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Education to Digital

How Covid-19 influenced the transition to Digital Education.

Introduction

The new coronavirus COVID-19 unexpectedly invaded our lives and the lives of millions of people around the world. Undoubtedly, we are experiencing unprecedented situations which will have significant social, psychological and economic consequences, the extent, intensity and duration of which cannot yet be estimated. At the same time that we try to protect our lives and the lives of our fellow human beings, we have been forced under conditions of confinement at home, to respond to the multiple roles we have in the context of our relationships and activities (family, work, education, etc.). In a really short time, millions of members of the educational community have started teaching in front of a computer screen while their students have had to stay home and watch lessons online.

How this transition happened?

According to UNESCO data as of April 27, 2020, 91.3% of pupils / students in 188 countries around the world did not go to school / university (UNESCO ISD, 2020). During the 1st Lockdown in the Spring of 2020, many countries tried to address the new situation in their education system with a grid of measures that varied according to local and national specificities, the level of knowledge and skills of teachers, parents and students with new technologies, familiarity with the philosophy of Distance Education, and ultimately cultural issues and the temperament of societies especially in emergency situations.

The transition of the education systems in EU to distance education during the coronavirus pandemic has highlighted gaps in students' digital participation. This is stated, inter alia, in the 2020 education and training monitoring report prepared by the European Commission and was highlighted again in the research of the [European project DigiVET](#) of the ERASMUS+ programme, realized in 2021.

How the teachers, students and parents reacted?

Teachers have to be professionals with multiple skills in order to attract students, in individual, or small groups and classes. Parents do not have these characteristics, nor do they have access to the student group that is often managed by teachers. Similarly, school culture is characterized by routine for students, e.g. a specific time each day breaks and completion of certain activities. Unfortunately, there is a risk that the gap between students widen during the period of education by distance. Therefore, it is important for both teachers and parents to work together to implement practical and informed solutions to the challenges posed by the COVID-19 pandemic (Spotlight, 2020 UNESCO, 2020). At the same time, parents cannot take on the role of teachers. The possibility to have pleasant spaces for study that will not distract students, to follow the schedule as defined by the school structures, to take defined breaks, to not hesitate to express questions or concerns to teachers, can support the process of education by distance. (Reimers, et. al, 2020).

According to UNESCO, only 20% of countries globally were equipped with online teaching devices and programs before the pandemic hit. Evidently, schooling systems were not digitally prepared, revealing the overall weakness of European digital learning. In fact, a survey published by HundrEd, a not-for-profit organization active on promoting innovation in education, indicated only 6% of respondents evaluated their education system as being prepared for the pandemic.

In Romania, only 63,4 % of teachers were provided with support from their institution. In Ireland, the Irish National Digital Experience Survey demonstrated that 70% of academics/teachers were completely inexperienced in online teaching before the crisis. Although, according to YouGov, a data analytics firm, 87% of teachers said they received support from their institutions.

Despite relative unprepared educational systems, some European countries were more experienced with online learning. These countries, Estonia, Finland, Iceland, Latvia, Lithuania, Sweden and Norway have decided to gather up their digital education tools and share best practices with other countries.

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Most of the reports researched in Cyprus revealed that there was/is a gap between how teachers and students perceive their digital skills. "The majority of teachers (61.8%) feel well or very well prepared to use ICT in teaching (EU average: 37.5%) and only 10.8% report a strong need for professional development in this area (EU average: 18%)" (OECD, 2020).

Slightly more than half of the teachers who participated in continuing professional development programs focused on ICT skills for teaching. However, given the rapidly changing nature of the ICT sector, it is troubling that this percentage has remained unchanged since 2013. In terms of students, 19% of 16-19 year olds thought they had low digital skills in 2019 - higher than the EU average (15%) and virtually unchanged since 2015. General digital skills above baseline are reported by 36% of students - a significant increase of 16 percentage points since 2015, but still well below average of the EU (57%)", it is typically noted. Specifically, it is noted: "New forms of digital learning require modern equipment in schools. Teachers believe that schools are well equipped with digital infrastructure in both primary (Vrasidas, 2015) and secondary education (OECD, 2020). However, according to a comparative study at EU level, the proportion of schools with a high degree of supply of digital equipment (laptops, desktops, cameras, interactive whiteboards) per student and high-speed broadband is very low in primary (2% vs. 35% on average in the EU) and in lower secondary education (0% vs. 55%) and moderate in upper secondary education (55% vs. 72%).

Challenges educational community faced!

Health care and access to education are basic human rights. Rights that continue to face multiple obstacles to their implementation in the general population. Unfortunately, both are now further threatened after the Covid-19 outbreak. There are many elements involved in distributing teaching materials, gaining experience and engaging students so that they can continue to learn as part of a community (ISP International Schools Partnership, 2020). Technology (modern or asynchronous) can support the work of teachers but in no way replace them. Many educators are unfamiliar with Digital design principles & practices. Some work intuitively, some borrow ready-made material. Some in learning planning need support. Extracurricular learning is often more effective (due to interaction with the teacher or with material). Lastly, the notion that all students have equal access to online resources or devices is wrong.

Summary:

The most important challenge before us is to see the adventure of the pandemic we are experiencing today in our education system, not as a painful parenthesis but as an unexpected opportunity and challenge in order to plan the transition to a distance school open for everyone.

Future research should focus on ways in which the fundamental pedagogical principles of distance education can help build a new exploratory learning environment; and creativity in a living and distance learning environment.

References:

UNESCO Institute for Statistics data. <https://en.unesco.org/covid19/educationresponse>

Education and Training Monitor, 2020, Teaching and learning in a digital age, European Commission

ISP, (2020). A new normal approach to learning during the covid 19 outbreak <https://www.internationalschoolspartnership.com/a-newnormal-isps-approach-to-learning-during-the-covid-19-outbreak/>

OECD, (2020) Supporting the continuation of teaching and learning during the COVID-19 Pandemic Annotated resources for online learning Retrieved from: <http://www.oecd.org/education/Supporting-the-continuation-of-teaching-and-learning-during-the-COVID-19-pandemic.pdf>



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DG CONNECT. (2019). 2nd Survey of Schools: ICT in Education. Retrieved from: <https://ec.europa.eu/digital-single-market/en/news/2nd-survey-schools-ict-education>

Reimers, F., Schleicher, A., Saavedra, J. & Tuominen, S. (2020). Pandemic Annotated resources for online learning Retrieved from: <http://www.oecd.org/education/Supporting-the-continuation-of-teaching-and-learning-during-the-COVID-19-pandemic.pdf>

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