

## Editorial

# Teaching and Learning After the COVID-19 Pandemic: A Reflection on the Challenges and Opportunities

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When we proposed the Call for Proposals for this issue in 2021, we intended to reflect on the challenges and changes that emerged from teaching through the pandemic and gather the experience gained to prepare for teaching after the pandemic. However, it has become difficult to predict or define when the “after” or “post-COVID” stage is and what it means by “after” or “post” in the conversations centered around going back to academic normalcy. The world has changed and the normal ways of work, study, and communication have been disrupted and changed. Digital resources and virtual technologies have been used to their full potential for communication and access during the pandemic and undoubtedly, this trend will continue as we gradually move away from the pandemic times.

### Challenges and Opportunities in Higher Education

In higher education, the Covid-19 pandemic has generated a period in which the entire university community worldwide has been able to experiment and implement different delivery modes and teaching approaches. Although with challenges, this experience has allowed the teaching and learning communities to develop and appreciate innovative solutions and to understand the possibilities that new media and digital technologies open up, especially in terms of accessibility, participation, and engagement.

Specifically considering the teaching and learning community in Italy, we can say that a significant portion of the enrolled student body in universities belongs to the so-called fragile categories, comprising fragile students and caregivers, who represent 6.5% of the young people in Italian universities (De Carli, 2021). These students are confronted with difficulties that can have a considerable impact on their management of academic commitments, for example, having less time for participation in training and study while experiencing anxiety and stress due to frequently overloaded responsibilities. The continued use of digital technologies supporting the flexible delivery of educational programs will help sustain these students’ academic efforts and reduce anxiety and attrition rates in higher education. This trend aligns with the current changes in universities globally. Although the emergency remote teaching and learning (ERTL) experiment during the pandemic will not result in a fundamental transformation, higher education institutions around the world are planning on many digitalized practices for the long-term development (Abdrasheva, et al. 2022).

### Challenges and Opportunities in Primary and Secondary Education

The pandemic has brought severe impacts on primary and secondary education. In the United States, reading and math test scores from 5.4 million U.S. students in grades 3-8 have shown more substantial drops than those from other school disruptions due to natural disasters (Kuhfeld, et al., 2022). There are similar observations of such declines in academic achievements globally; for example, the international evidence from the Responses to Educational Disruption Survey (REDS) reveals a decline in learning progress as perceived by principals, teachers, and students in 11 countries (Meinck, et al., 2022). School closures, teacher and staff shortages, teacher burnout, and student well-being and mental health issues

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are the most frequently mentioned challenges in education worldwide during the pandemic years. However, many positive changes have also emerged from the ERTL during the pandemic, including a large number of educational resources that are available freely and openly, active teacher collaboration and peer support, and increase technology adoptions.

### **Conclusion**

We would conclude by emphasizing the importance of developing digital skills or competencies and considering the best practices and lessons learned from ERTL. Digital skills or competencies are critical for successful ERTL and online teaching and learning. The evolution of the European DESI index (Digital Economy and Society Index) shows a constant increase in basic digital skills from 2017 to 2021 in Europe. Although some sub-dimensions of the DESI index show significant growth, it is clear that the pandemic has influenced the development of digital skills in a non-diffusive and uniform way while maintaining a gap within the population.

How to prepare for a flexible and digitalized educational environment in the upcoming years following the pandemic? Higher education institutions must choose concerning the possibility of innovating and moving towards digitization while reserving ample opportunities for traditional learning for those who prefer mainly face-to-face teaching. Administrators and leaders in primary and secondary education will also need to focus on providing sufficient professional development programs to improve teachers' digital competencies while reducing teachers' burnout and mental health issues at the same time.

Regardless of the educational systems in different countries, critical strategies and recommendations for future education include adopting suitable technology, prioritizing effective teachers, and ensuring learners are engaged, which lead to the five principles for reimagining learning based on the lessons from ERTL during the pandemic (Muñoz-Najar et al., 2021). Xie et al. (2020) argue that most of the solutions adopted during the pandemic do not require new inventions or technology; therefore, the biggest challenge in the next few years will be finding the financial resources for rapid and well-coordinated implementation. Countries already financing projects to consolidate the good practices adopted during the pandemic crisis will have an advantage over the others.

### **References**

- Abdrasheva, D., Escribens, M., Sabzalieva, E., Vieira Do Nascimento, D., and Yerovi, C. (2022). Resuming or reforming? Tracking the global impact of the COVID-19 pandemic on higher education after two years of disruption. [https://www.iesalc.unesco.org/wp-content/uploads/2022/05/IESALC\\_COVID-19\\_Report\\_ENG.pdf](https://www.iesalc.unesco.org/wp-content/uploads/2022/05/IESALC_COVID-19_Report_ENG.pdf)
- De Carli, S. (2021). I grandi invisibili: sono 391mila i giovani caregiver in Italia. *Vita*.
- Kuhfeld, M., Soland, J., & Lewis, K. (2022). Test score patterns across three covid-19-impacted school years. *Educational Researcher*, 51(1). <https://doi.org/10.3102/0013189X2211091>
- Meinck, S., Fraillon, J., & Strietholt, R. (2022). The impact of the COVID-19 pandemic on education: International evidence from the Responses to Educational Disruption Survey (REDS). <http://www.unesco.org/open-access/terms-use-ccbysa-en>
- Muñoz-Najar, A., Gilberto, A., Hasan, A., Cobo, C., Azevedo, J. P., & Akmal, M. (2021). *Remote Learning during COVID-19: Lessons from Today, Principles for Tomorrow*. Washington, D.C.: World Bank Group.
- Xie, X., Siau, K., & Nah, F. F. (2020). COVID-19 pandemic – online education in the new normal and the next normal, *Journal of Information Technology Case and Application Research*, 22(3), 175-187, DOI: 10.1080/15228053.2020.1824884