



# The Global Learning Crisis



## The path to 21<sup>st</sup> century education in the developing world.

By Claudia Costin

In September 2015, the UN General Assembly approved the Sustainable Development Goals (SDGs), one of which, the SDG-4, focuses on the educational goal of ensuring free, equitable and quality primary and secondary education that will lead to relevant and effective learning outcomes. This goal, which is to be achieved by 2030, is ambitious. Even today, there are too many children without access to a school, or those who are not learning the basics, or dropping out of school.

In 2015, there were a total of 121 million children and adolescents not enrolled in school. In low- and middle-income countries, over 15 percent of children were unable to complete primary education and one-third of adolescents did not complete lower secondary levels. Almost a third of developing countries still do not have gender parity in primary education and 50 percent do not have it in secondary education. Worst of all, 250 million children cannot read, write or do basic arithmetic, even though many of them have been in schools for some years. Lant Pritchett's book, *The Rebirth of Education*, was appropriately subtitled 'Schooling ain't learning'.<sup>1</sup> In it, he analyses the challenges the developing world faces in ensuring improvement in literacy and numeracy in a context that could be clearly described as a global learning crisis.

To accentuate the issue, demand for skills is migrating to non-routine cognitive and interpersonal skills as many jobs are gradually being eradicated through automation and artificial intelligence. Education systems do not have the tools to address these new skills that include not only sophisticated reasoning and collaborative problem-solving abilities, but also the capacity and agility to reskill as old skills are replaced by machines.

Through globalisation, these challenges have spread to almost every country, adding to the existing inequalities of wealth distribution and contributing to the intergenerational transmission of poverty. In many countries, certified teachers (educators who have received the formal education that each country demands in its own regulations) lack training in areas such as Mathematics, Physics and Chemistry. Textbooks are scarce and available only in limited quantities. And electricity—what to talk of Internet connectivity—is rare in school buildings. In the absence of basic resources and skills, the demand for higher-level thinking skills in the evolving labour market imposes a double challenge on an already burdened school system.

School systems in developing countries are unable to make progress towards first providing every child with access to schooling, then promoting quality education for all in the outdated model, and then ensuring that the system incorporates the development of a different set of skills. They eventually learn from other countries that faced similar challenges, following a convoluted path to education improvement.



### Skills development

In order to equip teachers for the role, some issues need to be addressed, such as the quality of pre-service and in-service education and inefficient teacher-hiring processes. Pre-service education in the developing world tends to overemphasise the pillars of education—the philosophy, sociology and psychology of education—to the detriment of the real craft of teaching. Curriculum reform in tertiary institutions that prepares future teachers would be more than welcome. Skills development should focus on training teachers not just to hold a class, but to be mediators in the skills development of literacy and numeracy, cognitive skills, and social and emotional skills. Those skills are better developed through interaction and not through long lectures or simply making students copy from a blackboard, as most teachers had done when they were students or as it happens in the present pre-service education system.

A few years ago, the OECD published a paper on strategies that mathematics teachers should use in class:<sup>2</sup>

- **Active learning** emphasises student engagement in their own learning, with the support of information and communications technology (ICT) and collaboration;
- **Cognitive activation** develops higher-order thinking skills, especially problem-solving and critical thinking; and
- **Teacher-directed instruction** relies on teachers to deliver good quality classroom instruction.

According to the report, the three strategies are not mutually exclusive. Pre-service education and the teacher-hiring process in the developing world should prepare professionals in a way that they are ready to manage these more sophisticated roles as they deal with their daily tasks of teaching a class. In addition, professional development should

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incorporate the notion that teachers are not only instructors, but also part of a team, and that teaching is not an isolated work. Thus, teachers need to learn to collaborate, to co-create, to plan classes and to monitor their work together. This should be done in the school where they are working and even across an entire school system. Initiatives like pairing teachers from struggling schools with those from better performing ones in the same geographical area and dealing with the same student population have shown promising results in different parts of the world.

For the teaching profession to become more attractive, and for pre-service education to become more effective, these countries need to address the challenge of developing the present cohort of teachers who often lack the skills to face the complex reality of schools overcrowded with vulnerable students in difficult areas. In this situation, a blend of a more scripted teaching strategy with some space for experimentation and support for innovation has shown to be effective. Unskilled teachers benefit greatly from additional support, be it in the form of pre-formatted class plans, digital classes and more detailed textbooks.<sup>3</sup> Learning how to deliver more engaging classes and allowing the students space to develop higher-order thinking skills are feasible even under these difficult circumstances. It just demands more structured professional development and better prepared instructors to address the needs of teachers.

### Building global citizens

The responsibility of schools is not restricted to preparing students for the increasing demands of the labour market. A child needs to acquire knowledge and capabilities to participate as an informed member of society. In addition to developing basic cognitive, social and emotional skills, a solid Global Citizenship curriculum should be introduced in the school system, especially in the developing world.<sup>4</sup> Understanding one's own country in context and how it

connects to others in an increasingly globalised world will be of great value to students. Indeed, it is the responsibility of an education system to teach its students to appreciate not only their own roots, but also different cultures. The Delors Report states that, “‘learning to be’ and ‘learning to live together’ should be part of every country’s curriculum, if we want to build a peaceful and better world.”<sup>5</sup>

To foster the skills needed to become a global citizen, in-service education must include collaborative work and group discussions on empathy, cultural appreciation, ethnic and gender identities, and a general knowledge of current world affairs and challenges. Teachers who believe they are part of humanity and not just of a region or a country tend to foster the same perception in their students.

Finally, if we want students to become global citizens, we need to give them a voice and promote a sense of responsibility to participate in the world, as well as to positively influence people, events and circumstances.<sup>6</sup> Very early on in their studies, students should learn that their dreams can be fulfilled and that their education is crucial to what they want for their future and the future of their communities. They should learn to be the entrepreneurs of their own lives.

### Using technology to leapfrog ahead

Although it might seem utopic, education in low- and middle-income countries can benefit from modern technology even when the basics are lacking. ICT tools can be used to support teachers in the classroom. In China, the Ministry of Education offers schools the option of digital classes that are projected in the classrooms. In Brazil, a similar option is offered to teachers in all subjects and grades, with the setup prepared by a team of trained instructors. The use of such a platform has shown to have a positive impact on learning—yet to take full advantage of this tool, Internet connectivity should exist. In the absence of this facility, pen drives or offline options can be provided. Technology has also been used for remedial education, even when connectivity is not available.

Another possible use of technology is the broadcasting of classes to support instruction where specific teachers are not available. An interesting example of this innovative practice was highlighted in the Millions Learning report from the Brookings Institution.<sup>7</sup> The school system in the state of Amazonas in Brazil had to provide Physics and Chemistry classes for upper secondary students in the Amazon jungle and the solution was to enrol the best specialist teachers to broadcast classes and provide the

schools (which in some cases were small huts or houses for about 20 or so indigenous youth) with a generalist teacher who ensured class participation and student engagement. Technology, thus, helps to bring resources and knowledge to every classroom.

### A guide to action

I propose below a schematic approach to ensuring quality education for all in the developing world:



#### FINANCING QUALITY EDUCATION

- Ensure proper funding through domestic spending, issuing a law that earmarks at least 20 percent of total revenues to basic education. Quality education is expensive but it helps to promote long-term economic growth.
- Reach out to donors, but ensure there is an integrated framework to improve access and quality at the same time.
- Enrol the private sector in supporting education, using the same framework.



#### DEFINE A GOOD NATIONAL (AND SUB-NATIONAL) CURRICULUM

- Define clear learning goals that incorporate 21<sup>st</sup> century skills, and establish the sequencing of the acquisition of content and abilities.
- Learn from the experience of other countries with similar challenges or cultural background.
- Engage principals and teachers in the definition of the learning goals before issuing the curriculum.
- Ensure that every school translates the curriculum to a school level approach and into an in-service education programme for the teachers.
- Ensure that every teacher has supporting material to deliver the curriculum.



#### ATTRACT TALENT, IMPROVE PRE-SERVICE EDUCATION, AND PROMOTE BETTER PROFESSIONAL DEVELOPMENT

- Socially recognise the teaching professional through better salaries and selective hiring programmes that include samples of experiences in real classrooms.
- Introduce a solid practicum component in every teacher's course and define rigorous and updated standards for the profession.
- Use the induction period for additional class management learning, including how to promote 21<sup>st</sup> century skills.
- Ensure appropriate teaching conditions, including smaller class sizes, resources for teaching and textbooks (in different formats or platforms).
- Allow time for teachers' collective learning and planning within the school or at special periods for professional development in the school system (building a culture of collaboration).
- Monitor students' learning and provide constant feedback to teachers.



#### CREATE INNOVATIVE TEACHING APPROACHES

- Teach students to think and become problem-solvers.
- Build skills for teamwork among students.
- Teach communication skills in the maternal (native) language and in other languages, going beyond narrowly defined literacy skills.
- Teach for understanding and how to be a global citizen—awareness of differences in cultural norms and behaviour, building bridges, role-modelling the social and emotional skills that we want students to develop.



#### SUPPORT TEACHERS THROUGH PROFESSIONAL DEVELOPMENT, TOOLS AND CONTENT FOR:

- Basic skills: structured class plans and materials, and digital or broadcasted classes and textbooks.
- Personalisation: assessment tools, class plans and appropriate and diversified digital classes or books.
- Thinking and teamwork: literature, maker spaces, science labs, pedagogical toys and tools.
- Cultural learning: connect classrooms and provide questionnaires for research of attitudes and values.



#### PREPARE FOR THE FUTURE SCHOOL SYSTEMS IN THE DEVELOPING WORLD

- Extend the number of hours in the school day, including time for collaborative work, and extracurricular activities and avoid having teachers work with fragmented time in many different schools.
- Connect schools to the Internet.
- Emphasise learners' agency (youth protagonism) with assemblies, student directed activities, community outreach, and collaborative problem-solving.
- Prepare the teachers for the development of 21<sup>st</sup> century skills in their students, including empathy, persistence, self-control and resilience.
- Create a culture of excellence and high expectations for every student.
- Use technology to leapfrog, and increase access to quality education.
- Experiment in schools with a more personalised approach where students can progress at their own pace and learn not only from teachers, but also from peers.
- Promote affirmative action for schools in fragile environments or those that receive more vulnerable students, giving them better teachers and additional resources.

### The role of teachers

The SDG-4 demands an organised effort to ensure that every child and adolescent in the world has the means to attend and complete quality primary and secondary school education, and develop skills to live a healthy and productive life. Unfortunately, this task seems almost impossible, even in the developed world, as more complex skills are being demanded by employers and globalisation requires individuals who have the cultural agility to be able to operate in different geographies and understand the challenges the planet is facing.

What should be the role of teachers in such an environment, especially in low- and middle-income countries? There are many things that teachers can creatively achieve, but without the appropriate learning environments and working conditions, they are limited to suboptimal instructional procedures. This does not mean unsophisticated or unrealistic approaches to teaching in poor countries—but public policy can certainly make advances easier and faster through technology and some transformation levers as a support for teaching.

There is no silver bullet to improve education for all. Change should come through a systemic approach that includes good policymaking and management in each country and at the school level. This prescriptive guide provides at least some clues to what can be done to ensure that a better world might emerge from a more educated society.

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- <sup>3</sup> Mona Mourshed, Chinezi Chijioke & Michael Barber, "How the World's Most Improved School Systems Keep Getting Better," McKinsey & Co., November 2010.
- <sup>4</sup> One suggested curriculum is proposed in Connie K. Chung, E. B. O'Donnell, Fernando Reimers, Julia Higdon & Vidur Chopra., "Empowering Global Citizens: A World Course," 2016.
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- <sup>6</sup> OECD, "The Future of Education and Skills: Education 2030," 2018.
- <sup>7</sup> Eileen McGivney, Jenny Perlman Robinson & Rebecca Winthrop, "Millions Learning: Scaling up Quality Education in Developing Countries," The Brookings Institution, 2016.