THEDIALOGUE
Leadership for the Americas

Working Group on Technology and Innovation in Education

FIRST BIANNUAL MEETING: SETTING THE AGENDA

Summary

Latin America is facing an education crisis. More children and young adults are attending school, but an alarming number of them drop out early or graduate with low learning levels. Experts are increasingly worried that young people in Latin America are not well prepared to be productive workers and informed citizens in a fast-changing world. This crisis is largely due to the lack of innovation in schools, as teachers continue to use ineffective pedagogical methods and outdated teaching tools. Meanwhile, technology use in the classroom has had limited impact, as schools have focused on giving students hardware without fundamentally reforming learning models.

Public education systems must explore how to tap into the transformative power of technology to significantly and sustainably change how children learn and how education systems operate. Although school systems have made some valuable efforts, these have had limited effects due to institutional barriers and general resistance to change. Discontinuous political will across different administrations has also made these efforts difficult to sustain. At the same time, few innovations coming from the private sector have achieved the scale and impact that Latin American education systems need.

Latin America is desperately lacking a vision for educational innovation, one that takes advantage of the region's increased connectivity and access to the internet, as well as new technologies such as artificial intelligence, cloud computing, big data and virtual reality.

The Inter-American Dialogue, building on its successful track record as a forum for innovative policy exchange, has established a **Working Group on Innovation and Technology in Education** with the purpose of generating that vision and promoting it at a regional level.

The **mission** of the Working Group is to contribute to creating an **ecosystem for educational innovation** in which actors from the public and private sectors collaborate effectively to generate and scale up new innovations in education.

The Working Group's specific objectives are:

- Generate ideas on how Latin American countries can utilize technologies to revamp teaching methods and improve educational management

- Facilitate knowledge-sharing among different countries and actors in the region

- Improve policies pertaining to educational innovation through strategic interactions with key actors in the region's public education systems

- Promote collaboration among private-sector stakeholders, researchers, public-sector specialists, international cooperation agencies and others on matters of educational innovation

On **January 16, 2019** in Washington, DC, the Working Group met for the first time to set an agenda that will guide the group's efforts over the next two years.

THE INNOVATION AGENDA

During its first meeting, the Working Group identified three areas that are critical to developing an effective ecosystem for educational innovation. The first area involves transforming **students' learning experiences**, so that they motivate students to learn and allow them to develop the 21st century competencies they need to succeed. The second area focuses on improving **teachers' effectiveness** through a better use of technology. The third area involves improving the **efficiency of educational management**, which will help leverage the previous two.
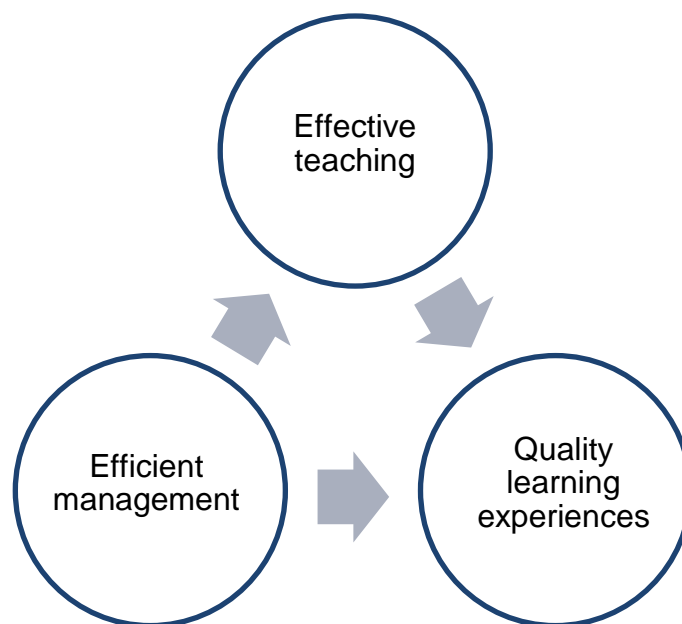
1. Quality learning experiences:

How do we use technology and innovation to motivate and encourage students?

Finding solutions to Latin America's profound learning crisis requires us to take a student-centered approach, which involves giving students greater autonomy over their learning, motivating them to learn, attending to their diverse needs and recognizing their different learning styles. We must break with Latin America's outdated learning models and explore the use of technology to promote **active learning** models, which can include self-guided, group-based, informal or remote learning.

Within this topic, the Working Group seeks to advance the following areas:

1. **New learning models**: School systems must break with the ineffective teaching methods that are pervasive in the region—which are often based on routine exercises, passive learning and rote memorization. Technology in and of itself is not the solution, but the *appropriate* use of technology as part of new learning models can allow us to significantly improve education quality. First, technology can improve student motivation by making the learning experience more dynamic, personalized, and relevant to different communities. Second, technology can complement learning inside the classroom through methods such as self-guided and/or group learning.

2. **New skills:** A globalized, fast-changing world requires us to adapt to new trends quickly and learn continuously over the course of our lives. How can technology help young people develop 21st-century skills? Beyond the obvious need to improve **digital skills**, the effective use of technology can help develop students' **soft skills** (such as collective problem-solving, resilience and leadership), **foreign language learning**, and learning in the fields of science, technology, engineering and math (STEM).

3. **More effective teaching tools:** In order to promote effective technology use over the course of a student's lifetime, countries must adopt a longitudinal vision that identifies priorities at different age levels. One important challenge will be to identify which types of technology are best for students of different age groups, and what the optimal conditions for safe and effective technology use are. These efforts should consider diverse technological tools, including ones that young people already use, such as social media, mobile devices and mass media.

2. Effective Teaching:

How do we design policies that give teachers more time for high-quality instruction?

Although education systems do not depend entirely on in-person interactions between teachers and students, it is unrealistic to conceive of education without teachers. This is especially true in the case of children who require a higher level of attention and care. Therefore, improving the effectiveness of teachers at all levels of the education system is essential. The correct use of technology can promote improvements in teaching in two areas:

1. **Redefining the role of teachers:** The effective use of technology has the potential to redefine the role of the teacher, so that he or she can become a facilitator, motivator and mentor in the learning process. In order to do so, teachers must have the skills and appropriate incentives to implement **new learning methods**—for example, self-guided learning or learning based on projects or games. Furthermore, technology can streamline administrative tasks such as taking attendance and reporting grades—activities that occupy a disproportionately high amount of teachers' time in the region—allowing teachers to spend more time guiding quality learning activities. The use of technology for **student achievement evaluations**, as well as for the transmission and use of student evaluation results, should also be improved. These changes, however, demand important adjustments to management models at both the school and system levels.

2. **Professional teacher development:** Both initial teacher training and subsequent professional development need significant modernization. There is a need to update and revitalize **initial training curricula** to incorporate, for example, digital skills training and instruction on how to use technological tools for teaching, as well as training in cognitive sciences that could help teachers develop more effective pedagogical strategies. It is also important to take advantage of technology to update teacher training methods, such as by developing digital and remote platforms for continuing education. More generally, these technological innovations should serve as **tools for teacher support**. For instance, countries should explore the creation of online platforms where teachers can engage with other peers and access helpful resources.

These innovations should be accompanied by efforts to raise the **status of teaching as a profession**—in other words, improve the social regard for teachers—to make it an attractive career for talented young adults in the region.

3. Efficient management of education:

How can technology help teachers, directors, and other educational leaders to manage education systems efficiently?

Poor educational management is one of the greatest bottlenecks in Latin American education systems. In both ministries of education and in schools, decision-makers do not have an adequate range of information about students and their academic progress. At the same time, the systems for managing human resources, infrastructure and school resources are very weak. Innovation in educational management is an absolute necessity for improving education quality.

Targeted areas for improvement include:

1. **School management:** Management within schools should give teachers and directors useful information about students and their performance. School systems should explore technologies that allow teachers to receive real-time feedback on their students' learning so that they can identify and address weaknesses in class. Technology can also be used to address absenteeism and drop-out rates. For example, with better systems for attendance control, **early warning systems for drop-out prevention** can be created to allow teachers and directors to take preventative actions to support their students.

2. **Human resource management:** At the systems level, technology has the potential to exponentially improve human resource management. For example, administrators should have more information about the composition of the teacher workforce. Furthermore, these systems should allow policymakers to track teachers throughout the school system and to identify the diverse needs of teachers throughout a country.

3. **Managing training markets**: We should improve quality assurance systems for both education and training providers. Along the same lines, we should explore the creation of information systems that give people easy access to their own education and training credentials, which will help improve the value of training and educational degrees in the region.

NEXT STEPS

The Working Group seeks to develop and promote a shared vision for establishing innovation ecosystems that make large-scale educational transformations possible through the use of technology.

Our work plan involves at least three more in-person meetings: one in the second half of 2019 and two in 2020. These meetings will focus on each of the three outlined areas. The meetings will seek to (i) build the case, using the best available evidence, for the transformational potential of technological innovations in each of the three areas; (ii) identify the technical, political, regulatory and financial bottlenecks that hinder the large-scale implementation of these innovations; and (iii) make proposals aimed at specific stakeholders, including governments, businesses, education entrepreneurs, civil society organizations and multilateral organizations, to overcome these barriers.

In between these in-person meetings, the Inter-American Dialogue will arrange virtual meetings and exchanges to aid the Working Group in identifying successful models to inform the group's actions. The members of the group will be invited to participate actively in these exchanges by contributing their ideas and experiences. Where possible, the Working Group will also look to incorporate international experts to enrich discussions.

Each meeting will be followed by the publication of a short report that summarizes the Group's conclusions and presents its recommendations for action. The goal is to develop an action plan for multisectoral collaboration on educational innovation that catalyzes new projects and alliances and influences public policy.

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