

# Pedagogical and Education-Related Measures suggested by the Algerian and British governments for the higher education sector during the COVID-19 pandemic – a comparative study

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## Abstract

The COVID-19 pandemic has had far-reaching effects, not only on public health but also on the global economy, social interactions, and daily life. It has highlighted the importance of global cooperation and the need for more investment in public health and emergency preparedness. The pandemic also exposed weaknesses in many countries' educational management systems; it has forced many higher education institutions to adopt new teaching and learning methods to minimize the risk of transmission. This resulted in the need for comparative studies to evaluate the effectiveness of different pedagogical responses and to find common ground on the most effective practices and responses that would help higher education institutions better prepare for similar challenges in the future. The present study provides a comparative study and outcomes through a record of the pedagogical responses by higher education authorities in two completely different contexts (Algeria and the UK). The authors of the paper adopted a desktop analysis approach through valid and first-hand reliable sources like government and university official releases. This research methodology would involve a systematic and rigorous approach to data collection and analysis to ensure the reliability and validity of the research findings. Through coding and thematic analysis of the collected data, the researchers concluded that the efficiency of the responses and decisions adopted by higher education institutions varied depending on a range of factors such as the institution's resources, infrastructure, and student population. However, the pandemic highlighted the need for agile and serious responses to ensure the safety and well-being of students and the campus community.

**Keywords:** coronavirus; COVID-19; higher education; risk management; pandemic; preventive measures; risk assessment.

## Introduction

Today's world has become increasingly interconnected, and so have the risks we face. The main peril we face today is the widespread nature of the coronavirus and its impact on people's lives. COVID-19 stands for coronavirus disease, also known as

the 2019 novel coronavirus “2019-nCoV” (Bender, 2020). The COVID-19 virus is related to the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV) that similarly can be fatal (Meng, Hua, & Bian, 2020). In late December 2019 in Wuhan, China, a serious viral outbreak resulted in an unknown pneumonic disease. This led the World Health Organization to announce, by the beginning of 2020, the discovery of the Novel Corona Virus. On March 11, 2020, the WHO declared a global pandemic because of the widespread nature of the virus. A month later, starting on April 1st, 2020, more than 3.4 billion people (43% of the world population) were in total lockdown in more than 80 countries and territories around the globe; eventually, this had a major impact on higher education (Marinoni et al., 2020).

According to data provided by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), by April 2020, different educational institutions such as schools and higher education institutions (HEIs) would have been closed in 180 countries, affecting 1 542 412 000 learners (89.4 percent of the total number of enrolled learners). Even if some countries witnessed in May 2020 a decreasing number of infected cases and deaths that resulted in loosening up or lifting confinement measures, different educational institutions in 177 countries were still closed, which affected 1 268 164 088 learners (72.4% of total enrolled learners).

The world’s focus today is directed towards different research studies of the health crisis in medical and health studies-related papers (Abdulmir & Hafidh, 2020; Gondauri, Mikautadze, & Batiashvili, 2020; Meng, Hua, & Bian, 2020; Holshue et al., 2020; Usak, Masalimova, Cherdymova, & Shaidullina, 2020). However, Toquero (2020) believes that very little research is conducted in the field of education and how COVID-19 and related infectious viruses affect the educational system (Bao, 2020; Sintema, 2020; Yan, 2020). This paper introduces a comparative study on educational measures opted for by the UK and Algeria to face the current health crisis in higher education. A conceptually identical study was conducted by the International Association of Universities (IAU) to comprehend the disruption caused by the widespread of COVID-19 in higher education institutions and to inspect the measures undertaken by higher education institutions globally in response to the crisis. However, the survey did not tackle most African nations given the limited communication infrastructure (Marinoni et al., 2020). Upon closer look at the literature provided, a number of gaps and shortcomings were found in different studies and surveys that did not consider African countries’ assumed measures for the health crisis. Thus, further investigation is needed to tackle this continent’s actions during the COVID-19 period given its delicate status in comparison to Asia, Australia, Europe, and North America. Algeria plays a major role both in Africa and the MENA region (the Middle East and North Africa); accordingly, this study aims to explore the main educational measures taken by Algerian policymakers in the face of the health crisis. Furthermore, to create a comparative framework between measures taken in Algeria

and the UK, taking into account the different statuses of the two countries in terms of infrastructure, educational technology, finances, and society.

## Research Method

Some methods may be more accurate than others; accordingly, this study is based on a desktop analysis approach to create a rigorous and effective update of the current status of COVID-19 and the measures taken by the two studied examples in higher education to face this global pandemic. In this sense, a careful reflection of the collected data in terms of quality is taken into account. The researchers attempted to test the quality of the data collected by relying on official documents. This procedure stands against misinformation and fluctuation of information on COVID-19, most notably on social media platforms. Given the sensitivity of the subject under study, the researchers tried to ensure the transparency of the data provided and analyzed by relying on official documentation such as university and government sources. For the purpose of this study and in the case of the English educational system, we focused on official correspondences by the British government and well-recognized international organizations such as the WHO, UNESCO, and the International Association of Universities (IAU). As for the Algerian higher educational context, we relied on official reports provided by the government, the Ministry of Higher Education, and the rectors' official reports and correspondences at Biskra University. It is important to note that the researchers relied on their own careful translation of the sources collected for the Algerian case, as most of these sources were sent in Arabic and French. The table below elaborates, in detail, on the nature and the source of the data collected.

Type of Source	Sample	Percentage
<i>Articles, reports, and papers</i>	15	24.59%
<i>Websites (university and official platforms)</i>	32	52.45 %
<i>Government Information (official ministerial and university communication)</i>	14	22.95%

*Table 1. Sources used for findings  
Source: Authors*

To make sure we create a valid comparative study with different perspectives, the current comparative study discusses the cases of the UK and Algeria, as the two cases are representative of developed and developing countries, respectively. The main differences, as far as the higher educational system is concerned, are summarized in the educational systems, educational governing structures and backgrounds, finances, technological development in education, international mobility, health care organisms, and the number of infected cases per day. These points are discussed in detail to check their effect on the measures opted for by higher education institutions

in the face of the global pandemic. The representativeness of the two cases plays a major role in linking our study with different inquiries in the same field. As for the UK, the case is deemed to have opted for similar or equivalent measures as other developed countries in Europe and North America. On the other hand, Algeria can be representative of several developing countries in Africa and the MENA region.

The data analyzed aims at creating a clear-cut synthesis of the pedagogical measures taken by the two cases as far as higher education is concerned. In other words, throughout the application of stratification, we seek to check the differences in the reactions of the two governments towards the pandemic in light of the variance in educational features and processes despite the similarities in terms of the main objective of higher education. Eventually, the researchers shed light on the importance, application, and challenges of digital pedagogy strategies. By targeting information usefulness, the results presented in this research paper are organized in terms of:

- The investigation (a comparative study) is based on a desk analysis approach.
- In the age of social media and the widespread dissemination of disinformation (fake news), the researchers paid more attention to reliable and official sources. (information quality) rigorous analysis and update
- Number and types of sources used (newspaper articles, government-released statements, official university releases, etc.)
- Authors used different types of documents in different languages (English, French, and Arabic), relying on their own translation support.
- The two cases (Algeria and the UK) are representative of the two main educational systems with differences in educational backgrounds, educational governing structures, finances, equipment, technologies, healthcare organisms, the number of daily infected cases, etc. (Spread of COVID-19 and responses)
- The two nations seemed representative of other nations given the criteria mentioned above. (Similar or equivalent educational systems and responses to COVID-19 + number of infections every day)
- We aimed to provide a clear synthesis of specific pedagogical responses to the pandemic and their effectiveness in addressing the health crisis.
- Supporting the digital pedagogy strategy

## **Data analysis**

In this section, we present a robust comparison between the measures taken by the UK and Algerian governments and policymakers in favor of effective pedagogical measures to face the global pandemic. COVID-19. Because of their particularly salient effects on the measures taken in higher education, we have taken into account the points mentioned earlier, such as the difference in higher educational systems,

pedagogical technology and E-learning, finances, and international mobility. Different laws and practices related to these points dictate specific and diverse measures for each nation. A suitable example of these points would be the vast difference in daily infected cases in Graph 1.

### Daily new confirmed COVID-19 cases

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

Our World  
in Data



Source: Johns Hopkins University CSSE COVID-19 Data – Last updated 10 February, 10:03 (London time)

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*Figure 1. A Comparison Between Daily COVID-19 Infected Cases in Algeria and the UK*

Another point worth mentioning is the nature of the higher educational institutions' financial management. The UK relies on a mixed funding process from the public and enrolled students' tuition. On the other hand, Algeria relies mostly on public funding.

### The Main Measures Taken by the UK and Algerian Governments

The measures discussed in this section are based on a number of rubrics. It must be noted that all rubrics define factors that have a substantial impact either directly or indirectly on measures taken by both governments. As stated in the method section, the researchers relied on government documents and releases to ensure the validity of the investigation and the authenticity of the study in times of misinformation and fake news.

### ***The Case of the UK***

The data reported in this section is primarily stated by the UK government through the Department of Education under the guiding document “Higher Education: Reopening Buildings and Campuses,” updated by February 2, 2021. The report focuses on measures in the form of guidelines and additional advice for facing the health crisis in higher education institutions.

*Local restriction tiers* In order to ensure the right level of intervention in the right areas, the government set out a management procedure based on the *4 local restriction tiers*: medium alert, high alert, very high alert, and stay at home. This helped the local authorities to share accurate information and make efficient decisions for residents and workers to manage any serious outbreak. As an active part of local communities, higher education (HE) providers will continue to operate at every restriction tier while considering moving to a vaster online provision with more serious local restrictions, most notably tiers (3) and (4), which require very high alert and staying at home, respectively.

*Outbreak plans.* Given the high spread rate and fatality of the virus COVID-19 and its possible variants (Yao, 2021), the agility of local authorities and HE providers in making fast and efficient decisions is of utmost importance. Thus, the government advises HE providers should have a strategy in place for any unexpected rise in the number of reported cases or local outbreaks and, most importantly, to modify aspects of their provision as quickly as possible. In other words, they should resume their educational activities at very short notice while ensuring their students’ and staff’s safety. The following list elaborates on a number of scenarios that must be covered by the HE providers’ plans (UK Higher Education: Reopening Buildings and Campuses, February 2<sup>nd</sup>, 2021):

- an increased prevalence of infection locally that necessitates interventions for the entire community, including students and staff
- a large-scale outbreak that may impact university activities
- a localized outbreak in student housing
- a localized outbreak including a specific student or staff member, faculty, or department

The HE providers must work with, cooperate with, and agree with the Director of Public Health within their local authority, and then share their plans with the Department for Education. In case of a massive rise in infections or infection rates, the provider should cooperate with the local Health Protection Teams and the Director of Public Health to decide and determine effective sanitary and health measures in order to reduce transmission.

*Higher education tiers of restriction decision-making*, in some cases, will be referred to the national level. The command structure of the government's Local Action Committee may provide advice to a certain HE provider to implement restrictions in a phased manner as far as face-to-face provision is concerned. Same as for local restriction tiers, there are four tiers for the HE providers. The first (tier 1—the default position) is related to the provision of blended learning by following public health guidance like face coverings, for instance. In the second (tier 2—the fallback position), HE providers must gradually increase the number of online courses. Priority is given to face-to-face instruction based on the HE's own risk assessment, especially in courses where this method is more beneficial, such as clinical studies, research, and practical learning. In HE tier 3, where stricter precautions are required, suppliers should maintain the same method mentioned in tier 2 while making sure that Students adhere to government guidelines established as part of any local restrictions tier. As an example, it says that students must remain in their current accommodations and avoid returning to their family homes or other residential accommodations. In such strict circumstances, providers should make sure that students feel safe. Also, increase support by keeping services open for students and staff, such as catering facilities and university libraries. Lastly, in HE tier 4, as a last resort, providers must shift the majority of their activities and provision to be online, while buildings are open only for essential employees and courses that require in-person teaching and essential research practices.

*Minimizing the risk for students.* Similar to several social groups, students face a greater risk of contracting the coronavirus, especially outside of their controlled academic and social circles. In this case, HE providers are responsible for communicating the importance of sanitary and safe behaviors to their students. Also, to provide COVID-secure environments and share safer social activities for students, such as campus bars and Student Union activities,

Reopening buildings and campuses for the academic year 2020-2021 (autumn 2020) was very challenging due to the indistinct future of the pandemic vis-à-vis the spread of the virus and the aspiration of the production of a vaccine. Accordingly, the governmental guidance came up with several instructions to help HE providers deal with the process of reopening pedagogical and administrative buildings and campuses. The relevant guidance, such as *staying safe outside your home staying alert and safe (social distancing)*, and *working safely during coronavirus (COVID-19)* are among the documents studied and analyzed for the sake of this study. The suitable precautions and sanitary measures accompanying the reopening of buildings and campuses are summarized next.

*Cleaning.* Crowded places and populated areas face different hygiene-related issues. Cleaning is one of the most important points that the guidance discusses extensively. It is a must that HE providers induce more frequent cleaning of rooms and shared

areas, such as using detergents on touched surfaces. *Ventilation*. COVID-19 spreads by aerosol transmission; for that reason, suitable ventilation of indoor and covered areas is highly required. On the other hand, poorly ventilated spaces must be adapted if possible, to make sure the air circulates at all times. If not, these areas should not be relied on as teaching or learning spaces to avoid pockets of stagnant air.

*Social distancing on campus*. Social distancing is an important measure to face the spread of the virus. The guidance recommends two meters of space between people on campus. As it elaborates, people must keep two meters apart, especially those who do not live together. Inside classrooms and learning spaces, it is up to the HE provider to assess the risks and take serious decisions about limiting social contact based on the number of attending students and teaching spaces.

On the same train of thought, *segmentation* plays a major role in minimizing unnecessary social contact. It is the method of creating small sub-networks of students and staff, such as sub-groups for regular courses and tutorial sessions. In this section, the Scientific Advisory Group for Emergencies (SAGE) highlights the advantages of segmentation.:

- lower risk of transmission (a fewer number of individuals to infect)
- simpler management (a smaller number of known contacts)
- fewer disruptions (a smaller number of people to confine or test)

The effectiveness of segmentation can help in reducing the severity of probable outbreaks, controlling the spread of the virus, and enabling more accurate and targeted closure or quarantine, eventually minimizing wider disruption. HE providers can undertake segmentation procedures based on courses, year groups, levels, accommodations, sites, or teachings. It is important to note that SAGE asserts that there is no one perfect model for segmentation and that the HE providers are responsible for their own methods and following general governmental safety guidance and institutional risk assessment.

According to government guidance, it is necessary to implement a variety of protective measures to ensure a safe and healthy workplace. Furthermore, it is possible to apply additional procedures to guarantee a safer professional and educational space. The warrant for increased consideration is directed towards a specific type of class, such as healthcare-related courses, vocational training, and performing arts. Among the initiatives include, but are not limited to, improved cleaning and the availability of hand sanitization facilities, utilization of outdoor spaces, reduction of congestion through adaptable timetables, and the use of signage for one-way entrances.

The COVID-19 virus is transmitted primarily through infected respiratory secretions and droplets. Thus, the guidance recommends the use of face coverings as an additional risk



mitigation measure by all parties involved in the educational sphere, like staff, students, and even visitors. This measure is mostly efficient in enclosed locations where social distancing is difficult to uphold, such as classrooms, corridors, and communal areas. The guidance considers exemptions for wearing coverings, most notably for people with physical or mental impairments; that is to say, they are unable to put on or remove their facial covering. Also, the guidance exempts people with severe distress caused by wearing face masks or face coverings in general. In case they need to lip-read to communicate, staff and students can use lip-reading-friendly face masks.

*Social Contact.* One of the main issues governments faces in the current pandemic era is crowdedness. That is why most nations prohibit gatherings, especially social events, given the nature of the issue in which the maximum number of persons in enclosed areas is regulated by law to prevent the spread of COVID-19; however, the guidance provided by the UK government for HE providers clarified that these limits do not apply to:

- gatherings for educational or business reasons when reasonably necessary;
- meetings of a single-family group
- a support bubble with more than six persons

Consequently, *student movement* may add a degree of risk, most notably with mass movement at the beginning of the academic year. In this sense, the guidance advises HE providers to maintain social distance and share best practices to mitigate the risk and create a consistent approach to reopening campuses. Furthermore, it is advised to share clear guidance and instructions with students to avoid staggered arrivals and ensure safe travel for all.

*International students and self-isolation:* An extensive range of scenarios were discussed by different governments for international mobility in higher education institutions during the current pandemic. For a period of nearly a year (March 2020 to January 2021), there were staggering socioeconomic consequences as some countries chose to totally or partially lock all borders. The UK, with its well-recognized higher education system and active academic and research mobility programs, faced pressure to keep borders open for professionals and academics in times of not only the global pandemic but Brexit as well. In view of that, the guidance shed light on strict measures for international students and advised HE providers to assume responsibility as soon as students arrive in the UK, if not before. On arrival, international students must fill out a passenger location form before beginning their 10-day self-isolation. To eliminate needless mobility between rooms and lodgings, HE providers will need to make systematic preparations for the provision of food and drink. The guidance instructs HE providers, through the *bespoke guidance*, to make every effort to look after students during the self-isolation period.

*As far as travel and transport are concerned*, the guidance recommends walking and cycling from and to the campus and different university buildings. The government provides guidance for passengers and operators, giving the chance for HE providers to arrange transport and share best practices to help control the coronavirus (COVID-19).

*Accommodation*: Similar to the sanitary measures undertaken for instructional and research spaces, students' accommodations must be cleaned regularly with attention paid to efficient ventilation. It is also advised to provide thorough household cleaning for accommodations that have been vacant for over 72 hours. Even though moving houses if necessary is not prohibited, frequent temporary movements will increase the risk of virus transmission; thus, it is advisable to stay within the same household to facilitate the process of testing and tracing activities. HE providers need to check households' routine contact and meetings with people outside of the household and campus. Furthermore, the HE providers have the right to decide on best practices and living arrangements depending on the actual arrangement of the lodging, taking into consideration shared kitchens and bathrooms.

*Teaching and learning environments*: The teaching and learning environment is as important as accommodation and transportation in the face of the global pandemic. The guidance advises HE providers to identify the appropriate mix of online and face-to-face content for different subjects (blended learning). This, according to the guidance, will help with learner engagement, help learners who cannot physically attend their courses, and enable providers as a whole to minimize any risk of contamination and transmission of the virus. If feasible, the same sanitary and educational considerations should be applied to laboratory science teachings to reduce the risk for those using such facilities. The government guides HE providers to manage university libraries in a COVID-secure way as of July 4, 2020, following the measures applied for public libraries through the *guidance for public libraries*.

In other cases, where face-to-face instruction is necessary, the guide discusses different fields and subjects with the application of further sanitary measures to comply with the general objective of the guidance. As for *sports training and performing arts teachings*, social distancing is of great importance. These activities can be carried out in accordance with routine guidelines, particularly the Department for Digital, Culture, Media, and Sports (DCMS) guidance for both professionals and non-professionals on *Working safely during the coronavirus (COVID-19): performing arts*. The main outcome of the two guidance outlines refers to the cumulative aerosol transmission from people performing at and attending events, which is likely to create more risks. Even though the DCMS is still developing a detailed understanding of methods to mitigate the potential aggregate risk, it is advisable to consider alternative methods to deliver courses in addition to segmentation and social distancing. As an example, the guidance recommends the reduction of cast sizes in drama and the size of the

orchestra, in addition to scheduling classes in larger, well-ventilated instructional areas. Other effective measures are one-on-one tutorials, rehearsals, and practice. The use of barriers, booths, or screens where social distancing is more challenging or not possible is highly recommended.

Certain equipment in the performing arts is integral to the instruction process. The guidance provides the following measures to be followed and respected in terms of handling equipment:

- If feasible, students and faculty should avoid sharing equipment.
- If equipment must be shared, be sure to enhance handwashing before and after handling equipment.
- ensuring that all equipment, including shared instruments, desks, sound and lighting equipment, microphones, and battery packs, is cleaned on a regular and rigorous basis
- dealing with documentation such as music scores, screenplays, and instructional materials

In the performing arts, the audience is an important part, especially if the production is particularly interactive in nature. Thus, if a live audience is essential for teaching and assessment purposes, HE providers need to limit attendance and advise the audience not to cheer or shout given the high transmission rate from aerosol and droplet transmission. Again, the use of screens, social distancing, and face coverings is highly required.

*Managing Social and Informal Interactions:* HE providers must consider students' desire to interact with people from their inner and outer educational circles either socially or creatively as part of the overall educational experience. Signage and markings in pre-designated specific areas for interaction (creative spaces) must be organized in a COVID-secure way. To engage securely outside of the classroom, there must be marks to allow for social separation and hygienic behaviors such as facial coverings.

*Compliance with guidance:* HE providers must ensure total compliance with government guidance; in doing so, the HE providers as an institution are ensuring the appropriate COVID-secure measures are in place. Furthermore, they are responsible for increasing student and staff understanding of these measures through continual communication in order to emphasize the necessity of following the rules. This can be undertaken through (as mentioned in the guidance):

- regular contact with staff and students
- signs and posters to reinforce the rules
- a clear description of student conduct standards, such as a behavior agreement
- adherence to guidelines

HE providers are encouraged to consider a system of rewards for compliance and penalties for noncompliance. In significant situations of noncompliance, disciplinary actions must be used due to the significance of the consequences on the health situation.

*Communication about compliance:* The universities in the UK are international higher education institutions with students and staff from different cultural backgrounds. In this sense, the government's guidance focuses on communication strategies for students and staff based on the following principles:

- Don't assume that everyone knows the official rules;
- instead, make sure everyone understands the rationale for actions and protective measures.
- Make COVID-protected conduct the norm.
- Foster an environment inside your institution that encourages the following COVID-secure activities.
- Involve staff and students in communication creation
- keep messaging and counsel consistent.
- When designing messages and strategies, keep a variety of cultural backgrounds in mind.

By considering these principles, universities will put the health of students and staff at the center of their efforts. They shall guarantee access to high-quality educational services that characterize them as HE providers, with consideration for staff, students, and visitors in accordance with the Health and Safety at Work Act of 1974 and the Equality Act of 2010, as the guidance clarifies.

Conclusively, the government guidance explains that These are natural reactions to an abnormal circumstance. It also recognizes the mental health challenges faced by students and staff because of the disruption to educational and professional routine practices. The Minister of State for Universities, Michelle Donelan, explained to the Office for Students (OfS) and HE providers in March 2020 that she stated that she wants to shine awareness on mental health and wellbeing in higher education. She concentrated on pastoral care and the emotional health of students by providing counseling services. HE Providers, as autonomous institutions, were advised to liaise with the NHS (National Health Service) and work in partnership with them to address any further necessities caused by the pandemic. With the financial hardships arising from the COVID-19 pandemic, the government, through its guidance and cooperation with the OfS to support disadvantaged students impacted by the health crisis; decided to spend £23 million in OfS Student Premium money from April to July 2020. In addition to £256 million for the academic year 2020-2021, which begins in August,

this student hardship fund assists the underprivileged in purchasing IT equipment and mental health support in order to cope with their peers and courses.

With the outbreak of the Coronavirus and before reporting any positive cases in Algeria, the government tried to launch a series of preventive measures in an attempt to prepare the citizens for the inevitable situation. The universities are considered the most crowded public spaces in the country; therefore, the Ministry of Higher Education began a prevention and awareness campaign by mid-February 2020. The campaign used posters and leaflets to introduce the virus and its symptoms to the higher education community. The organization responsible for the awareness operation focused on identifying the suspected cases and the risk levels; moreover, they invited all university members who spent the last 14 days in one of the following countries (China, South Korea, Japan, Iran, and Italy) to approach the health services. (Sensibilisation et information. Note 270, 2020)

*Alternative teaching modes:* By the end of February 2020, the ministry of higher education addressed the universities and instructed their heads to provide all ICT materials as a preliminary step to prepare for e-learning that was intended to be adopted by March 15<sup>th</sup>, 2020. The ministry urged the teachers to get actively involved in the preparation and creation of one-month course content that can be used for distance learning. The teachers were invited to rely on the various official platforms available, mainly the MOODLE platform, to keep in touch with their students in case the university closed its doors, and that is what eventually happened. After the MHPHR (Ministry of Health and Population and Hospital Reform) reported some COVID-19 cases had been verified in the nation, the Ministry of Higher Education immediately closed all universities and accommodation campuses one week before the scheduled date of the regular spring holidays, precisely on March 12<sup>th</sup>, 2020. (Gestion du Cas Suspect et/ou Confirmé. Note 05, 2020)

Following the inevitable decision to close all schools and universities, the Ministry of Higher Education sent a clear instruction to all institutions on March 17<sup>th</sup>, 2020; it invited all members to adopt online teaching as an alternative to in-class teaching, a decision that was unwelcome among teachers and students. The concerned categories, namely teachers and students, commented on the decision as unrealistic and illogical; they supported their comments with the fact that the majority of teachers experience this type of instruction for the first time in their entire career, while students claimed that a large number do not have the facilities to access online material provided by their instructors. However, the ministry did not consider their resistance and insisted on adopting online teaching. It ordered the responsible parties not to spare any efforts for the success of the operation and to make the uploaded lectures easy to access for all students across the country. (Mesures Préventives. Note 288, 2020)

*Maintain communication:* By the beginning of April 2020, universities intended to go back to in-class teaching; unfortunately, with the increasing number of COVID-19 cases in the country, the ministry decided to extend the spring holidays for another 25 days (until April 29, 2020). The higher education decision-makers stressed the importance of online teaching in the midst of the current circumstances and invited teachers to stay connected with their students via any available means. In April, the situation started to get more serious and the break took longer than expected; therefore, the Ministry of Higher Education addressed the teachers of all domains to be innovative in their online teaching by varying the methods of interaction with students. They want to draw the teachers' attention to the fact that e-learning is more than just uploading lectures in PDF or WORD format; however, it is highly recommended that they shift towards using recorded videos and scheduling online video sessions via the different applications' free versions, such as Zoom, Google Meet, Microsoft Teams, etc. Moreover, they were encouraged to plan interactive lessons and even devise tests and evaluation assignments. The ministry asked the heads of the universities to benefit from the experience of the newly recruited teachers, who received training on planning online lessons and working on online teaching platforms. (Cours en Ligne, Note 440, 2020)

*Pedagogical issues:* This step has split the higher education community into two parties. The first group of teachers, which represents a minority, welcomed the idea and started working in different methods such as creating YouTube channels and contacting their students on various social media sites and other useful applications. The first group of students, which also represents a minority, was in tune with teachers by attending the online lectures and doing assignments. The second party of teachers, the majority, resisted the decision and argued that it was not realistic and would not lead to satisfactory results. Besides, they complained about the bad quality of the internet connection in the first place and the absence of effective teacher training. The second group of students was definitely against the decision, arguing that they need more time to get used to this type of learning, in addition to the fact that the majority lack the necessary facilities at home, which prevented them from having equal chances with their peers who do not face such a problem. All in all, online teaching proved inefficient in its beginning, and both teachers and students faced lots of technical problems. The results were not encouraging at the start, but none can deny the fact that it was a beneficial experience. (Mise en Ligne des Supports Pédagogiques, Note 416, 2020)

*Outbreak restrictions:* The end of April witnessed the extension of the holidays for the third time because of the increasing number of cases across the country. Consequently, the Ministry of Higher Education invited all the components to take part in evaluating the situation at the pedagogical level and suggesting practical and preventive solutions

for the post-Covid holidays. (Situation Post-COVID-19 Note 547/SPN, 2020). After a series of meetings and discussions of the suggestions, some important decisions were taken. The following is a summary of the post-holiday plan:

- In-class teaching will be resumed by the third week of August 2020. (Poursuite des Enseignements, Note 634, 2020)
- Online teaching remains the only alternative. (E-learning, Note 465, 2020)
- Reinforcement of online teaching via tutorial videos to facilitate the task for teachers and students. (E-learning, Note 465, 2020)
- Turning all on-site conferences and seminars into webinars
- All administrative and pedagogical meetings must be held online via the available applications.
- Setting the pedagogical and preventive measures for Master's and Doctorate vivas: social distancing, face masks, and banning audience attendance
- The possibility of scheduling Master's and Doctoral vivas online (Soutenances de mémoires et de Thèses. Note 471/SG, 2020)
- The possibility of evaluating Master's dissertations by the board of examiners without scheduling a viva (Soutenances de Memoires et de Thèses. Note 471/SG, 2020)
- Postponing the beginning of the new academic year 2020-2021 to the end of October 2020 for L2, L3, M1, and M2 students and to mid-November for new L1 students

Higher education institutions were then expected to respect the following schedule:

### ***The Case of Algeria***

Date	Activities
<b>From August 23<sup>rd</sup> to 29<sup>th</sup>, 2020</b>	<ul style="list-style-type: none"> <li>- Resumption of classes exclusively online to all levels.</li> <li>- Resumption of Master's and Doctorate vivas (defence) with emphasis on taking the necessary preventive measures.</li> </ul>
<b>Starting from September 1<sup>st</sup>, 2020</b>	<ul style="list-style-type: none"> <li>- The possibility to take face to face exams.</li> <li>- Priority is given to graduating classes</li> <li>- Adopting plans that minimize the number of students at the different pedagogical spaces to guarantee social distancing.</li> </ul>

*Table2. Resumption of Pedagogical Activities*

*Source: Ministry of Higher Education of Algeria, Poursuite des Activités Pédagogiques. Note 866,2020*

***Higher education international mobility:*** The above decisions were subject to change and modification with reference to the development of the health situation and the

spread of the pandemic in the country. That was at the local level, while internationally, after banning all international flights by Algerian Airlines and closing most of the universities and laboratories in host countries, 164 scholarship holders, including teachers and doctoral students whose scholarships have come to an end, addressed the government and the ministry of higher education to request an extension of their stay to finish their research work. After coordination meetings between the government and the Ministry of Higher Education, the latter asked the concerned scholarship holders to send a report on their situation and the progress of their research. Shortly after their demand, the ministry announced its decision, which was in favor of the scholarship holders' request, and an extension period was given to those who were stuck in the following countries: France, Spain, Romania, Turkey, Malaysia, the United Kingdom, the Netherlands, Portugal, Belgium, Italy, the UAE, Canada, Egypt, Tunisia, and Oman. As mentioned earlier, the Algerian government was very strict about the movement of flights from and to the countries that witnessed a higher number of COVID-19 cases. This urgent and sudden decision caused thousands of Algerians, including university teachers, to get stuck in different countries and transit airports. The concerned teachers were on a short internship abroad, and unfortunately, they had to extend their stay to an unknown date. They contacted the Algerian consulates and the Ministry of Higher Education to ask for an immediate solution, as staying abroad is very costly. The authorities have scheduled rescue flights to evacuate all stranded citizens, including university teachers, and imposed a 14-day quarantine upon their arrival in Algeria (Prolongation PNE, 2020).

*Resuming activities in HE institutions:* To guarantee a successful start to the academic year, the Ministry of Higher Education addressed the heads of the universities at the beginning of October 2020 to draw their attention towards the psychological preparation and accompanying of the university members (students, teachers, office workers, etc.), to reduce the psychological effects of the virus, especially anxiety and obsession with or fear of infection. In this regard, the following instructions were emphasized:

- Prepare a schedule of face-to-face consultation sessions with psychologists.
- Provide all university members with a phone number to consult a specialist when necessary.
- Provide online service to book a face-to-face appointment with a specialist or to take a distance consultation via the available free of charge applications.

All the above instructions and measures depend directly on the society's awareness in general and the university community in particular to avoid infection among university members and their families and to guarantee a successful beginning of the pedagogical and scientific activities. (Accompagnement Psychologique; Notes 1110, 2020)



## Summary of the Main Results

The unprecedented crisis of the COVID pandemic has led to radical changes worldwide. Higher education institutions were no exception. The aforementioned institutions, given their importance, had to adapt to the critical situation in different ways. Depending on the country's governing systems, resources, and social construct, each attempted to create a plan of action for its tertiary education institutions to remain operational in the face of the global pandemic. The UK and Algerian HEI dealt with the critical situation differently. Accordingly, in this section, we will summarize the main findings we found comparing the two countries in terms of decisions made in favor of HEI and their operations during the pandemic. As one of the most crowded public areas in any country, if not the most, the university might be among the main areas where the virus can spread vastly and lead to losing control over restricting the number of infections. We relied on the analysis of different government documents and communications, in addition to institution instructions, to find recurring patterns and code them, then summarize similar codes into main themes in relation to the main decisions made by the two cases during the pandemic. Therefore, answering the main research question, "What are the main measures suggested and executed by the Algerian and UK higher education institutions during the COVID-19 pandemic?" This might lead to further investigations studying the effect of these decisions on the spread of the virus and sharing best practices in case a similar phenomenon occurs in the future.

The first theme in our comparative analysis is the organizational measures declared by the two governments. In the UK, HE institutions were instructed to take preventive measures based on four main restriction tiers. This helped decision-makers in universities decide the right level of intervention based on how serious the outbreak was. The universities could also collaborate with local authorities based on the four restriction tiers. However, the HE provider remained operational no matter the restriction tier or seriousness of the situation. The more the situation is serious, the more online provision of services is in universities. Cooperation between HE institutions, the Department of Public Health, the Department of Education, and local authorities was of high importance to keep the institutions open at all times and manage the health situation more efficiently. In Algeria, the government focused more on the issue of universities being the most crowded public areas in the country. An immediate shutdown of activities and the closure of all universities were taken by authorities as soon as the number of infections in the country rose. The Ministry of Higher Education and Scientific Research issued a decision for university rectors to visit nearby universities a week before the scheduled spring holidays, exactly on March 12<sup>th</sup>, 2020. The authorities' assessment of the sanitary situation resulted in an immediate shutdown of all university activities, both pedagogical and administrative.

As the governing system of universities in Algeria is mostly centralized (public), the decision did not cause many issues for HE providers. While all Algerian universities were closed, the higher education institutions in the UK remained operational with certain limitations as far as catering facilities, libraries, and administrative buildings were concerned. The number of infected cases decreased in Algeria during this period, while it remained very high in the UK. It is quite possible that the total closure of HE institutions in Algeria helped decrease the number of COVID-positive cases in the country.

The second point worth discussing is the on-campus measures taken by the two authorities during this health crisis. In Algeria, the resumption of face-to-face pedagogical activities took place by the third week of August after relying on online courses for the previous four months. The gradual resumption of activities was followed by very strict sanitary measures on different campuses in the country. To minimize the risk for students and staff, both countries considered several restrictions inside universities to avoid any major breakouts. In the UK, HE providers shared safe behaviors with students and reinforced communication, especially in campus bars and for student union activities. Several precautions and sanitary measures were taken in both countries given the nature of the virus transmission. Cleaning and hygiene were of utmost importance. Using detergents and installing hand-sanitation stations were effective measures since the virus spread through aerosol transmission and droplets. Ventilation in classrooms and avoiding the use of air conditioners were among the main measures enforced by Algerian higher education institutions to avoid the spread of the virus, taking into account the major risk of pockets of stagnant air in these situations. As for social distancing, the segmentation of teaching groups was among the measures that seemed efficient in these conditions. In the UK, smaller sub-networks of students were segmented based on the course, accommodation, sites, or teachings. In Algeria, university rectors were given the liberty to consult with their staff and take suitable measures depending on the number of students in their institutions and the nature of the geographical area. Rectors decided on segmentation based on teaching years. Year one and two students studied for a whole week, then they left, so the rest of the students resumed their studies for the same period. Other universities relied on a fifteen-day period, while others went for a whole month, i.e., month by month for both groups. This might not be very efficient in the UK, given the different natures of the educational systems between the two nations. However, both segmentation methods seemed very efficient in avoiding wider disruption and ensuring easier control, testing, and quarantine of infected cases.

As far as the teaching and learning process is concerned, the two authorities encouraged the use of e-learning materials and methods. In order to minimize the risk of contamination, the UK guidance advised HE providers to deliver an appropriate

mix of online and traditional content for different subjects. This decision was followed by enforcing further sanitary measures such as the provision of larger, well-ventilated facilities and the segmentation of sessions, mostly in the face-to-face courses for performing arts teaching and sports training. Other preventive measures were applied, such as the use of barriers, booths, and screens where social distancing might be challenging or not possible. The Algerian authorities opted for total closure and the switch to online education, taking advantage of the feasibility of this decision since all HE institutions are public. The concerned ministry took advantage of newly recruited teachers' expertise in online course design and online teaching to train other teachers and help with digital literacy challenges. Newly recruited teachers usually go through a one-year in-service training in pedagogy and professional development. Their training includes a course on online course development and digital literacy. By the third week of August 2020, the authorities attempted to resort to blended learning following the challenges, resistance, and ineffective techniques used in online teaching. The sanitary measures adopted by the local authorities were similar to those used by HE institutions in the UK, including installing hand sanitizing stations, relying on signage, and distributing free face masks.

As for social contact and students' lives between campus and dorms, the UK faced pressure from HEI and the international community to keep borders open. This was a leading reason for the government to hold HEIs responsible for students' and staff's safety. Local authorities advised against the avoidance of staggered arrivals and enforced students' completion of a passenger locator before starting self-isolation for at least ten days. Furthermore, walking and cycling from and to campus and the main university buildings were highly recommended. As for students' accommodations, HEI in the UK was asked to ensure frequent cleaning and ventilation of dorms with specific living arrangements and organized use of shared kitchens and bathrooms. This process was planned to facilitate the testing procedure and trace activities and infections. In the Algerian context, very limited movement of individuals and public transportation was applied during the total lockdown in and out of HEI. As the institutions started opening at the beginning of the academic year 2020-2021, segmentation was applied to both campuses and dorms. Students who finished their pre-identified and limited educational period were asked to leave their dorms to allow the next group of students to resume their courses. A very strict course of cleaning was applied to dorms in general and university restaurants, cafeterias, and shared spaces in particular. During students' regular courses, frequent and temporary movement was restricted by their institutions.

Compliance with guidance is one of the most challenging aspects that authorities have to deal with. Both governments shared best practices and recommended maintaining communication with different stakeholders. HEI worked on raising awareness among

students, employees, and staff through constant communication and promotion of the importance of compliance with the guidance. Different methods of communication were applied by the Algerian and UK authorities. In the UK more focus was on sign posters to reiterate rules. Moreover, incentives and disincentives for compliance and non-compliance with guidance were put into play. In Algeria, similar measures were applied with an extra focus on constant and regular communication through messaging and social media platforms. Serious disciplinary measures were applied in and outside of campuses and dorms to ensure a reduction in the seriousness of outcomes on the general health situation. As a summary of communication procedures applied by both authorities, maintaining constant communication, considering a range of cultural backgrounds, simplifying statements, and involving staff and students when creating communication were the main actions employed in facing the global pandemic in HEI.

Finally, mental and psychological support for students and staff was of immense importance in the field of higher education during the pandemic. In the UK, support for well-being was offered through counseling services to help disadvantaged students via a liaison with the NHS office for students. Financial assistance for counseling and IT equipment to keep up with and cope with their classmates. In Algeria, just before students resumed their sessions after the total lockdown and university closure, the Ministry of Higher Education planned to open free counseling and psychological

to reduce the psychological effects of the virus, especially anxiety and obsession with or fear of infection. In this regard, the following instructions were emphasized:

- Prepare a schedule of face-to-face consultation sessions with psychologists.
- Provide all university members with a phone number to consult a specialist when necessary.
- Provide online service to book a face-to-face appointment with a specialist or to take a distance consultation via the available free-of-charge applications.

## **Conclusion**

The main aim of this study is to shed light on an important issue related to risk management. Also, to reflect on the decisions made by the governments of Algeria and the UK in dealing with the pandemic in a sensitive sector, i.e., higher education, and share best practices for future similar challenges, The COVID-19 global pandemic caused staggering issues in different fields and led all stakeholders in different domains to think of procedures to save and maintain their businesses while simultaneously avoiding any casualties. The higher education field was no exception. Different institutions around the world followed procedures to minimize the threat of the pandemic and maintain their operations, which was not an easy task. In the

UK, it was nearly impossible to complete the total closure of institutions given the international framework of universities and the large number of international students in the country. For financial reasons as well, universities in the UK could not risk total closure, which caused a high number of infections over a long period. Even though the restriction measures seemed efficient at times, the number of infections and the rate of contamination remained very high. On the other hand, the Algerian national authorities sorted to total closure, which helped limit the number of infections and lowered their rate. However, some reflection is highly required by decision-makers for the measures adopted by the Algerian government to sort out better decisions and adopt better approaches in dealing with such situations. Sharing best practices that were a success in the country must be generalized to other institutions in Algeria, which leads us to rethink the policies adopted and research the Algerian higher education policies again.

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