



Risk Management of Covid-19 in Tertiary Institutions of Learning: Challenges, Impact, and Future Preparation

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ABSTRACT

The outbreak of COVID-19 in China and the speed at which it is spreading across the globe in 2019 to 2020 has had devastating consequences on tertiary institutions of learning. The majority of the tertiary institutions of learning have to shift learning from the usual classroom or face-to-face lectures to virtual or online lectures in addressing the challenges broad by the pandemic COVID-19. This paper aims to look at risk management of COVID-19 in tertiary institutions of learning and the responses to the emerging risks, challenges, and prospects in the future. The study also discussed the risk and challenges of COVID-19, reassessing tertiary institutions of the learning risk landscape, managing the risk, effective use of technology, the impact of COVID-19, responses, and future preparation for post-COVID-19. The ability of tertiary institutions of learning and the government to manage the risks of COVID-19 now and in the future is useful for various parties, including students, parents, lecturers, support staff, management team, investors, governments, and other stakeholders.

Keywords: Covid-19, risk management, tertiary institutions of learning, virtual learning, classroom learning

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1. Introduction

Tertiary learning institutions face significant challenges due to coronavirus, just like any other sector in the world. Kelly (2020) asserts that almost all the universities and colleges in the world had a weak academic disruption in the educational sector. The statistic has shown that over 1.5 billion students and youths worldwide are affected by schools and universities' closure due to the COVID-19 outbreak (International Association of Universities, 2020). The closure of universities and colleges worldwide was made in the middle of March, and students were sent home. But as for some universities in the developed world with well-developed information technology on their campuses, learning or lectures were shifted online. This virtual learning is expected to continue to the end of the semester or even beyond. For other universities and colleges without or with inadequate information technology tools, and cannot commence virtual and online teaching model immediately will be expected to remain closed until 2021 (Kelly, 2020), when they have acquired all the necessary information technology tools and are ready, or rather device some other means with safety measures, or wait until the COVID-19 is put under control.

The pandemic coronavirus was responsible for causing the immediate change in operations in tertiary institutions of learning. This sudden change in the mode of operation has increased or changes the risk profile of the institutions upside down and forced them to change the method of learning from campuses based to distance learning, and to task the risk assurance teams to look at new risks and ways to remedy them (Lim, 2020). Thus, Kelly (2020) stated that a lot of universities and colleges could likely face strategic risks emerging due to COVID-19. For instance, some old institutions established in the 90s or 20th centuries that depend on classroom teaching on campuses may find it difficult to adapt to online teaching. But as for those institutions that came up, or will come up newly in this 21st century who are assessing the risk of switch to virtual learning due to the coming of Covid-19, may not have difficulty if they have acquired all the necessary technological tools. The question is, will classroom teaching on campus go to be necessary during or after the coronavirus pandemic? Or will there be a mixture of both virtual learning and classroom now and the future?

Ironically, the first thing that comes to mind immediately Covid-19 stated to spread faster across the globe was, "how can the tertiary institutions of learning help" since they are not medical doctors and nurses. As such, they are not going to assist on the front lines. Be as it may, the tertiary institutions of learning have a unique way to assist in responding and managing the emerging risk from crises. Therefore, universities must have to learn and adjust faster to the present unexpected challenges and risks. The ability of these tertiary institutions of learning to manage the risks of Covid-19 is useful for various parties, including students, parents, lecturers, support staff, the management team of the higher institution of learning, investors, and governments.

This paper aims to reflect on the risks management of COVID-19 in tertiary institutions of learning and its preparation for the future. The study considered and discuss issues like risks and challenges of COVID-19 in tertiary institutions of learning, re-examining risk landscape in tertiary institutions of learning, risk management, effective use of technology to manage risk, the effect of COVID-19, and preparation for post-COVID-19 in tertiary institutions of learning.

2. Risks and Challenges of COVID-19

Every crisis comes with challenges and risks. As such, COVID-19 is not an exception. The challenges and risk faced by tertiary institutions of learning in the face of COVID-19 as opined by Winthrop (2020) are:

2.1. Distance learning will reinforce teaching and learning that everyone knows they do not work well: Almost all tertiary institutions of learning in many countries of the world are shifting from classroom to distance learning approaches through technology (virtual learning or online) or physical packaging of materials to students. There are risks attached to the new approaches to learning and can be very solitary and didactic when telling the students to stay at home and watch videos, click through presentations, or read documents. Sanz et al. (2020) opined that the most challenging and worst form of learning is to stay at home alone and listen, most especially to those who are left behind and finds it difficult to understand. These may be the nature and kind of lectures the students will receive when the learning institution is closed. Exams will be written online, and lazy and unserious students may likely not be the ones to write the exams, since lecturers cannot monitor the process. Thus, the schools cannot be sure whether the student who enrolled is the one taking the lectures and writing the exams.

2.2. Educators will be overwhelmed and unsupported to do their job well:

The pandemic caught everyone unaware. The staff had no prior knowledge of their school closure and transferring lectures from physical contact to virtual or online learning (UNESCO, 2020). According to Winthrop (2020), the sudden change was challenging for all the staff, most especially as concern for sorting materials, filtering through all the resources to find those of the standard, and fitting into the new approaches. Like any other person, lecturers are also feeling the new world order as fathers, aunties, mothers, uncles, trying all possible best to manage themselves, take care of their families, and search for a new method to use in ensuring that learning does not stop.

2.3. Protection and safety of students: The protection and safety of children may be difficult to safeguard. Tertiary institutions of learning already have some measures taken for their students' security against predators, such as pedophiles, to enable them to have access to their students. Thus, once any higher learning institutions or universities switch to virtual learning where students can take lectures at home, it is difficult for the school to safeguard them against predators. So people have to be careful and mindful about the design of virtual or online learning they are using, so bad people do not corrupt their wards.

2.4. Closure of school will widen the equity gaps: There has been great improvement in the number of students having access to digital devices and internet connectivity, facilitating the quick movement to virtual learning possible. But the issue is that not every student has access to electronic devices and connectivity to the internet at home. These categories of students are required to have access to learning materials too. Thus, the learning institutions are required to make learning resources available and accessible on different means possible where every student can have access in the possible way it will reach them.

2.5. It is difficult to get buy-in later for ed-tech students: Students who use ed-tech during COVID-19 will have a poor experience because it is a new and improve learning approach. Additionally, students will also be unhappy and mentally affected health-wise to adapt to the new normal with the isolation due to the pandemic. Initially, student test scores will be terribly impacted when they tried the ed-tech. Therefore, tertiary education needs to identify and know what works and what does not work at these risks and challenges.

3. Re-Examining the Tertiary Institution of Learning Risk Landscape

The main aim of tertiary institutions of learning remains the same despite the effect of COVID-19: Preserving academic integrity, servicing students, achieving financial and budgetary goals, and complying with state and federal regulations. The only thing that has changed for the tertiary institutions of learning is the mode of operation from the classroom's usual instruction to a broad scale distance learning. Thus, the way and manner tertiary institutions risk assessment should be carried out radically different (International Association of Universities, 2020; Lim, 2020). Most especially in the following aspects:

3.1. Security: Staff and students make use of their time on online communication. This increases privacy risk in transmitting confidential intellectual property around the internet and protecting personally identified information. The ICT infrastructure of tertiary institutions is prompt to potential risks of cybersecurity vulnerabilities and attacks as off-campus and VPNS become the order of the day. Until recently, students have been targeted by COVID-19 cybersecurity scams, with hackers sending fake email messages from campus administration accounts.

3.2. Liquidity: Staying on campus assist students to save money in some ways, such as lower utility bills, no much spending on sporting events. Thus, time tested budget projection has become obsolete. Invariably, the quest and need for fiscal responsibilities are increasing and growing bigger for the tertiary institution of learning in the face of reducing school fees they may face.

3.3. Academic integrity: How can the institutions be sure that students enrolled or admitted are the actual person who does assignments and writes test online? And the type of test and assignments have to be critical and be put into consideration.

3.4. Student life: In the traditional campus settings, bullying, mental health, and sexual harassment have some regulatory compliance and litigation risks for any school that refused to consider them seriously. Such problems exist even in the online world. Thus, representative bodies and institutions must have to look for new ways to resolve those issues or problems. This shows that immediately an institution implement new procedures and strategies for risk management in response to coronavirus, the institution risk profile would have been changing automatically.

4. Managing The Risk of CCOVID-19

Risk management is designing, selecting, and implementing strategies to reduce risk's adverse effects (Florin and Burkler, 2017). Tertiary institutions of learning encapsulate almost all the risk problems coronavirus can offer. Thus, Collins, Florin, and Burkler (2020) assert that the management of tertiary institutions of learning decision-taking after the careful assessment is instrumental in arriving at the extent of harm the risk will cause. Kelly (2020) identified a few basic procedures for the audit teams to cope in the troubled period. These are:

4.1. Risk assessment triangle: Coronavirus has changed institutional risk profiles to the extent that risk management professionals can hardly maintain the paste of change. This calls for the tertiary institutions of learning to spin out or find another way risk is handled daily (Djalente, Shaw, and Dewit (2020). Therefore, audit teams in the tertiary institutions of learning need to prioritize as a matter of urgency which categories of risk will require re-examination at the moment and which ones can be shifted further, and which ones can wait.

4.2. Remember your enemy and understand your allies: As tertiary institutions of learning came out with new control procedures and policies, lecturers and other staff in the institutions are going to grumble. Some will feel these new steps that are coming up are unnecessary and intrusive because they may not see or consider the risk the

management of the institutions are worried about even though it is due to unforeseen circumstances like the pandemic COVID-19. The audit team must put at the back of their mind that coronavirus is the enemy of tertiary learning institutions. Therefore, the institutions' business is an ally that must have to function and cannot be alienated. To successfully implement the remediation plans and compensate controls without encountering much resistance, audit teams need deft interpersonal skills, collaboration, communication skills, and appreciation to enable the institutions of learning to achieve their goals.

4.3. Monitor and repeat: In real terms, whenever tertiary institutions of learning implement new strategies for managing risk, and strategies and processes in response to the pandemic, the tertiary institutions of learning risk profile may have definitely changed automatically. For instance, the government may have change closure dates for tertiary institutions of learning or rather approved emergency funds to tackle unforeseen risks and emergencies. Note that the situations of coronavirus risk and its management will change from time to time. So it is mandatory to monitor the level or extend of the state of risks, analyze the data, examine and re-examine every situation all over again, and again.

5. Effective use of Technology to Manage Risk

Effective use of modern technology is required to manage the risk of Covid-19 in the tertiary education system. These could be possible with the deployment and use of information technology, which enables people to work remotely, and students receive lectures at a different location and at the same time, performing their work as a team is very important and necessary in this period of pandemic COVID-19 (Wang et al. 2020). Thus, all the normal issues about technology capabilities are relevant and applicable in this era of coronavirus, as stated by Kelly (2020). These are:

5.1. Use of a single, trusted source of data: This is essential, most especially given the vast number of lecturers and students who will be having lectures from home or different locations from each other. Thus, the need for a single, trusted source of data in one platform is safer due to the risk of version control issue or data inaccuracy and completeness, which may be high.

5.2. Collaboration and communication equipment: Coronavirus has separated and keeps lecturers and students apart from each other, across a time zone, out of normal classroom lectures, office usual, without an easy avenue to have lectures and work together spontaneously as it was before. Therefore, collaboration, functional and friendly communication gargets are required to charge and recover from the loss of face-to-face interpersonal relationships experienced during lectures on campus and at work in tertiary institutions of learning before coronavirus.

5.3. Procedure to monitor remediation work and flag steps to achieve it: This is the tendency that many more risk of tasks will arise when lecturers, supporting staff, and students have lectures or worked remotely. It is essential for institutions to devise means and ways to track tasks assigned to lecturers and supporting staff and automated notifications and workflows remediation effectively and functional. At the same time, lecturers should also device means to track the task given to the students

5.4. Strong documentation and testing mechanism: With the coming of many new risks resulting from COVID-19, improvised processes and procedures for emergency controls, testing, and documenting all those things will become very important and essential in the tertiary institution of learning. Since lectures and students must literally stay away from each other, coronavirus has task our ability to work together to prevent infection or contact with the disease. There are some new risks challenges that coronavirus came with, which could be a prior new risk or totally new that shows in a

new dimension, of which tertiary institutions of learning, just like any other sectors, are experiencing similar challenges. In this new world order, audit teams must have to push their capabilities and talents a little bit further, to almost every aspect of the institutions, from assessment of risk to remediation plans, testing and documentation, collaboration, ingenuity, and much of perseverance must have to be put in place. Above all, better use and application of modern technological equipment will be the driving force for success in the new era.

6. Effect of Covid-19 on Tertiary Institutions of Learning

The estimated and real effects of COVID-19 on tertiary institutions of learning, most especially as concerns different actors or stakeholders according to UNESCO (2020) and Sanz, Sainz, and Capilla (2020), are as follows:

Students: The closure of institutions due to COVID-19 means the temporary stoppage of classroom lectures and all other activity most especially for the undergraduates in some countries without a clear view and idea of how long the stoppage will last, the effect on their day to day life, cost to incurred and other financial burdens as well as on the continuation of their studies in particular. The students will feel the effect on how to adjust to daily life, financial cost personally, and burdens as a result of the replacement of face-to-face classes to online lectures and international mobility.

Faculty: Although the effect is mostly focused on students, the study cannot deny that lecturers and other supporting staff also significantly affect their work and professionalism. For instance, not every tertiary institution of learning has in place continuing strategies for a learning activity to be performed with the advent of COVID-19. Thus, part-time, temporary, contract, and visiting lecturers may be terminated. In some countries, full-time lecturing in universities is not common, and the majority of the lecturer operate on a part-time basis. The stoppage of face-to-face lecturing serves as a threat to the staff on contract and temporary appointments.

Alternatively, the management and the contract staff can negotiate for temporary suspension, but the suspension could belong if the situation persists and continues. If virtual technology is put in place, the return to face-to-face or classroom lectures could be risk and difficult. Another effect is that lecturers will continue to lecture using virtual equipment for some universities with the equipment because virtual learning has been going on hand in hand with the classroom lecturing in Europe, some parts of Asia, and America. But in the majority of the African and Latin American universities, virtual learning is none existence. Thus, virtual learning is the source of greater uncertainty, which will result in a set of different effects on the system of their universities. This is because most universities do not have internet service and some basic connectivity and technology to guarantee the continuation of learning in this pandemic.

The majority of the students in the rural areas in most African countries like Nigeria, Niger, Chad, etc. and Latin America and the Caribbean like; Argentina, Colombia, Peru, Bolivia are faced with worse connectivity conditions than in their homes in the cities close to the campus where they study (UNESCO, 2020). In countries where the institutions do not have virtual learning technology, it will take a longer time and cost for such institutions to return and start learning if the problem persists. This means most of the staff who are not information technology compliance may need to be trained. Thus, the demand for quick transformation of tertiary institutions of learning needs the incorporation of technology to be able to survive in this period of COVID-19 and the future.

Non-Academic staff: The non-academic staff in administration and other support services may be at risk, especially when their tasks are no longer considered critical to

learning continuity. For instance, employees who work in the canteens, dining rooms, and cleaning services are not critical, unlike workers connected to the computer and technical support services. However, what will detect the tone in terms of employment and social protection are the government's measures in most cases. The non-academic staff is the most vulnerable in tertiary institutions of learning when possible jobs cut. Most especially in the face of the obvious decrease in students' enrollment and cancellation and reduced fees. The tertiary institution of learning will face possibly financial stringency or shortage and the inability to pay non-academic staff. Hence, cut in staff salaries and entitlements will be the order of the day and possible employment termination of redundant staff.

Tertiary learning institutions: It is now evident that there is a temporary stoppage of classroom lectures in tertiary institutions of learning across the globe. This has disrupted their proper functioning. The disruption's effects depend largely on their ability to sustain themselves financially and remain active and functional in their academic activities rather than a change in training or teaching modalities. To continue virtually teaching courses, as a notice in some institutions across the globe due to transfer from the classroom to the virtual education system, has not been so easy, most especially for those that do not have enough technological equipment for the virtual education system.

The institutions that have enough technology and technical infrastructures for virtual courses will take them some time to provide the technical and technological requirements to support all courses in the institution for all the students. Also, most public and private institutions depend on the students' school fees to operate, particularly private institutions. For instance, tertiary institutions of learning in Chile, Colombia, and most public schools in Mexico that depend solely on school fees from the students will find it difficult to operate as there may not be enough cash flows due to financial difficulty. Financial survival in the case of private universities and some self-financing public universities who have been closed for more than a quarter will worsen. If the problem persists, most especially when they cannot guarantee continuing training in virtual mode, they would have to suspend the collection of fees and possibly close their universities.

The system: Tertiary institutions of learning worldwide have reacted and acted in the same way with the advent of COVID-19. They have continued their academic activities using virtual learning modalities that do not need classroom or face-to-face lectures (Wang et al., 2020; Higher Education Bureau of Macau, 2020). But some tertiary institutions of learning in Africa, South America, and some parts of Asia have stopped due to inadequacy or lack of virtual learning facilities. If the problem of COVID-19 persists, the effect on the system will be many. The issues can only be addressed when tertiary institutions look at the demand and supply side and consider the increase in challenges for the institutions' governance.

7. Preparation For Post-COVID-19

There are five things to do to prepare for post-COVID-19 in tertiary institutions of learning. No one can deny the fact that COVID-19 pandemic has fastened and dramatically changes all aspects of human life all over the world. In the business sector, education, healthcare, and politics. One thing is certain that this COVID-19 will change lives and the way people behave in all facets of life for years or decades to come. Is your business or institution prepared for the five biggest macro trends that are about to unfold (Egan, 2020)?

7.1. Rise in improved websites and digital tools: These revolutions in information technology using new digital tools help tertiary institutions of learning remain afloat

during the COVID-19 disease outbreak. This will be a micro-trend that becomes more important, most especially at a time, social distances are becoming a common practice. This practice may possibly continue for other potential outbreaks in the future. It is pertinent to note that, when coronaviruses started, many tertiary institutions of learning and businesses that sold non-essential goods together with retail shops, hair salons, offices, warehouses, and factories had their office and shops and schools closed. This is because they do not have the technological equipment to survive with their physical location closure. That means tertiary institutions of learning must have to be ready to leap into the digital world to reach out to their students or customers. Thus, for tertiary institutions of learning to survive and thrive, they must improve their websites and digital tools to better serve their students. For instance, tertiary institutions of learning that never used e-learning before most have to adopt it now use advanced product configurations, chatbots, and mobile applications, which are currently in greater demand in this new decades' of the technological revolution.

7.2. Cybersecurity concern takes center stage: With the surge in lecturers and students lecturing remotely through visual devices due to pandemic coronavirus, there are many more data breaches and cyberattacks. The effect of data breach and cyberattack is something tertiary institutions of learning are being or will be forced to tackle squarely. But as for some tertiary institutions of learning, cybersecurity is not a new thing, most especially with the Californian's Consumer Privacy Act, EU's General Data Protection Regulation, and other privacy laws. The major causes of the potential breach are lecturers and students using third party tools, unsecured infrastructures, together with data storage and access practice that violate privacy laws. For instance, there has been an upsurge or increase in oversea cyberattacks in this coronavirus period, such as brute force attacks, denial service attacks, and attempted hacks (Egan, 2020). Thus, Aljawarneh (2019) champions the need for keeping websites and web servers updated and secured as quickly as possible when using virtual learning. Therefore, tertiary institutions of learning are currently forced to invest heavily in information technology accessible remotely, scalable, and secured, due to the onslaught of new data security and privacy regulations.

7.3. Virtual meetings: There has been a tremendous surge in virtual meetings in tertiary institutions of learning immediately after the coronavirus discovery. This is expected to continue for now and years to come even though it cannot substitute face-to-face meetings and handshake. The virtual meeting may apply to any aspect of institutions' life but not to the traditional institutions of learning. For instance, there will be a virtual meeting with your project supervisors, lecturers, therapists, doctors, legal practitioners, bankers, and consultation. And this will increase costs and saves time for parties or individuals involved. Although the virtual meeting trend is not new, it has been in place even before the advent of coronavirus. The event will be amplified as we continue in this new decade.

Tertiary learning institutions most have to be prepared for this trend and go beyond having virtual meetings, space, and software to include tutorials, videos, digital business cards, and brochures and improve website information. These will be mandatory and necessary as tertiary institutions of learning find it difficult to have physical lectures and classes and delivered materials to "students" hand to hand.

7.4. Increase control in expenditures: Covid-19 has brought sudden institutional and businesses captured all over the universe; thus, they have to keep searching for ways to have absolute control over their expenditure. The tertiary institutions of learning will be requesting or insisting on short term contract periods, emergency clauses and provisions in agreements using temporary staff or agencies, have the easily scalable workforce in trying to reduce or cut down expenditure. Thus, presently, tertiary

institutions of learning show interest in lowering expenditure, not because of COVID-19 but as a practice, they will like to continue in the future. Tertiary institutions of learning must answer their students and stakeholders on how to save, reduce contracts terms, or protect their institutions from catastrophes and disasters in the future.

7.5. Even more remote workers: The four trends above will come with a shift or move to remote lectures and work by tertiary institutions. Tertiary learning institutions that are forced to close their institution's offices and schools realize that they cannot work efficiently, effectively, and economically without remote lectures and work, as it is required now and in the future. Increasing needs for remote lectures and work means increasing needs for the four points mentioned above. The trend has been in existence long ago, but the coming of the COVID-19 outbreak has amplified it in these new decades.

8. Conclusion

The study shows that classroom lectures through physical contact may no longer be relevant. The only thing that will apply in 2020 and beyond is only the trends for virtual learning. Thus, making decisions to position tertiary institutions of learning for these changes from face-to-face lectures to virtual devices will ensure that tertiary learning institutions are at the forefront and set for the new remote and digital technological revolution. The paper is summarized as follows; introduction, the risks and challenges of COVID-19 in tertiary institutions of learning, re-examining risk landscape in tertiary institutions of learning, risk management of COVID-19, effective use of technology to manage risk, the effect of COVID-19, and preparation for post-COVID-19 in tertiary institutions of learning. The ability of these tertiary institutions of learning and the government to manage the risks of Covid-19 is useful for various parties, including students, parents, lecturers, support staff, the management team of the higher institution of learning itself, investors, and governments.

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