

Introduction

New challenges for teachers in the context of digital learning and the post-Covid era

Guest Editors special issue:

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As well as clearly demarcating global and regional digital divides and demonstrating the monopoly power of the private sector over the development and control of educational technology, one of the main lessons of the COVID-19 pandemic has been to underscore the crucial role that teachers continue to play in communication and education. The pandemic accelerated challenges educators have long faced due to the pace of change in the information and knowledge society. These include not only teaching the new generations who interact daily with digital communication spaces but also training teachers, both pre-service and in-service.

These challenges of teaching-learning processes in the digital age are complex and go much further than incorporating information and communication technologies (ICTs) in classrooms and promoting their appropriate use, but also incorporating media and information literacy (MIL) in the curriculum. The accelerated use of ICTs in education intersects with the new uses and challenges posed to Media and Information Literacy (MIL), because teaching with media overlaps with teaching about media. Educating in the digital age requires an awareness that the media are now constitutive of public space and a central site for identity performance. It is in our engagement with media, in great part, that we negotiate who we are and may become.

And if this is not enough, the goal posts keep moving. Teachers today deal with new educational technologies, and the attendant ICT and MIL competences, while contending with evolving techno-social mechanisms such as datafication (which transgresses into the privacy), mediatization (all learning and interactions mediated by screens) and platformization (that monetizes and curates learning materials). Much of what passes as development in pedagogical design risks by-passing educators and their interactions with students, given the private control of most educational technology devices and platforms.

The five contributions selected in this issue (chosen from among more than 330 submissions) address with different emphases the challenges educators have faced in these times of emergency online education when the need to maintain pedagogical continuity (at school and at home) and educational continuity (across educational actors, such as families, peers...) has added new pressures on teaching personnel and institutions alike. Noemí Serrano-Díaz, Estibaliz Aragón-Mendizábal and Rosario Mérida Serrano investigate perceptions of Spanish families with school children in confinement during the pandemic regarding academic performance and learning scenarios and discuss how families dealt with so-called "pedagogical continuity" during the early weeks and months of covid-19. They illustrate the participation of the family as accidental educator in the face of an increasingly digital society, through which we can learn much about educational paradigms currently in force. The results show a strong variation and point to the need for strong relationship between families and schools, with cooperation and communication links, and better management of shared educational resources and challenges.

Some of the challenges of virtual learning in Higher Education are investigated in the contribution of María-

Consuelo Sáiz-Manzanares, Joana-R. Casanova, José-Alberto Lencastre, Leandro Almeida and Luis-Jorge Martín-Antón. The authors evaluate the experience of a group of students in Health Sciences exposed to e-learning and b-learning (blended) modalities of training. Participants preferred different elements of the pedagogical design in both learning strategies, and while the capacity to interact with pedagogical resources at a distance was appreciated, this was more so if it involves interaction with other students and also includes meta-instruction on the technology itself. Overall, the authors show that young people tend to see the use of active methodologies and technological resources in a favourable light. They point to the importance of design that is based on active pedagogies and multimedia resources, not unlike MIL pedagogies.



Considering the perspective of classroom schoolteachers, Alfonso Gutiérrez-Martín, Ruth Pinedo-González and Cristina Gil-Puente study the perceptions about media competencies that primary, secondary and university teachers have in Spain, the use they make of information technologies and communication and the training needs they consider important. Their research shows that teachers in schools feel that their overall competences are low and that they attribute greater importance to MIL competences, rather than the technology and its tools. Based on the results, they propose an integrated model, COMPROMETIC, that advocates for a better complementary between the MIL and ICT, and points to a paradigm shift in favour of multi-literacies.

A critical and comparative perspective on media education needs in a post-pandemic context in Latin America - particularly in Peru, Chile, Ecuador and Argentina - is developed in the study by Julio-César Mateus, Pablo Andrada, Catalina González-Cabrera, Cecilia Ugalde and Sebastián Novomisky. Based on the perceptions of educators of children between the ages of 9 and 11, the authors propose a critical media education agenda, rooted in local conditions and the particular daily experiences of digital engagement that includes internet access gaps, availability of technological resources according to agreements signed by governments with telecommunications companies, and training needs for educators, families and the students themselves. The article results shows that governments and public policies were not prepared for full digital teaching and had to implement rapid crisis response strategies. Teachers were offered rapid training, often by private sector entities (Google, Microsoft, etc.) and felt unprepared and without enough capacity-building. The authors point to the need to develop public policy strategies to address connectivity gaps, capacity-building gaps and content gaps in terms of digital citizenship competences for all.

In their article on critical media literacy, Walter Antonio Mesquita Romero, Carmen Fernandez Morante and Beatriz Cebreiro Lopez considered the multiple actors and policies required for effective MIL. They conducted focus groups with various actors (families, researchers, students, teachers) and used a questionnaire addressed to students aged 13-17. The results show that students can be trained in media literacy who will show overall improvement after training. The main dimension of MIL explored was based on a six-part critical reference model: Technology, Language, Processes of interaction, Ideology and values, Production and dissemination, and Aesthetics.

The four dimensions of technology, language, ideology and production showed significant improvement through the training (unlike interaction and aesthetics). The authors suggest that there is an urgent need of critical media literacy and that immersion in digital media environments is no guarantee of competences to understand and navigate such environments.

These articles have several points in common that show a new awareness of the stakes and solutions devised by teachers and a new degree of agency in relation with the other actors of education (parents, administrators, students...). They emphasize the need to scale up curricula and balance chosen modalities (online, hybrid, face-to-face) instead of the abrupt immersion in digital teaching and learning caused by the pandemic. They point to a paradigm shift in the convergence between ICT learning and MIL learning, with MIL more central, and recognizing "critical" thinking as a core competence and a core mindset. In this sense, they confirm the relevance of some competences over others, pointing to the need to revise modalities in teacher training as well as student learning.

The articles also emphasize the relevance of the transformation of teaching practices for students who are everyday experts in ICTs but need adult and teacher support to make sense of their online interactions and learning, including the ideology and values behind the platforms they use. They tend to use methodologies based on experimental design, which makes sense considering that the focus on MIL that encourages such an approach, looking for changes in attitudes and values of teachers and learners alike. Of course, covid-19 is a protagonist in much of this experimental design given how isolation, uncertainty, pre-existing digital divides, corporate-controlled platforms and limits to previous up-scaling of online pedagogical design in Education directly or indirectly impacted the design and implementation of the research projects.

Another key question raised by these articles is who is leading the process of change, educators or industry titans? It appears that teachers' pedagogical activities are dependent upon a few digital platforms, whose design is not solely intended for educational purposes. The global cultural industry giants who design and sell educational devices and platforms benefit directly from mechanisms such as big data, artificial intelligence and the 24/7 feedback of ubiquitous learning devices. The challenge for educators is how to harness such devices and position them for educational design that empowers learners and communities of practice. The covid-era crisis management exemplified in these articles shows the need for multi-stakeholder strategies (including educators, parents and communities) to shift traditional patterns of interactions. In order to develop and harness the empowering affordances implicit in ICTs, the agency of teachers is key to bridge the gaps and create a continuum between those who are versed in the new multi-literacies or transliteracies of the XXIst century and those who are rendered invisible.

For educators, it is important to take stock and ensure that the capacity for educational innovation in the digital society not follow uniform and proffered solutions. This risk can be counteracted by reflective and reflexive approaches that foreground fundamental shared principles - such as the value of the person and an ethical stance about public education in a digital society - rather than just the technological dimension of digital tools. This must also include perspectives of diverse actors that make up teaching-learning communities. The challenge for educators in the digital society, then, includes the formation of a citizenry that nourishes the competences required to coexist and develop in a context of continuous and accelerated change, and that at the same time is capable of growth, in a critical way and in dialogue with others.

The stakes are high as we contemplate the future. The algorithms, policies, and evolving technologies that govern educational practices should be counterbalanced by teachers' solutions for producing singular curricula, adjusted to their population of students and learners. The articles included in this issue partly unlock the mystery of the future for educators challenged with the task of thinking creatively, practically and critically with the new digital tools and devices. Their enduring effect needs to go beyond the alarm call of the e-confinement, to embrace the promise of critical change in the necessary competences fostered by the considered interlacing of the ICT affordances and the holistic framework provided by MIL. How we react now will influence what is possible in the future.