Millions Learning Real-time Scaling Labs

Emerging findings and key insights

Jenny Perlman Robinson

Molly Curtiss

Patrick Hannahan

B | Center for Universal Education at BROOKINGS

Jenny Perlman Robinson is a senior fellow at the Center for Universal Education at Brookings

Molly Curtiss is a senior research analyst at the Center for Universal Education at Brookings

Patrick Hannahan is a project director at the Center for Universal Education at Brookings

Acknowledgments

Cover photo credit: Anna Sawaki, CAMFED Program Manager-Development and Scaling Lab Researcher

INTRODUCTION

Given the magnitude of education challenges around the world, it is increasingly clear that large-scale, systemic change is urgently needed. In "normal" times, 258 million children and youth around the world are out of school[1] and 617 million are in school but not learning the basics.[2] As a result, 53 percent of children in low- and middle-income countries cannot read or understand a simple story by the end of primary school.[3] Moreover, significant inequities persist between and within countries, with the poorest and most marginalized the most likely to be left behind or excluded. The COVID-19 pandemic has further exacerbated these challenges. On April 1, 2020, there were country-wide school closures in 194 countries impacting 1.59 billion learners, representing more than 91 percent of the world's total enrolled students.[4] Beyond the unprecedented disruptions to learning, the potential devastating longer-term implications on children's well-being and learning are vast. While much about this crisis remains uncertain, it seems inescapable that it will have lasting negative impacts on children's right to quality education and deepen inequities.

Even prior to the COVID-19 crisis, the pace of change was insufficient to address these challenges. It is estimated that at current rates by 2030, only 89 percent of children will complete primary school globally, 81 percent lower secondary school, and just 58 percent upper secondary school, falling far short of the 100 percent target.[5] Meanwhile, school completion is only one component of achieving Sustainable Development Goal (SDG) 4—inclusive and equitable quality education and lifelong learning opportunities for all. And these projections have not yet taken into account the additional challenges stemming from the current pandemic.

The scope and depth of these challenges and the reality of how far we are from achieving SDG 4 clearly demonstrate that "business as usual" approaches will not work. Countries need to identify, scale, and sustain effective approaches in order to address the magnitude of the learning crisis and transform education systems to meet the needs of all children, especially the most marginalized. Scaling quality education programs requires more than simply identifying effective initiatives; it takes a combination of technical and political strategies, mechanisms to accelerate the adoption of new practices, and strengthening of local capacity for successful adaptation and scale.

> The term "scaling" represents a range of approaches—from deliberate replication to organic diffusion to integration into national systems—that expand and deepen impact leading to lasting improvements in people's lives.

In response to this gap, the Center for Universal Education (CUE) at Brookings launched a series of Real-time Scaling Labs, in collaboration with local institutions in a number of countries, to generate more evidence and provide practical recommendations around the process of scaling impact in education. Over the course of five years (2018—2023), this action research project is accompanying initiatives at various phases of scaling in order to learn from, support, and document the process as it unfolds. The following brief provides a synthesis of emerging insights and learning from the Real-time Scaling Labs to date (June 2018-June 2020).

Real-time Scaling Labs: A participatory action research project

The Real-time Scaling Labs are a participatory, action research approach that aim **to generate new evidence and practical guidance for decisionmakers on how to expand, deepen, and sustain the impact of education initiatives leading to transformative change in education systems, especially for the most disadvantaged children and youth.** The labs accompany a range of education initiatives in the process of scaling in order to achieve three interrelated objectives (see Figure 1):

- *Learn* from the process of scaling in real-time, analyzing key themes within and across labs to inform current efforts, and feed into the global evidence base;

- *Document* the scaling process to "tell the story of what happened," building evidence not just on what outcomes were achieved but also *how*; and

- *Support* efforts to scale in real-time by providing feedback and practical recommendations, as well as use the learning to inform decisions and strategies.

Figure 1. Real-time Scaling Lab objectives
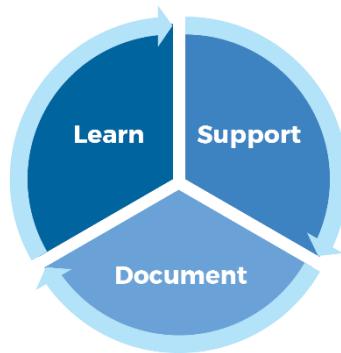
The lab process involves a series of in-person and virtual convenings that bring together policymakers, practitioners, and a diversity of other stakeholders around a particular education initiative that is in the process of scaling. During the multi-year process, lab members periodically come together to identify scaling goals, develop and/or refine scaling plans, and engage in a participatory and iterative process of implementing the scaling plan, reflecting on progress, and making data-driven course corrections along the way.

Through a comparative case study approach, CUE is interested in distilling common themes and transferable lessons about the scaling process in education. In each lab, CUE is partnering with a local institution and local researcher(s) to document the process of implementing, adapting, and scaling the selected interventions via quantitative and qualitative methods, analyzing the data on an ongoing basis to identify lessons learned and challenges confronted, and recommending course corrections identified through the iterative learning process (see Figure 2 for the Real-time Scaling Lab cohort).[6] Across the labs, CUE aims to deepen its understanding of the 14 key scaling drivers or "core ingredients" identified through previous research;[7] further investigate how these drivers contribute to scaling, drilling down into questions of who, when, where, why, and under what conditions; and examine the strategies pursued in their absence. The Real-time Scaling Labs provide an opportunity to interrogate this key drivers framework and identify areas that can be refined or improved, as well as any drivers that may have not been considered in the original research.

In addition to sharing emerging insights and ongoing findings throughout the five years, the research will also result in a suite of knowledge products capturing robust, actionable evidence on essential scaling drivers, critical challenges, and common scaling and systems change themes, as well as practical resources and guidance for global and national education decisionmakers to support scaling while optimizing quality, equity, and sustainability.

The lab approach was developed through extensive research and informed by seminal scaling literature,[8] collective impact and adaptive learning mechanisms, and related methodologies and frameworks, such as improvement science, systems thinking, and change management. CUE regularly engages with a high-level International Advisory Group (see Annex 1 for list of members) to gather expert guidance and input on key elements of the project. More details on the action research methods and approach can be found in the "Millions Learning Real-time Scaling Labs: Designing an adaptive learning process to support large-scale change in education" report.[9]

Figure 2. Real-time Lab Scaling cohort[10]

Botswana
Local partner: Young 1ove
Intervention name: Teaching at the Right Level (TaRL)
Focus: Targeted instruction approach to numeracy implemented in grades 3-5 in primary schools in collaboration with Ministry of Basic Education

Current reach:[11,12]
Students in grades 3-5
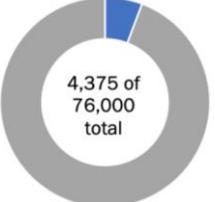
4,375 of 76,000 total

Scaling goal:
Reach 100% of grade 3-5 students by 2022; infuse TaRL into daily teaching practice in all primary schools by 2025

Côte d'Ivoire
Local partner: Transforming Education in Cocoa Communities
Intervention name: Teaching at the Right Level (PEC)
Focus: Remedial education through targeted instruction for literacy and numeracy in grades 3-5 delivered in primary schools and bridging classes in collaboration with Ministry of National Education, Technical Education, and Vocational Training

Current reach:[13]
Students in grades 3-5
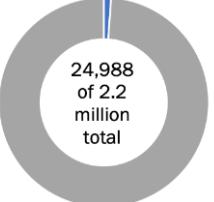
24,988 of 2.2 million total

Scaling goal: Reach 100% of students in grades 3-5 (timeline TBD). Potentially expand to also cover grades 1-2

Jordan
Local partner: INJAZ
Intervention name: Financial Education Program
Focus: Financial literacy course implemented in grades 7-12 in all secondary schools, led by Ministry of Education and Central Bank of Jordan

Current reach:[14]
Students in grades 7-12
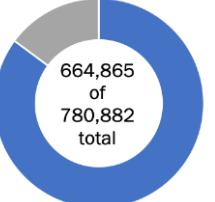
664,865 of 780,882 total

Scaling goal: Reach 100% of students in grades 7-12 and transfer all elements of program to government by end of 2022

Tanzania
Local partner: CAMFED
Intervention name: Learner Guides
Focus: Life skills curriculum delivered by female secondary school graduates to secondary students as part of 18-month volunteer program with focus on transition to higher education and workforce, in collaboration with Ministry of Education, Science, and Technology

Current reach:[15]
Lower secondary students
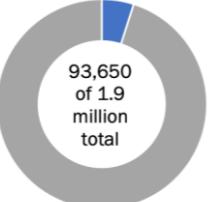
93,650 of 1.9 million total

Scaling goal: Introduce program to 12 new districts in Tanzania by 2021 and lay groundwork for eventual uptake by government to implement as national program

The Philippines
Local partner: Foundation for Information Technology Education and Development (FIT-ED)
Intervention name: Early Language, Literacy, and Numeracy (ELLN) Digital
Focus: Blended teacher professional development model for K-3 teachers implemented in public schools, led by Department of Education

Current reach:[16]
Number of K-3 teachers currently reached out of approximately 240,000 total is unavailable, due to COVID-19 disruptions to data collection

Scaling goal: Reach 100% of K-3 teachers in all public schools by 2024 through phased roll out; expand model to other grades and subjects

At-a-glance
- **Five** Real-time Scaling Labs launched
- Groundwork laid for **one** additional regional scaling lab and initial scaling support provided to the International Rescue Committee (IRC) for scaling in Iraq, Jordan, and Lebanon as part of the Ahlan Simsim early childhood development (ECD) initiative launched by the IRC and Sesame Workshop
- **Ten** national lab convenings established a common scaling language and framework in each country, identified urgent problems and a shared scaling vision to address them, and collaboratively explored challenges and opportunities in achieving this vision
- **17 partners** from the first cohort of labs participated in an initial training workshop in December 2018
- **28 partners from 12 countries** attended the Real-time Scaling Lab Global Convening in Switzerland to facilitate cross-lab learning on key scaling themes and the scaling lab process in July 2019

4

EMERGING SCALING THEMES

A key principle of the Real-time Scaling Labs is the use of data for learning and adaptation, and the sharing of information in an ongoing, timely manner to inform decisionmaking. As such, rather than wait until the end of the project to publish key insights and lessons learned, CUE is sharing lessons, emerging themes, and persistent questions and challenges throughout the process. Below is a synthesis of insights and areas for further investigation that have emerged through the Real-time Scaling Labs to date.

Leading with the problem and not a solution

The work of the Real-time Scaling Labs has underscored the importance of approaching scaling as responding to a deeply perceived need, rather than leading with a predetermined solution and then "searching" for a problem to solve. **This calls for an in-depth understanding of the challenge within the system and its root causes, investigating the government's key priorities and goals related to this challenge, and exploring what has already been tried and tested to address the issue.** While this may seem redundant for actors who already have extensive knowledge and experience working in a particular context, many lab members found this deliberate exploration of the ecosystem valuable, revealing important information related to scaling they might not have otherwise taken into account. For example, stakeholders in the lab in Côte d'Ivoire reported that while they were previously familiar with the national Education Sector Plan, the process of reviewing it as part of developing a scaling plan for the initiative of focus, Teaching at the Right Level (Programme d'Enseignement Ciblé (PEC)), demonstrated how many sector priorities already closely aligned with PEC, and therefore how it could serve as a potential solution to a problem already prioritized by the government.

This problem-driven approach frequently requires a mindset shift around the ultimate goal of scaling: to sustainably address an identified challenge rather than to scale a particular solution. At times, this requires letting go of fidelity to the original model, full attribution of impact, or branding of the activities. Through the scaling labs, the need to approach scaling "without ego"[17] has emerged, requiring not just originators of an initiative but also funders to move away from scaling "my solution" and instead focus on the best way to address a problem in the system. In Côte d'Ivoire, part of the Real-time Scaling Lab process includes engaging national and international actors undertaking related efforts to improve early grade literacy and numeracy, in order to determine where approaches might be aligned, rather than implementing similar initiatives in parallel. There is a recognition among lab members that efforts to adapt and scale PEC are enriched by data from relevant experiences, and that simultaneously, lessons from the process of scaling PEC can be applied to others' efforts.

Meeting with Ministry of Education officials in Jordan. Photo credit: Abdul-Hadi Qallab, HR officer at INJAZ

Through initial work with the scaling labs, CUE has observed that often, **government buy-in for a particular solution is not based solely on its effectiveness but on the priority of the problem it seeks to address.** In Jordan, a primary driver behind the Ministry of Education's decision to adapt an NGO-developed financial education program as a mainstream class across all secondary schools was government recognition at the highest political level of the widespread problem of low financial literacy and its contribution to high rates of unemployment among youth. At the same time, the labs have illuminated the distinction between government partnership and government ownership of scaling an

initiative. While the two are often conflated, transitioning from an initiative that is "tolerated" or even welcomed by the government, to an initiative that is prioritized is often a challenging bridge to cross. The scaling labs will continue to explore how best to enable this transition, which may include building a grassroots constituency for change, as well as deeper engagement and joint planning with government from the start.

In the case of the labs, taking a problem-driven approach has meant **positioning the process not as a removed research project that will take participants' additional time and focus, but as a new way of working to address existing challenges and advance current priorities and goals.** This already has been demonstrated in responses to COVID-19, where insights from the scaling labs are being applied in addressing the crisis. Buy-in for this type of adaptive, collaborative process in support of scaling is predicated on the lab aligning itself with existing priorities, plans, and structures in the system and serving as a support, not as an end-goal in itself. For CUE, this has meant constantly reevaluating the lab process to understand where it can be most useful and additive to existing efforts, what gaps it seeks to fill, which stakeholder groups should be represented, and what should be adjusted to best serve the scaling goals and challenges of the lab members and the broader system. This has resulted in CUE not leading with an externally defined research agenda but, rather, ensuring that the scaling questions explored are of direct interest to those decisionmakers involved with the labs.

Moving from a project mentality to systems approach

A second emerging insight from the Real-time Scaling Labs is the importance of grounding the process of scaling in a systems approach, such that **scaling efforts are not solely focused on the education intervention itself or the institutions delivering it, but emphasize analyzing and understanding the system more broadly, including the structures, relationships, power dynamics, and norms within it, and how these might enable or hinder scaling.** The initial work of the scaling labs has identified obstacles to pursuing this systems approach, namely the persistence of a "project mentality" among many stakeholders when selecting, implementing, adapting, and expanding education initiatives. It is certainly easier to focus on maintaining or growing a particular project than on institutionalizing a change within a system to address complex social challenges such as improving learning outcomes. Often, political timelines, budget cycles, and donor constraints further perpetuate this short-term, project-based approach.

Nevertheless, scaling impact requires stakeholders at various levels of a system to reconceptualize scaling not as maintaining or growing a particular project but instead as scaling a change, which the system can sustain over time. In the scaling lab in Botswana, the ultimate scaling goal of the Ministry of Basic Education is to infuse Teaching at the Right Level (TaRL) into everyday teaching practice for teachers in grades 3-5 in all of the country's 755 primary schools. This will require changing teacher instructional practice in classrooms across the country, altering the status quo, and sustaining that behavioral change within the current system. One benefit of the TaRL approach is its similarity to pedagogical practices that teachers in Botswana already learn during preservice training, so it can be framed not as a new, external innovation but as a "refresher" to the effective elements of the existing system. Nonetheless, local partner Young 1ove recognizes that even when teachers and school leaders feel enthusiastic about TaRL, this type of sustained behavior change can be challenging to embed and maintain over time, especially when it deviates from existing teaching and learning norms.

Part of approaching scaling through a systems lens is to recognize the importance of political economy factors, power dynamics, incentives, and social and cultural norms. Issues that might not have been apparent at small scale may become much more significant once an initiative expands. Over the past year, CUE has observed a **tendency by practitioners to place more emphasis on the technical design of an initiative, without sufficient attention to the broader enabling environment.** In each of the labs, it is clear that political economy dynamics have a significant impact on scaling plans, but nonetheless, in some cases, lab members have been reluctant to frankly discuss these realities. This reluctance may stem from the politically sensitive nature of these topics and the inherent challenge of discussing such issues with a diverse group of education stakeholders, who may not typically collaborate. In other cases, the hesitation may have come from the sense that it is too soon in the scaling process to consider these issues, or that it would be better to address them at a later date when the intervention is perfected and "ready" to scale.

The Teaching at the Right Level approach is used in a classroom in Botswana. Photo credit: Thabang Maranyane, Young 1ove Senior Communications Officer

A systems approach also has implications for the monitoring and evaluation (M&E) of the scaling process. **In addition to metrics related to increasing reach and maintaining impact during scaling, there must also be targets and milestones around the more intangible components of the scaling process,** such as institutionalization and government ownership, capacity, and strength of partnerships, as well as tracking shifts in the enabling environment that might affect scaling, such as policy changes and resource allocations. These indicators might be more challenging to track and measure, requiring different types of data and analytical approaches. However, they are nonetheless important to understanding if an initiative is making progress toward scaling goals, identifying any unintended consequences as a result of scaling, and determining course corrections as needed. In many of the labs, CUE found that lab partners want more information and guidance about how to assess progress on longer-term and less attributable outcomes, including tools to track relevant metrics, such as government decrees signed, high-level task forces formed, and line items in budgets. In the coming years, CUE will continue to explore questions around how to design and adapt M&E approaches to gather the type of data on the system and enabling environment needed to inform timely, data-driven decisionmaking about the scaling process and how best to strengthen the capacity of local actors to do so.

Finally, a reflection from this initial year is that an **important and often overlooked piece of the systems puzzle is the role of intermediaries: third-party institutions or initiatives that play key roles in the process of adapting, transferring, and scaling an initiative.** In the education sector, there is often a missing link between those originating innovations and the broader government systems delivering education at scale. The process of expanding, adapting, and institutionalizing an effective education

The Real-time Scaling Lab in Côte d'Ivoire launch event in October 2019. Photo credit: Transforming Education in Cocoa Communities

A Learner Guide facilitates classroom discussion in Tanzania.
Photo credit: Eliza Powell, CAMFED

initiative requires functions and tasks that may be difficult for either the originating organization or the government to undertake, such as coordination, documentation, capacity building, or evaluation. This often requires an intermediary actor to serve as a bridge that connects and cross-pollinates between the two in pursuit of sustainable scaling.[18] At the same time, it is important to recognize that intermediaries may bring their own agendas and that their engagement can inadvertently create additional challenges. Through Real-time Scaling Lab efforts, there is an opportunity to continue exploring this intermediary function, including where and how it can play a beneficial role, whether there are any

unintended consequences, and what elements can be taken up and embedded into existing systems effectively. The first year of the labs have underscored that this is a critical missing space where the labs can contribute—serving as a catalyst for broader systems change. In Côte d'Ivoire, Transforming Education in Cocoa Communities (TRECC) has been playing this intermediary role by bringing together government, NGOs, cocoa and chocolate companies, and funders to work together toward the shared goal of ensuring all children in Côte d'Ivoire have a good start in life and access to quality education.

Establishing a "winning coalition"

This first year of lab implementation has reinforced the notion that while the government is ultimately responsible for ensuring the right to education for all children, it cannot do so alone; **sustainably scaling education initiatives that consider equity and quality requires a "winning coalition"[19] of diverse actors to help drive change forward.** Part of establishing this winning coalition includes cultivating and sustaining leaders and champions for scaling the initiative across all levels of the system. While champions at the highest political levels can help marshal necessary human and financial resources to support scaling, the reality of frequent turnover in political positions means it is equally critical to cultivate mid-level bureaucrat, senior civil servant, and local leaders, who are more likely to remain in their roles throughout political cycles. In Botswana, Young 1ove has pursued a bottom-up and top-down approach to engage key leaders and cultivate champions at the community, district, and national level; champions span from school heads and teachers, to regional leaders and technocrats, to deputy and staff-level champions within ministries, to senior-level government officials. This fostering of champions at all levels and proactive and ongoing nurturing of these relationships by Young 1ove has helped generate and maintain momentum for scaling TaRL, despite leadership changes within government ministries over the last three years.

Additionally, the scaling labs have demonstrated the **need to expand participation even further than originally envisioned, to include other important actors who might not typically have a seat at the table.** These actors, such as teachers, school heads, and others, can constrain or accelerate scaling in education. This includes proactively identifying and engaging early in the scaling process with potential opposition and including their voices in the process. **Focusing on reducing opposition can often be a more effective strategy than simply "pushing harder" for scaling a particular intervention.** In Tanzania, lab members are considering how the volunteer-led Learner Guide program can be scaled nationally. The program has been widely supported to date since schools and communities have asked for it to be implemented, and classroom teachers readily welcome the volunteers (all of whom are from the communities in which they serve). However, as the program is introduced to new areas, lab members acknowledge it could meet resistance from school leaders and classroom teachers unaccustomed to

having additional people managing the classroom. To ensure the voices of these and other stakeholders are considered, scaling lab discussions are examining how to ensure that the education workforce meaningfully contributes to the process of planning for scale from the beginning and are actively included throughout. Through this collaboration, lab members can ensure that the Learner Guide role serves as a steppingstone to formal teacher training through experience and a vocational credential, and that it complements the work of teachers in times of rising enrollment rather than competing with it.

In the coming years, CUE will continue to delve more deeply into questions about the process of cultivating and sustaining a winning coalition: how leaders and champions are identified and cultivated, effective strategies to engage and sustain their involvement, the primary challenges to engaging them in the scaling process, and how changes in leadership and political priorities are managed. CUE is also interested in deepening understanding about how educators can best be engaged in the scaling process beyond implementation of the specific intervention and how their engagement can facilitate or hinder scaling.

Strengthening adaptive capacity

A key principle underlying the Real-time Scaling Labs is that scaling is an iterative process that requires ongoing adaptation.[20] The disruption caused by the COVID-19 pandemic has brought this reality to the forefront—the need for education systems to cope and respond to crises, shocks, and changes in the environment (see COVID-19 sidebar). While unprecedented in scale, COVID-19 is not the first nor the last disruption to education; it may not always be a pandemic, but events and crises, such as teachers' strikes, environmental damage, and conflict, do occur. Sustainable scaling must take these realities into account and be prepared to respond and adapt. However, a reflection from the initial work of the scaling labs is that while there is increasingly recognition that adaptation and data-driven iteration are fundamental to sustainable scaling, implementing these principles is more challenging. Entrenched hierarchies, human and financial resource constraints, and vested interests in the status quo are a few of the obstacles that can stifle adaptive learning efforts. Gaps remain in understanding how to effectively build capacity and align incentives for timely learning and adaptation.

Responding to immediate needs while looking toward the future

The COVID-19 crisis has made this type of quick, real-time adaptation to the model an urgent necessity, given school closures and stay-at-home orders. Since the pandemic began, the scaling labs in Côte d'Ivoire and Botswana have been experimenting with low-tech, distance learning approaches, such as radio-based and SMS instruction, to continue delivering the TaRL approach to students while schools are closed and as they reopen. In Tanzania, because Learner Guides live in local communities and do not need school structures to serve children, they are expanding their roles by working with families to share official World Health Organization and government guidance; they are also improvising learning opportunities at a safe distance for students while schools remain closed. In Jordan, the Ministry of Education and INJAZ are experimenting with digitizing the financial education program, an idea that was already being considered pre-COVID-19 but that circumstances have accelerated. While these changes have been in response to an unprecedented crisis and to maintain instruction where possible, all labs are considering longer-term implications of the pandemic and how further adaptations might be necessary, as well as identifying any short-term measures that should be maintained. In all labs, collecting data on how these changes impact the effectiveness of the model, along with equity and inclusion, will be essential.

When considering adaptations necessary to facilitate scaling, CUE distinguishes between two categories: (1) adaptations and simplifications of the model itself (the "what") and (2) adaptations and adjustments to the scaling approach (the "how"). The former—adapting the model to facilitate scaling—entails recognizing the need for simplicity and cost-effectiveness when scaling; experience and evidence suggest that the more complex a model, the more challenging to scale and sustain, even if it leads to impact at small scale. As such, a **necessary step in the scaling process includes identifying the core elements of the model or approach that are fundamental to its impact and then working to simplify, adapt, and/or streamline the rest as the context requires.** In Tanzania, lab members are examining the different elements of the Learner Guide model, such as the types of training and incentives provided to volunteers, or the life skills curriculum used, to determine the leanest, most effective model for the government to adopt and scale nationally. This flexibility to adjust and adapt the model and focus on fidelity to outcomes rather than to model or process might be especially critical in the education sector, given how human-dependent and contextually relevant education is.

The latter category of adaptation—adjusting the scaling strategy and approach—is additionally challenging. It requires not only useful and timely data, an understanding of the system and context, and space for critical reflection, but also the willingness and capacity to act on this learning and make changes accordingly. CUE is learning that the "how" of fostering this type of adaptive orientation in scaling requires more than just greater access to relevant information and a mindset shift among key stakeholders around the importance of an adaptive approach. It also requires an **"authorizing environment" for decisionmaking that encourages experimentation and views course corrections not as failures but as critical features of an iterative scaling process.**

A Learning Action Cell session of K-3 teachers takes place in the Bayombong Central School in the Philippines. Photo credit: Irene B. Bosque, School Head SY 2016-2017

In the Philippines lab, the Department of Education is undertaking a staged roll out of a blended teacher professional development course—Early Language, Literacy, and Numeracy (ELLN) Digital—to all K-3 teachers in the country. The ELLN Digital course combines guided independent study of multimedia courseware by the teachers with collaborative learning through school-based Learning Action Cells. As part of this process, the Department of Education has embedded "Plan-Do-Study-Act" improvement cycles in each school and division. These improvement cycles enable quick feedback loops to inform ongoing adaptation and course correction of implementation at the school level, while data is also being aggregated across schools, divisions, and regions to inform future stages of the roll out to more teachers and in more schools. This system-wide iterative learning process has been possible given the space, mandate, and resourcing by the government at the central level.

An additional element surfacing is the **evolving role of the entity "originating" an innovation throughout the scaling process,** especially when the intervention is transitioning from outside the government to inside the formal system. While this may be an uncomfortable prospect for originating organizations to consider, it is nonetheless essential to expanding and sustaining impact over the long term. Often there is an assumption that there will be a clear point in the scaling process when the originating entity will declare "mission complete" and cease to be involved, but the reality is that frequently there is a continuing (albeit shifting) role for the organization to play. This may require gradually transitioning control to the government while continuing to support through roles such as providing master training or conducting external M&E. In other cases, it might require shifting to more of an advocacy role, continuing to build and sustain a constituency for the change. In Jordan, while the

Ministry of Education has assumed responsibility for implementing a national financial education program in all secondary schools, INJAZ (the "originating" NGO) continues to play a role in several important areas. A developer of financial literacy curriculum and resources for more than 20 years, INJAZ continues to review and update the curriculum for each grade together with the ministry. INJAZ "master trainers" train supervisors from the Ministry of Education who in turn deliver training to teachers, and INJAZ supports training follow-up to understand how to iteratively improve the training process.

Moving forward, CUE intends to continue to explore how the role and engagement of the originating organization must change throughout the scaling process, what role incentives play in facilitating or impeding this shift, and what aspects of this evolution are unique or specific to the education sector. CUE will continue to focus on how to foster and build adaptive capacity and the use of data for learning among different key stakeholders for scaling, including researching where the primary barriers and breakdowns occur, strategies for addressing them, and what types of support are most needed.

Creating a learning community

Finally, the work of the labs to date has confirmed CUE's previous research demonstrating that **many initiatives in the process of scaling are working in isolation, and in spite of contextual differences, can benefit from greater collaboration and peer-learning to share experiences and problem-solve collectively.** Across the labs, CUE has seen tangible benefits of hosting in-person, peer-to-peer learning exchanges, which have provided the opportunity for individuals from each of the scaling labs to come together to share scaling experiences and processes, reflect on common challenges and opportunities arising, and collectively problem-solve. Real-time Scaling Lab partners have shared that the in-person global convenings have been beneficial to their scaling efforts, even for those working across diverse issues and contexts.

Between these infrequent moments for in-person exchange, CUE has also provided opportunities for lab partners to more frequently connect with each other virtually via online webinars, discussions, and workshops. While these virtual exchanges were less time- and resource-intensive than the in-person events, CUE observed that **because participants had first established in-person relationships and built trust, the virtual discussions were strengthened.**

While there is much to learn in the coming years about how to better support the process of scaling in education, including through approaches such as the Real-time Scaling Labs, initial results do underscore the benefits of peer-learning opportunities and the utility of a neutral platform for planning for scale and refining scaling strategies. CUE has found that the time, effort, and resources needed to enable and support peer-learning and knowledge exchange can be a worthwhile investment, helping to ensure that initiatives are problem-driven, user-centered, adaptive, and engage diverse stakeholders from the start.

NEXT STEPS FOR THE REAL-TIME SCALING LABS

In the coming years, CUE will continue to pursue the three interrelated objectives of the Real-time Scaling Labs to both support the individual initiatives in the process of scaling and to draw key insights and transferable lessons from across the cases. Next steps include:

Learn

- To continue to interrogate its framework of 14 key scaling drivers, in addition to ongoing data collection and documentation, CUE and local lab researchers will undertake **in-depth research on scaling drivers that have emerged as shared priorities** in each lab. This research will inform analysis within and across the labs on how these key drivers contribute to scaling in

education, what strategies are pursued in their absence, and how these drivers might be strengthened, as well as to support ongoing work in the individual labs.

- CUE will facilitate additional opportunities for ongoing knowledge exchange and **peer-learning between the labs** through focused webinars, convenings, and dialogues on scaling-related themes and issues.
- CUE will continue to look for opportunities to engage in knowledge exchange beyond the labs, to **connect and learn from related initiatives** in the education space at large.
- CUE will continue to engage with a high-level International Advisory Group through virtual and in-person meetings (if possible) to gather strategic input and guidance on the project's research approach, knowledge mobilization, and dissemination plans, and other aspects.

Support

- Individual labs will continue to **develop and refine scaling plans**, drawing insights from a diverse group of perspectives and responding to the realities of the local context and education system.
- Labs will **put scaling plans into practice,** test adaptations, reconvene to reflect on progress to date, and continue iterating on scaling strategies based on timely data, lessons learned, changes in the broader ecosystem, and exchange with other labs.
- CUE will work closely with partners and lab members to explore how **scaling plans, strategies, and goals might need to shift given the realities of the COVID-19 pandemic,** including sharing information on what is being tested elsewhere and evidence on what has worked in crises in the past, as well as looking for additional opportunities to connect labs with each other and with related initiatives. CUE and the labs will also consider how the participatory action research approach might need to change in response.

Document

- CUE and the local lab researchers will continue to closely **document the scaling journey** of each initiative, including challenges faced, changes tested, milestones achieved, and lessons learned.
- CUE will **share emerging insights and unresolved questions and challenges** from across the labs in an ongoing fashion through blogs, podcasts, social media, and other platforms, as well as at conferences and other events.
- CUE will begin planning for the development of policy reports and scaling resources and start **developing a dissemination and engagement strategy.** This will include, in particular, consulting with a wide range of stakeholders to determine how best to tailor and package the diverse set of products for various end-users and uses, so that the resources are accessible, actionable, and focused.

ANNEX I: MILLIONS LEARNING INTERNATIONAL ADVISORY GROUP

Advisory Group Chair: Jaime Saavedra, Global Director, Education Global Practice, The World Bank Group; Former Minister of Education, Government of Peru

1. Modupe Adefeso-Olateju, Managing Director, The Education Partnership Centre
2. Theresa Betancourt, Salem Professor in Global Practice, Boston College School of Social Work; Director, Research Program on Children and Adversity
3. Larry Cooley, President Emeritus and Senior Advisor, Management Systems International; Nonresident Senior Fellow, Brookings Institution
4. Luis Crouch, Senior Economist, International Development Group, RTI International
5. Laura Ghiron, Vice President, Partners in Expanding Health Quality and Access
6. Yaneth Giha, Executive President, Association of Pharmaceutical Research and Development Laboratories (Afidro); Former Minister of Education, Government of Colombia
7. Javier Gonzaléz, Director, SUMMA; Affiliate Professor, Center of Development Studies, University of Cambridge
8. Sanni Grahn-Laasonen, Member of Parliament; Former Minister of Education and Culture, Finland
9. Afzal Habib, Co-Founder and Chief Imagination Officer, Kidogo
10. Rachel Hinton, Senior Education Advisor, Education Research Team, Department for International Development, United Kingdom
11. Maysa Jalbout, Founding CEO, Abdulla Al Ghurair Foundation for Education; Nonresident Fellow, Brookings Institution
12. Homi Kharas, Senior Fellow, Global Economy and Development, Brookings Institution
13. Shiv Khemka, Vice Chairman, SUN Group; Chairman, The Global Education and Leadership Foundation
14. Lord Jim Knight, Chief Education and External Officer, TES Global
15. Wendy Kopp, CEO and Co-Founder, Teach For All
16. Ruth Levine, Chief Executive Officer, IDinsight
17. Johannes Linn, Nonresident Senior Fellow, Brookings Institution; Distinguished Resident Scholar, Emerging Markets Forum; Senior Advisor, Results for Development Institute
18. Joe McCannon, Executive in Residence, Rustandy Center for Social Innovation, University of Chicago Booth School of Business
19. Kristen Molyneaux, Vice President, Social Impact, Lever for Change
20. Lant Pritchett, RISE Research Director, Blavatnik School of Government, University of Oxford
21. Ramanathan Ramanan, Mission Director, Atal Innovation Mission, Niti Aayog
22. Sara Ruto, Chief Executive Officer, People's Action for Learning (PAL) Network
23. Asif Saleh, Executive Director, BRAC
24. Gus Schmedlen, President and Chief Revenue Officer, Startup in Stealth Mode
25. Justin van Fleet, President, Theirworld; Executive Director, Global Business Coalition for Education
26. Yaw Osei Adutwum, Member of Parliament; Deputy Minister – Basic and Secondary Education, Ministry of Education, Ghana

ENDNOTES

[1] UNESCO Institute for Statistics (UIS), "New Methodology Shows that 258 Million Children, Adolescents and Youth Are Out of School," *Fact Sheet No. 56,* 2019, accessed 28 February 2020: http://uis.unesco.org/sites/default/files/documents/new-methodology-shows-258-million-children-adolescents-and-youth-are-out-school.pdf.

[2] UNESCO Institute for Statistics (UIS), "More Than One-Half of Children and Adolescents Are Not Learning Worldwide," *Fact Sheet No. 46,* 2017, accessed 28 February 2020: http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf

[3] "Learning Poverty," The World Bank, 15 October 2019, accessed 27 May 2019: https://www.worldbank.org/en/topic/education/brief/learning-poverty.

[4] "COVID-19 Educational Disruption and Response," UNESCO, accessed 27 May 2019: https://en.unesco.org/covid19/educationresponse.

[5] "Meeting Commitments: Are countries on track to achieve SDG 4?" United Nations Education, Science, and Cultural Organization, UNESCO Institute for Statistics, and the Global Education Monitoring Report, 2019, accessed 19 May 2020: https://unesdoc.unesco.org/ark:/48223/pf0000369009/PDF/369009eng.pdf.multi.

[6] For more detail on the individual labs, see: https://www.brookings.edu/product/millions-learning/.

[7] Jenny Perlman Robinson and Rebecca Winthrop with Eileen McGivney, *Millions Learning: Scaling Up Quality Education in Developing Countries* (Washington DC: Brookings Institution, 2016), 9-11.

[8] Seminal scaling works referenced include: Rogers (1962); Meyers (1984), Uvin and Miller (1994); Moore (1999); Samoff et al. (2001); Coburn (2003); ExpandNet, MSI, and World Health Organization (2007); Hartmann and Linn (2008); ExpandNet and World Health Organization (2011); Dembele et al. (2011); and Chandy et al. (2013).

[9] Jenny Perlman Robinson and Molly Curtiss, *Millions Learning Real-time Scaling Labs: Designing an adaptive learning process to support large-scale change in education*, (Washington DC: Brookings Institution, 2018).

[10] Criteria for lab selection included: 1) demand-driven, with a committed local partner with aligned interests and capacity to engage; 2) evidence of effectiveness of the intervention being scaled; 3) strategic timing where there is a reform process underway or other catalyst to leverage; 4) political will and buy-in from government partners; and 5) addressing a critical education issue facing many countries. Additionally, CUE deliberately sought diversity across cases, including geographical location, fragile contexts, type of education intervention and target beneficiaries, place in the scaling process, and scaling pathways pursued.

[11] Note: CUE considers reach only one dimension of scaling, in addition to critical issues of quality, impact, efficiency, sustainability, and equity. CUE's definition of scaling in education emphasizes expanding and deepening impact, leading to lasting improvements in people's lives. For the purposes of this graphic, CUE chose to depict the current scope of target beneficiaries reached as one way to visualize the progress each lab has made toward its scaling goal to date, but it is certainly not the only factor that should be considered. The figures included for each lab are current numbers available for the most recent year (as noted), as opposed to cumulative numbers reached over time.

[12] Current reach data is a 2019 statistic provided on Young 1ove's public dashboard, accessed 4 June 2020: https://public.tableau.com/profile/young1ove#!/vizhome/Young1oveReach-New/LatestStory. Total number of students in grades 3-5 is an approximate figure provided by Young 1ove.

[13] Current reach is for the 2019-2020 school year and reflects PEC activities delivered with the technical assistance of TaRL Africa and the International Cocoa Initiative (ICI). The figures were provided by TaRL Africa and ICI. Total number of students in grades 3-5 is an approximate figure based on

school statistics from the Department of Strategy, Planning, and Statistics of the Ministry of National Education, Technical Education, and Vocational Training of Côte d'Ivoire.

[14] Current reach is a 2019 statistic provided by INJAZ in Jordan. Total number of secondary school students in Jordan is a 2018 figure from the UNESCO Institute for Statistics: "UIS.Stat," UNESCO Institute for Statistics, accessed 28 May 2020: http://data.uis.unesco.org/.

[15] Current reach is a 2019 statistic provided by CAMFED in Tanzania. Total number of enrolled lower secondary students in Tanzania is a 2018 figure from the UNESCO Institute for Statistics: "UIS.Stat," UNESCO Institute for Statistics, accessed 28 May 2020: http://data.uis.unesco.org/.

[16] Data on current reach in the Philippines was not available at the time of publication, due to delays in data collection activities as a result of the COVID-19 pandemic. Approximate total number of K-3 teachers is a statistic provided by FIT-ED.

[17] Sabina Vigani, "Moving from a project mentality to systems change," (Panel Discussion, Millions Learning Real-time Scaling Lab Global Convening, 1 July 2019).

[18] Management Systems International, "Scaling Up – From Vision to Large-Scale Change: A Management Framework for Practitioners," Third Edition, 2016.

[19] Rakesh Rajani, "Scaling quality education: Shifting mindsets for systemic change," (Panel Discussion, Global Compact on Learning Donor Network Annual Meeting: Scaling in Learning, 23 September 2019).

[20] Arntraud Hartmann and Johannes F. Linn, *Scaling Up: A Framework and Lessons for Development Effectiveness from Literature and Practice* (Washington DC: Brookings Institution, 2008); Laurence Chandy and Johannes F. Linn, "Taking Development Activities to Scale in Fragile and Low Capacity Environments," Global Working Papers no. 41. (Washington DC: Brookings Institution, September 2011). Adaptive capacity is a term drawn from environmental science literature, but now applied more widely in development. Syntegral, in particular, has applied the term specifically to program implementation, and concepts of adaptive management and scaling. See: "What is Adaptive Capacity?" Syntegral, accessed 1 June 2020, https://www.syntegral.org/what-is-adaptive-capacity.

BROOKINGS