The Impact of Corona Pandemic on the Students Widespread Use of Technology: A Case Study of Gulf University

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Abstract

Education technology significantly influence the effectiveness of learning. The important of education technology has been increased within the period of Corona pandemic. The aim of the study is to examines the effect of Corona pandemic on the widespread use of technology to revolutionize education in HEIs. It measures the impact of Corona pandemic on the students' capability of using the technology. The study used the survey method to seek the respondent's perception on the above matters. Respondents are belonging to the higher education institution, namely, Gulf University students at accounting and finance. The authors expected that the effect of Corona pandemic on the widespread use of technology to revolutionize education in HEIs is significant. In other words, Corona pandemic could significantly influence the students' capability of using the technology. The results of the study could alter the policy makers and education institution on the important of having technologic tools in education that may enhance the performance of students, as students currently are more capable for using most of education technology.

Keywords: Corona Pandemic, Students' Capability, Using Technology, Gulf University

1. Introduction

Technology is an important part of education in the twenty-first century (Hardman, 2005; Onyema *et al.*, 2020). Technology has the potential to significantly increase teaching and learning capacities, therefore improving student performance (Chigona & Chigona, 2010). Further, educational technology has the potential to empower instructors and students, inspire change, and support the development of 21st-century skills. To satisfy the needs of users, education institutions change their instructional methods by advancing technologies and the Internet in an optimal atmosphere of learning. With today's demographics of students, educational institutions are ready to address the demands of the new student by creating and developing multimedia learning resources for the computerised classroom (Saadé *et al.*, 2007).

Study of AlAmmary (2012), has found that educational technology has inspired students to get more engaged in learning activities, which has resulted in them becoming more active and engaged in learning. Educators today utilise a variety of platforms to connect and interact with their students, as well as to obtain feedback on assignments and other responsibilities. Students ask questions and create answers on the fly using mobile devices such as cellphones, tablets, and notebooks (Onyema *et al.*, 2019). Furthermore, the faculty lecturer believes that adopting of technologies would improve their interaction with students, decrease the teaching strain generated by course material preparation, and hence the lecture content becomes available throughout the discussion (AlAmmary, 2012). Technology, such using as computers, might assist relieve the escalating problem by permitting adjustments in pedagogical techniques and, as a result, perhaps enhancing students' learning (Hardman, 2005).

The important of using technology have been very important in the epidemic of COVID-19. Covid 19 has created a near-impossible barrier to containment and non-transmission across the world since the outbreak. Because of the COVID-19 epidemic, all forms of educational institutes have been forced to close their doors. Hence, Institutions of higher education have made the switch to online learning (Aguilera-Hermida, 2020). In this regard, the perceived usefulness of the currently employed online learning systems is critical, particularly given the lack of any actual classrooms (Pal & Vanijja, 2020). The unforeseen closing of schools for COVID-19 has apparent worldwide ramifications, despite the fact that the choice to close schools appeared to be the correct one given the necessity to manage the Coronavirus epidemic (Onyema *et al.*, 2020).

The epidemic was initially detected in the United Arab Emirates (UAE) and Kingdom of Bahrain in early March, and large-scale containment measures began by the middle of March (Alabdulkarim *et al.*, 2020). Covid 19 has caused educational disruptions and public health difficulties that have proven to be extremely difficult to manage and control for public health systems. Further, the daily corona cases are still high where the number of cases for June and July are 15848 and 14516, respectively (see Figure 1). This pandemic make education fully translation to online learning.
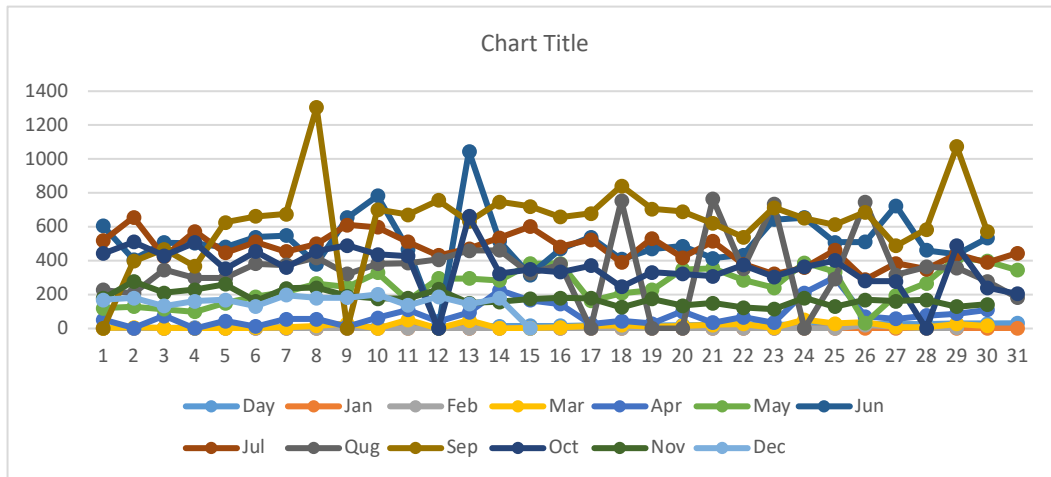
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Fig. 1. Daily corona cases (https://g.co/kgs/na1vCb)

There is substantial evidence to demonstrate that online learning is at least as successful as traditional learning. Many studies have found that online or hybrid formats have statistically significant influence on student learning outcomes when compared to traditional formats. Among the positive outcome are; Improving the learnings, engagement of students in class, enhancing the quality of learning and online education which could reduce the issue of withdrawal or failure (Nguyen, 2015). During the COVID-19 epidemic, the online method of learning has been heavily encouraged to replace the traditional learning (face-to-face) (Dong *et al.*, 2020; Pal & Vanijja, 2020).

Given the present worldwide COVID-19 epidemic, it is necessary to conduct a usability review of frequently used technology for online learning, notably because the education learning has been shifted to "online solely" (Pal & Vanijja, 2020). As a consequence, the availability of learning technology is now a critical aspect in assuring the success and value of online learning for students (Pal & Vanijja, 2020). According to Aguilera-Hermida (2020), use of technology increased after the transition from face to face to online. Hence, the aim of the study is to examines the effect of Corona pandemic on the widespread use of technology to revolutionize education in HEIs.

2. Literature review

2.1. Technology in Education

Online education is now conducted via mobile wireless technology such as cell phones, tablets, and computers. The mobility and speed of these gadgets are advantages (Cook & Sonnenberg, 2014). In education, the advancement of technology has enhanced connectedness, interaction, and productivity. As a result, technology may effectively increase teaching and learning capabilities, resulting in improved student performance (Chigona & Chigona, 2010). As a consequence of the rising use of technology in education, teachers' approaches have shifted from a conventional strategy in which they operate as information dispensers to a more flexible approach in which they act as facilitators and motivators mentors to urge students to engage and learn (Onyema et al., 2019). Indeed, Several studies have found that hybrid or online formats offer statistically significant advantages over traditional face-to-face forms in terms of student learning results (Nguyen, 2015).

According to AlAmmary (2012), educational technology is used to improve the teaching and learning processes, students' learning and accomplishment improve. With the advancement of technology and the Internet, higher education institutions are adjusting their teaching techniques to meet the demands of their students in order to give the best learning environment possible (Xu & Ebojoh, 2007). Further, The rise of mobile devices may usher in a new era of online education (Cook & Sonnenberg, 2014). Educational technology has inspired students to become more active and engaged in learning activities. Furthermore, the faculty lecturers believes that using of technologies would improve their interaction with students, reduce the load on teachers caused by course preparation, and make course content accessible during the learning (AlAmmary, 2012). The use of technology improves the teaching and learning process, as well as content production, course distribution, evaluation, and feedback (Onyema et al., 2020).

Educational institutions are striving to address the demands of the modern student by inventing and implementing virtual learning technologies as a supplement to computer-assisted instruction (Saadé et al., 2007). There are several virtual educational tools/platforms available to assist with online courses, particularly during epidemics such as the Coronavirus pandemic, e.g., GoToMeeting.com, Skype.com, Google Classroom/Open Online education (edu.google.com), Youtube.com, Blackboard.com, udemy.com, coursera.org, memory.com, alison.com, edx.org, easyclass.com, vedamo.com, Khanacademy.org, TED-Ed (ed.ted.com), Codeacademy.com, Stanford Online

(Online.stanford.edu), futurelearn.com, rcampus.com, learnopia.com, Peer 2 Peer University (p2pu.org), Teachers pay Teachers (teacherspayteachers.com), Thinkific (thinkific.com), MOOC.org, openculture.com, academicearth.org, itunesU Free courses (apps.apple.com), lessonpaths.com, funbrain.com (for kids), memrise.com, Edmodo (edmodo.com), whyville.net (for teens), schoology (schoology.com), classdojo (classdojo.com), google hangouts (hangouts.google.com), Zoom (zoom.us), Whatsapp.com (Onyema et al., 2020).

2.2. COVID 19 Pandemic and Using Technology in Education

The unintended shutdown of schools throughout the world has endorsed the need of implementing and using cutting-edge technology in learning. The COVID-19 epidemic increased worldwide demand for online education (Pal & Vanijja, 2020). Education may now be accessed from anywhere, even one's own home (Onyema et al., 2020). During the COVID-19 outbreak, virtual education was widely promoted as a viable alternative to traditional face-to-face teaching in order to retain kids learning at home (Dong et al., 2020). According to Nguyen (2015), approximately 92 percent of all distant and online education research conclude that distance and online education is as least as successful as traditional education, if not better.

The COVID-19 epidemic has had a significant effect on all types of learning, including higher education. Some of the closures began in January 2019, but the majority occurred in March, when the disease had spread to nearly every country on the planet (Hussein et al., 2020). As a result, face-to-face classes were halted and educational establishments throughout the world have been pushed to adopt a "online only" exclusivity model for teaching and learning (Hussein et al., 2020; Pal & Vanijja, 2020). As the globe fights to prevent COVID-19 or future outbreaks, educational institutions sector, faculty lecturers, and students have increasingly been dependent on educational technology platforms (Aguilera-Hermida, 2020; Onyema et al., 2020; Pal & Vanijja, 2020). One example of the technology platforms is Microsoft Teams. It offers an excellent answer in this regard, since it not only allows teachers to utilise it as a learning management system, but it also enables both asynchronous and synchronous education. For instance, much as a physical classroom has a set schedule, this programme allows several students to participate in live online sessions at a pre-determined time (Pal & Vanijja, 2020). Hence, Students have indicated anxiety about online learning as well as issues completing assignments (Aguilera-Hermida, 2020). Many teachers and students who had little (if any) prior experience with online learning were forced to do so with little assistance (Hussein et al., 2020).

Most educational institutions use the internet in their classrooms, generally through Learning Management Systems (LMSs). LMS have been increasingly popular in recent years, and they now have a significant impact on the teaching education process, especially in higher education (Cerezo et al., 2016). LMSs may help students learn by putting information online and adding features like quizzes, slideshows, and screencasts, as well as assignments and forums. LMSs also make it very simple and seamless for instructors to distribute and administer these materials. Because every activity in an LMS is recorded and monitored, insight into students' online behavior may be acquired, which can then be utilized to improve learning and teaching. Learning analytics is the term used to describe the analysis of LMS data. It is described as "the measurement, collecting, analysis, and reporting of data about learners and their surroundings with the aim of understanding and optimizing learning and the contexts in which it takes place."

According to Dong et al. (2020), most parents (92.7 percent) indicated that their kids had online learning experiences throughout the epidemic, and majority (84.6 percent) spending less than a half-hour each time. Parents had largely unfavourable attitudes toward the ideals and advantages of online courses and favoured conventional learning in early childhood programs. They resisted and even rejected distance classes for three main reasons: the inadequacies of distance courses, young children's insufficient self-regulation, and their limited time and relevant expertise in assisting children's online courses. Furthermore, the suffering created by the COVID-19 epidemic has forced them to suffer, making them averse to distance learning at home. According to the findings, the implementation of online learning during the pandemic was complex and difficult for families. The Chinese parents lacked the necessary training and were unprepared to accept online schooling (Dong et al., 2020).

3. Research Methodology

This study is a quantitative study by using the questionnaire that adapted from the previous studies, e.g., Das and Mishra (2016a, 2016b); Pal and Vanijja (2020). The population of the study is all students at accounting and finance department at Gulf University which the total numbers are 110 students. The questionnaire distributed to all those students at gulf university. The reason of selecting the whole student in accounting and finance department at gulf university is due to low number of students at this department. The study focus only on this department as there is one section of the survey related to accounting software program which is used in for the students at this department. The authors have generated an electronic questionnaire which the link sent to all students through email and WhatsApp.

4. Conclusion

The impacts of the COVID-19 pandemic on education are severe, as are the multiple impediments that prevent students and teachers from engaging in online education for ongoing learning during the COVID-19 lockdown. During the Corona epidemic, the importance of education technology has grown. The study's goal is to investigate the impact of the Corona epidemic on the extensive use of technology to modernise teaching at HEIs. It assesses the influence of the Corona epidemic on students' ability to use technology. The authors predicted that the Corona epidemic will have a substantial impact on the widespread use of technology to change teaching at HEIs. In other words, the Corona epidemic might have a severe impact on the students' capacity to use technology. The study's findings may influence politicians and educational institutions about the necessity of having technological tools in education that can improve student performance since students are now more competent in using most education technologies.

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