

The emergency has accelerated technological integration in university education. However, three out of four professors in the region do not feel prepared to use new digital technologies in the classroom. The lack of technological and financial resources, strategic planning, and training are considered the main challenges for their integration. More spaces for collaboration, digital skills diagnoses, and training are essential to face the educational challenges imposed by the pandemic.

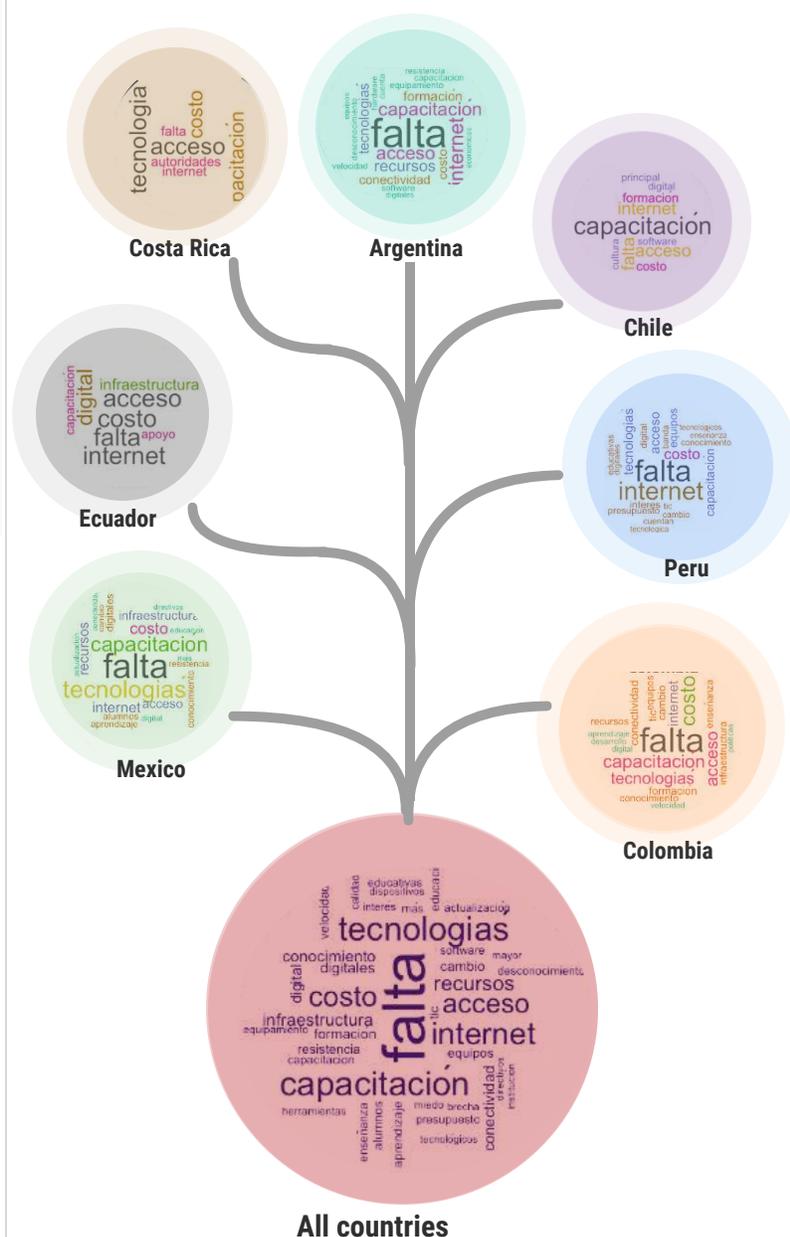
COVID 19 has placed digital technologies as protagonists in the teaching and learning processes

- In higher education, the pandemic has affected more than 26 million students and 1.4 million¹ professors who have suddenly moved into a virtual environment to continue educational processes.
- Pre-COVID-19, only 19% of higher education programs focused on online education, and 16% used blended modalities in universities with a virtual-based approach.²
- A regional study carried out by the IDB and the Instituto Tecnológico de Monterrey between February and March 2020, consulted more than 800 university professors about their perception of the penetration of digital technologies in universities.³

Lack of adequate training, internet access and funding are perceived as the main challenges for incorporating digital technologies in universities

- 90% of professors consider digital technologies useful to improve learning processes. However, there are significant challenges for its integration.
- In Argentina and Peru, 40% and 30% of professors, respectively, consider that lack of internet access is the main obstacle.
- 27% of professors in Colombia and 22% in Mexico consider the lack of funding and access to new technologies as the main challenges.
- In all the participating countries, the lack of faculty training was highlighted as one of the main difficulties with using digital technologies for teaching and learning.

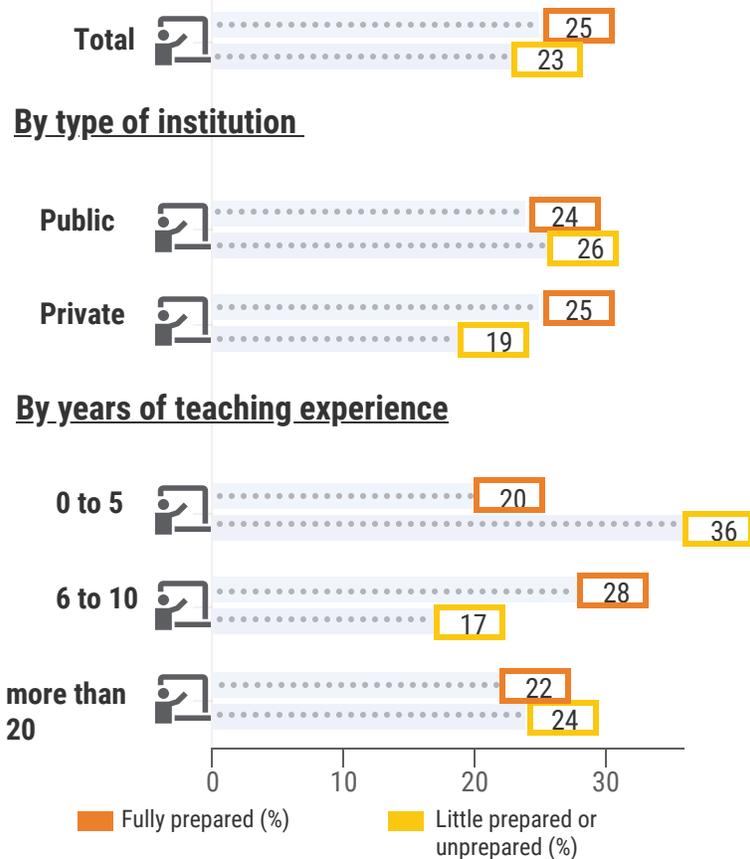
OBSTACLES TO THE USE OF DIGITAL TECHNOLOGIES IN THE TEACHING AND LEARNING PROCESS



Source: Study on the use of digital technologies for teaching and learning in LA (2020).

Note: Results of the processing of the main words used by professors to describe the challenges of using technology in their universities.

PROFESSOR PREPARATION FOR THE INCLUSION OF DIGITAL TECHNOLOGIES IN THE CLASSROOM



Source: Study on the use of digital technologies for teaching and learning in Latin America (2020).

Note: Technical preparation refers to professors' self-perception of their ability to include new digital technologies in their courses.

38% of professors report that their universities do not have training programs for the use of digital technologies

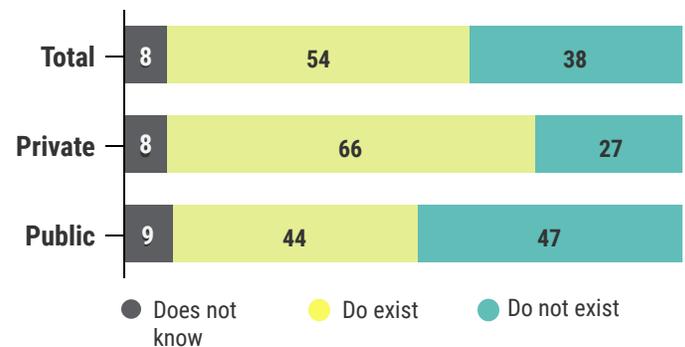
- The gap between the availability of digital training programs reported by professors from public and private universities is 23 percentage points.
- Six out of every ten professors who report having participated in training programs find them useful.
- 59% of professors report that their university has not developed an incentive system to promote the development of projects using digital technologies.
- 64% of professors in public universities do not consider that an incentive system exists. This proportion is 54% in private universities.

Only one out of four professors feels fully prepared to incorporate new digital tools into their courses

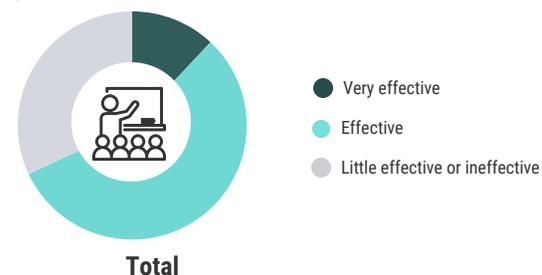
- 74% of professors report knowing new technologies applicable to the courses and disciplines they teach.
- 30% of professors with between 6 and 20 years of experience feel fully prepared to incorporate new technologies. Only 20% and 22% of professors with between 0 and 5 and more than 20 years of experience feel the same.
- While 19% of professors in private institutions feel little prepared or unprepared, 26% of those in public universities have this perception (there are no significant differences between ages or years of experience between the two groups).

AVAILABILITY AND EFFECTIVENESS OF DIGITAL TRAINING PROGRAMS FOR UNIVERSITY PROFESSORS

Program availability



Effectiveness perception



Source: Study on the use of digital technologies for teaching and learning in Latin America (2020).

Note: Perception of availability of digital training programs shows the proportion of professors who answered question regarding whether within their universities training programs existed or not and how effective they considered them.

Four out of ten professors report not access to internet, or that the speed of internet access in their institution is not optimal

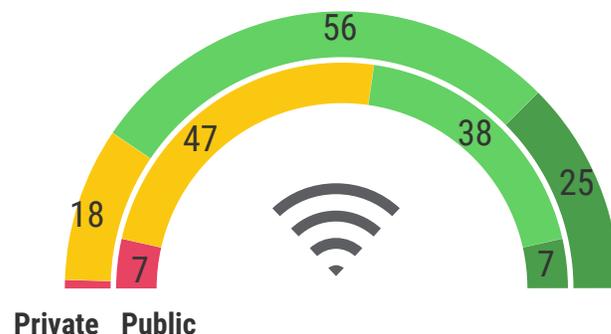
- In Argentina, 60% of professors report their universities have low or no internet connection. In Mexico and Colombia, this proportion is less than 35%.
- While 19% of professors in private universities report not having internet access or the speed is slow, this proportion rises to 55% in public universities.
- 75% of the professors reported that their institution had a Learning Management System - LMS.
- This share is 86% among professors in private universities and only 68% among those in public institutions.

The cost of licensing is one of the most critical obstacles to the appropriation of digital technology

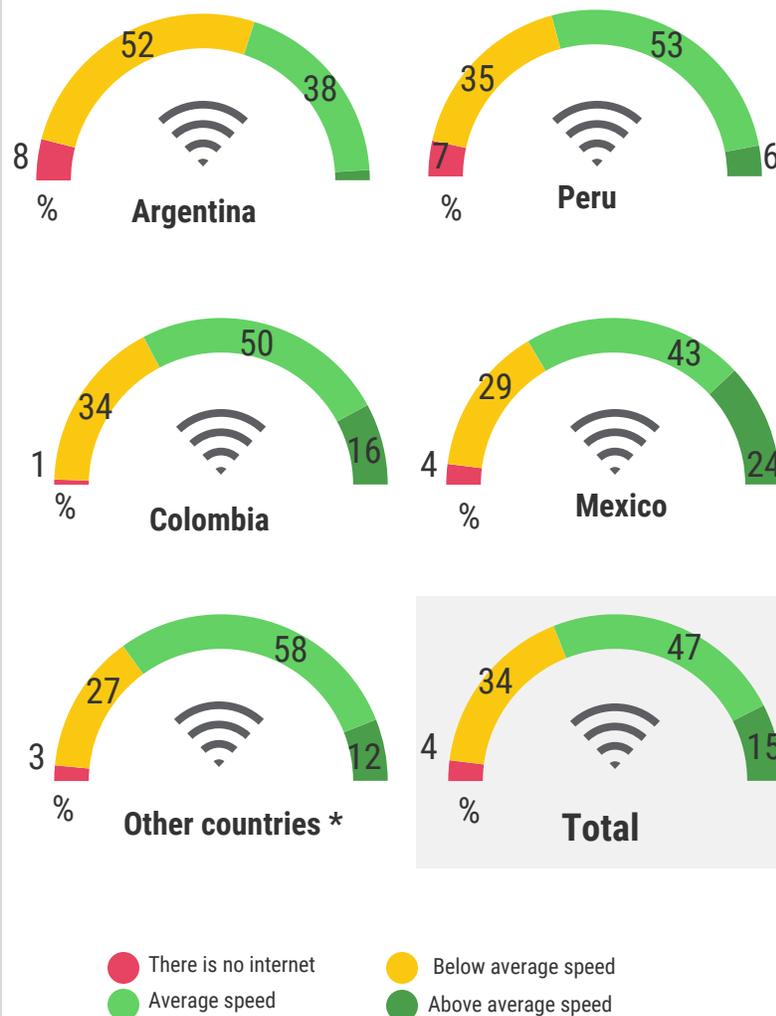
- Seven out of ten professors consider the high cost or lack of resources for digital licenses as a factor that hinders its adoption.
- This perception is higher among professors in public universities (76%) than among those in private institutions (67%).
- Among the countries analyzed, this proportion ranges from 69% of professors in Argentina to 77% of professors in Colombia.

ACCESS TO AND VELOCITY OF INTERNET SERVICE IN UNIVERSITIES

By type of institution



By country



Source: Study on the use of digital technologies for teaching and learning in Latin America (2020).
*** Other countries** refer to Brazil, Chile, Costa Rica, Ecuador and Uruguay, where the participation of professors in the survey is less than 12%.
Note: There are no statistically significant differences between the proportion of professors in public and private institutions.

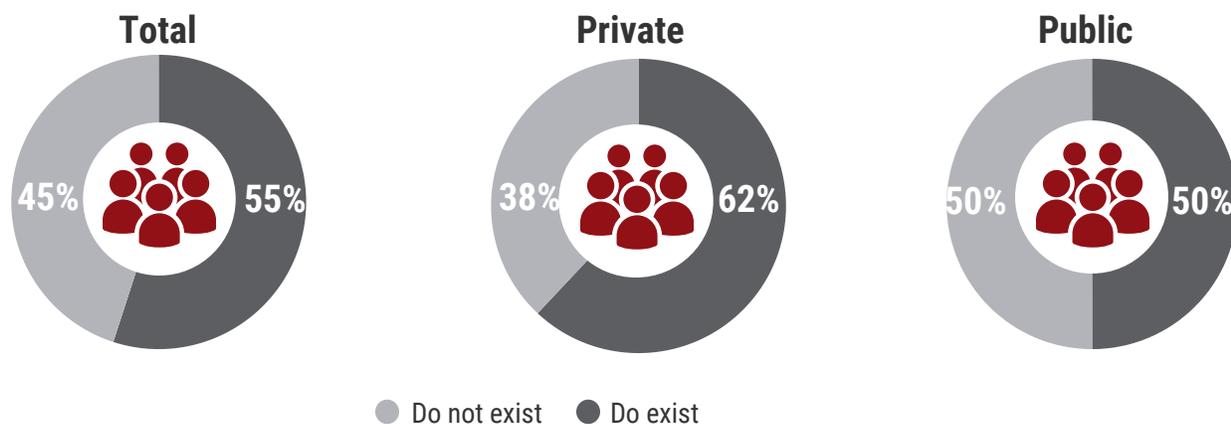
One out of four professors considers that their institution does not have a vision of using digital technologies to improve teaching and learning

- This ratio is one in five (17%) for professors from private universities and one in three in public universities (32%).
- 3 out of every 7 professors consider that there are no collegiate spaces for discussion to promote and plan the use of technology to improve learning.
- This proportion is 38% among professors in private universities compared to 50% in public universities.

Digital tools are now central to higher education processes. It is essential to take advantage of available opportunities to accelerate their adoption.

- Creating spaces for the exchange of experiences between public and private universities or non-university entities can facilitate cross-learning among professors.
- Countries like Colombia and Mexico have created spaces to discuss and exchange digital experiences, such as partnership programs between professors inside and outside the universities.
- Strategies for digitization like DigCompEdu in the EU and digital self-assessment tools like Check-In can improve professors' digital readiness and learning during and after the emergency.

PROMOTION OF COLLEGIATE SPACES FOR DISCUSSION ON THE USE OF TECHNOLOGIES FOR TEACHING AND LEARNING IN UNIVERSITIES



Source: Study on the use of digital technologies for teaching and learning in Latin America (2020).

Note: The promotion of collegiate spaces refers to the percentage of teachers who report that spaces for discussion and planning of the use of technologies for learning are provided in their HEIs.

The Information Center for Improvement in Learning (CIMA, for its acronym in Spanish) of the Education Division of the Inter-American Development Bank seeks to promote the use of data and indicators in evidence-based decision-making when developing education policy, with the goal of providing a quality education for all. With this objective, CIMA publishes a series of briefs that analyze indicators that contribute to the improvement of education quality in the region.

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Publication date: June 2020



References: 1. UNESCO, 2020; 2. OECD (2015, p. 68) "E-Learning in Higher Education in Latin America". 3. Study financed by the IDB and developed together with the Instituto Tecnológico de Monterrey. The study is based on surveys of more than 800 LA university teachers about their perception of the penetration of digital technologies in higher education. The surveys were distributed through the Observatory of Educational Innovation. The countries that were part of the Study were: Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Peru, and Uruguay. 4. The Digital Competence Framework for Educators (DigCompEdu) and the online self-reflection tool (Check-in) are part of the European Union's digital transformation strategy for education (2019) more information: <https://ec.europa.eu/jrc/en/digcompedu>

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