

UNIVERSITIES AT THE FOREFRONT OF THE FIGHT AGAINST VIRUSES

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ABSTRACT:

ONCE THE NEW CORONAVIRUS (COVID-19) HAS SPREAD TO ALL CONTINENTS AND AFFECTS MILLIONS OF PEOPLE, HEALTH OFFICIALS, POLITICIANS, SCIENTISTS AND INNOVATORS AROUND THE WORLD ARE STRUGGLING TO INVENT WAYS TO COMBAT THE SPREAD OF THE VIRUS.

UNIVERSITIES ARE CONTRIBUTING TO THIS COLLECTIVE STRUGGLE AGAINST THIS SERIOUS AND POTENTIALLY LASTING CRISIS. THE ROLE OF UNIVERSITIES IS TO BE AT THE FOREFRONT OF THE FIGHT AGAINST CORONAVIRUS AND TO FIND THE BEST SOLUTIONS TO REDUCE AND EVEN ERADICATE THIS DISEASE. FIRST OF ALL, WAYS MUST BE FOUND TO CARRY OUT EDUCATION IN GOOD CONDITIONS DURING THIS PANDEMIC.

KEYWORDS: *UNIVERSITIES, VIRUSES, COVID-19, SCHOOL, MANAGEMENT, SOLUTIONS, EDUCATION.*

Introduction

All over the world, universities, colleges and schools need to prepare their teachers for change. As the culture of our society changes in response to technological innovations, the coexistence with viruses, institutions and teachers must adapt.

Online learning opportunities and the use of open educational resources and other technologies can reduce the costs associated with training materials and allow more efficient use of teacher time. Today, we can talk about blended learning that combines face-to-face learning opportunities with online learning opportunities. The degree to which online learning takes place and how it is integrated into the curriculum may vary by school. The strategy of combining online learning with face-to-face school instruction is useful to adapt students' various learning styles and to allow each learner to study at their own pace.

Online resources allow the revolutionization of the educational system, not only because they are convenient and accessible, but because they allow the whole process of teaching and learning to become more interesting and adapted to the digital student. Thus, a personalization of learning is achieved. Today, students and teachers benefit from free online resources and paid online resources. Each student prefers different resources depending on the topics of interest and learning style. Teachers and students want good quality tools that are free¹.

¹ Jean-Pierre Willem, *Faire face aux virus : coronavirus, grippe, ebola, H1N1, SRAS*, Dauphin, 2020

Managing the impact of coronavirus on education systems

All over the world, it is necessary to implement an elaborate training program for teachers, so that we provide them with all the tools and knowledge necessary to create a rich and interactive distance learning experience.

At the end of February 2020, when the general mobilization resonated in the face of the accelerated spread of Covid-19 worldwide, only China and a few affected countries imposed social distance measures by closing schools. Just two weeks later, 120 countries closed schools for various periods of time, affecting the lives of nearly one billion students worldwide.

In a normal classroom, four to five seats per student should be reserved to maintain a distance of two meters. Many take advantage of the professional breaks imposed by the COVID-19 pandemic to improve their training.

At Laval University in Quebec alone, 3,000 more students were registered than last year for the summer session.

This includes students who are employed professionals and who have chosen to come and improve.

As we have seen in previous health emergencies, especially with Ebola epidemics, the impact of Covid-19 on education is expected to be particularly dramatic in countries with poor health, learning, high dropout rates and resilience. limited to shocks. If school closure seems to be a logical decision to impose social distancing of the population, this distance tends to have a disproportionate negative impact on the most vulnerable students over time: at home, learning opportunities are limited².

Their presence can weaken the economic situation of parents, who are forced to find lasting solutions for care or to compensate for the disappearance of meals provided at school.

Advances in large-scale efforts to expand access to education could be blocked with the prolonged closure of schools, knowing that alternative solutions (especially distance learning) will be inaccessible to families without internet access. As a result, human capital losses could worsen and access to economic opportunities may decline.

The reaction of different countries

Many of the most vulnerable countries have implemented different strategies. Here are some examples³:

-Improving training systems while keeping schools open: conducting and supporting preventive measures in schools (Afghanistan); establishing protocols to enable schools to manage patients and suspicious cases (Belarus, Egypt, Russia); mobilizing educational infrastructure and human resources to stop the spread of the virus (Liberia, Sierra Leone); limiting physical contact by reducing social and extracurricular activities (Russia, Singapore);

-Closure of targeted schools: they chose to isolate treatment areas; some governments have provisionally decreed the closure of the affected areas (India). These approaches were then extended (Australia, Brazil, Canada, India);

-Closing all schools in a country (the most common solution after the coronavirus outbreak); With the spread of the virus, many countries have announced the closure of all schools. There is a real fear that children and young people, a priori less affected by the virus and with a

² Bruno Humbeeck, *Les leçons de la pandémie*, Editeur: DeBoeck-Vanin. Collection Outils pour enseigner, 2020

³ Bertrand Legrand, *Journal d'un médecin au temps du coronavirus*, Archipel, 2020.

much lower fatality rate than adults, will become vectors of the disease, with the risk of infecting older family members more, where intergenerational coexistence is the rule.

-Use of distance learning resources to alleviate learning erosion: many countries use distance learning to make up for lost learning hours (100% online education in Germany, Saudi Arabia, China, Italy, France; use of mobile phones or television in Mongolia and Vietnam). In addition to the existence of infrastructures and connection capacities, the mastery of tools and processes by teachers and administrative staff is at the heart of the distance learning solution (Singapore). Other countries continue to learn through homework (Lebanon). In Bulgaria, more than 800,000 accounts have been set up for teachers and parents, while publishers have been encouraged to provide textbooks and digital learning materials for students in grades 1-10, and two national television channels will broadcast educational programs. Countries need to be inventive to participate in mitigation efforts: adapting existing platforms to smartphones or negotiating agreements with telecommunications companies to gain free access to the Ministry of Education's website⁴.

A cyclical approach to emergency education

Like previous pandemics, the Covid-19 crisis reminds us of the importance of the preparation phase.

Of all the scenarios considered, many expect the virus to spread in waves, which means implementing cyclical measures. Countries that are still spared must begin the "anticipation" phase by drawing up a response plan. Thus, they will be better equipped when the "management" phase begins, with measures aimed at mitigating the negative effects of the crisis. The plan may in particular recommend the introduction of screening protocols in schools, the organization of hygiene awareness campaigns, the closure of schools, access to distance learning, the use of closed schools as emergency centers, etc.

Once the emergency is over, communities will be able to enter the "recovery" phase by implementing government policies and measures to compensate for lost time. This can lead to the adjustment of the school calendar, giving priority to students in the final years and the parallel organization of school and distance education. Countries that face repeated crises and have shown resilience, as in East Asia, are best able to learn from the past and respond to the current situation. They have managed to exploit this dynamic to prepare for a new crisis, to invest and to strengthen systems for the future.

We all need to mobilize to learn together from previous epidemics (SARS, Ebola, etc.) and help governments identify available options.

Universities need to provide support in each of these three stages: anticipation, management and recovery.

Countries whose economies are dependent on money sent home by migrants must be supported for compensation.

Money sent home by migrants is a vital source of income for developing countries. The economic downturn caused by the COVID-19 pandemic is seriously undermining migrants' ability to send money home. Migrant transfers help families have money for food, health and other basic needs.

⁴ Mădălina Lazăr, *Universitățile sunt cele care hotărăsc modalitatea de desfășurare a cursurilor*, <https://ordineazilei.ro/universitatile-sunt-cele-care-hotarasc-modalitatea-de-desfasurare-a-cursurilor/>, 2020, accessed in 29.08.2020

The COVID-19 crisis could have far-reaching and long-term negative effects on children around the world. This impact is probably devastating, even if children get sicker and have lower death rates than other age groups.

More than 1,5 billion students did not attend class, which will have major repercussions on future education and career formation. Large-scale loss of jobs and income, as well as economic insecurity of families, opportunities for child exploitation for work, sexual exploitation and early marriage.

The constraints facing families lead to an increase in the incidence of domestic violence. As the number of deaths caused by COVID-19 increases, a large number of children will be orphaned and vulnerable to exploitation and abuse.

"The risks to children during the COVID-19 crisis are enormous," said Jo Becker, director of advocacy for children's rights at Human Rights Watch⁵.

For many children, the COVID-19 crisis will mean stopping or restricting their education. More than 91% of the world's children are out of school because schools have been closed for at least 188 countries. The crisis has revealed huge disparities in countries' preparedness for emergencies, children's access to the Internet and the availability of educational materials. Although there is a lot of talk about e-learning platforms, many public institutions are not yet organized to use them and do not have the technology and equipment to transmit instructions / information over the internet. Almost half of humanity does not have access to the Internet.

There are additional stresses faced by families as a result of the COVID-19 crisis, including job loss, excessive isolation and medical and financial concerns - they increase the risk of domestic violence, it is applied between partners, between children, or adults who they have adopted and cared for them. The UN Secretary-General spoke of a "terrifying" global increase in domestic violence related to COVID-19. Calls to emergency numbers have been reported to have doubled in some countries. Child abuse is less likely to be detected during the COVID-19 crisis, as child welfare institutions have reduced their surveillance to prevent the virus from spreading, and teachers will no longer be able to detect signs of abuse because units are closed.

Experts estimate that there will be many deaths caused by COVID-19, so it is inevitable that many children will lose one or both parents or even their caregivers. Orphaned children are particularly vulnerable to human trafficking and other forms of exploitation, including sexual exploitation, as well as begging or forced labor. Older children often drop out of school to try to support their younger siblings.

The COVID-19 crisis also increases the risk of sexual exploitation of children on the Internet. Also, children spend more time online due to school closure and may feel lonely or anxious due to isolation, making them more vulnerable to online predators⁶.

As the COVID-19 pandemic overwhelms health systems, children can no longer be vaccinated or have access to other life-saving health care. The reduction in access to treatment during the 2014-2015 Ebola epidemic in West Africa has led to a dramatic increase in deaths from malaria, AIDS and tuberculosis, including among children.

Human Rights Watch urges governments to take urgent action to protect the rights of children, including by:

- Prioritize efforts to continue education for all children using available technologies;

⁵ Ibidem

⁶ Michel Muller, *Covid-19 : mensonges et vérités*, Viasocial, 2020.

- Providing financial assistance, including cash payments, to low-income families who will be hit hardest and hardest in the first place, to help them meet basic needs without resorting to child labor or marriage;
- Minimizing disruptions to children's access to essential and vital medical care;
- Increase efforts to identify pandemic orphans and expand extended family networks and adoptive families;
- Expand public education, awareness campaigns, emergency numbers and other services for children at risk of being abused or sexually exploited.

In general, increasing children's access to the Internet will improve their access to information and their ability to organize and express themselves.

The economic crisis related to COVID-19 could push governments to strengthen guarantees of economic and social rights, as well as social protections for poor communities and vulnerable families. Such measures, in the long run, can improve food security and reduce poverty, child labor and the marriage rate of children⁷.

Aware of the existing digital divide, universities have taken into account in their instructions measures for adapting distance learning activities, and for new teaching methods to take into account the technological capacity available in students' homes. On the other hand, if students face technological problems, it is recommended to inform the teaching staff.

Some universities (University of Cordoba and Jaume University in Spain) have offered students in financial difficulty the opportunity to borrow laptops and 4G USB keys, to allow them access to online education.

Students with disabilities are among the most affected because they need specific support and educational tools that are not always available with distance education. The UNESCO chairs of the University of Zagreb (Croatia) and the University of Padua (Italy) are examples of solutions.

The Inclusion Office of the University of Padua has sensitized all professors who offer online courses to the needs of students with hearing loss, who normally benefit from shorthand services. In addition, it has published specific guides on its website on how educational tools, such as videos and PowerPoint presentations, are accessible to students with hearing and vision impairments.

Mitigation of loss of livelihood

Another vulnerability caused by the crisis that can have an indirect impact on learning is the increased economic stress of students due to loss of income. For example, the department at the University of Maastricht (Netherlands) reported that “many foreign and off-campus students, who usually depend on part-time jobs to cover tuition fees, have lost income due to closure. incorrect economic activities”. In response, the university launched a crowdfunding campaign and offered students the opportunity to obtain an interest-free loan for several months. In Spain, the chair of the University of Jaume I reported the latter's decision to postpone the payment of tuition fees for April for more than 5,200 undergraduate and master's students to mitigate the impact of COVID-19⁸.

UNESCO has been at the forefront of promoting online education since the beginning of the pandemic and has identified MOOCs (Massive online open courses) and OERs (open

⁷ d'Åsa Ericsson, *L'épidémie*, Actes Sud/Actes noirs, Paris, 2020

⁸ COVID-19 : 20 projets de recherche sélectionnés pour lutter contre l'épidémie, <https://www.enseignementsup-recherche.gouv.fr/cid150211/covid-19-20-projets-de-recherche-selectionnes-pour-lutter-contre-l-epidemie.html> 2020, accessed in 2.09.2020

educational resources) that can provide online courses and self-study content for students through mobile platforms⁹.

Possible solutions

The spread of the virus and the closure of schools could serve as an ideal testing laboratory for technological interventions in support of distance education. Unfortunately, few education systems are fully prepared to deal with this situation. China is one of the exceptions, which has managed, despite the closure of schools, to maintain online education and distance education. Not all countries and school systems are equally well prepared. Household access to technology is variable, and the likelihood of having broadband or a smartphone is linked to income levels, even in middle-income countries. Therefore, programs that can quickly target those who need it most are absolutely vital.

Educational interventions in times of crisis can accompany preventive measures and the recovery of public health systems, while reducing the negative effects on students and learning. If health units are missing, schools can be turned into temporary care centers. All of this needs to be integrated into planning in the crisis management stages. Education can also protect children and young people: it allows them to have a wealth of information (through distance learning skills or increased knowledge of digital tools) to deal with the situation, or to maintain a certain normality or to recover faster.

Teachers, often the most educated in hard-to-reach areas, can be trained to follow contacts and communication campaigns.

⁹ Bruno Humbeeck, Op, cit. p.64

REFERENCES

1. Becker Jo, *The Hidden Cost of Jewelry: Human Rights in Supply Chains and the Responsibility of Jewelry Companies*, 2020, <http://www.hrw.org/contact/new-york>,
2. Ericsson d'Åsa, *L'épidémie*, Actes Sud/Actes noirs, Paris, 2020
3. Humbeeck Bruno, *Les leçons de la pandémie*, Editeur: DeBoeck-Vanin. Collection Outils pour enseigner, 2020
4. Lazăr Mădălina, Universitățile sunt cele care hotărăsc modalitatea de desfășurare a cursurilor, <https://ordineazilei.ro/universitatile-sunt-cele-care-hotarasc-modalitatea-de-desfasurare-a-cursurilor/>, 2020, accessed in 29.08.2020
5. Legrand Bertrand, Journal d'un médecin au temps du coronavirus Archipel, 2020
6. Muller Michel, Covid-19 : mensonges et vérités, Viasocial, 2020
7. Willem Jean-Pierre, Faire face aux virus : coronavirus, grippe, ebola, H1N1, SRAS, Dauphin, 2020
8. COVID-19 : 20 projets de recherche sélectionnés pour lutter contre l'épidémie, <https://www.enseignementsup-recherche.gouv.fr/cid150211/covid-19-20-projets-de-recherche-selectionnes-pour-lutter-contre-l-epidemie.html>, 2020