

The Silver Lining: Education in a post-pandemic world

Edward Ma
Yidan Prize Foundation

The pandemic unquestionably challenged the education world during 2020. In spite of the difficulties, however, there are reasons to be optimistic. Around the world, we're gathering the tools, attitudes, and evidence we need to bring about long-needed education reforms, at a faster pace.

The road ahead is difficult. Right now, 600 million learners—around a third of all students in the world—are still out of school. Many of those students might never return to a classroom. The loss falls most heavily on the most marginalized groups: girls, children from poor families, and disengaged learners.

Yet we've also seen education systems around the world change course with speed and energy, moving beyond the traditional classroom and embracing technology. As the dust begins to settle, we have the proof that education can change. And we might be at the tipping point now: we've seen how education can become more accessible and we're driven to keep going.

At the Yidan Prize Foundation, we are focused on the big ideas that help build a better world through education. Our Yidan Prize laureates offer plenty of insight and experience about what works, and now we're bringing them together with more experts in different fields of education, from economics to psychology. Together, this newly formed Council of Luminaries can help steer the world's post-pandemic approach.

So, when seeking a silver lining, several questions arise. Is it the greater use of technology that we have seen worldwide? Is it bringing teachers and parents and guardians closer together to support education? Should we be supporting marginalized children who are missing out on their education?

I believe the answer is “Yes” to all these questions.

How Technology Is Supporting the Education Crisis

We can't miss how technology supported us in weathering the pandemic crisis. For one, it's a powerfully personalized way of learning. Students can watch and re-watch videos to more thoroughly understand an idea. They can plot a path through their education that follows their individual interests, not necessarily a pre-set curriculum. And they can stack together shorter programs and clusters of credentials to form a full degree course.

Professor Carl Wieman knows first-hand how online learning is being embraced by educators. His PhET Interactive Simulations—which cover physics, biology, and chemistry and are available in 93 languages—have seen a huge increase in users during the pandemic.

The flipside of self-directed online learning is that, without the right support, it might not be as effective as we'd like. Vicky Colbert, the founder of Fundación Escuela Nueva, has seen its teaching model transform 20,000 rural schools in Colombia. She points out that teaching also must evolve. Teachers need to move from instructors to supporters: reinforcing self-learning skills and peer tutoring and putting knowledge into context. Vicky observes: “Introducing computers into the

Educators Responding to the COVID-19 Pandemic

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classroom without changing your pedagogy will just perpetuate traditional techniques at a higher cost.”

Bringing Online and Offline Worlds Together

Salman Kahn, founder of massive online learning platform Khan Academy, sees great potential for a blended approach. Khan Academy offers a free education for anyone, anywhere. The program has reached tens of millions of learners, who are benefiting from vibrant video lessons based on Khan’s philosophy of student-centered learning. But he’s also launched a bricks-and-mortar school, the Khan Lab School, recognizing the importance of developing social and emotional skills.

In an ideal world, perhaps we could offer students this same mixture of self-structured virtual learning and in-person social experiences. That means engaging more than just the student and teacher; we need to look beyond the classroom into the student’s day-to-day world.

Involving Students and Their Families to Make Progress

Through lockdowns and home learning, we’ve never seen so clearly how important parents, guardians, and communities are in a child’s education. Teachers and families are embracing the value of working together, as education partners.

We also know that, right from birth, social and emotional skills are critical. Professor Patricia Kuhl’s work in early learning shows that “the early brain is born to learn, ready to learn, and there are certain conditions [under which] kids can soar.” Parents and guardians are children’s first teachers. They lay the blueprint for how children learn to think, perform in

school, behave, and thrive. More than that, they’re how we pick up one of our first and most fundamental skills. “Language needs to come from a human for young children to learn,” explains Patricia.

Attitude to learning is also a major force for educational success. Professor Carol Dweck’s work in growth mindset shows how teachers and parents can plan an important role in setting children up for lifelong learning. She believes education has the greatest impact when everyone involved fosters a collaborative learning environment and relinquishes old ideas about fixed intelligence.

The message is clear: When we talk about education reform, we’re not just talking about formal education systems. We’re looking at every piece of the puzzle, including how to engage families—many of whom might have other critical priorities.

Reaching the Most Marginalized Communities

Among our Yidan Prize laureates and luminaries are experts from organizations who have been tackling education inequality and inequity for decades. They have evidence that can help us make education available for all, not just for some.

BRAC is the largest educational NGO in the world. Founded almost 50 years ago as the Bangladesh Rural Advancement Committee, it prepares children and young people across the country for all levels of education, and runs libraries, adult education, and scholarship programs as well. More than 12 million children have already attended BRAC pre-schools and primary education—often because the BRAC team has reached out to the parents and guardians directly.

They hold monthly meetings to discuss how families can



**CAMFED Association
Learner Guide, Vimbai,
talks to a student
through her My Better
World workbook.
CAMFED/Jon Pilch**

support learning. And they've opened ECD centers, known as *khelar jogot* ("universe of play"), to promote the importance of learning through play. At these centers, children from four weeks to five years old enjoy playing with toys, singing songs, and, of course, a regular nap, all while supported by a play leader and parent volunteers.

Lucy Lake and Angeline Murimirwa of CAMFED (the Campaign for Female Education) also know how important parents' involvement can be. They recognize that, in all communities, most parents want what's best for their children. But not everyone can afford that—and what money families have is often spent on boys, rather than girls. CAMFED started out by offering scholarships, proving, as their CEO Lucy says, "that if you took poverty out of the equation, girls would be at school alongside the boys." Angeline, who was once a CAMFED scholarship beneficiary herself and is now Executive Director in Africa, talks about unlocking the potential of girls and young women as "a gem, a gold mine, the best investment you can make."

These days, CAMFED works with government, local authorities, teachers, traditional leaders, families, and community champions to support girls financially and socially, and they've built a network of their scholars in the CAMFED Association. They're hands-on with parents and guardians, offering meals, emotional and practical support, training to help identify children's needs, and counselling.

Accessible and Inclusive Education

Not all barriers are financial. And not all education systems are set up for children who need extra support. Excluding such children, or placing them in environments where they feel out

of sync with their peers, can have a lifelong impact on their well-being.

Step one is to keep children—all children—at the center of policy, according to Professor Usha Goswami. Her work in cognitive developmental neuroscience gives us a window into inclusive teaching and learning. She's focused particularly on dyslexia, and the way young children pick up language. As with Professor Patricia Kuhl, she recognizes that children copy language from parents and playmates, but she is particularly interested in the way that works in the brain. Usha's research reveals that rhythms of language have a strong part to play, and that dyslexia might be a problem with processing those rhythms efficiently. This suggests that the sooner we start doing rhythmic activities with children, the better. "If we can really show this is something fundamentally important for language disorders, it would totally change the way you remediate a child with a specific language impairment," she explains.

Balancing All of This Means Working Together

Experienced researchers and practitioners from across the education spectrum need to come together in order to spark big ideas that move us forward.

That's the thinking behind our council. We know that bringing education to everyone is going to take all kinds of specialists: educators, yes, but also neuroscientists, economists, psychologists, statisticians, and innovators. Many of our luminaries are well-versed in getting government, non-profit, for-profit, and community stakeholders on board with their efforts.

All of these sectors talk about the importance of evidence. To build sustainable, accessible models for education, we



Students in Mexico explore a science simulation from PhET Interactive Simulations.

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have to know what works and why. And we have to get that information into the right hands.

For example, statistician Professor Larry Hedges and economist Professor Thomas Kane bring a wealth of work in education analysis to our council. Larry's goal is to make our research more robust—a method of evaluation that has more in common with double-blind medical trials than some of the ways we've examined education in the past. And he believes we need to get a lot better at communicating what we find to educators, policymakers, and philanthropists.

Thomas' MET (Measuring the Effectiveness of Teachers) study was a groundbreaking effort to link evidence about the art of teaching with evidence about the effect of teaching. Unbelievably, until 2007, no one had successfully brought the two together. But when we can evaluate which teachers are turning out students with the most positive learning outcomes—

and how they're doing that—we must share that information.

That's not just because it's the right thing for children. Professor Eric Hanushek has shown that whole countries can benefit from economic growth when people are offered a quality education. Especially one that focuses on helping them develop the right skills to adapt to rapidly changing work landscapes. "Development is improved productivity, and that, as far as I can tell, is largely the quality of the labor force," says Eric. "Quality drives growth, and not the other way around."

All of these methods and analyses lead us to the best teaching and learning practices, the most effective interventions, and the best ways to engage learners and their communities. They bring parents and guardians into the fold, and show that education is key for children to build on the world they're inheriting—and make it better for their children, their grandchildren, and beyond.



Nenani, a CAMFED Association Learner Guide, acts as a role model for children in her community in Malawi's Neno district. CAMFED/ Catherine Cardwell

Mercy, a CAMFED Association member and Learner Guide in Ghana, leading a life skills and wellbeing session for secondary students.

CAMFED/Eliza Powell

