CRISTÓBAL COBO

Improving the quality of education and favoring innovation in education systems are among the most pressing challenges and priorities worldwide, especially in developing regions such as Latin America. Their relevance is underlined by the work of the international community through two main policy frameworks: the Millennium Development Goals (MDG) and the Sustainable Development Goals. Until 2015, international efforts in education responded to the need to increase enrolment rates and achieve universal primary education, as highlighted by MDG. Access to education is the first step towards introducing other improvements in the education system and despite the fact that there remain challenges in this field, innovation in the education system requires a more comprehensive approach capable of addressing the needs of a 21st century society.

When thinking of large-scale opportunities to bring innovation into education, digital technologies are usually one of the main items on the policy agenda. For instance, in most Latin American countries, digital education policies have mainly focused on the deployment and adoption of digital technologies and, where possible, on connectivity and other educational resources. Although digital education also has the potential to enhance innovation in education systems, as international evidence suggests, the mere introduction of digital technologies does not ensure nor guarantee innovation in education (Santillana, 2016). For instance, by 2015 nearly 30 million students in Latin America had personal computers or smartphones in their classrooms to support their learning (Severin y Capota, 2011).

Evidence suggests that One Laptop per Child (OLPC) and similar programs implemented in Latin America and the Caribbean as stand-alone actions have limited effects on the performance on traditional standardized tests; it should be noted that
governments have spent more than $2 billion on personal laptops in the past few years. (Busso et al [Eds.] (2017).

According to the World Bank, the region has seen a relatively great amount of public investment in digital education through 1-to-1 or similar models (see public programs such as Enlaces in Chile, Plan Integral de Educación Digital in Argentina, Computadores para Educar in Colombia, AprendeMx in México or Plan Ceibal in Uruguay).

As indicated in the Global Compilation of the National Educational Technology Agencies, in the Latin American region there are relevant cases to be considered (usually Plan Ceibal in Uruguay is mentioned as a positive example), but broadly speaking, the focus has been much more on infrastructure than on transforming the role of education in the 21st century (Trucano & Dykes, 2017).

In most Latin American countries innovation in education has focused, at best, on the deployment and adoption of digital technologies and where possible on connectivity or educational resources. Based on the results of different studies, the deployment of digital platforms and the like is not enough to ensure innovation in education (not to mention better performance on standardized tests). There are still several gaps in the implementation of large-scale transformation (national or regional innovations) in the curriculum and teacher training.

When analyzing international experiences, in terms of educational technologies, evidence suggests that the focus should shift from short-term policies that simply hand out computers, laptops and tablets to students, to policies that link access to equipment with strategies for guided use, with suitable contents according to level and subject matter, and with clear goals based on measurable learning indicators.

The OECD (PISA results) also suggests that limited use of computers in school may be better than not using computers at all, however, more intensive use tends to be associated with poorer student performance (2015). ICT is linked to better student performance only in certain contexts. In Latin America, the limited learning effects of computer-based interventions should be emphasized because,
often, introducing technology in schools is considered an easy fix to tackle difficult educational problems. However, the evidence suggests a different perspective (Busso, 2017).

Innovation in the region needs to be supported by cutting-edge scientific research in order to develop evidence-based guidelines. However, the development of research areas that are fundamental to innovation in education is still very incipient in Latin America.

The lack of assessment of digital education policies should be a source of concern. A region that spends about $80 billion a year on primary education should be able to make policy decisions based on a substantial body of data obtained from evaluations conducted in its own context.

There is a need to raise the professional standards of those who promote, implement and monitor innovation in public digital education. That means to increase (both nationally and regionally) technical capacities as well as to diversify the opportunities for collaboration and exchange within those communities that can generate better learning conditions (Caprile, Palmén, Sanz, Dente, 2015).

These are some of the main concerns that led to the creation of the Center for Research Fundación Ceibal, which in partnership with the National Research and Innovation Agency (Agencia Nacional de Investigación e Innovación [ANII]) and with the support of all the universities in the country, organized a global summit between academics and policymakers in Uruguay (also known as Winter School). The goal of this international meeting, which took place in Punta del Este in 2017, was to analyze and discuss cross-cutting topics at the intersection of educational, ICT research and policy with leading international experts in the field.

One of the outcomes of this multi-national collaboration was the publication of this special edition, which addresses some of the critical topics to be considered when designing, implementing and evaluating the quality and cost-effectiveness of different education and technology programs.

This research was conducted by academics and experts from universities and partner institutions from Australia, Mexico, Argentina, Chile, Spain, Israel, and
Uruguay. Adopting different perspectives and approaches, the authors successfully explored how these digital education policies can have a positive impact on the learning processes. Other questions they posed were: how can technological interventions with a real positive impact be designed and implemented? How can the region learn from failures? What lessons can we learn from successful experiences and good practices from other countries? What role does the social and cultural context play in the technology and education equation? Which new languages and pedagogies are worth considering? What are the opportunities and challenges to be considered?

As Megan Erikson argues, 'education is not a design problem with a technical solution', so the fundamental questions of what works, and under what circumstances are more relevant than ever. These, among others, are critical questions to better understand the affordances and constraints of technology in the world of education.

Highly grateful for the global collaboration which supported the elaboration of all these articles you shall find here, we invite you to enjoy a good read and pose new questions that help us rethink learning and equity in a society that is changing and becoming globalized at an unprecedented (and sometimes disturbing) speed.

REFERENCES


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