in collective philanthropy enables you to:

- achieve more with your money because it's pooled with other funds, it's also more powerful
- feel confident you're investing in quality projects because collectives more effectively find, assess and measure projects
- exchange views and insights with peer philanthropists to guide your future
- reduce the risks of acting alone in a new area there's also less chance of people duplicating their efforts
- feel sure that everyone involved is accountable for, and committed to, achieving the goals

UBS Collectives

Thinking about getting involved in collective philanthropy? At UBS, we have three ready-made collective portfolios available to invest in alongside other philanthropists:

- The Climate Collective. Developing sustainable and climate-resilient livelihoods for communities and smallholders.
- The Transform Collective. Supporting family-based care as an alternative to institutional care; and reforming policies and practices to protect vulnerable children and strengthen families.
- The Accelerate Collective. Using innovative financing models to unlock new sources of funding to improve health and education outcomes for disadvantaged children.

To find out more about our collective philanthropy portfolios, please speak to a UBS client or financial advisor.

Championing a new collective

If you find yourself wondering how you can create a collective, there are some points that you'll want to consider before you start.

1. Explore the issue and your readiness to start:

- Find and recruit likeminded champions.
- Build a strong and trusted relationship with the local community, in which you will be working.
- Create a plan to launch the collective.

2. Launch the collective:

- Create a steering committee to champion the effort.
- Identify key issues and gaps at the start and measure your progress against them.
- Engage community stakeholders on your findings.

3. Organize for impact:

- Create a common agenda together, including the collective's vision, goals and ways of measuring progress.
- Review and test the common agenda with community stakeholders.

4. Develop strategies:

- Design the backbone of your collective (people who manage the collective and ensure participants are engaged).
- Create strategies for change, and form working groups for each change area.
- Devise an approach for sharing measurements and learning strategically.

The five key ingredients to successful collectives

1. Common agenda.

Everyone shares and understands the same goals.

2. Strategic learning.

The collective shares measurements and insights, so everyone learns and makes better decisions together.

3. Mutually reinforcing activities.

The collective shares everyone's skills and talents.

4. Strong and trusted engagement with stakeholders.

By creating strong relationships with partners, everyone works together to achieve the same goals.

5. Backbone support.

Dedicated staff who can challenge and coordinate the participants.

United for young people

Fabio Segura Co-CEO of the Jacobs Foundation The Jacobs Foundation invests in the future of young people so they become socially responsible and productive members of society.

Why is collaborating so important to scale educational impact?

The transformation of learning ecosystems is a systemic, multifaced challenge that requires meaningful collaboration across sectors and organizational capabilities. Private philanthropy is well-placed to play the role of a partnerships innovator, bringing together multi-stakeholder coalitions between researchers, governments, companies and schools, to leverage capacities, knowledge, and resources and jointly scale up effective education policies and practices. Increased collaboration is a key prerequisite to move away from fragmented small scale projects and align energies and resources to achieve sustainable impact at scale.

How has the Jacobs Foundation supported collaborations?

One of the flagship engagements that best illustrates how we have mobilized coalitions of partners is our long-standing engagement in Côte d'Ivoire through the Transforming Education in Cocoa Communities (TRECC). We launched TRECC in 2015 to improve the living conditions of children in Côte d'Ivoire through quality education and early childhood development.

Through this work, we've created a coalition focused on aligning private funding with national priorities. The coalition comprises the government, three philanthropic foundations, twelve global cocoa and chocolate companies, twenty civil society organizations, and academic partners.

This has paved the way for system-wide impact. The Child Learning and Education Facility (CLEF) was launched with its founders from government, companies and foundations committing an initial 69 million Swiss Francs to the initiative. And the government committed to integrating evidence-based education solutions into national policies and programs. TRECC is a blueprint for how the public and private sectors can collaborate to improve learning outcomes in Sub-Saharan Africa and beyond.

What kind of challenges do collaborations face?

Joining forces requires a common vision, a convergence of interests, and to understand the goals and principles of working together. Naturally, this requires a lot of trust. It takes time, openness and perseverance to build that trust and establish a common vision. Once the relationships are established, its crucial we continue to actively nurture them to be able to weather also challenging times.

04.4 Top tips from experts

We asked respected experts to share their top tips with you. Here's what they said...



Respect the fact that government leaders and their partners already understand the education system and what needs to change. Recognizing this will increase your chances of focusing on and achieving feasible impact.

Kate Dooley

Chief Executive Officer, Education Partnerships Group (EPG)



Philanthropists have a key role to play in ensuring that SDGs are achieved through evidence-informed policies and programs. By providing critical core support to evidence-to-policy catalyst organizations, you can help ensure that the most effective and cost-effective education interventions benefit students.

Igbal Dhaliwal

Global Executive Director, The Abdul Latif Jameel Poverty Action Lab (J-PAL)



Childrens' early years is a unique window of opportunity to improve lives. If you change the beginning of the story, you can change how that story unfolds. Investing in the early years can bring the highest social, economic and environmental returns to society.

Cecilia Vaca Jones

Senior Advisor to the CEO, Bernard van Leer Foundation



To make a global impact on education, you need a laser focus on three areas: Access – solutions that work for all students, especially the most disadvantaged; Affordability – solutions that are sustainable even in poorly resourced environments; Efficacy – evidence-based solutions that use data to continuously improve.

Joe Wolf

Co-founder and CEO, Imagine Worldwide



Learning takes time. Philanthropy has the most impact, both for individual children as well as school-systems at large, when it adopts a long-term approach and prioritizes multi-year interventions.

Shanti Rigger, Education Coordinator & Emma Gremley, Senior Director, Education, at the International Rescue Committee (IRC)



Whether you're looking at your philanthropic journey to nourish your soul or sharpen your strategic footprint, engaging with ECD means you have the superpower to build a caring and joyful world for babies and young children. Investing early will give you the highest returns in the form of positive laterlife outcomes.

Sumitra Mishra Executive Director, Mobile Creches



Philanthropic projects can provide major benefits at three levels - first, for the project participants, second, for regional populations, and third, for the whole of society through changes to national policies. To make the most of your philanthropic capital and drive social progress, you'll need to carefully evaluate your potential impact.

Professor Yaojiang Shi Center for Experimental Economics for Education (CEEE)



Invest in online, one-on-one, personalized, and "high-dosage tutoring" (one-on-one tutoring or tutoring in very small groups).

Harry Anthony Patrinos

Practice Manager, World Bank Group, Europe and Central Asia



Education transforms children's lives, and changes families, communities, and societies for the better. Yet millions are still shut out from learning. There's a huge opportunity for philanthropists to improve millions of children's lives, especially following the pandemic. Look to programs that are already achieving major impact for children.

Caitlin Baron

CEO, The Luminos Fund



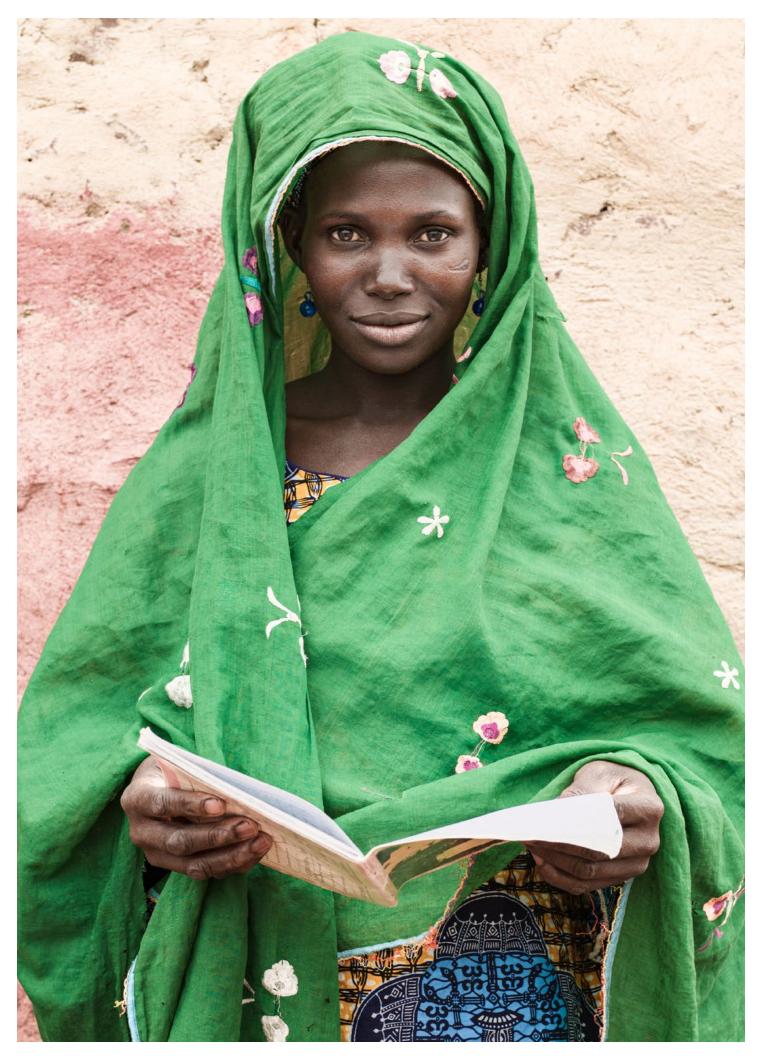
Center on the Developing Child at Harvard University

"The science of early childhood development (and its underlying biology) continues to advance, and tenuous 'systems' that were in place to support families before the pandemic began need to be rethought, not just rebuilt. Early childhood policy must be about the foundations of both lifelong health and readiness to succeed in school. The reconstruction of a more robust ecosystem that forges stronger connections at the community level among primary health care (both physical and mental), early care and education, social services, child welfare, and financial supports is essential."



Tessy Antony de Nassau Award winning Philanthropist and Business Executive

"To be educated in the 21st century is not an opportunity, but a right, which we all should be entitled to no matter where we are born in this world."



05 What's next

In the past decades we have debunked several ideas we used to take for granted in education. It has become clear that schooling does not necessarily translates into rather than fix, universal stages. We have realized that education should prioritize social and emotional skills as they are key not only for personal well-being but very much so

they most likely won't progress despite spending many years in school. We have gained important knowledge from neurobiology on how adversity can physically affect play-based learning.

most are those most in need of a good education. Knowledge of what works does not ambitions into action on the ground.

And all the policies and regulations should not overly constrain educators' work, but also, importantly, establish a space where educators' creativity can flourish. We have seen how this creativity has been key to come up with good coping strategies during the pandemic.

This is where you come in. As a philanthropist or an investor, you can push for positive change.

> like you. And rest assured, there will be many like-minded souls keen to join and help you on your journey. To bring quality education to those who are most in need, is increasing their an impact on the economy and society as a whole.

Thank You

We're grateful to the experts, colleagues and clients who shared their insights and perspectives for this guide.

Special thanks go to:

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- Batya Blankers, Co-founder and CEO, Chancen International
- Center on the Developing Child at Harvard University
- Lena Dente, Communications Specialist, UBS
- Iqbal Dhaliwal, Global Executive Director, The Abdul Latif Jameel Poverty Action Lab (J-PAL)
- Kate Dooley, Chief Executive Officer, Education Partnerships Group (EPG)
- Emma Gremley, Senior Director, Education, The International Rescue Committee (IRC)
- Helen Shwe Hadani, Fellow, The Brookings Institution
- Lewis Hamilton, Seven times Formula 1 world champion and Education activist
- Ricardo Hausmann, Founder and Director of the Growth Lab at Harvard University
- Kathy Hirsh-Pasek, Senior Fellow, The Brookings Institution
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- Sumit Joshi, Global Director, Lorinet Foundation

- Iqbal Khan, Co-President GWM & President EMEA, UBS
- Sumitra Mishra, Executive Director, Mobile Creches
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- Grégorie Muhr, Head Philanthropy and Impact Insights & Philanthropy Services EMEA, UBS
- Bolor Lorinet & Pierre Lorinet, Co-founders, Lorinet Foundation
- Sabrina Parks, Business Development for Family Advisory and Philanthropy, UBS
- Harry Anthony Patrinos, Practice Manager, World Bank Group, Europe and Central Asia
- Aunnie Patton Powers, Social finance expert, angel investor and author of "Adventure Finance: How to Create a Funding Journey That Blends Profit and Purpose"
- Shanti Rigger, Education Coordinator, The International Rescue Committee (IRC)
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- Arushi Terway, Private Sector Approaches Lead from NORRAG at The Graduate Institute, Geneva (IHEID)
- George Kronnisanyon Werner, Minister of Education, Liberia, 2015 to 2018
- Joe Wolf, Co-founder and CEO, Imagine Worldwide

About UBS

Changing the world needs leadership. As one of the world's largest wealth managers, at UBS, we want to lead the way to a better future – for ourselves and generations to come.

> We believe people's desire to make the world a better place will keep growing. People will increasingly seek to do good by choosing sustainable investments and philanthropic solutions. We are here to help you have more impact with your wealth. Together, we'll explore your purpose and help you make a difference through giving, investing, connecting, and leading the change you want to see.

> We're recognized globally for our philanthropy services and expertise. With over 20 years' experience, we can help you and your family maximize your impact locally, nationally and globally. And we're proud to be among the founding signatories of the Principles for Responsible Banking (PRB) of the United Nations Environment Programme Finance Initiative (UNEP FI). We were also among the first banks to shine a light on the United Nations' Sustainable Development Goals and what it takes to make them investable for clients.

> Today, we're always seeking to develop solutions that direct investments towards those goals. Our philanthropic grant-giving foundation, the UBS Optimus Foundation, focuses on education, health, social protection, and environmental and climate issues. We've also launched UBS Collectives to help you connect with other philanthropists and take your solutions to the world. We cover the costs of running your collective, match investors' funding by 10%, 99 and provide a deep learning experience over three years.

As with any investments, the value may fall as well as rise, and you may not get back the amount you originally invested.

⁹⁹ UBS matches any and all donations to Optimus Foundation – whether from client or employee – whether for a Collective or another programme – at 10% as standard procedure





UBS Optimus Foundation's approach to social finance

The UBS Optimus Foundation uses social finance to support educational enterprises.

Social finance investments generally go towards organizations that provide investors with the potential of financial returns. These organizations might include low-cost private schools and learning centers, tertiary education establishments, and providers of education materials and technologies. Where there are no opportunities to receive financial returns, outcomes contracts (also know as "impact bonds") are a powerful tool for investors to achieve impact.

The UBS Optimus Foundation invests in:

- improving learning through outcomes contracts (impact bonds)
- low-cost schools, ensuring they focus on providing low-income families with high-quality learning
- education technology providers
- student financing, such as income share agreements (where students receive funding for education and agree to pay back a percentage of their income for a fixed number of years once they start working)
- social enterprises in tertiary education, focusing on improving learning outcomes in line with job market requirements; and ensuring disadvantaged and low-income students can access learning.

The foundation has invested in various education programs including the Quality Education India development impact bond, which focuses on improving learning results; and Chancen International's Future of Work Fund, which provides finance to tertiary students in Africa.

How does UBS support education?

We want to be the financial provider of choice for clients seeking to invest in achieving the 17 UN Sustainable Development Goals, including SDG 4: Education. We value the importance of education within our business and global communities.

> The in-house UBS University helps our employees build skills and capabilities that are relevant to the ever-changing labor market. In 2021 alone, we invested more than 71 million US dollars in training our employees.

Our long-term success depends on the strength of our institutions and the cohesiveness of the communities we belong to. So we build sustainable partnerships with public institutions, non-profit organizations and social enterprises. We invest for the long term in education and entrepreneurship within our communities. In 2021, our community investment amounted to 31.4 million US dollars. We also run community programs globally that enhance financial literacy, enabling children and young people to act responsibly with money. Many of our skills-based volunteering activities also improve financial literacy, such as the UBS Social Investment Toolkit and UBS Elevating Entrepreneurs.

Did you know?

In 2015 UBS put out the world's first development impact bond (DIB) in education with "Educate Girls"



Education is one of the largest portfolios and longest-standing focus areas of UBS Optimus Foundation, our grant-making organization. We seek to deliver long-term and system-wide solutions to a learning crisis that's leaving more than half of primary-aged children without basic skills. Our work also aims to enable the conditions that lead to better learning. We believe that supporting the most disadvantaged in their foundational years will reduce inequities in education and put the most vulnerable on a path to long-term success. UBS Optimus Foundation's portfolio is improving access to education in three areas:



Early childhood

We support organizations that cross generations and combine support for children and their families to reduce inequities in education that arise from poverty.



Transitions

We seek to make systems more resilient by supporting transitions across educational levels, and reintegration into those levels. Our work recognizes that many vulnerable children drop out of school temporarily and seek to reintegrate at later stages.



Numeracy and literacy for primary-aged children

We want to support children in gaining the foundational skills they need for more complex learning, and to nurture the social and emotional skills they require to succeed in school and life.

UBS Optimus Foundation reached an important milestone as a founding partner of the Child Learning and Education Facility (CLEF) – a public-private partnership between the government of Ivory Coast, the Jacobs Foundation and fifteen cocoa companies. CLEF aims to mobilize up to CHF 110 million to build schools and improve education for children in cocoa-growing regions. UBS Optimus Foundation has contributed CHF 3.5 million and acts as the main platform for all private contributions to CLEF.

UBS Optimus Foundation has partnered with an outcomes specialist to create and launch a pioneering initiative which aims to invest USD 100 million in 15 to 20 SDG-aligned outcomes-based programs. The programs work with governments and philanthropic donors to design and invest in education, health, employment and environmental projects that support vulnerable children and adults in developing countries. Investors will receive returns based on verified social and environmental impact. The initiative will use an innovative blended-finance structure with 20% of philanthropic first-loss funding. This enables investors to achieve impact at scale, while reducing risk and improving potential financial returns.



To find out more about...



...what we do as a firm: ubs.com/socialimpact



...how we can support you with your philanthropy: ubs.com/philanthropy



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