

**ANALYSIS STUDY OF ONLINE TEACHING IN THE EDUCATIONAL SYSTEM IN PALESTINE
IN THE ABSENCE OF VISION AND CONSEQUENT POLICY IN LIGHT OF COVID-19**

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Abstract

The Palestinian formal and informal education circumstance changed on March 5, 2020, when the first reported case of Infectious diseases, COVID-19, was discovered. As a result, Palestine joined a list of 188 nations around the world that have put schooling on hold. This research assessed the numerous existing body of literature of networks and suggests those that have been used in different nations around the globe during the COVID-19 pandemic, as well as offers a suggestion for the transfer phase to online courses in the Palestinian school system during the COVID-19 eruption namely the web platform and television education and alternatives such as Zoom, Google Meet, the Edu website, which can be used for e-Learning and direct communication. The main objective of this study was to look at the different environments in which individuals continued their education at homes during the school closure caused by COVID-19, the benefits and drawbacks of virtual learning implementation, the difficulties faced by both teachers and students, and the contrast of e-learning frameworks in developed countries. The research is focused on the descriptive research process, which involves analyzing previous studies and conducting research on various scientific research platforms. When nations, states, and citizens are better equipped than they are currently, the experience gained from the COVID-19 pandemic can implement a range of rules, policies, forums, and new strategies in all areas and attitudes, particularly education.

1. Introduction

In the times of COVID-19, the academic sector has to suffer a lot. All the institutions worldwide have to initialize the online education strategy and mitigate COVID-19 pandemic risks by stopping all the classes and other laboratories practice. The COVID-19 outbreak is considered a public health emergency worldwide since it creates massive destruction, and all the countries across the world face economic and social ramifications, including Palestine. The disease outbreak has posed adverse effects on the business sector as well. Besides this, the academic has also faced massive disturbance (Arora and Srinivasan, 2020; Blankenberger and Williams, 2020; Marinoni, Van't Land and Jensen, 2020; Toquero, 2020; Zawacki-Richter, 2021). The pandemic has highly disturbing all the higher education aspects. This enormous destruction has to be necessarily transformative. The universities have started the online learning education system to cope with the current situation. All the universities are closed, and the exams are canceled (Bao, 2020; Fischer, 2020; Jacob, Abigeal and Lydia, 2020; Tamrat and Teferra, 2020). During this current situation, all the educators and administrators must train their employees to urgently assess their new practices and protocols. They must work accordingly in the world of isolated existence and social distancing, and adverse economic stress conditions (Altbach and de Wit, 2020; Martel, 2020; Mohammed *et al.*, 2020; Rizun and Strzelecki, 2020; Shahzad *et al.*, 2020).

With the help of technology, most universities have developed particular strategies. As a result, higher education is highly dependent on the IT system and invests a lot. However, the It systems have not proven helpful in providing effective outcomes (Obaid, 2020)

Digital technology has subsequently empowered several teaching methodologies, such as the flipped classroom teaching approach, i.e., the hybrid system and the distance learning system (Chick *et al.*, 2020; Gupta, 2020; Khan, Hossain and

Abdou, 2020; Mosquera Feijóo *et al.*, 2021). But, they are not always found to accept and allow this, as most universities and academic sectors perceive teaching as secondary to research (Obaid, 2020). Thus, the use to the learning platforms, including the blackboard, Moodle has to invest a massive amount of the time of the universities. However, the investment is only made when teaching is recognized as a valued activity (Obaid, 2020).

Consequently, most of the universities' learning platforms have to become sources in which lectures are submitted and stored for the downloading purpose and are not providing the students of the universities with very few and minimal benefits (Obaid, 2020).

The COVID-19 outbreak has adversely affected the lives of people worldwide for more than a year. Besides this, it has massively disturbed the academic sector and educational system of around 300 million students worldwide, as mentioned by (UNESCO, 2020a; Subaih, Sabbah and Al-Duais, 2021). All the educational institutes, schools, colleges, universities have shut down in the condition of the strict lockdown (Subaih, Sabbah and Al-Duais, 2021). Parents help and assist their children in education by homeschooling or educating them with online learning platforms. Unfortunately, like most countries globally, Palestine was also unprepared to face the COVID-19 crisis (Subaih, Sabbah and Al-Duais, 2021).

The Government of Palestine announced the emergency in March 2020. This emergency results in significant loss and disruption of the educational system. The Palestinian educational system was not fully prepared to introduce and initialize the e-learning system. Consequently, multiple discussions stated alternative ways to continue academic learning (Abu al-Khair, 2019). To sustain the contact among students and teachers, various steps were taken, such as the use of social media. The teachers and students communicate with each other with the help of Google Classroom, Zoom Meetings, Facebook Groups, WhatsApp, and through many different means (Subaih, Sabbah and Al-Duais, 2021).

In the educational system of Palestine, e-learning has become the current discussion topic. However, it shifts from the alternative education method towards the traditional or conventional way, lacking the proper planning (Abu al-Khair, 2019). (Almehmadi, 2018; Majdi & Hinnawi, 2019) stated that the present situation of the COVID-19 had generated difficulties for the teachers and students (Subaih, Sabbah and Al-Duais, 2021). Besides this, the parents are also suffering during this present condition because of the mentioned reasons:

1. The e-learning platform using ability in the educational systems.
2. Unavailability of the proper and organized educational plans.
3. Unavailability of the infrastructure and tools
4. Unavailability of the complete electronic syllabus.
5. Teachers and students are not prepared well.

During this century, digital gadgets have helped a lot in generating advancing problem-solving capabilities in this pandemic since COVID-19 has imposed several challenges and problems (Sintema, 2020; Subaih, Sabbah and Al-Duais, 2021). To face the educational issues and challenges, the decision-makers and administrators have to develop these skills. In addition, the teachers that are also facing the challenges and hurdles in e-learning also have to develop these skills (Onyema *et al.*, 2020; Subaih, Sabbah and Al-Duais, 2021). Moreover, to deliver quality education to students without facing obstacles, the administrators and decision-makers must identify and understand the issues and challenges that the students and teachers face while using the online learning platforms (Subaih, Sabbah and Al-Duais, 2021). This will be proven helpful in the successful execution and adoption of the online learning platform (Onyema *et al.*, 2020; Subaih, Sabbah and Al-Duais, 2021).

The current research investigates the condition of the education system in Palestine during the COVID-19 outbreak. First, the researcher identified the problems and confusions between the teachers, students, and parents using the e-learning platform. However, most of the teachers are still using the traditional teaching methods. Furthermore, the researcher has also searched the previous literature on the difficulties faced by the teachers in online teaching in the higher education system of Palestine during the lack proper of vision and consequent policy and also the comparing to the developed countries in the context of Covid- 19 (Subaih, Sabbah and Al-Duais, 2021).

2. Literature Review

2.1. E-learning education system:

The use of computers and other online sources to educate students and individuals is termed the e-learning education system (Derouin, Fritzsche and Salas, 2005; Downes, 2005; Qudais, Al-Adhaileh and Al-Omari, 2010; Cope and Kalantzis, 2017; Fleming, Becker and Newton, 2017; Mayer, 2017; Cidral *et al.*, 2018; Vaona *et al.*, 2018; Janelli, 2018; Kumar Basak, Wotto and Belanger, 2018; Rodrigues *et al.*, 2019; Al-Fraihat, Joy and Sinclair, 2020). It considers as the incorporation of the material, strategy, and methodologies in the context of learning and teaching (Derouin, Fritzsche and Salas, 2005;

Downes, 2005; Qudais, Al-Adhaileh and Al-Omari, 2010; Sangrà, Vlachopoulos and Cabrera, 2012; Cope and Kalantzis, 2017; Fleming, Becker and Newton, 2017; Mayer, 2017; Cidral *et al.*, 2018; Vaona *et al.*, 2018; Janelli, 2018; Kumar Basak, Wotto and Belanger, 2018; Rodrigues *et al.*, 2019; Al-Fraihat, Joy and Sinclair, 2020). In addition, video conferencing is used in this technology to share information between the teachers and students. It is an asynchronously, asynchronous experience. However, it can also be a combination of these (Subaih, Sabbah and Al-Duais, 2021).

Most teachers do not polish and develop their skills, do not adopt creative thinking, and rely on the traditional teaching system even though the Palestinian Authority has established e-learning platforms (Abu al-Khair, 2019; Subaih, Sabbah and Al-Duais, 2021).

Thus, firstly, in the Palestinian educational systems, there is a hurdle of providing e-learning technology. Secondly, the students are not well aware of using the e-learning platform considered another issue. Similarly, the teachers and educators face the same issues (Al Malah, 2010; Shaqour, 2013; Sharaf, 2016). E-learning is the best and the most innovative approach to deliver an interactive learning platform for the students. It provides the most interactive and learner-centered atmosphere (Lincoln, 2011). It must be accessible to the information for the students so that they can quickly and easily obtain the informative content and material (Herrington, Reeves and Oliver, 2009). To supervise and guide the students is the teacher's first and vital role. Besides this, the teacher also has to deliver and facilitate the students with the educational material (Al Malah, 2010).

Additionally, the teacher has to help the students motivate them and help them learn the technology in this era, especially in the times of the COVID-19 outbreak situation (Almelhi, 2021; Subaih, Sabbah and Al-Duais, 2021). The teacher must have to fulfill the following requirements to accomplish the goals. Firstly the teachers can guide and help students in using the modern approach (Almelhi, 2021). Secondly, the teacher has to motivate and encourage their students and develop a sense of creativity in their students (Fryer and Bovee, 2016; Islam *et al.*, 2018; Janelli, 2018; Aliyyah *et al.*, 2020; Goh *et al.*, 2020). Thirdly, the teacher must be the student's facilitator, evaluator, and guide and promote class-based discussions during the class (Fandiño and Velandia, 2020). Also, the students must fulfill these mentioned conditions. The learner should also be the self-learner. Besides this, the learner must have the polishes communication skills and also, he or she is a critical thinker, and the learner can do teamwork tasks online. The learner must also be well aware of the use of computers and electronic gadgets with the help of which they approach the e-learning platform (Jad and Assem, 2015; Subaih, Sabbah and Al-Duais, 2021).

The rearrangement of exams and permitting the open book are the major problems. Out of them, the issuance of the accurate and true grade to the students on its performance is also the major problem since the students are giving their exams out of the class. However, the quality of online learning requires future study (Basilaia, G., & Kvavadze, 2020; Subaih, Sabbah and Al-Duais, 2021).

3. Methodology:

Multiple pieces of literature have been read to write this review composition. The main aim of this study was to find pieces of literature regarding the prospect and implementation of online learning in Palestine, the problems and difficulties faced by the students and teachers, probable pros and cons of e-learning as well as a comparative analyses of the advent of e-learning with the developed countries amid the Covid-19 pandemic. The search words 'Online Education', 'Covid-19' and 'Palestine' were used to systematically search Web of Science, Google Scholars, Research Gate, PubMed, Science Direct, and JRCO to gather original articles and reports recommendations, policy papers, and web resources. Articles were included if they offered empirical data or a detailed examination of the implementation of e-learning mechanisms in Palestine and the policies and acceptance of online education during the Covid-19. Furthermore, scanning bibliographies found further important details and policy documents

4. Findings:

Many schools are establishing specialized plans in response to the tremendous shift toward technology use but often lack the vision, skill, or willingness to implement them effectively. As a result, many organizations spend much money on information technology platforms that don't achieve the expected results. These institutions fail to recognize that they do not require a digital strategy but rather a business plan appropriate for the digital era. Staying competitive in the modern age necessitates a strategic vision for the organization, headed by the top organization and backed by many divisions, not just information technology. Because academics, students, and staff lack digital literacy, early involvement and communication to develop the necessary support networks are critical to achieving long-term transformation across the organization. Many colleges are either unable or unwilling to respond effectively to the disruptive effects of higher education (Obaid,

Abdaljawad and Abumandil, 2020).

On March 5, 2020, the President of Palestine declared a state of crisis, closing all Gaza and West Bank institutions. This impacts 1.3 million pupils and 70,500 teachers in 2885 government-run schools, around 2095 schools, UNRWA-run schools, which are almost 349 schools, and 412 private educational institutes. Despite the fact that the school system is constantly disrupted by the continuous war in Palestine, many officials are skeptical about online education. (Shraim, 2018). After consulting with stakeholders and associates, the Ministry of Education declared on March 10 that schools would use e-learning platforms as the primary method of keeping students occupied in the regular education process during school cessations (MoE, 2020).

The Ministry of Education of Palestine has indicated that the educational institutions are using multiple tools for:

1. Students and instructors should be urged to use any suitable technology for emotional support, improve safety awareness through competitions, and inspire students and their families to help prevent COVID-19 from spreading in Palestine.
2. Junior schools such as preschool through fourth grade should use PowerPoint, animated video slideshows, music, workbooks, sketching, games, and YouTube videos to make learning more interesting and enjoyable.
3. Teachers should design teaching materials according to grade and subject, uploading assignments, worksheets, materials, photographs, and videos. In addition, middle and upper schools such as from 5th to 11th grades should form Facebook groups.
4. Each Department of Education shall build a YouTube channel for higher secondary, for example, Twajih; 12th-grade students upload videos made by teachers in various disciplines.

The educational institutes employ personal Facebook pages and YouTube channels, students, and instructors besides the e-School portal (MoE, 2020). The Rawafed virtual learning portal, UNRWA's Interactive Learning Program, and Voice of Education Radio is also used by teachers and students in Gaza (UNESCO, 2020c). All shareholders, including decision-makers at all stages, students, teachers, and parentages, communicate through WhatsApp and Facebook, the most widely used social media platforms in Palestine (Hamleh, 2019). They're used to share facts and figures, express opinions, and discuss concerns related to the present COVID-19 pandemic. Virtual meetings are also held using ZOOM.

The Ministry of Education is closely collaborating with its stakeholders to keep an eye on the situation and take necessary measures. The Ministry of Education announced on April 2 that all assessments for the 2019-2020 school year would be canceled, except the Tawjih exams. All teachers will cover the key topics through traditional face-to-face instruction at the start of next year. The Ministry of Education has also teamed up with Al-Quds Open University and the Palestinian Broadcasting Corporation to launch the Online Secondary initiative, which will broadcast live lessons via YouTube, radio, and television to provide a more rigorous schedule of daily online classes for students in 12th grade (MoE, 2020). Numerous programs are also being used to connect students and professors, such as Zoom and Google Hangouts (MoE, 2020).

Despite the efforts of the Government of Palestine, there were various difficulties faced by the students and teachers in the adaptation and adoption of online learning.

4.1. The difficulties faced by virtual learning implementation:

According to the study conducted by (Hebebcı, Bertiz and Alan, 2020), An examination of students' perspectives on the deployment of online learning reveals that variety is more advantageous. The most commonly voiced notions are completing education at home, studying effectively, and gaining various instruments. Another benefit is that the lectures are brief and to the point. Finally, comfort is one of the concepts that students highlight. Although several students indicated a desire to return to school and the classroom, others claimed that they enjoy studying at home.

The insufficiency of lectures is one of the downsides of distance education. Another difficulty pupils see as a barrier is that they do not comprehend what the instructors say (Hebebcı, Bertiz and Alan, 2020). Table 1 shows some of the pros and cons of online learning. From the study, it can be seen that the opinion regarding online learning was mixed among students.

Table 1 shows some of the pros and cons of online learning.

Advantages	Disadvantages
Course process such as concise lessons. Efficiency and professionalism.	Inadequate lessons
Continuing education at home	I don't understand what teachers are teaching
Access with different tools	Technical and technological disadvantages (Hardware requirement, Being intertwined with electronic tools, technical problems)

Resource diversity	No classroom environment
Comfort	There is nothing to like.

The efficiency of online learning is dependent on instructors' ability to design and deliver learning materials, which is a time-consuming process that necessitates coordination with experts such as instructional designers, media professionals, and online learning specialists (Hodges *et al.*, 2020; Shraim and Crompton, 2020). For instructors with little computer handling and abilities, developing digital lessons on short notice is extremely difficult (Bozkurt *et al.*, 2020). In addition, instructors said they had to acquire information from various sources, many of which were not culturally appropriate with the Palestinian background, leaving children feeling disconnected and confused. Students and parents were given a multitude of online materials and resources for home study; however, these were designed to support teaching rather than learning, and the content quality was poor because teachers used a range of sources that had not been assessed as per online quality criteria, infrastructural criteria were overlooked, not all kids had access to the materials, and students and parents spent too much time looking for useful resources (Shraim and Crompton, 2020).

According to the survey conducted by (Khlaif *et al.*, 2020), The majority of teachers in the 3 nations of Afghanistan, Libya, and Palestine used Zoom, Google Classroom, and Microsoft Teams to teach and communicate with their pupils. However, some professors from these regions highlighted their concerns about the lack of time to understand and apply new technology.

4.2. Challenges with regards to Palestine:

As a result of the COVID-19 crisis, a shift to online education has revealed a number of issues unique to the Palestinian context, including a deepening of the digital divide in education and a rise in negative attitudes toward online education. These issues occur in most countries, particularly developing ones, under normal conditions, but they become more obvious in an emergent situation (Shraim and Crompton, 2020). Improper facilities, inadequate internet networks, power outages (particularly in Gaza), and a lack of knowledge of the benefits of e-learning among students and their families are the main barriers to online education in Palestine. Furthermore, certain students, particularly those in Palestine's most exposed areas, such as Gaza, East Jerusalem, and Area "C," have limited access to online information and lack access to computers or smartphones (UNESCO, 2020c).

The college's administration should give resources to assist students in determining whether they are ready to take an online course and offering preparation advice. For example, because internet access is currently costly in Ghana, the university's administration could negotiate with cellular operators for educational discounts for distant students. In addition, administration staff should provide useful information sustenance through explanatory workshops that can assist students in assessing their willingness for online learning, gaining the necessary skills, and considering using flexible teaching methods and deadlines to accommodate students with time restraints or who do not have trustable Wi-Fi or broadband access. (AGORMEDAH *et al.*, 2020).

The COVID 19 epidemic has forced researchers to look at even more inventive ways of delivering education and new ways of thinking about the future of education. Regardless of the fact that the shift to digital can be challenging, universities that adopt the correct business plan, which includes digital technology accountability in every department, can open up a slew of fascinating new ways to connect students, professors, and staff (Obaid, Abdaljawad and Abumandil, 2020). The Distance Education Task Force is creating the groundwork for new distance learning solutions to guarantee that all Palestinians have access to high-quality education and lifetime learning prospects (Bozkurt *et al.*, 2020; UNESCO, 2020c).

5. Discussion:

On March 5, 2020, the Palestinian government state of emergency to help stop the spread of the Corona Virus and urged the suspension of all schools and colleges in Palestine as a precautionary step to prevent the spread of the Corona Virus known as COVID-19.

The Ministry of Education (MoE) promptly announced its National Action Plans for COVID 19, highlighting distant learning as an alternate opportunity for students to continue their education. In addition, the Ministry of Education is prepared to develop a Facebook group called "Ta2ammal" to fill the gap between students and get input on their success and difficulties during the pandemic. It also developed an e-learning portal for Palestinian students of all grades (UNESCO, 2020c).

The website needs further work, particularly in terms of educational content, in order to cover all grades and the lessons that go with them. The Ministry also launched an online program in collaboration with Palestine TV and Al Quds Educational

Channel to provide support to 12-grade students who will be sitting their general test on May 30, 2020. Additional measures for lower classes are presently being launched at the directorate level, such as creating YouTube channel videos and using other social media sites (UNESCO, 2020c).

The Covid-19 problem has the same influence on students' education everywhere over the world, according to the findings, which is consistent with the findings of this article (UNESCO, 2020b) and other researchers (Khlaif and Salha, 2020; See, Wardle and Collie, 2020; Shraim and Crompton, 2020; Van Lancker and Parolin, 2020).

If it is to compare Palestine to the more developed countries, the problem lies in the lack of resources and policies regarding the online teaching of the courses. First, it can be seen from the various studies that most developed countries offer online courses regardless of a pandemic or not (Rubin and Fernandes, 2013). This trait of the developed countries helped them cope with the regularization of the Online classes as the school closure was the only option to stop the spread of the Corona virus. Secondly, most developed countries are rich in resources when it comes to the optimization of e-learning. Resources such as the internet, computers, and other technical tools are readily available to people. Moreover, the government provides them with some stimulation funds to deal with the economic crises they might have (Karger and Rajan, 2020).

However, even then, choosing online education is on the lower side compared to the physical classes. Even in developed countries, various studies show that students would prefer to attend the physical classes rather than attend online classes. After some duration, it becomes boring for students to attend classes and lose focus. But according to many studies, it can be seen that the fear of Covid 19 plays a major role in the adoption of e-learning across the world (Al-Marroof *et al.*, 2020).

6. Conclusion:

The first wave of COVID-19 school closures in early 2020 necessitated special consideration by all educational operators to offer adaptable teaching techniques for all students through online teaching platforms. As a result, decision-makers, teachers, and parents have emphasized the need to utilize technology during the outbreak in Palestine. According to all research, Palestinians have access to technology like mobile phones, social media, and cloud computing, which would be useful and appropriate for boosting safety awareness, communication, and the design and distribution of instructional materials. However, given the unpredictability and disruption of the circumstances in which inclusive learning has been designed, created, and executed, it would be deceptive to claim that it has provided effective learning opportunities for all school-aged children. The expansion of the education's digital divide and an increasingly negative attitude toward online education are the key problems of introducing online education as a response to the COVID-19 pandemic in Palestine. Nonetheless, this review of COVID-19 wave one underlines future opportunities and challenges for decision-makers, who are likely to make additional changes as they reconsider the value of integrating technology into education reform, not just for future pandemic waves, but also in the long run and on a bigger scale.

References:

- Abu al-Khair, A. G. (2019) 'The obstacles facing the school administration in implementing e learning from the point of view of principals and teachers in primary schools in Gaza governorate', *The Journal of Palestine Technical Univ. for Research*, 7(3), 1-15.
- AGORMEDAH, E. K. *et al.* (2020) 'Online learning in higher education during COVID-19 pandemic: A case of Ghana', *Journal of Educational Technology and Online Learning*, 3(3), pp. 183–210.
- Al-Fraihat, D., Joy, M. and Sinclair, J. (2020) 'Evaluating E-learning systems success: An empirical study', *Computers in Human Behavior*. Elsevier, 102, pp. 67–86.
- Al-Marroof, R. S. *et al.* (2020) 'Fear from COVID-19 and technology adoption: the impact of Google Meet during Coronavirus pandemic', *Interactive Learning Environments*. Taylor & Francis, pp. 1–16.
- Aliyyah, R. R. *et al.* (2020) 'The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia', *Journal of Ethnic and Cultural Studies*. Yildiz Technical University, 7(2), pp. 90–109.
- Almeahadi, G. A. T. (2018) 'Evaluating the reality of using e-learning management system (EMES) in KAAU from the students', *Basic Education College Magazine For Educational and Humanities Sciences*. Babylon University, (39).
- Almelhi, A. M. (2021) 'Effectiveness of the ADDIE Model within an E-Learning Environment in Developing Creative Writing in EFL Students.', *English Language Teaching*. ERIC, 14(2), pp. 20–36.
- Altbach, P. G. and de Wit, H. (2020) 'COVID-19: The internationalisation revolution that isn't', *University World News*, 14.

- Arora, A. K. and Srinivasan, R. (2020) 'Impact of pandemic COVID-19 on the teaching–learning process: A study of higher education teachers', *Prabandhan: Indian journal of management*, 13(4), pp. 43–56.
- Bao, W. (2020) 'COVID-19 and online teaching in higher education: A case study of Peking University', *Human Behavior and Emerging Technologies*. Wiley Online Library, 2(2), pp. 113–115.
- Basilaia, G., & Kvavadze, D. (2020) 'Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia', *Pedagogical Research*, 5(4), em0060.
- Blankenberger, B. and Williams, A. M. (2020) 'COVID and the impact on higher education: The essential role of integrity and accountability', *Administrative Theory & Praxis*. Taylor & Francis, 42(3), pp. 404–423.
- Bozkurt, A. *et al.* (2020) 'A global outlook to the interruption of education due to COVID-19 Pandemic: Navigating in a time of uncertainty and crisis', *Asian Journal of Distance Education*, 15(1), pp. 1–126.
- Chick, R. C. *et al.* (2020) 'Using technology to maintain the education of residents during the COVID-19 pandemic', *Journal of surgical education*. Elsevier, 77(4), pp. 729–732.
- Cidral, W. A. *et al.* (2018) 'E-learning success determinants: Brazilian empirical study', *Computers & Education*. Elsevier, 122, pp. 273–290.
- Cope, B. and Kalantzis, M. (2017) *E-learning ecologies: Principles for new learning and assessment*. Taylor & Francis.
- Derouin, R. E., Fritzsche, B. A. and Salas, E. (2005) 'E-learning in organizations', *Journal of management*. Sage Publications Sage CA: Thousand Oaks, CA, 31(6), pp. 920–940.
- Downes, S. (2005) 'E-learning 2.0', *ELearn*. ACM New York, NY, USA, 2005(10), p. 1.
- Fandiño, F. G. E. and Velandia, A. J. S. (2020) 'How an online tutor motivates E-learning English', *Heliyon*. Elsevier, 6(8), p. e04630.
- Fischer, K. (2020) 'Confronting the seismic impact of COVID-19: The need for research', *Journal of International Students*, 10(2), p. 211.
- Fleming, J., Becker, K. and Newton, C. (2017) 'Factors for successful e-learning: does age matter?', *Education+ Training*. Emerald Publishing Limited.
- Fryer, L. K. and Bovee, H. N. (2016) 'Supporting students' motivation for e-learning: Teachers matter on and offline', *The Internet and Higher Education*. Elsevier, 30, pp. 21–29.
- Goh, C. F. *et al.* (2020) 'Why do university teachers use E-learning systems?', *The International Review of Research in Open and Distributed Learning*, 21(2), pp. 136–155.
- Gupta, R. (2020) 'Hybrid-Flipped class room Approach for Fashion Design Students: Mitigating impacts to Learning Activities due to Emergence of COVID-19', in *2020 11th International Conference on Computing, Communication and Networking Technologies (ICCCNT)*. IEEE, pp. 1–6.
- Hamleh (2019) *Silenced Net: The Chilling Effect among Palestinian Youth in Social Media*. Available at: <https://www.apc.org/en/pubs/silenced-net-chilling-effect-among-palestinian-youth-social-media>.
- Hebebcı, M. T., Bertiz, Y. and Alan, S. (2020) 'Investigation of views of students and teachers on distance education practices during the Coronavirus (COVID-19) Pandemic', *International Journal of Technology in Education and Science (IJTES)*, 4(4), pp. 267–282.
- Herrington, J., Reeves, T. C. and Oliver, R. (2009) *A practical guide to authentic e-learning*. Routledge.
- Hodges, C. *et al.* (2020) 'The difference between emergency remote teaching and online learning', *Educause review*, 27, pp. 1–12.
- Islam, S. *et al.* (2018) 'To Boost Students' Motivation and Achievement through Blended Learning', in *Journal of Physics: Conference Series*. IOP Publishing, p. 12046.
- Jacob, O. N., Abigeal, I. and Lydia, A. E. (2020) 'Impact of COVID-19 on the higher institutions development in Nigeria', *Electronic Research Journal of Social Sciences and Humanities*, 2(2), pp. 126–135.
- Jad, M. M. M., & Assem, D. M. (2015) 'Designing a proposed electronic environment to develop an Open University education system in light of foreign experiences', *Studies in university education: Ain Shams University - College of Education, University Education Development Center*, pp. 31, 299-410.
- Janelli, M. (2018) 'E-learning in theory, practice, and research', *Вопросы образования*. Федеральное государственное автономное образовательное учреждение высшего ..., (4 (eng)).
- Karger, E. and Rajan, A. (2020) 'Heterogeneity in the marginal propensity to consume: evidence from Covid-19 stimulus payments'. FRB of Chicago Working Paper.
- Khan, M., Hossain, S. and Abdou, B. (2020) 'Flipped Classroom: How Institutions of Higher Education (HEIs) of

- Bangladesh Could Move Forward During Covid-19 Pandemic'. SSHO-D-20-00523.
- Khlaif, Z. N. *et al.* (2020) 'The Covid-19 epidemic: teachers' responses to school closure in developing countries', *Technology, Pedagogy and Education*. Taylor & Francis, pp. 1–15.
 - Khlaif, Z. N. and Salha, S. (2020) 'The unanticipated educational challenges of developing countries in Covid-19 crisis: A brief report', *Interdisciplinary Journal of Virtual Learning in Medical Sciences*. Shiraz University of Medical Sciences, Shiraz, Iran, 11(2), pp. 130–134.
 - Kumar Basak, S., Wotto, M. and Belanger, P. (2018) 'E-learning, M-learning and D-learning: Conceptual definition and comparative analysis', *E-Learning and Digital Media*. SAGE Publications Sage UK: London, England, 15(4), pp. 191–216.
 - Van Lancker, W. and Parolin, Z. (2020) 'COVID-19, school closures, and child poverty: a social crisis in the making', *The Lancet Public Health*. Elsevier, 5(5), pp. e243–e244.
 - Lincoln, T. D. (2011) 'Students' experiences of e-learning in higher education: The ecology of sustainable innovation—by Robert A. Ellis and Peter Goodyear'. Wiley Online Library.
 - Majdi, M. R., & Hinnawi, R. N. N. H. (2019) 'E-Learning: Competencies, Attitudes & Obstacles', *Journal of the Arab American University*, 5(2).
 - Al Malah, M. (2010) 'The electronic school and the role of the Internet in education', *Amman: House of Culture for Publishing and Distribution*.
 - Marinoni, G., Van't Land, H. and Jensen, T. (2020) 'The impact of Covid-19 on higher education around the world', *IAU Global Survey Report*.
 - Martel, M. (2020) 'COVID-19 effects on US higher education campuses', *From Emergency Response to Planning for Future Student Mobility*. Recuperado de: <https://bit.ly/2zVxewC>.
 - Mayer, R. E. (2017) 'Using multimedia for e-learning', *Journal of Computer Assisted Learning*. Wiley Online Library, 33(5), pp. 403–423.
 - MoE (2020). Available at: <http://www.moehe.gov.ps>.
 - Mohammed, A. O. *et al.* (2020) 'Emergency remote teaching during Coronavirus pandemic: the current trend and future directive at Middle East College Oman', *Innovative Infrastructure Solutions*. Springer, 5(3), pp. 1–11.
 - Mosquera Feijóo, J. C. *et al.* (2021) 'Some Web-Based Experiences from Flipped Classroom Techniques in AEC Modules during the COVID-19 Lockdown', *Education Sciences*. Multidisciplinary Digital Publishing Institute, 11(5), p. 211.
 - Obaid, T. (2020) 'Higher Education Under Quarantine: What Insights Palestinian Institutes Can Share?', *Available at SSRN 3665685*.
 - Obaid, T., Abdaljawad, R. and Abumandil, M. (2020) 'COVID-19 and the digital transformation of higher education: What insights Palestinian institutes can share?', *IJAR*, 6(8), pp. 109–114.
 - Onyema, E. M. *et al.* (2020) 'Impact of Coronavirus pandemic on education', *Journal of Education and Practice*, 11(13), pp. 108–121.
 - Qudais, M. A., Al-Adhaileh, M. and Al-Omari, A. (2010) 'Senior Faculty Members' Attitudes in Jordanian Universities towards Using Information and Communication Technology.', *Int. Arab. J. e Technol.*, 1(4), pp. 135–141.
 - Rizun, M. and Strzelecki, A. (2020) 'Students' acceptance of the Covid-19 impact on shifting higher education to distance learning in Poland', *International Journal of Environmental Research and Public Health*. Multidisciplinary Digital Publishing Institute, 17(18), p. 6468.
 - Rodrigues, H. *et al.* (2019) 'Tracking e-learning through published papers: A systematic review', *Computers & Education*. Elsevier, 136, pp. 87–98.
 - Rubin, B. and Fernandes, R. (2013) 'Measuring the Community in Online Classes.', *Journal of Asynchronous Learning Networks*. ERIC, 17(3), pp. 115–136.
 - Sangrà, A., Vlachopoulos, D. and Cabrera, N. (2012) 'Building an inclusive definition of e-learning: An approach to the conceptual framework', *International Review of Research in Open and Distributed Learning*. Athabasca University Press (AU Press), 13(2), pp. 145–159.
 - See, B. H., Wardle, L. and Collie, P. (2020) 'Teachers' responses to the school reopening strategy.' Durham University Evidence Centre for Education & Schoolzone.
 - Shahzad, A. *et al.* (2020) 'Effects of COVID-19 in E-learning on higher education institution students: the group comparison between male and female', *Quality & quantity*. Springer, pp. 1–22.

- Shaqour, A. (2013) 'Reality of Employment of Technological Innovations and the Constraints of this Employment in West Bank and Gaza Strip Schools from the Teachers's Perspective'.
- Sharaf, F. (2016) 'Palestinian virtual education prospects and its role in political development (towards a Palestinian virtual university)'.
- Shraim, K. (2018) 'Palestine (West Bank and Gaza Strip)', *E-Learning in the Middle East and North Africa (MENA) Region*. Springer, pp. 309–332.
- Shraim, K. and Crompton, H. (2020) 'The Use of Technology to Continue Learning in Palestine Disrupted with COVID-19'. *Asian Journal of Distance Education*.
- Sintema, E. J. (2020) 'E-Learning and Smart Revision Portal for Zambian primary and secondary school learners: A digitalized virtual classroom in the COVID-19 era and beyond', *Aquademia*. Veritas Publications LTD, 4(2), p. ep20017.
- Subaih, R. H. A., Sabbah, S. S. and Al-Duais, R. N. E. (2021) 'Obstacles Facing Teachers in Palestine While Implementing E-learning During the COVID-19 Pandemic', *Asian Social Science*, 17(4).
- Tamrat, W. and Teferra, D. (2020) 'COVID-19 poses a serious threat to higher education', *University World News*, 9.
- Toquero, C. M. (2020) 'Challenges and Opportunities for Higher Education Amid the COVID-19 Pandemic: The Philippine Context.', *Pedagogical Research*. ERIC, 5(4).
- UNESCO (2020a) *COVID-19 Education Response*.
- UNESCO (2020b) 'Global education coalition', *Covid-19 Impact on Education*.
- UNESCO (2020c) *UNESCO*. Available at: <https://en.unesco.org/news/covid-19-palestine-how-distance-learning-will-help-student-continue-education> (Accessed: 12 April 2020).
- Vaona, A. *et al.* (2018) 'E-learning for health professionals', *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd, (1).
- Zawacki-Richter, O. (2021) 'The current state and impact of Covid-19 on digital higher education in Germany', *Human Behavior and Emerging Technologies*. Wiley Online Library, 3(1), pp. 218–226.

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