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| RESEARCH ARTICLE

E-learning Gate of Success in Crisis: Iraqi Universities

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ABSTRACT

The article shows intensively how the Iraqi universities struggled and exceeded successfully and academically through the academic years from 2019 to 2022 and still strive to cope with the Coronavirus pandemic crisis. More than 100 Iraqi universities in which approximately 50,000 academics and 800,000 students started to study every year periodically during the Corona pandemic via e-learning and connected respectively with the ministry of Iraqi higher education (IHE) to drive the new trail with e-education from the homes and have never stopped. In spite of Iraqi universities having weaknesses in infrastructures for e-learning, the majority of universities work and fully invest in e-platforms (MOOC) like Google classroom, Coursera and high support of social media, consequently best criteria for academic and students that have been accomplished via e-exams and study. Regulations of public health and the ministry of Iraqi health created a crucial decision to convert toward e-learning as a gate of success in crisis to do e-exams and manage the mechanism of education because it was difficult to return the Iraqi universities to their ordinary exams and began training committees on e-exams and e- procedures to success the e-education in whole universities of Iraq, especially higher education. This paper showed the results IHE relates to applying high standards in e-education during the academic years from 2019 to 2022 in the coronavirus pandemic crisis. In this respect, the Iraqi universities present strong evidence to prepare and accomplish a roadmap to implement blended learning through successful e-learning in the current time and in the future toward lifelong in universities of Iraq.

KEYWORDS

Iraqi E-learning, E-exam, Coronavirus Pandemic Crisis, E-platforms (MOOC)

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1. Introduction

The education system in Iraq before the Coronavirus pandemic used traditional ways of teaching and learning, like face-to-face in whole Iraqi universities. In this respect, the digital e-normalization in Iraqi society has become a fact, and universities approved ready to transform towards a new era of e-learning methods effectively with keeping on traditional methods in education (Elameer et al.,2021). Moreover, approximately 85% of the Iraqi population uses the Internet daily by using mobile devices, as presented in (figure 1).

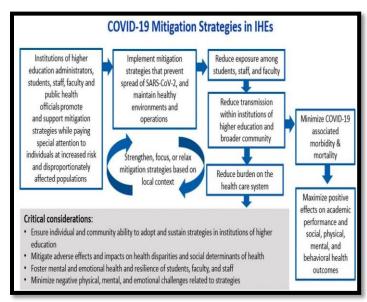


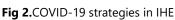
Fig 1. Shows the Iraqi population using the Internet daily by using mobile devices

Coronavirus pandemic changed educational system rapidly in whole the world and using IT and ICT tools ubiquitously in schools and universities through several e-platforms (MOOC) in order to meet last educational technology as e-classroom via Google Classroom, Moodle, Edmodo G-Suite, Coursera...etc., as a free e-platform to communicate with students and teachers in the new e- environment. Thus Iraq universities achieved a leap in the IT revolution to mimic modernity in e-learning.

2. Ministry of Iraqi Higher Education (IHE)

At the current time, two of Iraq's Higher Education Ministries are divided based on regions, including (The federal government of Iraq in the capital, Baghdad, and the Ministry of Kurdistan's higher education in the north of Iraq). This research focuses on the Ministry of Higher Education and Scientific Research (MOHESR) in the capital Baghdad (www.mohesr.gov.iq), which involve more than 30 public universities in the government sector and roughly 15 private university, as well as approximately 42 private university colleges, majority of them, establish in last two decades after 2003 (Elameer et al.,2021), comprises two Commissions (Medical Specialization and Computer and Information) This article discusses how Iraqi universities public and privets interaction together with the new ear of e-education through e-learning as explained in figures below.





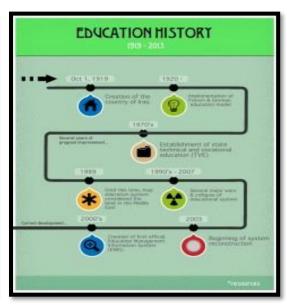


Fig 3. Iraqi universities before 2003

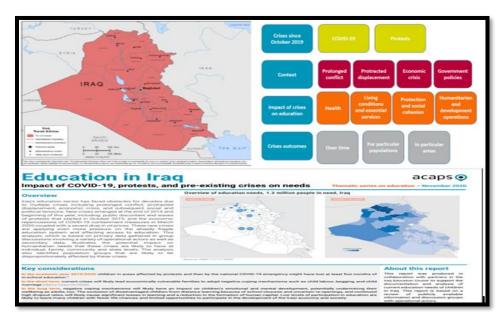


Fig 4. Shows Top 10 Universities and Coronavirus pandemic crisis in Iraqi

3. Universities of Iraq and Coronavirus Pandemic

E-learning is a new trail in education for universities of Iraq through Coronavirus Pandemic Crises and difficult circumstances imposed on whole universities in Iraq to apply e-learning compulsorily, especially from 2019 to 2022 in which the education convert into 70% e-education by using multi- e-platforms (MOOC) like Google Classroom, Coursera, Hangout, Zoom and several elocations and applications of social media to exceed crisis of coronavirus pandemic with a set of obstacles and challenges (Elameer et al.,2020). In spite of the universities of Iraq passing crises with a number of difficulties and complexity, Iraqi universities completed the study years during the coronavirus pandemic with high criteria by (MOHESR) to achieve international standards in teaching and learning. Thus, academic study in Iraq usually starts on the first of September every year and continues till June of next year to complete the educational goals designed for it. In addition, the educational process has been continuing in all universities in different provinces without stopping. Moreover, Iraqi universities have adopted the concepts of e-education (elearning) and blended learning already to prepare suitable teaching staff to start a new experience and apply digital learning culture through many workshops about e-learning to reinforce lifelong learning Basha(2020). Consequently, IHE has been well qualified to apply e-learning as a new e-gate in the whole education sector from the beginning to the end of the academic year (Elameer et al., 2020). Again project of e-learning has been planned to achieve and support new criteria in e-education for Iraqi universities within several steps adopted precisely and neatly included: analysis stage, preparing stage, rebuilding, and training stages, applying synchronous and asynchronous in education as a new stage and eventually evaluation stage. Thus, IHE and universities challenged the coronavirus pandemic and achieved high success, and Iraqi universities overcame difficult circumstances with hard work in all education sectors.

4. Coronavirus Pandemic Crisis and (IHE)

Iraqi higher education (IHE) sought and succeeded in facing the coronavirus pandemic as a proactive step in a short time and achieved all global regulations for UNESCO in the education of new project in e-learning by a professional team in (IHE) that equipped intensively to create e-workshops in the ministry of Iraqi higher education to training all staff in Iraqi universities from north to south and connected directly and daily to manage all events of e-learning to mimic the new e-era of education. In this respect and during a few months, Iraqi higher education leap and attained a high level of e-project goals in e-learning through sharing in e-workshops, and e-platforms like (classroom, Moodle, Edmodo, G-Suite Coursera..etc.) via official links among staff and ministry of Iraqi higher education in one hand, and among teachers and students in another hand as well as present several e-conferences with multi universities in the world figures (5, 6,7) showed some of activates for numbers of Iraqi universities across e-platform in e-learning.



Fig 5. IHE and Training academics in Iraqi Universities



Fig 6. IHE and e-workshops in Iraqi universities



Fig 7. IHE and e-conferences in Iraqi universities

5. Real Results in (IHE) and Discussion

- **1-** Iraqi Universities, based on regulations of IHE, started and never stopped in education via transforming academic work to home in a short time, approximately a few days when the coronavirus pandemic crisis spread in Iraq.
- 2- Roughly 900,000 students in (IHE) from undergraduates and postgraduates are learning online from 2019 to 2022 yet.
- **3-** Firstly (IHE) adoption of e-learning at the end of 2018 with a percentage of around 7%, but from 2019 to 2021 onwards became more than 90%.
- 4- At the current time, exactly in June 2022, all (IHE) students have had study and e-exam via e-learning.
- **5-** IHE is considered one of the fastest educational institutions in applying e-learning during the coronavirus pandemic crisis based on the last report by UNESCO organization.
- 6- High percentage of students, roughly more than 95% in all universities in Iraq, passed the online exam during their studies.
- **7-**In the beginning, the policy of (IHE) through virus pandemics communicate only via social media applications, then (IHE) joined e-learning e-platforms like Google classroom and created e-classrooms and complete teaching and learning process.
- **8-** Create workshops continuously during academic years in the ministry of (IHE) for Iraqi universities to reinforce and update new information in e-learning and e-platforms and establish digital rooms to manage e-exam and give online lessons and workshops.
- **9-** Using applications of social media and offline programs for students to overcome limited internet access and problems that occur on the internet.
- 10- Help learners with self-learning via e-learning.

- **11-** Conduct some tests in e-exams at the beginning, including quizzes and assignments for initialization to kick start e-learning in Iraqi universities.
- **12-** Solve whole obstacles in training on e-learning and applications of e-platforms for academics via e-exams throughout the year.
- 13- IHE leaped with a high percentage reach on 99% of e-learning and achieved it through insistence on success.
- **14-** E-learning professionals in IHE used tools and LMS to find their needs via a shareable content object reference model (SCROM) to deliver the contents.
- **15-** Using e-learning in Iraqi universities became an official feature to distinguish and competition locally or globally among universities in terms of study online, e-conferences, and e-workshops, to mimic the last updated information technology (IT) to communicate with universities in the world, especially during coronavirus pandemic crisis, therefore (IHE) trained more than 30000 of academics in Iraqi universities, moreover intensive e-workshops about e-learning during the academic years from 2019 to 2022. http://mohesr.gov.ig/en/2022/05/13/19866 (Elameer et al., 2021).



Fig 8. Cooperation IHE with universities of the world

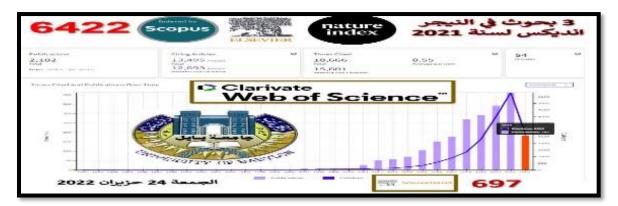


Fig 9. Open sources references and share publication

Moreover, the Ministry of (IHE) organized a number of virtual e-conferences and contributed to Scientific Research through e-learning with universities around the world with huge attendances (figurer) https://eliraq.com/mooc/.ln this respect, Human Resources Capacity and e-environment with available infrastructures most challenge to exceed main aspects that guided universities in Iraq to success and lead to train approximately 4000 of academics through e-workshop and virtual workshop. In addition, IHE established thousands of open resources references to publish and several courses in e-platforms (MOOC) and training on multi- platforms for all Iraqi universities https://eliraq.com/oer/(Figures above 8,9).

5.1 Results and Facts Achieved in IHE

IHE interacted with the crisis of the coronavirus pandemic rapidly and achieved more than 4000 e-workshops and e-meetings during a limited time and created an e-platform boost inside Iraqi universities, and shared with different institutions around the world via e-conferences to share the culture of e-learning and induce staff and academics to use e-learning (figure 10). In addition, more than 3750 meetings were conducted in Iraqi universities and learning institutions to overcome the main obstacles in IHE that increased and expanded the culture of e-learning among Iraqi academics in all universities. Therefore, training and qualification of academics for e-learning in IHE reached approximately 85%, about 38.800 academics trained on e-learning and

achieved cooperation together in governmental universities and private universities to teaching and learning in e-learning (Elameer et al., 2021).



Fig 10. Example of MOOC workshop in University of Sumer

6. IHE and Roadmap to adoption e-learning

Applying e-learning became fact and inevitable in Iraqi universities with the exacerbated crisis of the coronavirus pandemic; consequently, IHE created a roadmap of IT solutions designed to execute e-learning locally and mimic universities of the world with regulations from some Iraqi universities that adopted e-learning early and have been achievements such: Baghdad university, faculty of information technology and the university of Sumer with Moodle platform show through link http://sumer.moodlecloud.com/login/index.php/ explain in figure (11)and other centers in Iraqi universities shared e-learning boost.



Fig 11. Apply e-platforms (MOOC) in Iraqi Universitles

Thus, IHE designed and monitored to execute and develop e-learning in Iraqi universities systematically through applications of social media to reach the last regulations and digital information to Iraqi universities. On this occasion, Iraqi higher education is considered as a source and roadmap to rebuilding and executing a plan of e-learning related to converting and controlling Iraqi universities into e-universities in learning operations and giving a new chance to teachers and learners to mimic e-learning in the entire world.

7. Apply Regulations of IT in Iraqi Universities

Regarding e-learning regulations and aims to apply IT in Iraqi universities don't need hardware and software to install, but covers areas of e-learning and applications that have been nerved designed and used before in Iraqi universities, the access starts with logging into a global web portal (Google classroom) whether was academic in university or student by official email. Consequently, all teachers and students have access easily to the e-platform and features for e-class. In addition, applications of social media are used to support the educational process via community among teachers and students.

Most e-learning conditions are based on global applications that have access to the e-platform easily for teachers or students as new regulations are as follows:

- 1. Cost of applications must be less than an installed LMS and pay for maintenance (Elameer et al., 2019)
- 2. Implementation time and designed applications via the web portal of the e- platform must follow the easiest instructions and speed process (Sanchez et al., 2021).
- 3. e-learning became ubiquitous during the coronavirus pandemic, and web applications are easy to use with several e-applications like Edmodo, Google Classroom, Moodle, and Facebook to reach e-curriculum to students and conduct e-exam (Elameer et al., 2020).
- 4. Easy Change applications via cloud LMSs that allow updating different colors schemes, templates, and regular features, whether off or online. (Elameer et al., 2019).
- 5. All academics and students have Mobile devices that help to use applications from anywhere and ensure they receive responses and regulations (Maya et al., 2022).
- 6. Available secure information and secure systems help to design applications that are highly secure to give trust to the academics and students (Adeoye et al., 2020)
- 7. Cost of Maintenance is very low, allowing to use of applications to be easy for designers and learners (Elameer et al., 2020).

8. Educational Plans in IHE

Most challenges and problems that faced the majority of Iraqi universities related to how the normalization of educational classics with e-learning to make it an official and actual study in Iraqi universities, respectively with the era of digital knowledge as a new culture ubiquitous globally and became the culture of society toward using information technology. In addition, available mobile device holders recently IHE encouraged and made high progress rapidly in achieving suitable results in all programs in universities via creating an e-environment (Elameer et al.,2020). Education states the role of teachers in the whole educational process. In this respect, the circumstances of the coronavirus pandemic contributed to creating new learning compulsory as blended learning to adopt in Iraqi universities. The blended learning, unfortunately, before Covid19, was infancy stage and absent in the whole IHE. Currently, the ministry of IHE in coronavirus pandemic crises found new mechanization and modern plans to mimic the digital era for e-learning, for example, clouds storage, e-exam, e-conferences, e-workshops...etc., that enable both teachers and students to discover high dominion and optional thinking about materials and study to make educational process easier.

Moreover, the ministry of IHE conducted surveys widely in whole universities of Iraq periodically via e-forms sent to universities (figure 12) to investigate about readiness and effectiveness of universities toward e-learning (Elameer et al., 2021). In this respect, increasing numbers of mobiles devices holders in universities and populations of Iraq helped both teachers and students stimulate new digital culture personally. On this occasion, IHE struggled and sought to enhance internet services and infrastructures for IT in whole sectors of education because e-learning became inevitable in education to communicate with universities of the world respectively.



Fig 12. E-exam and e-forms in Iraqi Universitles

9. Conclusion

This paper highlight only e-learning in Iraqi universities during the coronavirus pandemic and presents how IHE challenged and leaped with new technology via e-learning; in spite of the ministry of IHE in the previous two decades have just traditional ways and limited research about e-learning in Iraqi universities for multi reasons related to lacking infrastructures of e-learning and factor of culture toward e-learning, these reasons draw daunting target to achieving and applying e-learning previously, but

increasing digital culture for mobile holders of academics and students helped in rebuilding a new culture of e-education and drove digital knowledge in all scoters, especially in education. In the meantime, the coronavirus pandemic suddenly hit the whole world and became use e-learning necessary and urgent faction in the education sector. The result of the paper showed how IHE succeeded in implementing the roadmap for all Iraqi universities and guided managers, academics, staff, and students together to accomplish new regulations in e-learning during the Covid19 crisis and used e-platforms like Google classroom Moodle to enhance the teaching and learning towards e-learning.

Below and Before the appearance coronavirus pandemic, there were main reasons for the limited progress in Iraqi universities to implementing a roadmap early, one of their supervision of international organizations, in terms of:
-the majority of challenges are economic conditions faced Iraqi government.

- -The culture's weakness toward e-learning among academics and students.
- lacking infrastructure and experience in investing technology techniques in Iraqi higher education.
- Using e-learning was absent and needed for crucial decisions at the highest levels of the Iraqi government. Thus, based on facts and results, this study suggests continuous in develop e-learning in Iraqi universities, especially during the crisis

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References

- [1] Aini, Q., Budiarto, M., Putra, P. O. H., & Rahardja, U. (2020). Exploring e-learning challenges during the global COVID-19 pandemic: A review. *Jurnal Sistem Informasi*. 16(2), 57-65.
- [2] Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during the COVID-19 pandemic. *Education and information technologies*, 25(6), 5261-5280.
- [3] Adeoye, I. A., Adanikin, A. F., & Adanikin, A. (2020). COVID-19 and E-learning: Nigeria tertiary education system experience.
- [4] Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-learning critical success factors during the covid-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Education sciences*, *10*(9), 216.
- [5] Basha. A.D (n.d). NEW ERA OF E-LEARNING CORONA PANDEMIC: UNIVERSITIES OF IRAQ, Journal of Innovative Research in Information Security, 8. 01-0
- [6] Bryson, J. R., & Andres, L. (2020). Covid-19 and rapid adoption and improvisation of online teaching: curating resources for extensive versus intensive online learning experiences. *Journal of Geography in Higher Education*, 44(4), 608-623.
- [7] Egielewa, P., Idogho, P. O., Iyalomhe, F. O., & Cirella, G. T. (2022). COVID-19 and digitized education: Analysis of online learning in Nigerian higher education. *E-Learning and Digital Media*, 19(1), 19-35.
- [8] El-Ameer, A. S., & Hammed, A. G. (2020, September). Iraqi e-learning Adoption Trials for Building Sustained Developed Society. In 2020 3rd International Conference on Engineering Technology and its Applications (IICETA) (pp. 252-257). IEEE.
- [9] Elameer, A. S. (2021, September). COVID-19 and real e-government and e-learning Adoption in Iraq. In 2021 4th International Iraqi Conference on Engineering Technology and Their Applications (IICETA) (pp. 323-329). IEEE.
- [10] Elameer, A. S. (2019). Baghdad Blended Learning Platform For Iraqi Higher Education. *Journal of Baghdad College of Economic sciences University*, 57.
- [11] Favale, T., Soro, F., Trevisan, M., Drago, I., & Mellia, M. (2020). Campus traffic and e-Learning during the COVID-19 pandemic. *Computer networks*, 176, 107290.
- [12] Gumantan, A., Nugroho, R. A., & Yuliandra, R. (2021). Learning during the covid-19 pandemic: Analysis of e-learning on sports education students. *Journal Sport Area*, 6(1), 51-58.
- [13] Mseleku, Z. (2020). A literature review of E-learning and E-teaching in the era of the Covid-19 pandemic. SAGE, 57(52), 588-597.
- [14] Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal (AWEJ)*, 11(4).
- [15] Maya, L., & Suseno, M. (2022). An Evaluation on Teaching and Learning Experiences During Covid-19 Pandemic Era: A Case Study. *BRIGHT: A Journal of English Language Teaching, Linguistics, and Literature*, *5*(1), 1-11.
- [16] Pustika, R. (2020). Future English teachers' perspective on the implementation of e-learning in the Covid-19 pandemic era. *Journal of English Language Teaching and Linguistics*, 5(3), 383-391.
- [17] Sanchez, D. V., Kerzmann, T. L., Chouinard, C. P., & Kotchey, G. P. (2021, July). Assessing the Effectiveness of a Flex Model for a Sustainability Course in the COVID-19 Learning Environment. In 2021 ASEE Virtual Annual Conference Content Access.