



**BRIEF COMMUNICATION**

## Argentine higher education in the COVID-19 pandemic and in the post-pandemic period

### La educación superior argentina en la pandemia por COVID-19 y en la pospandemia

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#### ABSTRACT

The closure of higher education educational centers, including higher education institutions, was one of the first measures taken by the Argentine National Government to prevent the spread of the new SARS-CoV-2 coronavirus. This article addresses some strategies related to teaching in higher education carried out during the COVID-19 pandemic in Argentina, as well as future projections or recommendations that could be derived in the post-pandemic stage with the aim of having strategies of coping with similar situations. The pandemic generated a deep reflection on institutional educational practices in the country, in particular, regarding their pedagogical sufficiency to take on the challenges of training mediated by technological resources. Virtual education implies extra work for the teacher, not only because of the preparation of materials, but also because of the need to always be available to hundreds of students. In the case of higher education, current reality has shown that, although some careers or subjects are practically impossible to do in virtual mode, in others it is feasible and even practical; The need arises then to review the curricular networks in the universities. Not only teachers, but also students, should be willing to change traditional models of education and find more participatory roles, so that this situation, a product of the health crisis, translates into a positive change in the educational processes of education. Argentine superior that is maintained in time.

**Key words:** COVID-19; Higher Education; Argentina; Pandemic; Curriculum.

#### RESUMEN

El cierre de los centros educativos de educación superior fue una de las primeras medidas que tomó el Gobierno Nacional Argentino para evitar la propagación del nuevo coronavirus SARS-CoV-2. En el presente artículo se abordan algunas estrategias relacionadas con la enseñanza en la educación superior llevadas a cabo durante la pandemia por COVID-19 en Argentina, así como futuras proyecciones o recomendaciones que podrían derivarse en la etapa pospandemia con el objetivo de contar con estrategias de afrontamiento ante situaciones similares. La pandemia generó una profunda reflexión sobre las prácticas educativas institucionales en el país, en particular, respecto de su suficiencia pedagógica para asumir los retos de una formación mediada por recursos tecnológicos. La educación virtual implica un trabajo extra para el docente, no solo por la preparación de materiales, sino por la

necesidad de estar siempre disponible para cientos de estudiantes. En el caso de la educación superior, la realidad actual ha mostrado que, si bien unas carreras o materias son prácticamente imposible realizarlas en modalidad virtual, en otras resulta factible e incluso práctico; surge entonces la necesidad de revisar las mallas curriculares en las universidades. No solo los docentes, sino también los estudiantes, deberían estar dispuestos a cambiar los modelos tradicionales de educación y encontrar roles más participativos para que esta situación, producto de la crisis sanitaria, se traduzca en un cambio positivo en los procesos educativos de la educación superior argentina que se mantenga en el tiempo.

**Palabras clave:** COVID-19; Educación Superior; Argentina; Pandemia; Curriculum.

## INTRODUCTION

On March 11, 2020, the World Health Organization (WHO) declares the new COVID-19 disease caused by SARS-CoV-2 as a global pandemic. At a press conference, Tedros Adhanom Ghebreyesus, WHO Director-General pointed out that the number of cases outside China increased exponentially, and the number of countries with cases increased three times. In the same way, he expressed deep concern both about the levels of severity, propagation and inaction.<sup>(1)</sup>

Two months passed until the virus reached Argentina, after causing concern and thousands of infected in several countries in Europe, Asia and America. Thus, on March 3, the first case in the country was detected, after several false alarms and numerous suspicious cases that yielded negative results. Since March 9, 2020, schools began to have cases of students with preventive isolation.<sup>(2)</sup>

On March 19, 2020, at a press conference by President Alberto Fernández, quarantine was decreed in Argentina, whose official name is Social, Preventive and Obligatory Isolation (ASPO). This was decreed at the national level by decision of the Government of the Argentine Republic by unanimous election through the National Emergency Decree (DNU) 297/2020.<sup>(3)</sup>

The closure of educational centres, from the primary level to the universities, was among the first measures taken by the government in order to prevent the spread of the virus.

That closure, while bringing relief, since closing them alone becomes a powerful non-pharmaceutical intervention, also implicitly constituted a challenge in the contingency for higher education.

The objective of this article is to describe the strategies carried out in the Argentine Republic during the pandemic, as well as projections and recommendations applicable in the post-pandemic stage.

## DEVELOPMENT

### Brief characterization of higher education in Argentina

In Argentina, according to the Higher Education Law, "*Higher Education aims to provide scientific, professional, humanistic and technical training at the highest level, contribute to the preservation of national culture, promote the generation and development of knowledge in all its ways, and develop the attitudes and values required by the formation of responsible people, with ethical and supportive awareness, reflective, critical, capable of improving the quality of life, consolidating respect for the environment, the institutions of the Republic and the validity of the democratic order*".<sup>(4)</sup>

The institutionalization of the university educational system in the Argentine context arises with Law 1,420 in 1884<sup>(5)</sup> from the rise of the standardized training model, promoting the impulse of the democratization of common, free and compulsory education, as a product of the need to activate the progress and development of society in the local framework. Another antecedent in the matter of university education is established by the enactment of Avellaneda Law No. 1,597<sup>(6)</sup> which calls for the reformulation of the organic statutes and full performance based on autonomy in the governing bodies of

each faculty that is in the orbit of the university. Higher education evolved and transformed its institutional practices based on the student and academic movements that gave it meaning and meanings that traced the history of higher education in Argentina.

With the advent of globalization, the standards of curricular designs, overcrowding of education and the right to access and opportunity to empower each citizen by going through the training course in the houses of higher studies.

Faced with the ideological, political and economic, social and cultural conditions of the context in the decade from 1990 to 2000, milestones were triggered that modulate and configure a new scenario and legitimation of higher education in Argentina.

In this way, it takes meaning and socio-institutional validation through the enactment of Higher Education Law No. 24,521, which recognizes universities and university institutes, state or private authorized and institutes of higher education of national, provincial or regional jurisdiction of the Autonomous City of Buenos Aires, with state or private management.<sup>(4)</sup>

The Resolution 2641-E / 2017 currently regulates distance higher education since mid-2017. This resolution addresses the institutional system that the university must have that incorporates or has a Distance Education modality, unifying the system, its evaluation system, for undergraduate, graduate and postgraduate careers. For this, it is based on criteria to be followed in the presentations for the official recognition of careers dictated under this modality.<sup>(7)</sup>

A reform project of the National Education Law 26.206 was recently proposed, which dictates the qualification of distance education, for all ages, at all levels and modalities of the National Educational System, in the face of emergencies.<sup>(8)</sup>

### **The pandemic from the perspective of education, an unexpected or unforeseen situation**

Overnight, Argentine education was involved in campuses, forums, social networks or WhatsApp groups. In the current times of global health emergency, any attempt to continue doing what was done in both undergraduate and graduate degrees is disarmed.

According to UNESCO, there are 1,091,439,976 affected students to date, 62,3 % of the total enrolled students, and total closures of educational centres in 123 nations are reported.<sup>(9)</sup>

Flexibility then becomes a change that requires virtual learning, coupled with the recognition of the controlled structure of the educational system.

The COVID-19 pandemic has generated profound reflections in relation to institutional educational practices, fundamentally regarding the pedagogical capacity to take on the challenges of a training mediated by technological resources.<sup>(10)</sup>

The demand to teach at a distance revealed the inequality in the educational offer and the difficulty of teachers to approach the optimal training of all their students regardless of their social situation.

### **Social inequalities emerge**

Fernanda Ozollo and col.<sup>(11)</sup> researchers at the National University of Cuyo, argue that education is an encounter, a bond; it is to act dialogically from and with the other in learning. In this sense, at least three dimensions are recognized to address the problem: the political-institutional, the pedagogical-didactic and the technological-communicational. Institutions mediate between national politics and actors; Whether or not they adhere to the guidelines and actions to guarantee the right to education and the adaptation of techno-pedagogical strategies will depend on them.

The health emergency context facilitated the use of online educational environments.

For this reason, a program was presented in Argentina that allowed students who could not attend schools to access the Internet in order to continue with their studies. Faced with the crisis, many educational institutions responded initially with the resources they had, and as the weeks went by, the institutional technological capacities installed were strengthened.<sup>(12)</sup>

The ASPO revealed shortcomings and limitations not only in the health sector, but also in one of the pillars of a country's development, education.

The first questions that arose from virtual education were what will students who do not have access to the internet or online platforms do?

Although in Argentina 62 % of the population is connected by mobile phone, students, family members and teachers found them faced with a scenario that raised a large gap in technological access, which makes us think about the particularities in the family and social context.

The Federation of University Teachers (FEDUN), the Argentine University Federation (FUA) and other organizations promoted the campaign "Let's study all connected", an initiative that seeks that companies that provide cell phone services release data from Mobile internet for students and teachers, to guarantee access to virtual education promoted by the Ministry of Education under the current context.<sup>(13)</sup>

Through an agreement reached by the Ministry of Education, the National Communications Agency (ENACOM) and companies that provide telephony and internet services, access to the educational platforms of the 57 national universities will not consume mobile data. In this way, students will be able to enter these portals from their devices at no cost.<sup>(14)</sup>

Seeking to guarantee social inclusion, equity and well-being of university students so that they have the necessary connectivity to develop virtual academic activities; Institutions such as the National University of the Northeast (Corrientes) implemented scholarships for students who require the resources to access the teaching of classes through the virtual modality. The "Conectar UNNE Scholarship" is intended for students "who do not have Internet connectivity in their homes, or sufficient socioeconomic resources to meet the costs of the Internet connectivity service".<sup>(15)</sup>

Other initiatives such as "Your PC to study" of the National University of La Plata, or the loan of computers to students of the Faculty of Exact Sciences of the University of Buenos Aires, and in the Faculty of Philosophy and Letters of the National University of Whose, just to mention a few, are actions aimed at those students who do not have computers to develop the virtual course.<sup>(16,17,18)</sup>

Because school is no longer the place where you learn, it forces you to contemplate those differences that are generated in homes. Housing conditions and study environments are other elements that affect both students and teachers.

Virtual classrooms, recorded classes and deferred activities allow students to move, within a certain limit, at their own pace of learning. This measure benefits, above all, those who, along with the study, have jobs that in many cases took up long hours.

The elements raised make it necessary to think of compensation strategies so that students can make up for lost teaching time.

### **Subjects and careers: essential presence?**

In Argentina one of the most used tools in virtual meetings is Zoom, however, Google Classroom, BigBlueButton and Jitsi Meet enjoy great acceptance. In the same way, digital presentations, audios, videos are used on platforms such as YouTube and digital libraries.<sup>(19)</sup>

Health sciences careers have encountered a great limitation in this context, given the need for face-to-face practical activities, despite the advancement of telemedicine.

The clinical education, the physical examination and the patient interview, the experiences lived with the health team cannot be replaced by mobile devices or virtual environments. However, there is no doubt that these work as a complement for the development of competences such as critical reasoning, updating and management of health information.<sup>(19)</sup> It is recognized that, in this particular case, a practical post-pandemic instance will invariably be necessary.

Distance education has not shown superiority in all cases over traditional education. This supports that the new techniques should not be used only for the fact of being new, but for the impact they can have

on the quality of teaching.<sup>(20)</sup> Therefore, it would not be necessary to use it in a generalized way, but rather selected or waiting for situations like the one we are experiencing at this time to arise.

Current reality has shown that, although some careers or subjects are practically impossible to do in virtual mode, in others it is feasible and even practical. The need arises then to review the curricular meshes in the universities. On the one hand, the flexibility of the curricula would benefit both students and teachers and on the other hand it would represent a substantial saving of resources; however, research is needed to support these recommendations.

### **Educational evaluation in the context of the pandemic, a pending issue**

Online education does not consist in the simple fact of adapting pedagogical content to online educational platforms in order for students to complete their activities, assignments and exams, teach classes or communicate with them.

On the other hand, this context promotes the discussion about the evaluation and accreditation of the knowledge that, anchored in the current school year, implies attending to the differentiated routes of the students before the suspension of face-to-face classes. In addition, it is necessary to work in the necessary infrastructure conditions so that the students who need it most can deal with both the current and indeterminate interruption and its effects.

Alemán y col.<sup>(21)</sup> suggest that individualized evaluation based on professional competencies and not on time should be considered. In this way, the student can be certified in acquiring these competences and not in having spent a certain time in a subject to qualify as competent.

In the province of Buenos Aires, criteria were established for teaching and evaluating educational practices in the context of the pandemic. The contingency in this case called for the processes to be analysed in a dynamic way in order to redefine the conditions so that there is no overload of tasks and contribute to decision-making in the new context of the school year; without losing the vision from the base of democracy, equality and educational quality.<sup>(22)</sup>

Evaluations with a “camera on” or with a permanent connection become scenarios that place students who present a more disadvantaged social and economic situation at a real disadvantage with respect to the evaluation.

Trujillo Sáez y col.<sup>(23)</sup> carry out a scenario analysis for the evaluation and propose four possibilities:

1. **Autonomy of the centres:** It implies that the government does not make any decision regarding evaluation beyond maintaining the functioning of teaching and evaluation similar to a “normalized” situation of the educational system. For this they invoke the autonomy of the centres in such a way that they are the ones who make the decision regarding the evaluation of their students.
2. **Curriculum adjustment:** It proposes the adjustment of the curriculum to adapt it to the confinement situation as a consequence of COVID-19. In this way, a curriculum of minimum content is agreed or because the educational centres, where teachers focus on minimum objectives and evaluate these minimum objectives with the means at their disposal.
3. **Positive conditional assessment:** In this scenario, it will be agreed to give a positive assessment to all students provided that minimum conditions are met that may be linked to issues such as the performance of specific tasks by the student. The complexity and number of assignments would be used to delineate the grades between passing and outstanding.
4. **Positive evaluation without conditions:** the educational system could consider that the responsibility for a possible school failure under current conditions should not fall on students and their families. For this reason, the educational system would avoid a possible situation of generalized failure by guaranteeing promotion and promoting specific educational reinforcement plans during the next academic year.

These scenarios show visions from different perspectives and are a tool for the possibility of involving participants in a process of conversation about the development and future of education.

In any of the cases, it is important to note that teachers make a great effort to evaluate despite the distance and that is meritorious. And beyond that there are others who take advantage of the crisis as an opportunity for innovation in the evaluation and design of newer formats.

Another no less important issue, with a much more immediate acceptance and application, was the virtual presentation of graduate and postgraduate theses. Although in many faculties there were precedents, the possibility was opened for students to defend their thesis in a virtual way and existing procedures were enabled or modified.

### **Educational management: from b-boss to m-boss**

The new prevailing reality and considering that the academic year should begin in April, forced the teachers to give the first classes or retake the subjects relying solely on their creativity and their attitude of doing things well. Many of them had no previous experience in teaching in virtual environments or this had been limited to sharing materials on the web.

Educational management is also faced with a great challenge, which cannot be left at the mercy of subjective interest. Therefore, an approach with strategies and pedagogical planning is necessary from the highest level of the institution.

In this sense, technology can become an obstacle, or an ally, when it comes to improving teaching practices and the quality of student learning.

The boss then becomes one more companion-apprentice, contributing his grain of sand in this hard process that his teachers go through; where management, distributing their leadership among managers and teachers, and establishing pedagogical indicators of the use of technology are vital tools.

### **The future of education and foresight that could not be**

Teachers with a long teaching career in the classroom suddenly found it necessary to modify or shrink their teaching methods and didactic resources to face a new experience: the drastic change that the teaching process represents in a virtual modality, through digital platforms, most unknown to them. There was not even time to receive a minimum training on the basic handling of some of these tools and, instead, the enormous deployment of virtual technologies is overwhelming: Moodle, Zoom Meeting, Skype, Google Hangouts, Google Meeting, Google Classroom, Blackboard. Even WhatsApp, through group communication, was used for teaching purposes, which is why in times of social distancing; it began to be part not only of the didactic lexicon, but also of the teaching practice.<sup>(24,25)</sup>

In this way, teachers have not only seen the need to learn the technical mechanisms of virtual education in isolation, but they are also very likely experiencing adaptation processes to the new situations imposed by online education; especially if it starts from the fact that the effectiveness of teaching in the classroom is based on good social interaction between teacher and students.<sup>(24)</sup>

Virtual education implies extra work for the teacher, not only due to the preparation of materials but also due to the need to be permanently available to hundreds of students.

It should be taken into account that, especially in the initial years of careers, virtuality could severely affect the process of educational socialization and the relationship between teachers and students.

## **CONCLUSIONS**

It is concluded that Argentina requires the priority implementation of public policies that promote the expansion of coverage and improvement of the quality of the Internet connection in the Argentine territory, as well as a public policy on digital education that relies on production of content and the distribution of technological devices with a pedagogical use.

The pandemic has deepened inequalities, aggravating the educational gap in the country, therefore, in order to mitigate its effects, the State must, from an approach that contemplates social justice, implement an intervention aimed at addressing the effects of the emergency in the education sector in the short term, together with medium and long-term interventions that aim to compensate for lost teaching time, especially for students in situations of greater vulnerability.

Online teaching requires a set of resources to ensure that the student is accompanied throughout their learning process, that they have the appropriate support and the experience and preparation necessary to offer quality resources, teamwork between teachers and students and a solid educational and pedagogical model.

Nobody is prepared for something like this, but it is our time and it is necessary to face it with resilience. From education, we must be attentive to what can and cannot be done in order to sustain teaching and learning processes in the best possible way, with an eye also to the future and what we want for it.

Not only teachers, but also students, should be willing to change traditional models of education and find more participatory roles, so that this situation, a product of the health crisis, translates into a positive change in the educational processes of education Argentine superior that is maintained in time.

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