

## Presentation of the special issue "Transition from conventional education to online education and learning, as a consequence of COVID19"

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The coronavirus pandemic seems to have caught everyone by surprise. Yet, its global impact has been rapid and dramatic. Over 1,7 million lives were lost in less than a year. The economic and social disruption caused is absolutely devastating as nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. In this chaotic scenario, the pandemic has presented also an unprecedented challenge to education which is leading to major changes in the sector.

The closing of schools and campuses around the world as a result of social distancing measures and lockdown policies led to an accelerated and massive transition of educational institutions to distance and online learning. This represented a readaptation of conventional teaching and evaluation forms into others that were feasible under the new circumstances. In fact, having become a political goal that formal learning couldn't stop, the only possible way for school and university activities to carry on was to conduct them remotely from teachers and students homes. However, such a complex operation was implemented overnight without appropriate planning as simply there wasn't enough time. Institutions, teachers, students and their families had to rapidly respond, adjusting to an unforeseen and quite unstable situation.

Soon a number of obstacles started to surface. Firstly, the increase dependence on technology exposed the digital divide still affecting our societies, even in the countries with more resources. This new form of exclusion results from social inequalities. But, somehow public opinion looked at online learning as a tool for extending them. Another apparent obstacle was the lack of updated infrastructure and broadband internet access, particularly in less developed regions.

However, the main obstacle seemed to be the low digital literacy of teachers and students. To this added the inertia of teaching methodologies and traditional forms of evaluation based mainly, or exclusively, on expository methodologies or face-to-face exams.

In spite of the best efforts by authorities, education institutions, professional organizations and communities, it became evident most teachers didn't have the needed competences and skills to deliver high quality online-based teaching. Difficulties in addressing digital divide issues, teacher and student workload, digital fatigue, unawareness of personal data privacy and management issues as well as a general misconception regarding distance education methodology and online learning pedagogy could be found across all education subsectors worldwide. The same could be said of teaching practices based on more active learning and on formative assessment models, more based on interaction, supervision and participation.

Mostly unprepared for online education, teachers scrambled to make sense of what it meant to teach at a distance using a fully online learning environment. They struggled to create content that was engaging and relevant, or experimenting with digital assessment. Choosing to play safe and avoid major risks, the majority simply limited to replicate their traditional classroom experiences, delivering lectures online through web conferencing systems, such as Zoom, Skype, Microsoft Teams, and WhatsApp, and online test-based assessment practices. This oversimplification of distance and online teaching and learning methodology has resulted in an excessive focus on content delivery, devaluing proper student support and feedback which is of paramount importance to assure student performance. The same should be noted in relation to the predominant use of synchronous communication instead of asynchronous one which is more appropriate as it promotes flexibility and reflection (Bates, 2020).

As experts have pointed out, most of these practices can be best characterised as emergency remote teaching, which is defined as "a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances" (Hodges et al., 2020). The aim is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency or crisis. Several have gone as far as to calling them 'panic-gogics' (Kamanetz, 2020). In fact, these expressions only reiterate the short-term nature and lesser effectiveness of the pedagogical approaches used.

We should recognize though that the pandemic has contributed as well to shown the limitations of current theoretical models on technology-supported teaching and online teaching. This is particularly true in what relates the scarcity of solid research and best practices on distance an online learning for non-adult populations, notably children.

In this unique moment in the modern history of education many mistakes and failures have unfortunately been made. Misconceptions resulting from the rushed efforts to teach digitally have hindered the reputation of distance and online learning (Czerniewicz, 2020; Baggaley, 2020). It could undermine "decades of work and experience with what works, and how it works, both pedagogically and technologically" (Naidu, 2020). But, this massive experiment has also fostered the digital transition of the education systems and institutions. Although institutions that normally teach face-to-face in classrooms or on campuses will likely return to that mode of instruction with some relief, the special arrangements they put in place during the COVID-19 crisis will leave a lasting trace (Daniel, 2020). As Naidu (2020) points out for proponents of open, flexible, and distance education this is the best of times. After decades of existence on the peripheries of conventional campus-based educational practices, distance and online education is no longer learning at the backdoor.

In order to support the quality of this transformation of institutional organizational cultures and teaching and learning practices, research is called to play a critical role. On one hand, it's important that the change of practices is actually informed by research results and based on its recommendations. On the other hand, the growing interest on technology-enhanced forms of teaching and learning is attracting an increasingly higher number of studies and researchers. The research community output on open and digital education is bound to expand dramatically in the coming years.

This trend can already be seen in the special issue of RED dedicated to the "transición de la educación convencional a la educación y al aprendizaje en línea, como consecuencia del COVID19". This issue assembles close to one and a half dozen articles presenting a rich array of topics and approaches. The authors represent a diverse cultural background as well, coming from countries as different as Spain, Taiwan, Portugal, United Kingdom, Brazil, United States, Mexico or Colombia.

The focal topic of most contributions relates obviously to how the pandemic has affected the educational systems. Jordan, David, Phillips, & Pellini approach it from the perspective of the relation between teacher/educators and technology in their excellent article entitled "Educación durante la crisis de COVID-19: Oportunidades y limitaciones del uso de Tecnología Educativa en países de bajos ingresos". The authors aim at demonstrating EdTech alone cannot close the learning gap. In their discussion paper they reflect on the critical importance of combining the dedication and resilience of teachers and educators with the efficient support of EdTech tools for ensuring learning doesn't stop. They explore some of the key constraints of using EdTech at scale to support education in low-income countries at a time of crisis, and highlight the opportunities that have so far emerged, in a rapidly-changing context. The authors draw upon evidence and examples to inform policy and programming decisions, moving from the initial emergency response to building resilience in the longer term, and planning to diagnose and treat the learning gaps that have emerged during the crisis. There is one last point to highlight: this work is the Official Full-Text Publication of the report on Education with Technology during the Covid-19 crisis in poor countries, commissioned by the British Foreign Office, through the UK's Department for International Development. The preparation of the report was initially entrusted to the team of researchers from the universities of Cambridge and Oxford led by Katy Jordan.

Another significant contribution focusing on the impact of Covid-19 in educational systems is presented by Area-Moreira, Bethencourt-Aguilar, Martín-Gómez & San Nicolás-Santos in their very interesting article "Análisis de las políticas de enseñanza universitaria en España en tiempos de Covid-19. La presencialidad adaptada". In their research, the authors analyze the educational policy proposals by Spanish public universities prepared for the new 2020-21 school year. The study is based on the recommendations offered by the Spanish Ministry of Universities, as well as the different resolutions or indications made by the institutional leadership. The article concludes by noting that there is a similar policy for the Spanish university system derived from the recommendations of the Ministry of Universities on adapted attendance. Likewise, the authors indicate that said concept does not exist in the academic literature, but that it responds to the modality of blended, hybrid or blended learning teaching. They note at the end that these policies are short-term and only designed to respond to the health emergency, thus lacking a more strategic vision on the digital transformation of higher education.

A relevant aspect during the pandemic has been the impact on mental health. Most analysis have focused on the high levels of stress and anxiety suffered by the educational communities resulting from the long periods of lockdown and social distancing. Gómez León brings however an innovative perspective, highlighting the positive impact of digital learning for the victims of bullying. In her article "Disminución de la ansiedad en las víctimas del bullying durante el confinamiento por el COVID-19", she conducts a study involving 276 teenagers, in which levels of anxiety, depression,

academic performance and cyberbullying are compared before and after confinement. Significantly, the lockdown hasn't affected the academic performance of the students victims of bullying and has even allowed to improve their levels of depression and cyberbullying. Differently, the other students didn't increase their levels of anxiety, but had their academic performance affected.

As noted before the research community differs substantially emergency remote teaching practices from online learning methodology. However, how do students perceive and evaluate this difference? Niño Carrasco, Castellanos-Ramírez & Patrón Espinosa provide us with a much interesting insight in their article "Contraste de experiencias de estudiantes universitarios en dos escenarios educativos: enseñanza en línea vs. enseñanza remota de emergencia". The authors explore the experiences of university students around the instructional action received in an online teaching setting, before Covid-19, and in an emergency remote teaching setting, during the pandemic. They interestingly found that the means were higher for the online teaching scenario compared to the emergency remote teaching scenario, although statistically significant differences were only found regarding the instructional design, the assessment of learning and the participation of students in the subjects.

One of the main advantages of online learning is that it promotes the collaborative construction of knowledge. Lin & Reigeluth address this theme in their excellent article entitled "Orientación para el aprendizaje colaborativo apoyado en wiki y construcción de conocimiento comunitario para una clase completa: Cómo mejorar los entornos de aprendizaje durante la pandemia COVID19". They present an instructional theory for collaborative learning supported by wikis in the context of small-group projects. Identifying the challenges regarding student motivation, group dynamics, and assessment. The authors of the study conclude that using wikis to foster a culture of sharing, and to increase student motivation and participation in individual or group project work, as well as in community knowledge building for an entire class, may enrich learning by creating learner-centered, knowledge-centered, assessment-centered, and community-centered learning environments.

The importance of good specific online learning design is also demonstrated by Díaz Guillen, Andrade Arango, Hincapié Zuleta & Uribe Uran in "Análisis del proceso metodológico en programas de educación superior en modalidad virtual". They characterize the online higher education provision in Colombia. The research conducted involved 10 institutions.

A critical factor for the success of any digital transition is digital literacies as pointed out above. Two articles bring important contributions to this discussion on digital skills for higher education transformation. Monteiro & Leite, with "Alfabetizaciones digitales en la educación superior Habilidades, usos, oportunidades y obstáculos para la transformación digital" choose to focus on the perceptions Portuguese higher education students hold on their digital skills. Their study shows good confidence levels on what relates to data search and editing and less confidence on the ability to conceive and develop new digital solutions It also demonstrates digital technologies are not being used for establishing learning networks and most teachers are not providing appropriate feedback and learning support.

Amaya, Cantú & Marreros directed their research to digital literacy amongst teachers. In "Análisis de las competencias didácticas virtuales en la impartición de clases

universitarias en línea, durante contingencia del COVID-19" they conduct an analysis of the digital didactic skills based on the T-PACK model. The results show that teachers presented outstanding skills in their distance teaching during the contingency, and furthermore, no significant differences were found between genres in none of the dimensions of the T-PACK model.

Another critical topic is the production of learning materials. During the pandemic the use of open educational resources (OER) and MOOCs has increased exponentially (). In this special issue two articles on the production of learning materials are included. Gomes, Martins & Azevedo present a study entitled "¿LongForm o Microcontenido? análisis de soportes para materiales didácticos digitales". Based on a survey conducted at a Brazilian University in the state of Minas Gerais, they conclude that microcontent is more suited for building learning with smaller materials in both size and content complexity. As for LongForm, their research shows it is more appropriated when dealing with complex, dense, multimedia-requiring contents to facilitate understanding.

The same topic is approached by Hernández-Ramos, Martínez-Abad & SánchezPrieto, in "El empleo de videotutoriales en la era post COVID19: valoración e influencia en la identidad docente del futuro profesional". The authors analyse the planning and implementation process of video tutorials in research methodology courses.

The very important topic of teacher identity and professional development is addressed in two case studies related to digital teacher training in the Initial Early Childhood Teachers' Training programme when confronted with the need to adapt to online education. García-de-Paz & Santana Bonilla in "La Transición a entornos de educación virtual en un contexto de emergencia sanitaria Estudio de caso de un equipo docente en Formación Profesional Básica" conclude on the relevance of three factors: a sound digital infrastructure at the school for teaching and communication; an educational organisation model based on leadership and autonomy of teaching teams; and the teachers' vision of the family as an essential educational agent.

On the other hand, Soto, Maldonado-Ruiz, Márquez-Román & Peña in their contribution entitled "Reconstruyendo el conocimiento práctico en confinamiento. Una experiencia de enseñanza en la formación inicial de docentes" highlight the critical importance of good coordination and tutoring and call our attention to the inadequacy of conducting fully online initial training of teachers at this level of education. In fact, the lack of physical interaction with the children at such an early stage of development may hinder the quality of teacher training.

Looking back on 2020, this was a year of much experimentation at all levels. In this issue there's also space for sharing the description of two significant case studies related to the digital transformation of university courses. González-Patiño & EstebanGuitart in "La transformación hacia experiencias expandidas en educación superior: curso #UAMskills de identidad digital" describe the successful redesign of a course at the Autonomous University of Madrid using a personalised learning pedagogical approach which included open and network learning activities. The aim was to highlight the potential of interconnecting cultural diversity with participatory trajectories.

Finally, De la Calle, Miró, de Dios & de la Rosa present "Adaptación de la asignatura de Responsabilidad Social del grado de Periodismo a la docencia en línea, en tiempos de COVID-19". In this qualitative analysis, they show how the diversification of the pedagogical methods and the focus on collaborative online learning lead to a significant increase in the level of social responsibility of the students during the pandemic.

Received: December 23, 2020

Accepted: December 31, 2020

Published: January 8, 2020

Moreira Teixeira, A. y Zapata-Ros, M. (2021). Presentation of the special issue Transition from conventional education to online education and learning, as a consequence of COVID19. *Revista Educación a Distancia (RED)*, 65(0B). <https://doi.org/10.6018/red.462271>

## References

- Baggaley, J. (2020). Educational distancing, *Distance Education*, 41: 4, 582-588. <https://doi.org/10.1080 / 01587919.2020.1821609>
- Bates, T. (2020). Why, 'logically', online learning is superior to face-to-face teaching. <https://www.tonybates.ca/2020/10/30/why-logically-online-learning-is-superior-to-face-to-face-teaching>. Consultado el 18 de diciembre de 2020.
- Czerniewicz, L. (2020). University shutdowns - What we learnt from 'going online'. <https://www.universityworldnews.com/post.php?story=20200325160338881>.
- Daniel, JS (2020). Education and the COVID-19 pandemic. *Prospects*, 1–6. <https://doi.org/10.1007/s11125-020-09464-3>
- Engelbrecht, J., Borba, MC, Llinares, S. *et al.* (2020). Will 2020 be remembered as the year in which education was changed?. *ZDM Mathematics Education*. 52, 821–824. <https://doi.org/10.1007/s11858-020-01185-3>
- Gewerc, A., Persico, D., Rodés-Paragarimo, V. (2020). The Emperor has no clothes: the COVID-19 emergency and the need for digital competence, *IEEE-RITA*, 8(4).
- Hodges, CB, Moore, S., Lockee, BB, Trust, T. y Bond, MA (2020, 27 de marzo). The difference between emergency remote teaching and online learning. *Educause Review*. <https://bit.ly/34tY19r>
- Kamanetz, A. (2020). 'Panic-gogy': Teaching online classes during the coronavirus pandemic. <https://www.npr.org/2020/03/19/817885991/panic-gogy-teaching-online-classes-during-the-coronavirus-pandemic>.
- Naidu, S. (2020). It is the worst—and the best—of times!, *Distance Education*, 41(4), 425-428. <https://doi.org/10.1080 / 01587919.2020.1825929>

Reimers, F., Schleicher, A. (2020). Schooling disrupted, schooling rethought. How the Covid-19 pandemic is changing education. OECD. [https://globaled.gse.harvard.edu/files/geii/files/education\\_continuity\\_v3.pdf](https://globaled.gse.harvard.edu/files/geii/files/education_continuity_v3.pdf).

Sahu P. (2020). Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus*, 12(4), e7541. <https://doi.org/10.7759/cureus.7541>

Shah, D. (2020). By the Numbers: MOOCs During the Pandemic. <https://www.classcentral.com/report/mooc-stats-pandemic/>.

Watermeyer, R., Crick, T., Knight, C. y Goodall, J. (2020). COVID-19 and digital disruption in UK universities: Afflictions and affordances of emergency online migration. *Higher Education*. <https://doi.org/10.1007/s10734-020-00561-y>.

Weller, M. (2020). *25 Years of Ed Tech*. Edmonton: AU Press.

Witze, A. (2020). Universities will never be the same after the coronavirus crisis. How virtual classrooms and dire finances could alter academia: part 1 in a series on science after the pandemic. *Nature* 582, 162-164. <https://doi.org/10.1038/d41586-020-01518-y>.

UN (2020). Policy Brief: Education during COVID-19 and beyond (August 2020). United Nations. <https://cutt.ly/bdHJEhX>.

UNESCO (2020a). Startling digital divides in distance learning emerge. <https://cutt.ly/adH2SRS>.

UNESCO (2020b). COVID-19: a global crisis for teaching and learning. <https://unesdoc.unesco.org/ark:/48223/pf0000373233>.