Essay 05

What is the Role of Teachers in Preparing Future Generations?

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In September 2015, the U.N. General Assembly approved the Sustainable Development Goals that included one all-encompassing goal on education, SDG-4, which demands primary and secondary inclusive quality education for all by 2030.

This is a very ambitious goal. In many parts of the developing world, too many are left behind by not having access to school or learning the basics. Of the 121 million out-of-school children and adolescents in low-and middle-income countries, one-sixth of children did not complete primary school and one-third of adolescents did not complete lower secondary. Thirty percent of countries still do not have gender parity in primary and 50 percent do not have it in secondary.

Worst of all, 250 million children cannot read, write, or do basic arithmetic, although many of them have been in school for some years. "Schooling Ain't Learning" states the subtitle of the excellent book from Lant Pritchett, "The Rebirth of Education," which analyzes the challenges the developing world faces to ensure improvements in literacy and numeracy.¹ The United Nations Educational, Scientific and Cultural Organization (UNESCO) has described it as the Global Learning Crisis.²

To make matters worse, the demand for skills is migrating to non-routine cognitive and interpersonal skills, since many jobs are being lost to automation.³ Curricula in schools do not normally consider this change and education systems do not have the tools to address these more sophisticated skills.

Globalization has made these changes present in almost every country, adding to existing inequalities and contributing to the intergenerational transmission of poverty. In many low-income, and even middle-income countries, certified teachers (i.e. teachers who have received the formal education required by the country's regulations) lack knowledge in some subjects such as mathematics, physics, and chemistry, lack adequate quantities of textbooks, and connectivity (and sometimes even electricity) is rare in school buildings. Yet, even in these cases, the demand for higher-level thinking skills is present in the labor market, imposing a double-challenge over an already overburdened school system. In this context, what should be the role of the teacher? It would be easy to respond that if the basics do not exist, we should not expect anything more than the basics, thus allowing the next generation of students to be unskilled and unprepared for the future ahead.

In this short essay, I try to state the opposite: It is possible, with the appropriate support, to expect teachers to help students to be active citizens and professionals in these times of uncertainty.

THE PATH TO SCALE 21ST CENTURY EDUCATION IN COUNTRIES WITH STRUGGLING EDUCATION ECOSYSTEMS

These countries cannot make their school systems progress step-by-step, first covering the last mile in access, then promoting the outdated model of quality education for all, and finally ensuring that the system incorporates the development of a new set of skills. They will have to leapfrog and learn from countries that have previously improved their education systems.

For this to be feasible, some initial deficiencies will need to be addressed, such as a precarious pre-service and in-service education and inefficient teachers' hiring processes. Pre-service education in the developing world tends to overemphasize the theory, at the expense of the practice of education. A curriculum reform in the tertiary institutions that prepare future teachers would be more than welcome. Only through a solid reflection on a teacher's everyday practice could we advance towards a model where they could be seen less as a mere class provider and more as a mediator in the process of skills development—literacy and numeracy, higher order cognitive skills, or social and emotional skills. These skills are better developed through interactions, not speeches or copying from a blackboard, as most teachers do. Facilitating a class where consistent participation is expected is extremely difficult for novice teachers that were themselves taught through pedagogies that don't demand students' engagement.



Last year, the OECD delivered an interesting report on the strategies mathematics teachers from participating countries in PISA 2012 used to deliver their instruction.⁴ The report grouped the strategies into three categories: active learning, where the emphasis is on promoting student engagement in their own learning, with support of ICT and lots of teamwork; cognitive activation, where students are challenged into a process that develops higher order thinking skills, especially problem solving and critical thinking; and teacher-directed instruction, that relies on the teacher ability to deliver good classes. According to the report, the strategies are not mutually exclusive, which demand the instructor a constant change in roles, to adjust to the kind of instruction being implemented.

Pre-service education and hiring processes in the developing world should prepare professionals that are ready to manage these more sophisticated roles as they deal with their daily teaching of classes.

In addition to this important transformation, professional development should incorporate the notion that, in addition to being a mediator, a teacher is part of a team and teaching is not an isolated work. Teachers need to learn to collaborate, co-create, plan classes, and monitor their work together. This could be in the school they are working or within a school system. Good initiatives of pairing struggling schools with better performing ones in the same area—thus dealing with the same student population—have shown promising results globally.

The real challenge is that before the profession becomes more attractive, and the pre-service education more effective, these countries need to deal with a current cohort of teachers that often lack the skills and repertoire to face this complex reality. In these cases, a blend of more scripted teaching strategies with space for experimentation and support for innovation have shown to be effective. Studies have shown that unskilled teachers benefit greatly from additional support such as pre-formatted class plans, digital classes, and more detailed textbooks.⁵

Despite this, learning—through collaboration or professional development courses—how to deliver classes that are more engaging and allow for the student's space to develop higher order thinking skills, is feasible even under these difficult circumstances. It just demands more structured professional development and better-prepared instructors to address these teachers' needs.

This demands mentoring and class observations, together with structured

materials to support initial efforts from the novice teacher to prepare meaningful class-plans and deliver them. It also requires some additional time if the classes are—as in some developing countries—too short or based on a curriculum overloaded with unnecessary content.

BUILDING GLOBAL CITIZENS AT UNCERTAIN TIMES

The demands put on schools are not restricted to preparing students for the increasing demands of the labor market. A child needs to grow to be an informed member of the society in which they live and to have the knowledge and capabilities to participate. In addition to acquiring basic cognitive and social and emotional skills, a solid Global Citizenship curriculum should be introduced in the school system even in the developing world.⁶ Understanding how his or her own country is organized, and how it connects to a globalized world, will be of great value for the student. To foster the skills needed to become a global citizen, we should develop these skills in a structured way in the teachers' workforce. This means in-service education through collaboration and group-discussions on empathy, cultural appreciation, ethnic and gender identities, and general knowledge of current world affairs and challenges. A teacher that believes she is part of humanity and not just of a region or a country tends to foster the same perception in her students.

Ultimately, if we want students to become citizens, we need to give them a voice. Very often, in school systems, we treat teenagers as children and don't trust them to be responsible for their own student lives and choices. This means we must trust them to take part in important decisions about the school curriculum and we must discuss their behavior issues with them directly—not their parents. This would also require allowing some space for them to make mistakes and learning to correct them effectively. A global citizen, it must be understood, is first a citizen in his own school, community, and country. If we truly want to prepare them to become informed and active members in their countries, it is important to give them some space to exercise choices and activism at an early stage.

In Rio de Janeiro, where I was municipal secretary of education, we introduced a mandatory assignment at the beginning of 7th grade, for the adolescents to state in a structured way the life project—that meant putting their dreams into words and learning to plan their future lives. They did it at the beginning of the school year, in an activity conducted



with the support of 9th graders that were trained specifically for the task. Only after the whole class arrived at an acceptable proposition for each kid did the teachers enter the classroom, at which point each student could choose a mentor teacher to continue discussing their projects. The results were impressive for both students and instructors.

USING TECHNOLOGY TO LEAPFROG

Although it might seem utopic, education in low- and middle-income countries can benefit from modern technology even when the basics are lacking, if a more contextualized approach to including such tools in the classroom is taken, as a support to teachers not as an additional subject.

In China, for example, the Ministry of Education offers schools options to use digital classes. In Rio de Janeiro, when I was secretary, we took a similar approach: offering all teachers the use of digital classes prepared by trained instructors. The use of the platform has shown positive impacts on learning. Yet to take full advantage of this tool, connectivity needs to exist. In the absence of this, pen-drives or offline options were provided. Using technology for remedial education was and is still done, even when connectivity is not available.

Other possibilities are 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 Center for Universal Education at Brookings.⁷ The school system in the state of Amazonas in Brazil had the challenge of providing physics and chemistry classes in the Amazon jungle for high school students. The solution was to enlist a teacher to broadcast classes and provide schools with a generalist teacher to ensure class participation and student engagement.

The use of technology in these examples show the possible advantages of bringing resources and a knowledge base that is not yet available in every classroom. On the other hand, the fact that in the education ecosystem it exists somewhere and may be mobilized is of great help and doesn't give teachers the sense of disempowerment, since it is prepared by teachers from within the Amazonas system or by members of the community and not by a distant company located in another country.

CONCLUSIONS

The SDG-4 demands an organized effort to ensure that every child and adolescent in the world has the means to complete quality primary and secondary school, as well as develop skills to live a healthy and productive life. Unfortunately, as uncertainty grows, this task seems almost impossible—even in high-income countries—as more complex skills are demanded by employers and globalization requiring individuals who understand the challenges the planet is facing and that can operate in different geographies.

What should be the role of teachers, in such an environment, especially in low- and middle-income countries? This is the question I have tried to answer here, providing some clues of what could be done to ensure that the United Nation's goal can actually produce a more educated global society, and that a better world might emerge.



ENDNOTES

- 1 Pritchett, Lant. The Rebirth of Education: Schooling Ain't Learning. Center for Global Development, 2013.
- 2 UNESCO. The Global Learning Crisis: Why every child deserves a quality education. 2013. http://unesdoc. unesco.org/images/0022/002238/223826e.pdf.
- 3 3 ILO. A Skilled Workforce for Strong, Sustainable and Balanced Growth. 2010. https://www.oecd.org/g20/ summits/toronto/G20-Skills-Strategy.pdf.
- 4 OECD. Teaching Strategies: For Instructional Quality. 2016. https://www.oecd.org/edu/school/TALIS-PI-SA-LINK-teaching_strategies_brochure.pdf.
- 5 Barber, Micheal, Chinezi Chijioke and Mona Mourshed. *How the world's most improved school systems keep getting better.* November 2010. http://www.mckinsey.com/industries/social-sector/our-insights/how-the-worlds-most-improved-school-systems-keep-getting-better.
- 6 Reimers, Fernando et al. *Empowering Global Citizens: A World Course.* CreateSpace Independent Publishing Platform. 2016.
- 7 McGivney, Eileen, Jenny Perlman Robinson, and Rebecca Winthrop. *Millions Learning: Scaling up quality education in developing countries.* Brookings Institution. 2016. www.brookings.edu/research/millions-learning-scaling-up-quality-education-in-developing-countries.



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Ms. Costin has been Vice President of the Victor Civita Foundation, dedicated to raising public education quality. Believing in the transformational power of education, she helped create the civil society movement Todos pela Educação, also serving on its technical committee. Convinced that teacher motivation is critical for real learning, Ms. Costin communicates with thousands of teachers using social media.

Ms. Costin has held academic positions at the Catholic University of São Paulo, Getúlio Vargas Foundation, INSPER Institute of Education and Research, Harvard Graduate School of Education and École Nationale d'Administration Publique in Québec. She has a Master's in Economics from the Escola de Administracao de Empresas de São Paulo of the Fundacao Getúlio Vargas.