International Journal of Academic Research and Development
www.academicjournal.in
ISSN: 2455-541X
Received: 01-03-2022, Accepted: 15-03-2022, Published: 30-03-2022
Volume 7, Issue 2, 2022, Page No. 17-21

Post-covid recovery academic institutions and new innovative teaching and learning paradigms

Laila Ali Almalki
Department of Education, Jazan University, Saudi Arabia

Abstract
The coronavirus epidemic outbreak has severely impacted education, with practically all countries cancelling schools in 2020. Amid the crisis, important international organizations underlined the necessity for fundamental policy reforms to address the crises' difficulties. Short- term, national education systems have to deal with the global health crises' many issues. Expanding online education became the most widely recognized legislative approach to ensure the academic year's continuation.

Keywords: COVID-19 epidemic, obstacles, academic institutions, learning

Introduction

The COVID-19 epidemic has spread to nearly every country and territory in the globe. Wuhan, China, was the site of the first epidemic detection in December 2019 (Chatterjee, Nagi *et al*. 2020) [7]. People all throughout the world were admonished to exercise caution. Handwashing, face masks, physical distance, and avoiding large crowds have all been recommended as public health measures. As a necessary measure to flatten the curve and restrict the spread of the disease, measures such as lockdowns and house quarantines have been implemented by The local government (Chatterjee, Chatterjee *et al*. 2020) [6, 7].

Lockdown and social isolation measures imposed in response to the COVID-19 epidemic have resulted in the closure of schools, training institutes, and institutions of higher education in the majority of nations (Crawford, Butler-Henderson *et al*. 2020) [8]. The way educators offer high- quality education is undergoing a fundamental shift through a variety of online channels (Watson 2008) [27]. Despite the difficulties faced by educators and learners alike, online learning, distant education, and continuing education have proven a remedy for this unprecedented worldwide epidemic (Neuwirth, Jović *et al*. 2021) [18]. Transitioning from traditional face-to-face education to online education may be a completely different experience for both learners and instructors, which they must adjust to in the absence of other options (Turnbull, Chugh *et al*. 2021) [24]. The school system and instructors have embraced "Education in an Emergency" via a variety of online venues and are being forced to adapt to a system for which they are unprepared (Yundayani, Abdullah *et al*. 2021) [28]. During this epidemic, e-learning platforms have played a critical role in assisting schools and universities in facilitating student learning when universities and schools were closed (Jameel, Abdalla *et al*. 2020) [13]. While adjusting to the new developments, it is necessary to assess the readiness of staff and students and provide appropriate assistance (Budur, Demir *et al*. 2021) [5]. A fixed mentality makes it difficult for learners to adapt and modify, whereas a growth mindset makes it possible for them to easily adapt to a new learning environment. For online learning, there is no one-size-fits-all methodology that works for everyone (Vonderwell, Liang *et al*. 2007) [26]. There is a wide range of disciplines with various requirements. When it comes to online learning, different techniques are required for different disciplines and age groups. Additionally, online learning provides physically challenged students with greater freedom to participate in learning in a virtual setting, requiring just a little amount of physical activity (Lee and Development 2018) [15]. With the help of evolving web-based platforms and technology, distance education provides students with educational settings that are independent of time and geography (Fleming and Hiple 2004) [11]. Institutions use distance education for a variety of reasons, including accessing learning and education, updating skill development (Bates 2005) [4], increasing cost effectiveness (Jung 2003) [14], improving educational structure quality, providing education to specific target groups (Guri-Rosenblit 2005) [12], providing emergency case training to target groups, expanding educational capacity in new subject areas, and associating with other institutions (Bates 2005) [4]. Institutions, on the other hand, may run into obstacles and issues when it comes to technological integration. First- order (external) and second-order (internal) hurdles to technology integration were highlighted by (Ertmer and development 1999) [10]. Equipment, education, access, time, and technical assistance are first-order hurdles, whereas pedagogy, belief, and personal preferences are second-order barriers (unique to instructors). The importance of the research comes from the fact that it aims to identify the reality of students' use of the e-learning system in studying interactive materials. Thus, the research may contribute to the following: The researcher will focus in the study on the suitability of the e- learning system in teaching and whether the system is sufficient for teaching if there is a need for that; It may

contribute to evaluating defects that affect the extent to which students comprehend some of the skills of courses taught online. The purpose of this article is to present an in-depth report on the influence of the COVID-19 pandemic on online teaching and learning of various papers, as well as recommendations for the future.

Material and Methods

The researcher in this study will employ a hybrid qualitative and quantitative approaches. First the research will conduct a vast literature review of all aspects related to the matter including the impact of COVID-19 to schools, the position of schools, and the obstacles facing using E- learning during COVID-19 pandemic. The systematic literature review (SLR) approach was used in this investigation. SLR is seen as a beneficial type of research that adheres to scientific method principles by being "intended to seek, analyse, and synthesise the best available evidence" in connection to the study aim, in order to deliver "informative and evidence-based" research.

Conceptual Framework

Interactive program: It is an educational program prepared on the computer with all the elements of multimedia that works to provoke the student and draw the largest possible number of his senses towards learning through the educational content of the interactive program in a way that the student has the opportunity to control his or her ability within all the programs according to the content of the information (Allen 2016).

Barrier or obstacle: Because e-learning integration in teaching and learning is a complicated issue, many teachers may face a variety of obstacles or hurdles (Schoepp and perspectives 2005). These problems are also referred to as 'barriers.' A barrier is defined as "a fence or an impediment that limits movement or access" by the (Curl and Wilson 2015). Furthermore, offers another definition of a barrier as "any situation that makes progress or achievement of an aim difficult." The Schoepp definition of the barrier was applied in this investigation.

Search strategy

A systematic search for articles published on “e learning and “COVID 19" and challenges and school “ was performed in google schoolar, science direct and Global Health, from 2019 through 2022. Primary search terms were COVID 19, e-learning (all synonyms) and obstacles (all synonyms) using ‘Textword searching’ – searching for a word or phrase appearing anywhere in the document, where the document is the citation (article title, journal name, author), not the full text of an article, and ‘Thesaurus (MeSH, EMTREE) searching’, employing Boolean operators and truncations, such as (“e-learning” OR “online learn*” OR “distance learn*” OR “computer- assisted instruction” OR “web-based learning” OR “internet-based learning” AND (“education” OR “school learning” OR AND (“challenges” OR “barriers” OR “enablers” OR “facilitator*”)

Results

According to the search for selected key words through the period from 2019 to 2022, the results showed in Table 1 indicated that out of 4768 were scored on Science direct, 3589 were scored on Google scholar and 478 on EBSCO data base.We developed a table to capture the nature of the studies according to the key words of the study. The results showed in table 1

Table 1: Published article on different search engine regarding E-learning and obstacles during pandemic

Search engine	Year				Total
	2019	2020	2021	2022	
Science direct	3	572	2835	1358	4768
Google scholar	415	1540	1400	234	3589
EBSCO	63	156	156	103	478
	481	2268	4391	1695	

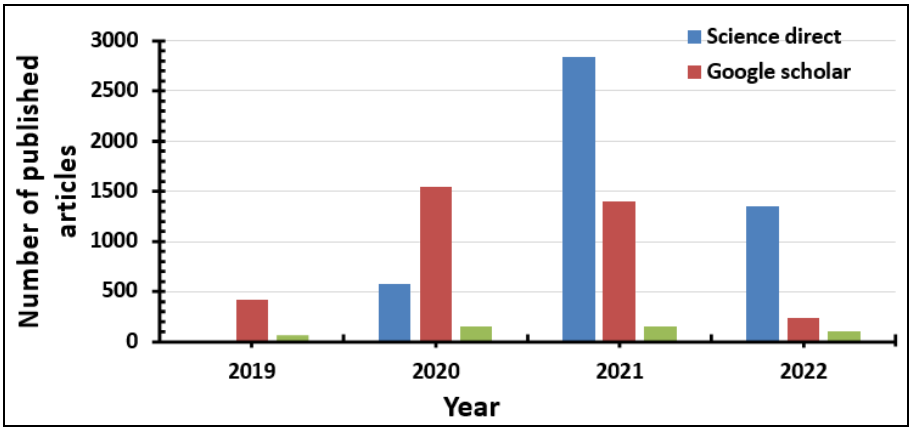

Fig 1: Publishing and peer review of preprints during the COVID-19 pandemic. Regarding the study area.

This study makes use of data from three sources, namely Science Direct, Google Schoolar, and the EBSCO database, which provides a large number of articles that are consistent with the research questions that were fitted to the Boolean search that was conducted. As a result of the summary, it was discovered that seven criteria were important in the implementation of e-learning: platforms, assessment models and evaluations; difficulties; and challenges. Based on these seven characteristics, it is possible to develop an e-learning model that can be employed at all levels of education and is adaptable to different learning environments.

Conclusion

Coronavirus illness, also known as Covid-19, is a health condition that is affecting many aspects of people's lives today, including their everyday lives, their professional lives, and the educational system across the world. It first emerged in Wuhan City, China, in December 2019. The World Health Organization (WHO) (Organization 2020) proclaimed Covid-19 a worldwide state of emergency on 30 January 2020, and a global pandemic on 11 March 2020, after it first occurred in Wuhan City in December 2019. It has been necessary to implement special constraints and procedures to slow the spread of this life-threatening infection on occasion. These have included travel restrictions, the closing of restaurants, entertainment venues, theatres, and cinemas, among other things. One of these drawbacks is that face-to-face instruction is not possible in this setting. Distance education methods have been utilised to limit interaction while y*et al*lowing students to finish their education (Sözüdoğru, Tuncay *et al*. 2022). Distance education has begun to be applied in this manner, beginning with preschool education and progressing to higher education. Distance education has begun to be applied in this manner, beginning with preschool education and progressing to higher education. The epidemic has had a major influence on education globally. Initially, most nations shuttered schools and used remote learning as a replacement. 197 nations stopped schools between February and June 2020, according to UNESCO data (Zancajo, Verger *et al*. 2022) [29]. Due to school closures, by late April, about 85% of primary through secondary pupils were out of school globally (Azevedo, Hasan *et al*. 2021) [3]. As the epidemic progressed, several nations had to temporarily or partially close schools during 2020 and early 2021 (Magnusson, Nygård *et al*. 2021).

The quick transition to the digital world during school shutdown periods revealed significant disparities in access to digital technology, not just across nations but also across socioeconomic categories within countries. The sharp digital gap exacerbated and magnified the social split, increasing inequality and having a direct influence on how learning losses were distributed among socioeconomic groups after school closures (Pokhrel and Chhetri 2021). According to our study, one of major obstacles affect e learning in some countries is internet bandwidth is limited in many developing nations due to a lack of connection points, and data packages are prohibitively expensive in contrast to the average income of the population, rendering accessibility and affordability insufficient. To improve this condition, policy involvement is essential. Additional study and inquiry into effective pedagogy for online teaching and learning is needed. Another topic of research is the requirement for building tools for genuine evaluations and quick feedback. The cost and accessibility of educational tools for all learners from diverse economic backgrounds is noted as a difficulty, which the creator of educational tools might address through customization. Intervention at the policy level is also critical. The other area of research and development is to make online education more creative, imaginative, and participatory through the use of user-friendly tools. This would aid and prepare the educational system for such future uncertainty.

Organizations that were previously opposed to change would be persuaded to adopt the new technology in the wake of this disaster. In order to deal with the current scenario, educational sectors were having a tough time; professional education was particularly difficult to deal with. Online e-learning is defined as learning experiences that take place through the use of different electronic devices (e.g., computers, laptops, cellphones, and so on) that are connected to the internet in either a synchronous or asynchronous setting. Online e-learning has the potential to be a platform that helps to make the educational process more student-centered, innovative, and adaptable. In particular, when it comes to offering content to students in rural and isolated places, online distribution of courses is both cost-effective and conveniently accessible. International organisations such as the United Nations (UN) and the World Health Organization (WHO) regard online e-learning as a valuable instrument for satisfying educational requirements (Vaz-Fernandes and Caeiro 2019), particularly in poor countries. A wide range of innovative techniques have been developed by several institutions to fight the situation, with online courses being delivered using various software/apps such as Google Classroom, Zoom, and Microsoft Teams. This virtual class of e-learning was established in order to not only complete the course but also to maintain constant contact with the learners during the COVID-19 pandemic. The goal of this virtual class of e- learning was to increase the students' certainty and confidence in their faculty during the pandemic.

Several research examined the integration of educational e-learning platforms with video conferencing applications that were prevalent in teaching and learning at the time, such as Zoom (Alameri, Masadeh *et al*. 2020) [1], Microsoft Teams (Nguyen and Duong 2021) [19], Moodle (Lisnani and Putri 2020) [16], and Google Classroom (Zulkefli, Hashim *et al*. 2020) [30], in order to overcome social distance concerns. During the pandemic's spread, the usefulness of these video conferencing platforms was demonstrated, and they provided an adequate answer to the issues associated with emergency online education.

Recommendation

In the investigation, several of the difficulties associated to Covid-19 pandemic time were discovered. It is imperative to take preventative steps in the case of pandemics or other emergency scenarios. The study's findings

can be used to better understand the challenges that educators, parents, and school administrators are facing as the Covid-19 epidemic continues to expand over the world. Because the difficulties that students are expressing seem to be linked to those of other stockholders, this is the main reason why. A university's faculty of education will be the focus of this research. The case might also be examined in other departments or faculties. Students, teachers, parents, and school directors can all be surveyed at the primary school level using a variety of ways. Finally, it is anticipated that resolving the issues raised by the research will be beneficial to the project's implementers.

References

1. Alameri J, Masadeh R, Hamadallah E, Ismail HB, Fakhouri HNJJI. "Students' Perceptions of E-learning platforms (Moodle, Microsoft Teams and Zoom platforms) in The University of Jordan Education and its Relation to self-study and Academic Achievement During COVID-19 pandemic.",2020:2692:2800.
2. Allen MW. Michael Allen's guide to e-learning: Building interactive, fun, and effective learning programs for any company, John Wiley & Sons, 2016.
3. Azevedo JP, Hasan A, Goldemberg D, Geven K, Iqbal SAJTWBRO. "Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates.",2021:36(1):1-40.
4. Bates AT. Technology, e-learning and distance education, Routledge, 2005.
5. Budur T, Demir A, Cura FJIJoSS, Studies E. "University readiness to online education during Covid-19 pandemic,2021:8(1):180-200.
6. Chatterjee K, Chatterjee K, Kumar A, Shankar SJMJAFI. "Healthcare impact of COVID-19 epidemic in India: A stochastic mathematical model,2020:76(2):147-155.
7. Chatterjee P, Nagi N, Agarwal A, Das B, Banerjee S, Sarkar S *et al*. "The 2019 novel coronavirus disease (COVID-19) pandemic: A review of the current evidence.",2020:151(2-3):147.
8. Crawford J, Butler-Henderson K, Rudolph J, Malkawi B, Glowatz M, Burton R *et al* Teaching "COVID-19: 20 countries' higher education intra- period digital pedagogy responses.",2020:3(1):1-20.
9. Curl JS, Wilson S. The Oxford dictionary of architecture, OUP Oxford, 2015.
10. Ertmer PAJEtr. Development "Addressing first-and second-order barriers to change: Strategies for technology integration.",1999:47(4):47-61.
11. Fleming S, Hiple DJCJ. "Distance education to distributed learning: Multiple formats and technologies in language instruction.", 2004, 63-82.
12. Guri-Rosenblit SJHe. "'Distance education'and 'e-learning': Not the same thing.",2005:49(4):467-493.
13. Jameel AS, Abdalla SN, Karem MA. Behavioural Intention to Use E-Learning from student's perspective during COVID-19 Pandemic. 2020 2nd Annual International Conference on Information and Sciences (AiCIS), IEEE, 2020.
14. Jung IJHode. "Cost-effectiveness of online education.", 2003, 717-726.
15. Lee KJETR. Development "Everyone already has their community beyond the screen: reconceptualizing online learning and expanding boundaries.",2018:66(5):1255-1268.
16. Lisnani L, Putri R. Designing Moodle features as e-learning for learning mathematics in COVID-19 pandemic. Journal of Physics: Conference Series, IOP Publishing, 2020.
17. Magnusson K, Nygård K, Methi F, Vold L, Telle KJE. "Occupational risk of COVID-19 in the first versus second epidemic wave in Norway,2020-2021:26(40):2001875.
18. Neuwirth LS, Jović S, BRJJoA, Mukherji. C. Education "Reimagining higher education during and post-COVID-19: Challenges and opportunities.",2021:27(2):141-156.
19. Nguyen HUN, LNTJAOJ Duong. "The challenges of e-learning through Microsoft Teams for EFL students at Van Lang University in COVID-19.",2021:12(4):18- 29.
20. Organization WH. "WHO Coronavirus disease (COVID-19) pandemic." Available in: https://www. who. int/emergencies/diseases/novel-coronavirus-. Accessed 20th May, 2020.
21. Pokhrel S, Chhetri RJHEftF. "A literature review on impact of COVID-19 pandemic on teaching and learning.",2021:8(1):133-141.
22. Schoepp KJL, tiheG. Perspectives "Barriers to technology integration in a technology-rich environment."
23. Sözüdoğru, O., N. J. H. o. R. o. C. T. i. A. E. Tuncay, Business, and Administration (2022). "A Review of Distant Administration in the Context of Openness Problems of Open Distance Learning Administrators, Teachers, and Students.", 2005, 19-43.
24. Turnbull D, Chugh R, Luck JJEI. Technologies "Transitioning to E-Learning during the COVID-19 pandemic: How have Higher Education Institutions responded to the challenge?",2021:26(5):6401-6419.
25. Vaz-Fernandes P, Caeiro SJIjoetihe. "Students' perceptions of a food safety and quality e-learning course: a CASE study for a MSC in food consumption.",2019:16(1):1-22.
26. Vonderwell S, Liang X, Alderman KJJoRoTiE. "Asynchronous discussions and assessment in online learning.",2007:39(3):309-328.
27. Watson JJNACfOL. "Blended Learning: The Convergence of Online and Face- to-Face Education. Promising Practices in Online Learning, 2008."
28. Yundayani A, Abdullah F, Tandiana ST, Sutrisno BJJoLL. Studies "Students' cognitive engagement during emergency remote teaching: Evidence from the Indonesian EFL milieu.",2021:17(1):17-33.

29. Zancajo A, Verger A, Bolea PJP. Society "Digitalization and beyond: the effects of Covid-19 on post-pandemic educational policy and delivery in Europe.", 2022.
30. Zulkefli N, Hashim H, SJIJoATiCS. Syahrin and Engineering. "Evaluating e- learning google classroom tools for computer science subjects during covid-19 pandemic.", 2020, 6251-6258.