

Barriers of Distance Education at Iraqi Universities: Analysis Study

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Abstract

The current study aimed at investigating distance education barriers within Iraqi universities. The design of the study was quantitative in nature and for this purpose, 150 Iraqi university teachers and students participated in this study. The universities were from all around Iraq. The participants were both male and female. The students' age ranged between 22 to 31, and the teachers' age ranged between 35 to 45. They all had the same mother tongue which is Arabic, and all of them had experienced distance education during Covid 19. Data were gathered through an online questionnaire. After the administration of the questionnaire, the responses were codified by numerical values and then were analyzed using descriptive statistics in SPSS version 24. Results suggested that the mean of all responses from both sides were over three, which indicated that, both teachers and students experienced certain barriers in distance learning education in Iraqi universities. The findings are discussed with regard to each barrier. The distance learning barriers were categorized as personal barriers, technical barriers, pedagogical barriers, organizational barriers and financial barriers.

Keywords: Distance Learning, Education, Technology, Barriers

معوقات التعليم عن بعد في الجامعات العراقية: دراسة تحليلية**فاطمة خونامري**

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المستخلص

هدفت الدراسة الحالية إلى تحليل معوقات التعليم عن بعد داخل الجامعات العراقية. لهذا الغرض، شارك في هذه الدراسة ١٥٠ مدرساً وطالباً جامعياً عراقياً. كانت الجامعات من جميع أنحاء العراق. كان المشاركون من الذكور والإناث. تراوحت أعمار الطلاب ما بين ٢٢ إلى ٣١ عاماً، وتراوحت أعمار المعلمين بين ٣٥ و ٤٥ عاماً. وكان لديهم جميعاً نفس اللغة الأم، وهي العربية، وقد اختبروا جميعاً التعليم عن بعد خلال جائحة كورونا. تم جمع البيانات من خلال استبيان الكتروني. تم تصنيف معوقات التعلم عن بعد على أنها معوقات شخصية ومعوقات فنية ومعوقات تربوية ومعوقات تنظيمية ومعوقات مالية. بعد إدارة الاستبيان، تم تدوين الإجابات من خلال القيم العددية ثم تم تحليلها باستخدام الإحصاء الوصفي في الإصدار ٢٤ من SPSS. أشارت النتائج إلى أن متوسط جميع الردود من كلا الجانبين كان أكثر من ثلاثة، مما يشير إلى أن كل من المعلمين والطلاب واجهوا معوقات التعليم عن بعد في الجامعات العراقية. تمت مناقشة النتائج فيما يتعلق بكل معوق.

الكلمات الدالة: التعلم عن بعد، التعليم، التقنية، المعوقات

1- Introduction

The academic community has been interested in the indirect contact of participants in the educational process for decades. In terms of educational technology, the evolution of mediated interaction has progressed from the oral transfer of prior generated experience to the usage of books and manuscripts as a medium of engagement. Then, with the advent of radio and television, it was done through broadcasting lectures and radio classes. Lastly, using the Internet world network, this development happened by the implementation of interaction technologies such as e- forums, mail, video, chats, and audio conferences for the transition of any types of data (textual, graphic, audio, visual) among the global participants in the educational process [1].

The integration activities of the global economy have necessitated improved information exchange. They have become one of the driving forces behind educational standards in other nations, educational organization collaboration, and young people's desire to study in countries other than their own[2]. Discussion between the learner and

the instructor at a distance helps to address social injustice by offering equal opportunities to people from all walks of life, including increasing access to education for low-income people, persons with impairments, and those with specific educational requirements[3].

As technology processes have become more sophisticated, there is a greater need for lifelong learning, self-education, and ongoing education, the industrial field has become more intellectualized, certain occupations have vanished, and new ones have emerged. As a result, remote engagement enables us to expand the chances for retraining and training, as well as advanced training of professionals, both internally and externally[4]. Any interaction between the teacher and the student that takes place at a distance is often referred to as remote training.

Many researchers have analyzed the practice and theory of distance learning[5]. Since the spring of 2020, global educational systems at all levels have become interested in distance learning. It is owing to the unfavorable epidemiological circumstance in Iraq and other countries. Whilst distance education was viewed as one of the possible ways of interaction in the educational system in the past, by the start of Covid 19, we have been having participants in numerous educational systems involved remote interaction between teachers and students at all levels of education.

Despite the numerous benefits identified for distance learning[6], institutions continue to struggle with the choice to build or extend their distance learning education due to the numerous constraints that impede the development and growth of it [7]. Faculty time limits, expense or lack of financing, equipment limitations, concerns about course quality, and lack of support from administration are all regularly mentioned as impediments to the implementation of distance courses.

The advancement of information and communication technologies has had a huge impact on higher education. In the Iraqi context, however, this transformation has been exceedingly slow. The Higher Committee for Education Development (HCED) in Iraq has been the sole venue to support the introduction of distant education so far. In October 2015, the first distant courses were introduced, with 145 scholarship applicants. The classes offered three levels of English for Academic Purposes: low-intermediate, high-intermediate, and advanced. All the learners were postgraduate students who had been awarded a scholarship to study in an English-speaking nation. The vision of HCED has been from the start to popularize the new technology in higher education sector. However, little is known about the barriers that might exist in Iraqi context for the implantation of distance learning.

Thus, this study addresses the barriers to distance learning and analyzes their impact on Iraqi universities. This is done to improve the standard of the current distance learning program and make it easier to create new ones. Identifying the elements that have influenced whether distance learning in Iraqi Universities is a feasible course delivery option, and if so, what adjustments are required to accelerate the expansion of this type of learning.

2- Review of Literature

Guthrie (2009) describes the way technology is utilized in teaching leadership education via contextual learning and indicates that learners' idea about employing technology go beyond the goal of building individual conceptions of leadership and give new insight for using other devices. He found that students appreciated every aspect of the project and that they respected the video production process since it allowed them to learn about other people's leadership theories and develop their own. Students particularly valued the chance to employ a variety of concepts to push them in ways not typically observed in on-campus teaching techniques, and it gave them abilities that they may apply in future leadership roles [8].

Kelsey *et al.* (2002) studied students' satisfaction with a distance learning program [6,p53]. They discovered that the program pleased all students enrolled in it in terms of instructional design, convenience, cohort group, and faculty. Learners, on the other hand, were dissatisfied with the isolation they experienced in their distance learning courses, and educational materials and inaccessible resources, and how long it took them to complete their course work. The devices should be made more user-friendly, according to the students, and any necessary training for technology management should be increased.

Koch, S., Townsend, C. D., & Dooley, K. E. studied the idea of using distant education technology to teach leadership education. According to their findings, graduate leadership instructors have a choice in the delivery mode they use, and students can be confident that leadership concepts can be taught remotely[9].

Koch *et al.* analyzed the distance learning offered to college. They discovered that the students were happy with the online program, especially in terms of class transferability, academic preparation, academic counseling, and overall education quality. More focus in the curriculum should be placed on students' critical thinking and decision-making in the mathematics and sciences, according to the participants. Place bound due to flexibility of classes, family, and employment were the most important reasons affecting participants' decisions to finish the distance learning program[10].

Mink and Moore (2005) assessed the instructional efficacy and student satisfaction of a Delaware soils science course. The findings revealed no significant variations in academic success based on the place and the time students took the class after controlling for prior knowledge, age, class standing, gender, and laboratory experience. Additionally, there were no variations in learner performance between those who took the optional lab component of the course and those who did not. Ultimately, learners in the Soils Science class rated it excellent feedback in both the on- campus and distance education parts [11].

Sampson *et al.* (2010) wanted to know how satisfied learners were with online classes in an education leadership agency's graduate certificate. Learners' satisfaction with education, communication, evaluation, management, collaboration, competence, and respect/diversity were all investigated by the scholars. Both the first cohort and the most current batch of learners expressed general satisfaction with the program. Collaboration was the weakest domain of satisfaction for both groups; nevertheless, evaluation was the greatest area of satisfaction for the cohort, whereas teaching was the highest area of satisfaction for the more recent group [12].

Several research have also looked at the features and psychological advantages of

distance education students. Qureshi et al. (2021) looked at four models of descriptive features for distance education and on-campus learners [13]. Studies indicated that the Demographic model (62%) had the lowest classification performance, while the Experiential model (74%), Motivational model (72%), and Inhibitory model (72%) had the highest classification percentages (84%). When distance education learners were compared to on-campus learners, it was shown that distance education educators were more educated, experienced, and more likely to face obstacles. Distance education learners were also shown to be less motivated, contrary to previous research.

When an illustrative online lecture, including PowerPoint, is utilized, Roberts and Dyer (2005) attempted to characterize how learner qualities like motivation, self-efficacy, and critical thinking dispositions impact their accomplishment and opinions [14]. Students' opinions were shown to be impacted by motivation and technological skill, according to the study. They also discovered that desire and past knowledge had an impact on student progress. Learners with greater levels of motivation display higher accomplishment and more positive views when an interactive online lecture is utilized to convey course information, according to the findings.

Shih and Gamon (2001) investigated the relationships between learner achievement and four variables: motivation, attitude, demography, and learning styles. Despite the fact that two-thirds of the learners under study were field-independent, no discernible differences in achievement between field-dependent and field-independent students were discovered. In the web-based courses, learners with various learning backgrounds and styles performed equally well. Web-based learners said they liked the ease and control they had over their learning speed, and that competition and high standards kept them motivated. Motivation was the only major factor that adequately explained more than one-fourth of students' achievement as measured by class grade [15]. Given the issues summarized in the literature review above, this study was designed to explore the following research question.

3- Research question

The aim of the current research is to understand what barriers are available in the development and implementation of distance programs within Iraqi universities.

RQ: What barriers are Iraqi university teachers and their learners faced in distance learning education?

4- Methodology

4-1 Design

This research using a quantitative design, which is exploratory and descriptive, aims to illustrate a phenomenon that exists in the actual world today. In this study, the researchers employed an exploratory descriptive strategy, using a questionnaire with responses from a conveniently chosen sample of 150 teachers and students. Many Iraqi universities' faculty members and students were chosen as research participants. As shown in Table 1, about 225 questionnaires were delivered, with a return of 150 teachers and students chosen at random from the total dispersed questionnaires. As part of an online survey, teachers and students were emailed the questionnaire, and some of them

were personally contacted because they were the researcher's coworkers.

Table 1: *Distribution of the Questionnaire*

Participants	Questionnaire Distributed	Questionnaire Returned
University Teachers	75	50
University Students	150	100
Total	225	150

4-2 Participants

A total of 150 Iraqi university teachers and students participated in this study. The universities were from all around Iraq. The participants were both male and female. The students' age ranged 22 to 31, and the teachers' age ranged 35 to 45. They all had the same mother tongue which is Arabic, and all of them had experienced distance education during Covid 19.

4-3 Ethical issues

The first stage of the electronic questionnaire, which included a signed informed consent letter assuring their privacy and freedom to withdraw, was freely completed by the participants. Participants might therefore decline the web-based survey at any time and without giving a reason.

4-4 Instrument

An online questionnaire was utilized to collect data. It was adopted from [16]. In general, the distance learning barriers were categorized as follows: five barriers are defined as personal barriers (self-imposed barriers), four barriers are defined as technical barriers, four barriers are defined as pedagogical barriers, and five barriers are defined as organizational and financial barriers. The reliability indices for all these five subcategories have been reported as high (0.83).

4-4-1 Section A

The five items in Section A of the questionnaire were designed to gather descriptive data about participants' personal barriers to distance education. The section A items are as follows: (a) students' lack of motivation to learn; (b) students' difficulty understanding some subjects without classroom interaction; (c) getting used to face-to-face learning; (d) teachers' doubt regarding the value of distance learning; and (e) the university's unwillingness to implement the distance learning system. On a Likert scale, which ranges from "Not sure" to "Strongly disagree," "Disagree," "Agree," and "Strongly agree," participants were asked to score statements pertaining to DE barriers.

4-4-2 Section B

The purpose of Section B of the questionnaire, which had four items, was to gather descriptive data regarding pedagogical barriers that participants in distance education faced. The section B issues are as follows: (f) learning challenges with some applied courses; (g) unclear evaluation; (h) inadequate university preparation for conducting DE; and (i) lack of appropriate curriculum and other topics. On a Likert scale (Not sure, Strongly disagree, Disagree, Agree, Strongly agree), participants were asked to score claims about DE barriers.

4-4- 3 Section C

The purpose of the four-item Section C of the questionnaire was to collect descriptive information about the technical barriers that participants encountered when pursuing distance education. Section C includes the following items: (j) unstable internet connectivity, (k) lack of technical know-how to interact through digital devices, (l) security and confidentiality of data and information, and (m) unstable or no electricity. A Likert scale (Not sure, Strongly disagree, Disagree, Agree, Strongly agree) was used to ask participants to score claims pertaining to DE barriers.

4-4-4 Section D

The purpose of Section D, which only had two questions, was to gather descriptive information about the participants' distance education participants' financial difficulties. The items mentioned in section D include (n) expensive internet data packages and (o) expensive communication devices (phone, laptop, desktop, and headphones). On a Likert scale, which ranges from "Not sure" to "Strongly disagree," "Disagree," "Agree," and "Strongly agree," participants were asked to score statements pertaining to DE barriers.

4-4-5 Section E

The purpose of the three-item Section E of the questionnaire was to collect descriptive information regarding the organizational barriers to the participants' distant learning. The section E's items are as follows: Lack of technical device training (p), the existence of different electronic media and a lack of standard regulation (q), and an unsuitable work/home environment (r) are all contributing factors to DE. On a Likert scale, which ranges from "Not sure" to "Strongly disagree," "Disagree," "Agree," and "Strongly agree," participants were asked to score statements pertaining to DE barriers.

5- Procedures

In March 2022 formal data collection using the finalized questionnaire began. On March 15, 2022, participants received an initial recruiting email detailing the aim of the questionnaire in which they were encouraged to participate. Those who chose to participate received a copy of the information letter as well as a link to the online questionnaire via email. Seven respondents reported that their universities did not have DE program, and ten emails were returned as invalid. A search for those individuals on their linked faculty sites was performed in an attempt to fix the erroneous emails. This endeavor yielded a population of 225 people who could be reached. 3 reminder emails were sent (March 30, April 5, April 15) to increase response rate as recommended by [17]. The online survey was closed at August, 25, 2022.

6- Data Analysis and results

After the administration of the questionnaire, the responses were codified by numerical values and then were analyzed using descriptive statistics in SPSS version 24. The results were shown in tables.

According to the sample, there are five major kinds of barriers that Iraqi universities must overcome in order to provide effective distance learning education (Table 2). The numbers in the column under "Teachers" are the mean and standard

deviation of 75 teachers' responses to the barriers, and the numbers in the next column represent 75 students' selections. The total mean and standard deviation of each barrier's selection from both teachers and students are shown in the overall column.

Table 2: *Barriers to Achieving the Distance Learning Education in Iraqi Universities*

Barriers' category	Barriers	Teachers M (SD)	Students M (SD)	Overall M (SD)
Personal Barriers	1. The lack of motivation of students to learn though DL approach	3.83 (1.31)	3.54 (1.09)	3.68 (1.2)
	2. The difficulty of students' understanding of some subjects in the absence of classroom interaction	3.57 (0.97)	4.09 (0.96)	3.83 (0.96)
	3. Get used to face-to-face learning	3.75 (1.13)	3.53 (1.16)	3.64 (1.14)
	4. Doubt among teachers about the usefulness of DL	3.37 (1.17)	3.35 (1.03)	3.36 (1.10)
	5. Unwillingness of the university/authority to implement the DL system	3.99 (1.11)	4.00 (1.06)	3.99 (1.08)
Pedagogical Barriers	6. Difficulties in learning some applied courses through DL approach	3.33 (1.21)	3.38 (1.13)	3.35 (1.17)
	7. Lack of clarity about the evaluation of the DL	3.49 (0.85)	3.40 (0.90)	3.44 (0.87)
	8. Insufficient preparation by the university to conduct DL	3.77 (0.89)	3.34 (1.01)	3.55 (0.95)
	9. Absence of proper curriculum and other contents to conduct DL	3.39 (1.34)	3.50 (0.86)	3.44 (1.1)
Technical Barriers	10. Unstable internet connectivity	4.21 (0.91)	3.93 (0.81)	4.07 (0.86)
	11. Lack of technical know-how to communicate through digital devices	3.40 (1.14)	3.56 (1.16)	3.48 (1.15)
	12. Security and confidentiality of data and information	3.89 (1.27)	3.43 (0.93)	3.66 (1.1)
Financial Barriers	13. Unstable or absence of electricity	4.12 (1.05)	3.56 (1.16)	3.84 (1.10)
	14. Costly internet data packages	3.67 (1.25)	3.72 (0.97)	3.69 (1.11)
Organizational Barriers	15. Costly communication devices	3.95 (0.97)	3.67 (1.11)	3.81 (1.04)
	16. Lack of training to use the necessary technical devices	4.10 (0.98)	3.48 (1.05)	3.79 (1.01)
	17. Presence of multiple electronic media and the absence of uniform controls	3.53 (0.97)	3.37 (1.19)	3.45 (1.08)
	18. The home/office environment is not suitable for DL	3.45 (1.21)	3.43 (1.04)	3.44 (1.12)

The university teachers and their students, for instance, attributed the barriers to achieving quality in distance learning education in Iraqi universities to students' lack

of motivation to learn through DL approach (3.68), the difficulty of students' understanding of some subjects in the absence of classroom interaction (3.83), the need for students to get used to face-to-face learning (3.64), teachers' doubt about the usefulness of DL (3.36), and unwillingness on the part of teachers to implement DL (3.36). The average of all replies from both sides was over three, which generally indicates that there were barriers to distance learning in Iraqi universities for both teachers and students.

7- Discussion

Users of e-learning encounter a number of technical challenges that impair the teaching and learning process, including time and location flexibility, students' differences, a lack of comfort with e-learning, increased annoyance and misunderstanding, and insufficient technology compatibility [18]. Institutions and organizations should create backup plans to address difficulties with distance learning[19].

George (2018) asserts that students should have access to email-based consultations with course lecturers because they are the most popular form of consultation when compared to office-based consultation and tutorials (conducted in class)[19,p30].

The aforementioned statement by George (2018) regarding the benefits of online learning, however, only applies to courses with a practical component, such as English language and history[19,p66].

The results of this survey showed that there were only five categories of barriers to high- quality distance learning at Iraqi universities, which we describe below in light of the opinions of the study sample's participants:

7-1 Personal Obstacles (Self-Imposed Obstacles)

Because there is no direct (traditional) instruction taking place in the classroom, the participants in the sample showed dissatisfaction with the distant learning system by indicating how badly motivated students are to pursue it and how challenging it is for them to understand particular topics. Their opposition to it demonstrates their ignorance of its importance in higher education as well as their lack of expertise. The lecture-style instruction utilized in e-university courses is performed differently and does not contain contemporary teaching strategies that encourage direct touch and visual communication between professors and students. According to [19,p21], some professors have a negative impression of online learning, and the sample participants also stated that some professors are not persuaded of the benefits of online learning.

This is also consistent with what Hamdan (2007) [20] says regarding instructors and students who do not fully understand the value of distant learning and all of its benefits. It is corroborated by the findings of Moore (1987) [21], who hypothesized that instructors worry about having their involvement in the educational process diminished and being constrained to working as educational software designers and technology experts. Since neither professors nor students are prepared to use it in these circumstances, distance education will continue to face criticism, confirming their habit of using traditional educational techniques. It is vital to increase awareness of this shift, assist others, and maintain one's resolve in order to accept it.

7-2 Pedagogical Obstacles

Both teachers and students acknowledged the challenges of studying various practical courses and directed work remotely, highlighted the requirement of both their physical presence and direct engagement, provided that the teacher makes the course clear and understandable. Everyone anticipates challenges in the assessment of electronic tests due to the lack of clarity in the evaluation methodologies. Additionally, it might be challenging to carry out certain pedagogical tasks in an online learning environment, such as administering examinations, in addition to getting feedback to determine a student's areas of strength and weakness. This can be because students and instructors do not have access to contemporary communication tools like e-mail and social media [22]. Iraqi universities have been unable to offer distance learners a high-quality education due to the university community's (including the administration and professors) inability to manage distance learning, including by prepping electronic courses in advance, using modern presentation programs, and other logistical capabilities.

7-3 Technical Obstacles

Teachers and students at Iraqi institutions said that one of the challenges to providing effective distance learning instruction was the slow internet speed in many rural regions, which led to broadcast disruptions and made it difficult to keep up with classes.

Additionally, there are concerns about the security and confidentiality of data and information, as well as protection against online piracy, all of which have an impact on the courses, tests, and outcomes. This is supported by the literature [23]. The instructor cannot ensure that the student is not attempting to cheat when taking a test electronically, nor can the teacher ensure that the person taking the exam is the student and not someone else.

7-4 Financial and Organizational Obstacles

Many teachers and students raised the issue of the inability to communicate remotely, which is similar with the results of a prior research of Hawker & Lyttle (2012) [24] concerning how difficult it was for certain students to access computers also discussed the difficulties in dealing with disobedient and untrained students during self-learning, as well as the challenges of ensuring students can master computer usage in the absence of teachers who have received computer training. Both the professors and their students emphasized the phenomenon of electronic multimedia and the absence of uniform controls among all instructors, which were brought on by the new medium and instructional style. Students found it challenging to understand the courses and to understand the information being conveyed to them. Due to the chaos of children, the small space, and the presence of multiple students in the same home, their comments made it plainly clear that the home setting is not optimal for distance learning.

7-5 Obstacles Comparisons

Tables 2, which both compared teacher and student responses, are worth mentioning. The following summarizes the range of challenges to providing high-quality distance learning instruction at Iraqi universities: 4.21 of the instructors cited unstable internet connectivity, while 4.12 cited erratic or absence of electricity. Comparably, 3.93 and 3.56 of students are enrolled.

Another notable difference is that 3.89 teachers cited data and information security as a barrier to effective distance learning education at Iraqi institutions, compared to 4.10 teachers who cited a lack of previous training in technology usage. This is much higher than the student mean (3.48 and 3.43, respectively). The instructors' more candid admission of their shortcomings in dealing with apps and using information technology to deliver lessons to their students may be the source of the difference in means between the two groups. The educational-learning process is unstable in Arab countries because there is no culture of distance learning.

Comparatively to students, instructors were more likely to see the variety of electronic media and the lack of consistent restrictions as barriers. The usage of electronic media by the professors varied widely, which presented challenges for the students, which may be the source of the variation in means between the two samples.

Finally, compared to students who gave the same response, more teachers said they were not really confident that distance learning was feasible. The fact that the lecturers and university administration did not work on creating e-courses may be the source of the variation in proportions between the two samples. Their reliance on conventional education necessitates the teacher's presence in the classroom without necessitating the distribution of supplementary electronic information to the students.

8- Conclusions

According to Algerian, Egyptian, and Palestinian institutions that have provided radio and television classes, the current state of Arab universities has incorporated both conventional and contemporary techniques of distance learning. Most Arab universities make use of the internet to deliver courses utilizing a range of learning platforms, including the Moodle platform, or to explain the lectures after disseminating electronic publications via university websites using social networking sites like Facebook and YouTube.

Distance learning has evolved into a crucial demand for higher education institutions due to our present emergency conditions. A modern education system that uses technology and promotes flexibility in the learning environment is necessary to ensure educational security and improve university results. The following are some suggestions from this research for raising the standard of distance learning in the study region and other areas:

1. Improving university infrastructure via the installation of computer laboratories in colleges and the employment of technical supervisors who train instructors and students on how to utilize technology, the internet, and different e-learning tools to their fullest potential.
2. Creating best electronic courses and posting them on university websites for the general public's use.
3. Offering faculty members ongoing training and education opportunities in the area of distant education, its needs, and the new responsibilities that instructors and students should play.
4. Provide a variety of distant learning activities to boost student motivation and encourage self- learning.

5. Coordination of Arab efforts to advance distant learning, particularly in the areas of online university curriculum and remote assessment while adhering to general quality requirements.
6. Providing all students in rural and outlying locations with access to the internet.

CONFLICT OF INTERESTS

There are no conflicts of interest

References

- [1] Goodyear, P., & Ellis, R. (2008). University students' approaches to learning: Rethinking the place of technology. *Distance Education*, 29, 141–152.
- [2] McCutcheon, L. R., Alzghari, S. K., Lee, Y. R., Long, W. G., & Marquez, R. (2017). Interprofessional education and distance education: A review and appraisal of the current literature. *Currents in Pharmacy Teaching and Learning*, 9(4), 729-736.
- [3] Polat, E. S. (2020). Theory and practice of distance learning: a textbook for universities.
- [4] Salinas, J., Muñoz, C., Albagli, A., Araya, G., & Vio, F. (2017). The contribution of distance education to health promotion in Chile. *Health promotion international*, 32(5), 913-921.
- [5] Holmberg, B. (2020). Guided didactic conversation in distance education. In *Distance education: International perspectives* (pp. 114-122). Routledge.
- [6] Kelsey, K. D., Lindner, J. R., & Dooley, K. E. (2002). Agricultural education at a distance: Let's hear from the students. *Journal of Agricultural Education*, 43(4), 24- 31.
- [7] Gammill, T., & Newman, M. (2005). Factors associated with faculty use of web-based instruction in higher education. *Journal of Agricultural Education*, 46(4), 60-71.
- [8] Guthrie, K. L. (2009). Situated technology as student tool for leadership instruction. *Journal of Leadership Education*, 8(1), 130-136.
- [9] Koch, S., Townsend, C. D., & Dooley, K. E. (2005). A case study comparison between webbased and traditional graduate level academic leadership instruction. *Journal of Agricultural Education*, 46(4), 72-82.
- [10] Mink, J. L., & Moore, L. L. (2005). Evaluation of the distance education degree program available to students through the college of agricultural and life sciences. *Journal of Agricultural Education*, 46(4), 83-95.
- [11] Murphy, T. H. (2000). An evaluation of a distance education course design for general soils. *Journal of Agricultural Education*, 41(3), 103-113.
- [12] Sampson, P. M., Leonard, J., Ballenger, J. W., & Coleman, J. C. (2010). Student satisfaction on online courses for educational leadership. *Online Journal of Distance Learning Administration*, 13(3), 1-12.
- [13] Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2021). Factors affecting students' learning performance through collaborative learning and engagement. *Interactive Learning Environments*, 1-21.
- [14] Roberts, T. G., & Dyer, J. E. (2005). The relationship of self-efficacy, motivation,

- and critical thinking disposition to achievement and attitudes when an illustrated web lecture is used in an online learning environment. *Journal of Agricultural Education*, 46(2), 12-22.
- [15] Shih, C. C., & Gamon, J. (2001). Web-based learning: Relationships among student motivation, attitude, learning styles, and achievement. *Journal of Agricultural Education*, 42(4), 12- 20.
- [16] Lassoued, Z., Alhendawi, M., & Bashitialshaaer, R. (2020). An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic. *Education Sciences*, 10(9), 232.
- [17] Dillman, D. A., Phelps, G., Tortora, R., Swift, K., Kohrell, J., Berck, J., & Messer, B. L. (2009). Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the internet. *Social Science Research*, 38(1), 1–18. <https://doi.org/10.1016/j.ssresearch.2008.03.007>
- [18] Favale, T., Soro, F., Trevisan, M., Drago, I., & Mellia, M. (2020). Campus traffic and e-Learning during COVID-19 pandemic. *Computer networks*, 176, 107290.
- [19] George, M. L. (2018). An effective classroom-based approach for teaching digital logic design to engineering undergraduates. *Int. J. Innov. Res. Dev*, 7, 45-53.
- [20] Hamdan, M. S. (2007). International and Arab experiences in the field of e-learning. *Palestinian Journal for Open Learning & e-Learning*, 1(1), 287-321.
- [21] Moore, M. G. (1987). Distance learning in the United States: The near future. *Distance Education*, 8(1), 38-46.
- [22] Falta, E., & Sadrata, F. (2019). Barriers to using e-learning to teach masters students at the Algerian University. *Arab J. Media Child Cult*, 6, 17-48.
- [23] Jawida, A., Tarshun, O., & Alyane, A. (2019). Characteristics and objectives of distance education and e-learning—A comparative study on the experiences of some Arab countries. *Arab J. Lit. Hum*, 6, 285-298.
- [24] Seville, E., Hawker, C., & Lyttle, J. (2012). Resilience tested: A year and a half of ten thousand aftershocks. University of Canterbury.