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Aims and Scope

Journal of Distance Learning and Open Learning (jdlol) is semi-annual open access and peer-reviewed international Journal. The leading journal is published by Beni-Suef University; Egypt; in collaboration with The Association of Arab Universities, starting at 2013 as the first journal issued by an Egyptian university in Distance education, e-learning, blended learning and educational technology. The journal is an open-access journal, published Semi-annual, all published articles are available immediately online at no charge from authors or readers. All articles Distance education, e-learning, blended learning and educational technology.

Vision

Publication of scientific production in the fields of Distance education, e-learning, blended learning and educational technology, and not have been published or considered for publication elsewhere. For this purpose, research and scientific studies.

Purpose

Providing authentic distinctive research and producing knowledge that serves society and supports intellectual creativity in the field of Distance education, e-learning, blended learning and educational technology in their diverse aspects as: Digital learning aids, Learning Management Systems, Web-based support systems, Video-Based Learning, Virtual and augmented reality systems, Computer-based training, Learning Platforms, Course design, Mobile learning, Social learning, Social Networking Technologies, Micro-Learning, Simulations and Game-Based Learning, Out-of-school applications, Self-Directed Learning, blended learning systems, distance education practices, Smart Learning Environment, E-learning administrative and policy issues and Evaluation systems.

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Contents

E-learning at the Algerian University:Reality and challenges

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A B S T R A C T

E-learning is a manifestation of modern education in various stages in general and university education in particular in the systems of education of developed countries. Since education is a tool for development, and as the university is the radiance of science and knowledge, Algeria ministry of higher education through a number of its institutions. In this paper, after a theoretical presentation of the importance of E-learning and its requirements, we seek to shed light on the reality of Elearning across Algerian universities by referring to the most important achievements and the nature of challenges and obstacles.

Keywords E-learning, Education system, Algerian Ministry of Higher Education, Higher education institutions

Introduction:

Almost everything today has gone electronic, e-government,eshopping, e-business, e-commerce, e-health, e-books, e-libraries, Elearning and so on. E-learning enables the learners to learn anytime and anywhere.
E learning has a well-established role in higher education, and it has been found to have a great influence on increasing the effectiveness of learning, It is a new asset in this modern era, and it's getting popular day by day among high education students in Algeria, because of the increasing availability of Various means and technologies of communication devices.

While the phenomenon took off overseas in the early-1990s and has all but exploded internationally since (a recent survey indicated that Total enrolment in US distance learning programs reached 6.36 million as of fall 2016, an increase of nearly 6% over the year before 2), it was only in around 2006 that it began to take hold locally and only now that we're starting to see its proliferation.

In Algeria and most of developing countries, the application of electronic learning (E-learning) in the higher educational system is yet struggling to gain much ground.

The purpose of this paper is to highlight the reasons for the delay of the success of E-learning in Algeria and to clarify the great efforts exerted by the Ministry of Higher Education to ensure the success of E-learning in the belief that E-learning is the future model of education.

Defining E-learning:

E-learning is defined by many people, in many ways, since the term E-learning is used inconsistently, in

order to gain a clear understanding of what E-learning is, here are a few definitions of Elearning. The letter "e" in E-learning stands for the word "electronic", E-learning would incorporate all educational activities that are carried out by individuals or groups working online or offline via networked or standalone computers and other electronic devices.3

E-learning or electronic learning according to the definition of Rosenberg it refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance. It is based on three fundamental criteria: 4

1- E-learning is networked, which makes it capable of instant updating, storage/retrieval, distribution information… and sharing of instruction or

2- It is delivered to the end-user via a computer using standard Internet technology…

3- It focuses on the broadest view of learning solutions that go beyond the traditional paradigms of training …". In other words, E-learning refers to instructional environments supported by the Internet. Online learning comprises a wide variety of programs that use the Internet within and beyond school walls to provide access to instructional materials as well as facilitate interaction among teachers and students. Online learning can be fully online or blended with face-to-face interactions.".5

Meanwhile, Koohang & Harman state: "E-learning is the delivery of education (all activities relevant to instructing, teaching, and learning) through various electronic media"6

From previous definitions, it can be said that E-learning is the appropriate application of the Internet to support the delivery of learning, skills and knowledge

Types of E-learning:

According to the Broadbent Brooke there are four types of Elearning namely: Informal, self-paced, leader-led and through performance support tools. In informal E-learning, a learner could access a web site or join an online discussion group to find relevant information. Self-paced E-learning on the other hand refers to the process whereby learners' access computer based or web –based training materials at their own pace. Leader led E-learning as the name suggests refers to an instructor, tutor or facilitator leading the process. This type of learning can further be divided into two categories (1) Learners accessing real-time learning materials (Synchronous). In addition(2) learners accessing delayed learning materials (asynchronous). The fourth and last type of E-learning described is through the use of performance support tools which refers to materials that learners can use to help perform a task (normally in software) such as using a wizard.7

Launching E-learning in Algeria

Algeria has already launched an E-learning system in 2006 in collaboration with both "Thomson" and "Microsoft" corporations. This section service provides 4.000 courses and lectures basically designed to teach ICTs and communication skills.8

According to Boutkhil GUEMIDE and Chellali BENACHAIBA, The first comment about the E-

-learning for better professional development. Teacher professional development is absolutely essential if technology provided to schools is to be used effectively. Simply put, spending scarce resources on informational technology hardware and software without financing teacher professional development as well is wasteful. That is, designing and implementing successful teacher professional development programs in the application of technology is neither easy nor inexpensive.9

Key to successful teacher professional development programs is a modular structure, corresponding to different levels of teacher experience and expertise using technology. Adapting materials to teachers' comfort level and starting points is essential. In this way, teachers new to technology can be exposed to the full series of professional development modules, while those further along on the learning curve can enter where their knowledge and skills stop, and help their less technology-savvy colleagues along. For a mentioned reason, exploiting E-learning is a necessity for better teacher professional development in Algeria. The E-learning strategy should be basically developed by Algerian universities and financed by the ministry of higher education.10

Within the "Priorities and Planning Report for 2007", which was prepared in September 2006, the Ministry of Higher Education and Scientific Research, in the form of "Strategic Objectives 2007-20082009", recorded two strategic goals in relation to information and communication technologies:

1. Control the integrated information system for the sector.

2. Establish a system of distance education as a support for civilizational formation.

This report deals with the second objective of establishing a distance education system as a pillar of civic training. In the world of distance learning, the various technologies available in the market are similar in general. In this sense, the Ministry of Higher Education and Scientific Research, like others, has since 2003 started to equip all institutions with specialized distance learning equipment at a total cost of 716,152,000 DA.

What distinguishes the process in particular is the strategic choice regarding the use of such equipment, which takes into account their compatibility with the global academic needs while at the same time conforming to our national peculiarities. It was this thinking that determined the choice of our distance learning strategy.

Our distance education is a bond of educative education, which supports and strengthens it. While in other countries (advanced or progressing) it is a choice of options given distinctly to the learner.

This approach allows our country to raise the great challenge of achieving the following objectives:

1. Absorbing the ever-increasing numbers of learners while at the same time gradually overcoming the effects of the inverted pyramid that currently characterizes the teachers (quantitative criterion).
2. Improve the quality of the configuration and quickly approach international standards regarding quality assurance.

In order to achieve this objective, an agenda has been set in the short, medium and long term that reflects

the immediate, medium and far-reaching concerns, as follows:

1-Network of visual lectures and E-learning system of the Ministry of Higher Education and Scientific Research: -In the short term, it first involves rationalizing the use of human and material resources, through: -Establishing a network for video lectures, integrating all university institutions, including 13 sites and 46 sites in the future.

Although this network allows for the indirect recording and transmission of lessons, it is used mainly concurrently, requiring attendees accompanying the teacher, facilities and student.

The network can now be used as a "point by point". Once equipment and capacity building is completed (process is under way), the system can collect 18 visual lectures simultaneously, with a central node and six multi-site modules placed in the Scientific and Technical Research Center.

The network was expanded from university entrance 2009-2010 to preparatory schools, which were also equipped with virtual laboratories and multimedia classrooms connected to a private network for video lectures. A parallel phase, or at least slightly delayed, is the development of an E-learning system.

An E-learning system based on a distance learning base in the form of a client-serveur that allows the preparation and access of resources across the line in an asynchronous form. The learner can access this system at any time and place, with or without facilities. This rule allows teachers to use various methods across the line (lessons, exercises, applied lessons, activities, training, etc.), and provides the learner with a rich, diverse and lasting pedagogical mode.

Al Qaeda also provides tools that allow for exchange and collaboration between teachers / attendants, learners and / or learners (mail, forums, chat, deposit and loading spaces). The final objective is to develop real study tracks across the line, which are based on taking into account the needs of the learners and based on a focused pedagogy, which is developed according to a specific pedagogic charter according to the new educational techniques resulting from the introduction of information and communication technologies (participatory, Sequencing, scenario development, etc.) and within the framework of respect for standards (SCORM, IMS, LOM, etc.).

To achieve this goal, a program of work has been outlined since mid-November 2006, which clearly defines the responsibilities of all concerned parties (the National Committee for Virtual Education, the Regional Evaluation Committees, the Higher Education Directorate, the Research Center for Scientific and Technical Information, the University of Continuing Education and the Ministry of Labor).

At present, there are tele-education centers in the university institutions that include pedagogic experts, engineers and technicians who have benefited from a specialized and diverse training program under the various projects of cooperation, especially within the framework of the UNESCO project and the European Commission, the cooperation program with CoseLearn, (AUF), which is based at the University of Science and Technology Hawari Boumediene.

The E-learning system will be strengthened through the national network between the libraries, which is the expansion space to include all institutions of the country.

Algerian Distance learning system:

In the medium term, a distance learning system will be set up to allow the integration of E-learning and television facilities into a vision that goes beyond the boundaries of the university that is already in its favor.

Therefore, it will remain a priority for the university family, but it can be useful to a wider audience than to those seeking social promotion and raise their perceptions, or simply thirst for more knowledge (institutional staff in continuous training, literate learners, hospital patients, people Within rehabilitation centers, persons in the third decade etc.)

Algerian Research Network (ARN):11

The Algerian Research Network, which in particular supports the distance education system through good consolidation, has experienced a fluctuating and fragmented development, to meet the precise needs that are often urgent, especially with regard to Internet access.

The ARBAC, designed and built on the pillars and lines of Algeria's transport, seems unable to withstand the future Enterprise Resource Planning because of its inadequate capabilities, namely, the widely integrated information system of the sector, which includes the education system (Including teaching and pedagogical processes, as well as the management of university services, heritage management, etc.), decisionmaking, statistics and others.

The amounts paid to Algeria Telecom for the rental of props and lines (about 2 billion Algerian dinars per year) necessitate thinking of other solutions in anticipation of a more suitable network adapted to the dimensions of l'ERP, as described above.

The rehabilitation of the Algerian research network through its evaluation and revitalization within the framework of the next five-year plan is the two possible ways.

Algerian Network for Education and Research:

In the long term, a sectoral network, similar to other education and research networks, must have a separate structure independent of those of commercial operators. It must:

The sector was granted an appropriate infrastructure pot, consisting of a bottleneck, inter-institutional linkages, a national data center and three regional centers. Allows the current baccabion to be increased from 155 Mbps to 2.5 Gbps and up to 10 Gbps, and the connectivity capacity of organizations that currently does not exceed 100 Mbps to 1 Gbps.

The establishment of a system of information, higher education and scientific research through the establishment of a new set of integrated services (G2G et G2C) in the service of students, professors, researchers, employees and citizens. These services come to support the services currently provided by the following software:

Services across the line addressed to the citizen G2C:

* Online registration for baccalaureate holders.
* Reading through the line on the pedagogic assessment.
* Requesting equations across the line for documents and

certificates.

Line-oriented services for G2G management:
* Successful students in the baccalaureate.
* Management of DMD.
* Follow-up training abroad.
* Conducting research projects - training (CNEPRU).
* Put on-line services in a platform on cooperation and exchange

with institutions: a directory of higher education, an investigation on indicators of human development, a statistical achievement that includes the final outcome of university entry, the needs of institutions with regard to automated media equipment, the filing of various files.

* Evaluation of research projects and follow-up of disbursements FN / RSDT.
* National service file management.

The development of other craft applications allows for enhancement of existing ones or in the way of development, such as applications: human resources management, financial monitoring of investment operations, electronic document management and the conduct of university services. In addition to day-to-day management, the system also provides decision makers with a set of indicators that help them take real time decisions.

Researchers have developed a platform for research and innovation, similar to the platforms offered by the national research and education networks of technology-producing countries, and meet the expectations of the sector for education and research for development through:

* Improve existing services.
* Develop new services such as:

A. Using new educational approaches.
B. Immediate access to digital and virtual libraries.
C. Retrieve more important amounts of data.
D. Establishing virtual libraries (drafting and experimentation).

And. Visualization of virtual organization (networks of cooperation).

E. Security, QoS, services, mobility .. Wide distance education system. For the sector, distance education with its network of visual lectures and E-learning platforms is a bond of civic training, complementing and supporting it.

Through the establishment of the future education and research network, distance education will contribute more to the modernization of teaching tools and methods, especially by building a digital

space - open to citizens - that integrates unified communication, information exchange and participatory action among all actors. The project, which is estimated to last four years during the first six months of 2010, has been registered.

Moodle: LCMS platform, for online courses and distance learning:12

Moodle is an online learning platform for creating learner communities around content and educational activities. To a content management system (CMS), Moodle adds pedagogical or communicative functions to create an online learning environment: it is an application to create, through the network, interactions between pedagogues, learners and educational resources.

The lateral blocks give access to the various tools and links of the course, for example:

- People: list of participants enrolled in the course
- Course: the list of courses in which the user is registered
- Search forums: search tool in the course forums
- Administration: record of the notes of the user ...
- Latest news: the last news published on the forum
- Upcoming events: activities listed in the calendar of its course
- Calendar: activities classified according to the calendar
- Online users: the list of participants, teachers and users, connected to the course
- RSS feeds, HTML block ... Course members have access to the following activities if the teacher has selected them:
- Chat: "chat" or chat room (possibility to open a certain day, at a specific time, weekly, etc.).
- Forum: different types of forums (subjects imposed by the teacher, subjects proposed by the students, evaluation or commentary possible, etc.).
- Assignment: assignment of work with evaluation of the teacher (of different types: online text, file deposit, advanced filing of files, offline activity).
- Test: suite of QCU, QCM, questions true / false, numerical questions, pairings, texts with holes, etc.
- Lesson: document containing questions and referrals to different courses depending on the answers (possible evaluation).
- Workshop: submission of works with evaluation by the students.
- Glossary: collective production of a document organized alphabetically (comment, validation and evaluation possible).
- Wiki: collective production of a hypertext document (possible comments from the teacher).
- Database: creation of records with custom fields, and search by criteria in the database.
- Survey: asked question with a series of options to choose from.
- Dialogues: internal messaging between course members.
- Groups / groups: Course members can be separated into groups (and have access to reserved forum sections, for example) or group groupings (which completely restrict access to resources / activities).

The main new features of versions 2.x are:
- the "drag and drop" of files in the course space, which avoids the X steps that were necessary before,
- the personal file space which offers the opportunity not to duplicate a support on all its courses, but on the contrary to use its own storage space from which we create links in its courses,
- the completion of the activities which proposes to the learners to tag the activities which they carried out, or which marks them automatically when the requested operation was carried out (rendering of

duty, quiz ...),
- sequencing of activities that can structure a learning path by requiring the learner to go through such a step, or obtain such a note, before going on such resource or activity,
- Cohorts, which are groups of learners at the platform level, and no longer at the level of a course.

All activities are configurable by the teacher. Other features

It is possible to integrate an external questionnaire, that is to say created with software that is not integrated into the platform such as: Hot Potatoes, Netquiz, CourseBuilder. The teacher (or tutor) who wishes to have detailed information about a student's connections can use the "Reports" command. It obtains the general history of the activity of the course and can ask the history of the activity for a group, for a student, by date, for a given activity.
The teacher has the possibility to make a backup of his lessons with or without data and student productions. Restoring a backup makes it possible to create or complete a course extremely quickly. It can also reset the course to keep its structure without resources, users and information exchange. A course can be defined as a "meta-course" of a main course, each student who enrolls in the main course is automatically enrolled in the pre-defined related meta-courses. Specific filters make it possible to include in educational resources: sound in mp3, flash files and algebraic expressions. Moodle is one of the first platforms to integrate the IMS- events for any type of user, the jobs to be rendered appear automatically in the calendar) but no personal calendar even if it is possible to insert private events Communication in synchronous mode: chat but no videoconference mode (if not by adding a Dim-Dim module).

Services of the tel-teaching:

The use of technology to maximize the student learning experience is a vibrant area of interest across all tiers of global education. Technologyenhanced learning (TEL) is often used as a synonym for E-learning13 The system allows the broadcast of multipoint interactive video conferences (sites sent to Receiver sites. 14

The central point has six units (6) Multi-site:

Each unit may distribute seventeen (17) participants over three (3) conferences. In total, eighteen (18) conferences can be held simultaneously, with the possibility of registering ten of them (10). During a visual conference, the professor can modify the content of the presentation at the level of the receiving sites in order to 1-Display the contents of the first page of your own computer. 2-Send the next image from the recording device. Sixteen (16) sites can be displayed on the same screen.

Conclusion:

Through their use of Internet, Algerians discovered the fragility of the systems which hinder them from keeping pace with the developments of the digital age. This is exactly what made the “distance educational system” remain confined to its traditional scope (printed lessons sent to the participants by regular mail). Unfortunately, the possibility of online registration in this type of education wasn’t announced until 2009.
This proves that the ambition to achieve a practical step in the field of E-learning remains unreachable,

even though many categories of Algerian society desperately need to benefit from learning opportunities that may be offered by virtual schools, if any, especially housewives, workers, employees, residents of remote areas and those who could not pursue their education, due to social, political or economic reasons. The E-learning space that Algerians can benefit from online is a reflection of the "the general educational scene" in our country, which is described as being miserable. 15

The Algerian Ministry of Higher Education has spent considerable money on the success of E-learning. It has encountered several failures, but the recent results indicate that there are real signs of E-learning on the ground.

References;

- *Algerian Research Network , Avalable at:Retrieved on 02.01.2019.*
- *- BAKIA, Marianne, LASSETER, Austin, SHEAR, Linda, & TOYAMA, Yukie. Understanding the Implications of Online Learning for Educational Productivity. Department of Education, Washington, D. C., US.2012,*
- *Boutkhil GUEMIDE, Chellali BENACHAIBA, EXPLOITING ICT AND E-LEARNING IN TEACHER'S PROFESSIONAL DEVELOPMENT IN ALGERIA: The Case of English Secondary School Teachers, Turkish Online Journal of Distance EducationTOJDE July 2012 , Vol.13 N° 03, P41. Available at: Retrieved on 02.02.2019.*
- *Broadbent Brooke, ABCs of A-learning. Reaping the Benefits and Avoiding the Pitfalls, Jossey-Bass / Pfeiffer, San Francisco, US,2002, P10 - Development of blended learning course on critical Understanding of ICT for B.Ed. Student Teachers of Karnataka, State Open University, Available at:Retrieved on 02.02.2019.*
- *Higher Education Academy,Technology enhanced learning, Available Retrieved on 02.02.2019 -*
- *ICEF Monitor, The continuing expansion of online learning in the US, available at Retrieved on 02.02.2019. - Koohang, A. & Harman,*
- *K., (Open source: A metaphor for E-learning. Informing Science: The International Journal of an Emerging Transdiscipline, 8,2005, Pp 75-86.*
- *Moodle: LCMS platform, for online courses and distance learning, Cerist , 22 juin 2016, Available at: Retrieved on 02.01.2019. -*
- *ROSENBERG, Marc Jeffrey , E-learning: Strategies for Delivering Knowledge in the Digital Age. USA: McGrow-Hill Professional.2001, Pp28-29. -*
- *Services of the tel-teaching, Avalable at :Retrieved on 05.02.2019.*

Gender Differences and Learner Satisfaction: An evaluation of E-Learning systems at Umm A-Qura University

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A B S T R A C T

This research aims to define the students' satisfaction level at Umm Al-Qura University with the e-learning systems (Blackboard & D2L), in addition, it investigates whether there are differences in the evaluation of Umm Al-Qura University students for e-learning systems (Blackboard & D2L) due to the gender variable (Male/ Female). To achieve these goals, a descriptive analysis methodology used in this research, the sample consisted of (513) students, (174) male, and (339) female at Umm Al-Qura University in the the academic year 2019/2020. The sample were asked to complete a 5-point likert scale questionnaire to collect the required data. Validity and reliability of the questionnaire were guaranteed. The results revealed that students are highly satisfied with the both of e-learning systems (Blackboard & D2L). There is no statistically significant difference between the average scores of males and females in the evaluation of the elearning system (Blackboard). There is a statistically significant difference between the mean scores of males and females in the D2L system evaluation in favor of females

Keywords E-Learning, Learning Management System (LMS), Satisfication, Gender diffrences, Evaluation, Higher education, Umm Al-Qura University

1.Introduction:

In light of the increasing interest of educational institutions, especially higher education institutions, in the quality of the educational and administrative process, as well as in light of the tremendous and accelerating development in computers and Internet services, many concepts such as distance education, e-learning and virtual universities have emerged, and have made a qualitative leap in the work of educational institutions, so that the focus is on providing students with the skills that will prepare them for the current changes. Within the framework of the universities' endeavors to achieve the orderly and effective application of technologies as an important aspect of their activities, the experts came up with a system based on the idea of distributing subject matter through a platform from instructors to students to support and enhance the teaching and learning process at universities to become more competitive. This system is known as a Learning Management System (LMS). (Ghoniem, Aljahdali, & Fahmy, 2010). A learning management system (LMS) is a software application or Web-based technology used to design, implement, and evaluate a certain learning process, where it provides the instructors with a tools to create and distribute content, monitor student participation, and evaluate student performance, and also provide students with the ability to use effective features such as threaded discussions, discussion forums , and video conferencing, with comprehensive distribution from instructors to students, and this contributes to the creation of what is called a web-based virtual

learning environment (Zahir, 2009; Ghoniem, Aljahdali, & Fahmy, 2010; Sofianti, Prawira, & Indrayadi, 2015).

There are many advantages for e-learning systems such as: Learners can obtain the best available instruction from any place at any time, learners define the speed and schedule, training adapts due to learning styles, teachers can teach from any place, course content can be more attractive, e-learning provides training around the world without travel, including valuable educational resources, on the other side, the disadvantage of e-learning is represented in more teacher efforts, and online training courses require 20-40% more time and effort than traditional courses, converting current classrooms into online courses has proven more difficult than many designers have anticipated. E-learning is often used as a form of distance learning and distance learning is "impersonal" due to the lack of a face to-face communication fear of technology(Chang,2016; Basak, Wotto, & Paul, 2018; Tahrishi, 2018).

Therefore, there is a need to prepare and implement periodic evaluation for e-learning systems and analyze their effectiveness, where evaluation of e-learning -systems is a vital necessary to ensure successful delivery, effective use, and positive effect on learners. (Maillson & Nyawo,2008; Al-Fraihat, Joy, Masa'deh, & Sinclair, 2020).

Bhuasiri, Xaymoungkhoun, Zo, JeungRho, and Andrew(2012) mentioned that there is a need to subject e-learning systems and programs to specific evaluation procedures in light of cultural and social developments in order to diagnose the strengths and weaknesses of these systems, in a comprehensive and objective manner that is balanced with the cultural and social variables facing societies.

Knowing the opinions and level of students' satisfaction is one of the most important indicators that are referred to in the process of evaluating e- learning and distance education systems (Palloff & Pratt,2007; Kishabale, 2019).

The previous studies identified the importance of individual aspects in influencing the acceptance of e-learning, where the user requests more personalized and adaptive system interaction (Aroyo & Dicheva, 2004; Singh & Hardaker, 2014). And gender is one of the individual variables that influences on the e- learning acceptance(Ramírez-Correa, Arenas-Gaitán, &Rondán-Cataluña, 2015)

Males and females differ in their levels of trust, and information processing, but also in their attitudes and motives of using and accepting e learning environments (Sanchez-Franco, Villarejo-Ramos, & Rondan-Cataluña, 2006)

In addition, some studies indicated that females communicated
more, have a greater social presence, and are more satisfied with online courses than males (Johnson, 2011; Gonzalez-Gomez, Guardiola, Rodríguez, & Alonso, 2012). And some studies indicate that males students used the LMS in e-learning environment more than females (Lim, Nam, Eom, Jang, Kim, and Kim, 2020) Ramírez-Correa, Arenas-Gaitán, &Rondán-Cataluña(2015) mentioned that we live in the information and communication era, and we need to know if there are still differences between males and females with regard to the acceptance and use of e-learning.

Consequently, the main objective of this research is to define the Students' satisfaction level with the e-learning systems at Umm AlQura University, as well as defining the gender differences on students' evaluation for e-learning systems at Umm Al-Qura University.

1. What is the satisfaction level of Umm Al-Qura University students with the e-learning system (Blackboard)?
2. What is the satisfaction level of Umm Al-Qura University students with the e-learning system(D2L)?
3. Does the evaluation of Umm Al-Qura University students for
e-learning system (Blackboard) differ by gender (male / female)?

4. Does the evaluation of Umm Al-Qura University students for e-learning system(D2L) differ by gender (male / female)?

2. Literature Reviews and Conceptual Framework

E-learning is responsible for developing the skills required for the era of a knowledge-based economy, and in order to give this type of education its place as one of the successful educational systems in Arab societies, e-learning must be characterized by basic requirements. One of the most important requirements is a periodical evaluation system in order to diagnose the strengths and weaknesses indicators in light of the diversity of needs and interests of the student community(males and females), as well as in light of the challenges and societal changes.
Considering the above, the current research will discuss the following topics:

2.1. Gender and E-Learning:

The gender factor is considered the main element for understanding inequalities and identities in modern society (Johnson, 2011)
Studies and the literature indicate that gender is a key component to understanding differences in perceptions of benefits and usability of technology (Venkatesh & Bala, 2008)
Consequently, many literatures and studies aimed to discover the relationship between gender differences and e-learning in many areas, especially in the field of e-learning usage and its evaluation. CuadradoGarcía, Ruiz-Molina, and Montoro-Pons(2010)indicated that there were statistically significant differences in the evaluation and use of elearning activities according to the gender variable (male / female) at two European universities, and also found that there are few differences between male and female students in their satisfaction with e-learning activities.

The study of Hung, Chou, Chen, and Own (2010) aimed to identify the differences between the readiness of Taiwan university students to learn within a web-based learning environment in the light of the variable of gender. The results revealed that the gender had no statistically significant differences along the dimensions of online learning readiness. The study of Lu, and Chiou(2010) concluded that gender significantly influenced the university students' satisfaction with the e-learning system in Taiwan. The study of Awad and Halas (2015) aimed to identify the trend towards distance education technology and its relationship to some variables among graduate students in Palestinian universities. Among the results of the study, there are no statistically significant differences in the responses of graduate students in Palestinian universities towards distance learning, depending on the gender variable. Al-Sharif's study (2016) aimed to identify the attitudes of Shaqra University students towards e-learning, and concluded that there are statistically significant differences at the level of 5% in students' responses to e-learning depending on the gender variable (male, female) in favor of females.
The study of Alharthi, Spichkova, Hamilton, and Alsanoosy(2018)investigated the gender and cultural differences in needs and usage of system features. the focus is on eLearning systems used in Australia and Saudi Arabia. The results revealed that the cultural and gender diversity may have a significant impact on user needs and preferences.
Djalev, and Bogdanov's study (2019) aimed to examine the pedagogical usability of interactive e-learning materials for foreign language practice at New Bulgarian University, Results indicated that all independent variables(age/ gender) and their interactions have a significant effects on the evaluations of the pedagogical usability. In addition, female tend to assign higher values than male.

The study of Lim, Nam, Eom, Jang, Kim, and Kim(2020) aimed to evaluate the structural differences between college students in their LMS use patterns according gender variable(male and female) through a multifactor model at a university in Korea. The results indicated that male students used the LMS more than females and that neither gender preferred communicating and cooperate with each other.

Jun and Freeman(2010) mentioned that the evidence about the effect of gender on the acceptance of information technology is not conclusive, where Kim, and Forsythe (2008) confirmed that there are not statistically significant differences between male and female in the process of adopting of e-learning. And in contrast, there is previous evidence of gender-related effects in the context of the adoption of elearning (Ong& Lai,2006)

Finally, the issue of the digital gender divide still exists and needs to be addressed with comprehensive recommendations for development, including the search for more participatory usage strategies towards learning management systems. (Lim, Nam, Eom, Jang, Kim, & Kim, 2020).

2.2. Satisfaction and E-Learning:

Satisfaction or attitude is the state of pleasure or disappointment formed by the comparison of the perceived effect of a product or service with an expected value (Peng, Yin, Rong, Yang, and Cong, 2020).

The educational literatures agreed that attitude has three basic components, as mentioned by Al-Helo (2006), Saraya (2007),

Abuallam (2007), Puspitasari(2014) as follows: 1)

The cognitive component: It is the cognitive aspects,

which include the individual's point of view related to the approval of the subject, and this component includes the objective information and facts available to the individual about the subject, and it consists of a group of experiences that form the cognitive framework for these stimuli. 2)

The emotional component: This component refers to the emotional and affective aspects related to the topic of the trend. After the individual has a set of experiences and knowledge about a specific topic, he appears to have some feelings and feelings that reflect his positive or negative direction towards the topic.

3) The (behavioral) component: It is a set of expressions and clear responses provided by the individual in a situation after his awareness, knowledge and emotion in this situation, the individual provides the response that is commensurate with this emotion, this experience and this perception.

The role of e-learning is evident in raising students' satisfaction about the teaching and learning process, due to the use of many instructional aids which may not be available to many learners,providing the learner with a suitable place in which he feels comfortable without interference from anyone, enabling learners to express their ideas and search for facts and information in more and more meaningful ways than what is used in traditional classrooms, making the learner in a state of excitement and constant activity during learning, and it increases the social relationship between learners and teachers. (Ke & Kwak, 2013; Kuo, Walker, Belland, & Schroder, 2013;

Dziuban, et al.,2015; Bahati, & Mukama, 2019) In e-learning, learner satisfaction is an aggregate of feelings or emotional responses to distinct factors while interacting with an elearning system (Goh & Chen, 2008) The factors that affecting the learner's satisfaction in e-learning can be illustrated as: Leaner(Computing attitude, Computer anxiety, Internet self-efficacy, Age, Gender, initial knowledge of e-Learning); Instructor(Response timeliness, Attitude toward e-Learning, instructor’s experience);

E-Learning Course(Course flexibility, assessment methods and interaction, Course quality); Technology(Technology quality, Internet quality); Design(Perceived usefulness, Perceived ease of use); and Environment(Diversity in assessment, Perceived interaction). (Hong, 2002; Sun, Tsai, Finger, Chen, &Yeh, 2008; Tarigan, 2011; Al-Qahtani, Al-Qahtani, and Al-Misehal, 2014;
Peng, Yin, Rong, Yang, and Cong, 2020)

There are many advantages to explore learner satisfaction with e learning systems. Rashid(2010) mentioned that The attitude or satisfaction is a fundamental concept in the educational and psychological sciences and it has gained great importance in it, and the educational research area around it is increasing day by day, as many studies see that improving the satisfaction now must be seen as a goal and a value. Li, Marsh, & Rienties(2016) also mentioned that A key concern for most institutions and instructors is whether students are satisfied with their learning experience.
Analyzing learner satisfaction questionnaires allows teachers and administrators to identify unseen problems as well as identify key information about learning processes. (Zerihun, Beishuizen, & Os, 2012; Rienties, 2014)

2.3. E-Learning Evaluation

Evaluation is one of the most important factors for the continued success and effectiveness of the e-learning system (Abdulhamid,2005) The reasons for adopting the evaluation approach for the elearning system including: E-learning systems evaluation can be used as evidence of whether the technology is profitable for the organization or not, and this helps convince senior executives of the organization about the importance of e-learning, the evaluation process encourages learners to work harder, where students do their best under monitoring and tracking their results, the evaluation process helps to reveal whether the individuals, departments and facilitators responsible for implementing and using the e learning systems are properly fulfilling their roles and whether the systems are delivering the promised results, the evaluation process may reflect the quality and effectiveness of educational materials and identify areas in need of improvement, and an evaluation of current e-learning systems will help senior decision makers to make well-informed strategic decisions(Reeves & Hedberg, 2003; Voigt & Swatman, 2004; Horton, 2006; Mallinson & Nyawo, 2008)
In this regard, there are many studies aimed at developing frameworks and models for evaluating e-learning systems, where Lanzilotti, Ardito and Costabile(2006) mentioned that the Quality of elearning systems is one of the important topics that the researchers were investigating in the last years, and proposed a new framework, called TICS (Technology, Interaction, Content, Services), which focuses on the most important aspects to be considered when designing or evaluating an e-learning system.

Ozkan and Koseler(2009). proposed a conceptual e-learning assessment model, HELAM (Hexagonal e-Learning Assessment Model), suggesting a multi-dimensional approach for LMS evaluation via six dimensions: (1) system quality, (2) service quality, (3) content quality, (4) learner perspective, (5) instructor attitudes, and (6) supportive issues.

Al-Shagran, Sahraoui(2017).proposed multi detentions approach to evaluate e learning systems which contain the following dimensions(Stakeholders- Organization- Technology- Environment- Pedagogic and curricular- Quality of eLearning Systems- Effective Blended E-Learning). Hadullo, Oboko, and Omwenga(2017). presented a model for evaluating LMS through reviewing the existing e-learning frameworks and models that aimed to evaluate the quality of e- learning systems, the model consist of 3

branches (key factors ~ Constructs ~ Measurements), and as example: Key factors: Course development ~ Constructs: Course information, course structure, course layout ~ Measurements: Course objectives, list of textbooks, list of lecturers, current and accurate, content, easy to use interface. The main key factors that exist in the model were: Course development, Learner Support, Assessment, User characteristics, Institutional factors, and Overall performance.

Pour, Hosseinzadeh, Azar, and Taheri (2017).mentioned that elearning systems' evaluation has become critical. Although many researchers have studied e-learning's performance evaluation, there is little research on e-learning assessment, which uses pedagogical principles and organizational issues along with information systems (ISs) assessment measures. The framework of evaluation contains the following items: Financial perspective, E-learner perspective, Internal process perspective, Learning and growth perspective

Al-Fraihat, Joy, Masa'deh, & Sinclair (2020) study proposed a model which mainly adopts the structures and indicators from other models and theories to fit the context of e-learning. The proposed model is one which includes seven independent dimensions: technical system quality, information quality, service quality, educational system quality, support system quality, learner quality, and instructor quality. In addition, there are four dependent dimensions: perceived satisfaction, perceived usefulness, system use, and benefits. Each dimension contains several items which indicate the level of quality.

The research has benefited from previous frameworks and models for evaluating e-learning systems in preparing a questionnaire for evaluation of the two e-learning systems (Blackboard - D2L) from the students' point of view in light of the gender variable at Umm AlQura University.

3.Research Methodology

3.1. The Research Design

The descriptive and analytical approach, which aims to study scientific phenomena and problems by describing them in a realistic manner and analyzing them in a scientific way, was used to answer research questions related to the evaluation of the two e-learning systems (Blackboard - D2L) from the students' point of view in light of the gender variable.

3.2. The Research Community

The research community consisted of all students at Umm AlQura University in the Kingdom of Saudi Arabia in the academic year 2019/2020.

3.3. The Research Sample

The research sample consisted of (513) students at Umm Al-Qura University, and Table 1 shows the distribution of the sample members according to the research variables:

Table 1. Research Sample Description

Variable	Variable Categories	Frequency	Percent	Total	Percent
E-learning system (Blackboard)	Males	123	37.3 %	330	64.3 %
	Females	207	62.7 %		
E-learning system (D2L)	Males	51	27.9 %	183	35.7 %
	Females	132	72.1 %		

3.4. The Research Tool

The research tool is represented in a questionnaire to identify two parts, the first: students' satisfaction with the e-learning system, and the second: students' evaluation of the e-learning system. The questionnaire consisted, in its initial form, of (9 items) to identify the level of students' satisfaction with the e-learning system, in addition to (8 items) to identify the students' evaluation of the e-learning system. The fivepoint gradient of Likert relied on answering the questionnaire's axes, so that the grades are assigned to them upon correction (1/2/3/4/5). To verify the validity and reliability of the questionnaire, the following steps were followed:

A.The Questionnaire Validity: The questionnaire validity was verified in two ways: A.1). The validity of the Arbitrators: The items of the questionnaire were presented, in its initial form, to specialized arbitrators. This is to judge the appropriateness of the questionnaire axes, the items clarity, its linguistic formulation appropriateness, and the items relevance to the axis that it measures. In

light of the arbitrators' directives, the wording of some of the questionnaire items was modified, and the arbitrators' agreement on the questionnaire's items was 100%. Therefore, no item was deleted from the questionnaire items. A.2). Internal consistency: The correlation coefficient between the degree of each item of the questionnaire and the total score of the axis to which it belongs, was calculated on a sample of (95) male and female students at Umm AlQura University, and the results were as shown in the following Table 2:

Table 2. The values of the correlation coefficients of the degree of each item with the total degree of the axis to which it belongs in the questionnaire

Blackboard System (n=50)				D2L System (n=43)			
Satisfaction with the system		System Evaluation		Satisfaction with the system		System Evaluation	
Item	Correlation Coefficient	Item	Correlation Coefficient	Item	Correlation Coefficient	Item	Correlation Coefficient
1	0.77**	1	0.78**	1	0.62**	1	0.68**
2	0.74**	2	0.79**	2	0.63**	2	0.76**
3	0.61**	3	0.63**	3	0.66**	3	0.75**
4	0.84**	4	0.86**	4	0.57**	4	0.53**
5	0.76**	5	0.75**	5	0.71**	5	0.72**
6	0.83**	6	0.84**	6	0.73**	6	0.75**
7	0.75**	7	0.79**	7	0.75**	7	0.80**
8	0.83**	8	0.78**	8	0.73**	8	0.68**
9	0.56**			9	0.47**		

It is evident from Table (2) that the correlation coefficients are statistically significant at the level of (0.01), and the values of the

correlation coefficients ranged from 0.47 to 0.86, and the internal consistency did not result in deleting any items. B. Questionnaire Reliability:
The reliability was calculated by Cronbach's Alpha method, whereby the Cronbach alpha coefficient was calculated for each axis of the questionnaire separately before deleting the item score and after deleting it, on a sample of (95) male and female students at Umm AlQura University, and the results were as shown in the Table 3.

Table 3. The Questionnaire Axis Reliability Coefficients Values

E-learning System	Axis	N of items	Cronbach's Alpha	Cronbach's Alpha if Item Deleted
Blackboard (n=50)	Satisfaction with the system	9	0.90	Ranged from 0.87 to 0.90
	System Evaluation	8	0.91	Ranged from 0.88 to 0.91
D2L (n=43)	Satisfaction with the system	9	0.83	Ranged from 0.79 to 0.83
	System Evaluation	8	0.86	Ranged from 0.82 to 0.86

It is evident from the Table 3 that the values of the reliability coefficients by the Cronbach Alpha method ranged from 0.83 to 0.91, which are acceptable reliability values, and that the Cronbach Alpha values obtained when deleting the items reduce the axes reliability coefficient. It is evident from the foregoing that the research tool has validity and reliability. It consists in its final form of (9) items to identify satisfaction with the system, and (8) items to identify the evaluation of the system.

3.5. The Research Procedures

The research procedures included the following:
1. Reviewing studies and literature related to the research topic. 2. Preparing the search tool and calculating its validity and reliability 3. Questionnaire Application after calculating its validity and reliability on the research sample 4. Statistical processing of data obtained from the application of questionnaire 5. Discussing the research results. 6. Providing recommendations and suggestions

4. Results and Discussion

4.1. Results of the first question:

The first question states: What is the satisfaction level of Umm AlQura University students with the e-learning system (Blackboard)? To answer this question, the frequency, percentage, average, and standard deviation of the responses of the sample members were calculated on each item of the axis of

satisfaction with the Blackboard e-learning system. Depending on that each item has a score that extends between (1 to 5), the range of grades will be (4) and the length of the category (0.8). So, if the average value is (1 to less than 1.8) the
level is very low, (1.8 to less than 2.6) the level is low, (2.6 to less than 3.4) the level is medium, (3.4 to less than 4.2) the level is high, (4.2 to 5) the level is very high, and the results are as shown in Table 4.

Table 4. Frequencies, percentages, averages, and standard deviations of the items of Student Satisfaction with the Blackboard System

Item No.	Items of student satisfaction with the Blackboard system		Responses					Mean	Std. Deviation	Satisfaction Level
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1	Blackboard's system interface is easy to use	F	36	43	71	138	42	3.32	1.18	Medium
		%	10.9	13.0	21.5	41.8	12.7			
2	Blackboard's system interface is easy to understand and learn	F	29	54	54	141	52	3.40	1.19	High
		%	8.8	16.4	16.4	42.7	15.8			
3	Blackboard's system facilitates discussion with other students	F	39	71	91	88	41	3.06	1.21	Medium
		%	11.8	21.5	27.6	26.7	12.4			
4	Blackboard's system facilitates discussion with the teacher	F	31	61	92	100	46	3.21	1.17	Medium
		%	9.4	18.5	27.9	30.3	13.9			
5	Blackboard's system makes it easy to access shared data and files	F	24	36	66	142	62	3.55	1.13	High
		%	7.3	10.9	20.0	43.0	18.8			
6	Blackboard's system facilitates the exchange of scientific experiences and concepts with others	F	31	50	98	109	42	3.25	1.14	Medium
		%	9.4	15.2	29.7	33.0	12.7			
7	Blackboard system content is constantly updated	F	22	36	76	145	51	3.51	1.08	High
		%	6.7	10.9	23.0	43.9	15.5			
8	Sufficient educational content is provided in the Blackboard system	F	15	54	86	125	50	3.43	1.07	High
		%	4.5	16.4	26.1	37.9	15.2			
9	The educational content included in the Blackboard system is useful	F	20	33	91	140	46	3.48	1.05	High
		%	6.1	10.0	27.6	42.4	13.9			
The total satisfaction with the Blackboard system								**3.68**	**1.14**	**High**

It is evident from Table 4: The existence of a high level of satisfaction
among university students towards the Blackboard system for items (2, 5, 7, 8, 9), and a medium level of satisfaction for items (1, 3, 4, 6). The total satisfaction mean with the Blackboard system is (3.68), indicating a high level of satisfaction with the system.

It is evident from the previous presentation that a high percentage of students are generally satisfied with the Blackboard system. Aspects of the system that make students feel satisfied can be arranged according to average values as follows: The system facilitates access to shared data and files. The system content is constantly updated. The educational content in the system is useful. Sufficient educational content is provided in the system. The system interface is characterized by being easy to understand and learn. The interface of the system is easy to use. The system facilitates the exchange of experiences and scientific concepts with others. The system facilitates discussion with the teacher. The system facilitates discussion with other students.

4.2. Results of the second question:

The second question states: What is the satisfaction level of Umm Al-Qura University students with the e-learning system(D2L)? In order to answer this question, the frequency, percentage, average and standard deviation of the sample members responses were calculated on each item of the axis of satisfaction with the D2L system. Depending on that each item has a score that extends between (1 to 5), the range of grades is (4) and the length of the category is (0.8). So, if the average value is (1 to less than 1.8) the level is very low, (1.8 to less than 2.6) the level is low, (2.6 to less than 3.4) the level is medium, (3.4 to less than 4.2) the level is high, (4.2 to 5) the level is very high, and the results are as shown in table

Table5. Frequencies, percentages, averages and standard deviations of the student satisfaction axis items of the D2L system

Item No	Items of student satisfaction with the D2L e-learning system		Responses					Mean	Std. Deviation	Satisfaction level
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1	The D2L system interface is easy to use	F	9	8	23	74	69	4.02	1.06	High
		%	4.9	4.4	12.6	40.4	37.7			
2	The D2L system interface is easy to understand and learn	F	8	15	19	68	73	4.00	1.11	High
		%	4.4	8.2	10.4	37.2	39.9			
3	The D2L system facilitates discussion with other students	F	15	42	52	51	23	3.14	1.15	Medium
		%	8.2	23.0	28.4	27.9	12.6			
4	The D2L system facilitates discussion with the teacher	F	15	41	49	54	24	3.17	1.16	Medium
		%	8.2	22.4	26.8	29.5	13.1			
5	The D2L system makes it easy to access shared data and files	F	8	9	28	72	66	3.98	1.05	High
		%	4.4	4.9	15.3	39.3	36.1			

6	The D2L system facilitates the exchange of scientific experiences and concepts with others	F	18	37	61	41	26	3.11	1.17	Medium
		%	9.8	20.2	33.3	22.4	14.2			
7	The D2L content is constantly updated	F	7	21	38	67	50	3.72	1.10	High
		%	3.8	11.5	20.8	36.6	27.3			
8	Sufficient educational content is provided in the D2L system	F	8	14	44	63	54	3.77	1.09	High
		%	4.4	7.7	24.0	34.4	29.5			
9	The educational content in the D2L system is useful	F	10	22	38	77	36	3.58	1.10	High
		%	5.5	12.0	20.8	42.1	19.7			
The total satisfaction with the D2L system								**3.98**	**1.11**	**High**

Table 5 shows: the existence of a high level of satisfaction among university students towards the D2L system for items (1, 2, 5, 7, 8, 9), and medium level of satisfaction for items (3, 4, 6). The total satisfaction mean with the D2L system is (3.98), indicating a high level of satisfaction with the system as a whole.

It is evident from the previous presentation that a high percentage of students are generally satisfied with the D2L system The aspects of the system that make students feel satisfied can be arranged according to the average values as follows: the system interface is characterized by being easy to use; the system interface is characterized by being easy to understand and learn; the system facilitates access to the shared data and files; sufficient educational content is provided in the system; the content of the system is constantly updated; the educational content in the system is useful; the system facilitates discussion with the teacher; the system facilitates discussion with other students; and the system facilitates the exchange of scientific experiences and concepts with others.

4.3. The results of the third question:

The third question states: Does the evaluation of Umm Al-Qura University students for e-learning system (Blackboard) differ by gender (male / female)? To answer this question, the Chi-Square Test was used to identify the significance of the differences between the frequency of the responses of the sample members according to the gender variable (male / female) with regard to the evaluation items of the e-learning system(Blackboard), and the results were as shown in table 6.

Table 6. The Chi-Square Test results for student evaluation items for the Blackboard system according to the variable of gender (male / female)

Item No.	Items of students' evaluation for Blackboard	Gender		Responses					Total	Chi-Square	Sig.
				Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1	The Blackboard system interface is easy to use	Males	Count	12	19	27	47	18	123	2.31	0.68
			Gender within %	9.8%	15.4%	22.0%	38.2%	14.6%	100.0%		
			Item within %	33.3%	44.2%	38.0%	34.1%	42.9%	37.3%		
			of Total %	3.6%	5.8%	8.2%	14.2%	5.5%	37.3%		
		Females	Count	24	24	44	91	24	207		
			Gender within %	11.6%	11.6%	21.3%	44.0%	11.6%	100.0%		
			Item within %	66.7%	55.8%	62.0%	65.9%	57.1%	62.7%		
			of %Total	7.3%	7.3%	13.3%	27.6%	7.3%	62.7%		
2	The Blackboard system interface is stable in controlling and navigating other components and interfaces	Males	Count	19	23	26	39	16	123	7.55	0.11
			Gender within %	15.4%	18.7%	21.1%	31.7%	13.0%	100.0%		
			Item within %	48.7%	41.1%	41.9%	28.9%	42.1%	37.3%		
			of Total %	5.8%	7.0%	7.9%	11.8%	4.8%	37.3%		
		Females	Count	20	33	36	96	22	207		
			Gender within %	9.7%	15.9%	17.4%	46.4%	10.6%	100.0%		
			Item within %	51.3%	58.9%	58.1%	71.1%	57.9%	62.7%		

Item No.	Items of students' evaluation for Blackboard	Gender		Responses					Total	Chi-Square	Sig.
				Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
			of %Total	6.1%	10.0%	10.9%	29.1%	6.7%	62.7%		
3	The Blackboard system facilitates discussion with other students	Males	Count	16	26	38	30	13	123	1.96	0.74
			Gender within %	13.0%	21.1%	30.9%	24.4%	10.6%	100.0%		
			Item within %	41.0%	36.6%	41.8%	34.1%	31.7%	37.3%		
			of Total %	4.8%	7.9%	11.5%	9.1%	3.9%	37.3%		
		Females	Count	23	45	53	58	28	207		
			Gender within %	11.1%	21.7%	25.6%	28.0%	13.5%	100.0%		
			Item within %	59.0%	63.4%	58.2%	65.9%	68.3%	62.7%		
			of Total %	7.0%	13.6%	16.1%	17.6%	8.5%	62.7%		
4	The Blackboard system facilitates discussion with the teacher	Males	Count	12	23	33	38	17	123	1.34	0.99
			Gender within %	9.8%	18.7%	26.8%	30.9%	13.8%	100.0%		
			Item within %	38.7%	37.7%	35.9%	38.0%	37.0%	37.3%		
			of Total %	3.6%	7.0%	10.0%	11.5%	5.2%	37.3%		
		Female	Count	19	38	59	62	29	207		
			Gender within %	9.2%	18.4%	28.5%	30.0%	14.0%	100.0%		
			Item within %	61.3%	62.3%	64.1%	62.0%	63.0%	62.7%		
			of Total %	5.8%	11.5%	17.9%	18.8%	8.8%	62.7%		

Item No.	Items of students' evaluation for Blackboard	Gender		Responses					Total	Chi-Square	Sig.
				Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
5	The Blackboard system makes it easy to access shared data and files	Males	Count	11	14	22	53	23	123	1.23	0.87
			Gender within %	8.9%	11.4%	17.9%	43.1%	18.7%	100.0%		
			Item within %	45.8%	38.9%	33.3%	37.3%	37.1%	37.3%		
			of Total %	3.3%	4.2%	6.7%	16.1%	7.0%	37.3%		
		Females	Count	13	22	44	89	39	207		
			Gender within %	6.3%	10.6%	21.3%	43.0%	18.8%	100.0%		
			Item within %	54.2%	61.1%	66.7%	62.7%	62.9%	62.7%		
			of Total %	3.9%	6.7%	13.3%	27.0%	11.8%	62.7%		
6	The Blackboard system facilitates the exchange of scientific experiences and concepts with others	Males	Count	16	20	31	42	14	123	4.57	0.33
			Gender within %	13.0%	16.3%	25.2%	34.1%	11.4%	100.0%		
			Item within %	51.6%	40.0%	31.6%	38.5%	33.3%	37.3%		
			of Total %	4.8%	6.1%	9.4%	12.7%	4.2%	37.3%		
		Females	Count	15	30	67	67	28	207		
			Gender within %	7.2%	14.5%	32.4%	32.4%	13.5%	100.0%		
			Item within %	48.4%	60.0%	68.4%	61.5%	66.7%	62.7%		
			of Total %	4.5%	9.1%	20.3%	20.3%	8.5%	62.7%		

Item No.	Items of students' evaluation for Blackboard	Gender		Responses					Total	Chi-Square	Sig
				Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
7	The Blackboard system helps to control and customize the learning process	Males	Count	6	9	51	45	12	123	1.99	0.7
			Gender within %	4.9%	7.3%	41.5%	36.6%	9.8%	100.0%		
			Item within %	30.0%	30.0%	41.1%	36.9%	35.3%	37.3%		
			of %Total	1.8%	2.7%	15.5%	13.6%	3.6%	37.3%		
		Females	Count	14	21	73	77	22	207		
			Gender within %	6.8%	10.1%	35.3%	37.2%	10.6%	100.0%		
			Item within %	70.0%	70.0%	58.9%	63.1%	64.7%	62.7%		
			of Total %	4.2%	6.4%	22.1%	23.3%	6.7%	62.7%		
8	The Blackboard system helps to record and monitor learner performance	Males	Count	7	12	34	54	16	123	1.01	0.9
			Gender within %	5.7%	9.8%	27.6%	43.9%	13.0%	100.0%		
			Item within %	38.9%	41.4%	40.5%	34.8%	36.4%	37.3%		
			of Total %	2.1%	3.6%	10.3%	16.4%	4.8%	37.3%		
		Females	Count	11	17	50	101	28	207		
			Gender within %	5.3%	8.2%	24.2%	48.8%	13.5%	100.0%		
			Item within %	61.1%	58.6%	59.5%	65.2%	63.6%	62.7%		
			of Total %	3.3%	5.2%	15.2%	30.6%	8.5%	62.7%		

It is clear from Table 6.: There are no statistically significant differences between the frequencies of male group responses and the frequency of female group responses on all the items of the Blackboard evaluation. As all Chi-Square values were not statistically significant, indicating the convergence of the frequencies of male and female responses in terms of approval and disapproval of all the evaluation items of the Blackboard.

In order to find out the significance of the difference between the average scores of males and females in the total score of the student evaluation axis for the Blackboard system, Independent Samples TTest was used to calculate the significance of the differences between two independent samples, and the results were as shown in the table 7.

Table 7.T-Test results for the gender variable in the overall score of the Blackboard Evaluation

The variable	(n=207) Females		(n=123) Males		T	Sig.
	Mean	Std. Deviation	Mean	Std. Deviation		
Blackboard system Evaluation	29.86	6.69	28.80	6.75	1.39	0.16

It is evident from Table 7: There is no statistically significant difference between the average scores of males and females in the evaluation of the e learning system (Blackboard) . This means that males and females were given roughly the same level of evaluation of the Blackboard e-learning system, meaning that males and females have a close sense of the pros and cons of the Blackboard.

4.4. Results of the fourth question:

The fourth question states: Does the evaluation of Umm Al-Qura University students for e-learning system(D2L) differ by gender (male / female)? To answer this question, Chi-Square Test was used to identify the significance of the differences between the frequency of responses of

Table 6. The Chi-Square Test results for student evaluation items for the Blackboard system according to the variable of gender (male / female

Item No.	Items of students' evaluation for Blackboard	Gender		Responses					Total	Chi-Square	Sig.
				Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1	The Blackboard system interface is easy to use	Males	Count	12	19	27	47	18	123	2.31	0.68
			% within Gender	9.8%	15.4%	22.0%	38.2%	14.6%	100.0%		
			% within Item	33.3%	44.2%	38.0%	34.1%	42.9%	37.3%		
			% of Total	3.6%	5.8%	8.2%	14.2%	5.5%	37.3%		
		Females	Count	24	24	44	91	24	207		
			% within Gender	11.6%	11.6%	21.3%	44.0%	11.6%	100.0%		
			% within Item	66.7%	55.8%	62.0%	65.9%	57.1%	62.7%		
			%of Total	7.3%	7.3%	13.3%	27.6%	7.3%	62.7%		
2	The Blackboard system interface is stable in controlling and navigating other components and interfaces	Males	Count	19	23	26	39	16	123	7.55	0.11
			% within Gender	15.4%	18.7%	21.1%	31.7%	13.0%	100.0%		
			% within Item	48.7%	41.1%	41.9%	28.9%	42.1%	37.3%		
			% of Total	5.8%	7.0%	7.9%	11.8%	4.8%	37.3%		
		Females	Count	20	33	36	96	22	207		
			% within Gender	9.7%	15.9%	17.4%	46.4%	10.6%	100.0%		
			% within Item	51.3%	58.9%	58.1%	71.1%	57.9%	62.7%		
			%of Total	6.1%	10.0%	10.9%	29.1%	6.7%	62.7%		

3	The Blackboard system facilitates discussion with other students	Males	Count	16	26	38	30	13	123	1.96	0.74
			% within Gender	13.0%	21.1%	30.9%	24.4%	10.6%	100.0%		
			% within Item	41.0%	36.6%	41.8%	34.1%	31.7%	37.3%		
			% of Total	4.8%	7.9%	11.5%	9.1%	3.9%	37.3%		
		Females	Count	23	45	53	58	28	207		
			% within Gender	11.1%	21.7%	25.6%	28.0%	13.5%	100.0%		
			% within Item	59.0%	63.4%	58.2%	65.9%	68.3%	62.7%		
			% of Total	7.0%	13.6%	16.1%	17.6%	8.5%	62.7%		
4	The Blackboard system facilitates discussion with the teacher	Males	Count	12	23	33	38	17	123	1.34	0.99
			% within Gender	9.8%	18.7%	26.8%	30.9%	13.8%	100.0%		
			% within Item	38.7%	37.7%	35.9%	38.0%	37.0%	37.3%		
			% of Total	3.6%	7.0%	10.0%	11.5%	5.2%	37.3%		
		Female	Count	19	38	59	62	29	207		
			% within Gender	9.2%	18.4%	28.5%	30.0%	14.0%	100.0%		
			% within Item	61.3%	62.3%	64.1%	62.0%	63.0%	62.7%		
			% of Total	5.8%	11.5%	17.9%	18.8%	8.8%	62.7%		
5	The Blackboard system makes it easy	Males	Count	11	14	22	53	23	123	1.23	0.87
			% within Gender	8.9%	11.4%	17.9%	43.1%	18.7%	100.0%		

Item No.	Items of students' evaluation for Blackboard	Gender		Responses: Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Chi-Square	Sig.
	to access shared data and files		% within Item	45.8%	38.9%	33.3%	37.3%	37.1%	37.3%		
			% of Total	3.3%	4.2%	6.7%	16.1%	7.0%	37.3%		
		Females	Count	13	22	44	89	39	207		
			% within Gender	6.3%	10.6%	21.3%	43.0%	18.8%	100.0%		
			% within Item	54.2%	61.1%	66.7%	62.7%	62.9%	62.7%		
			% of Total	3.9%	6.7%	13.3%	27.0%	11.8%	62.7%		
6	The Blackboard system facilitates the exchange of scientific experiences and concepts with others	Males	Count	16	20	31	42	14	123	4.57	0.33
			% within Gender	13.0%	16.3%	25.2%	34.1%	11.4%	100.0%		
			% within Item	51.6%	40.0%	31.6%	38.5%	33.3%	37.3%		
			% of Total	4.8%	6.1%	9.4%	12.7%	4.2%	37.3%		
		Females	Count	15	30	67	67	28	207		
			% within Gender	7.2%	14.5%	32.4%	32.4%	13.5%	100.0%		
			% within Item	48.4%	60.0%	68.4%	61.5%	66.7%	62.7%		
			% of Total	4.5%	9.1%	20.3%	20.3%	8.5%	62.7%		
7	The Blackboard system helps to control and customize the learning process	Males	Count	6	9	51	45	12	123	1.99	0.74
			% within Gender	4.9%	7.3%	41.5%	36.6%	9.8%	100.0%		
			% within Item	30.0%	30.0%	41.1%	36.9%	35.3%	37.3%		
			%of Total	1.8%	2.7%	15.5%	13.6%	3.6%	37.3%		
		Females	Count	14	21	73	77	22	207		
			% within Gender	6.8%	10.1%	35.3%	37.2%	10.6%	100.0%		
			% within Item	70.0%	70.0%	58.9%	63.1%	64.7%	62.7%		
			% of Total	4.2%	6.4%	22.1%	23.3%	6.7%	62.7%		
8	The Blackboard system helps to record and monitor learner performance	Males	Count	7	12	34	54	16	123	1.01	0.91
			% within Gender	5.7%	9.8%	27.6%	43.9%	13.0%	100.0%		
			% within Item	38.9%	41.4%	40.5%	34.8%	36.4%	37.3%		
			% of Total	2.1%	3.6%	10.3%	16.4%	4.8%	37.3%		
		Females	Count	11	17	50	101	28	207		
			% within Gender	5.3%	8.2%	24.2%	48.8%	13.5%	100.0%		
			% within Item	61.1%	58.6%	59.5%	65.2%	63.6%	62.7%		
			% of Total	3.3%	5.2%	15.2%	30.6%	8.5%	62.7%		

the sample members according to the variable of gender (male / female) with regard to the evaluation items of the D2L system, and the results were as shown in table 8.

It is clear from Table 8: There are no statistically significant differences between the frequencies of the male sample responses and the frequency of the female sample responses on the items of the D2L system evaluation. As the Chi-Square values were not statistically significant, indicating the convergence of the frequencies of male and female responses in terms of Approval and disapproval of the evaluation items of the D2L system. Except for item No. (1), The difference is in favor of females, where the highest percentage of repetition was in the female group (43.2%) for the response (strongly agree), while the highest percentage of repetition came in the males group (39.2 %) For response (agree), indicating the height of females compared to males in the degree of agreement with the item (1) of the D2L interface being easy to use. In order to find out the significance of the difference between the average scores of males and females in the total score of the students' evaluation axis for the D2L system, (Independent Samples T-Test) was used to calculate the significance of the differences between two independent samples, and the results were as shown in table 9.

Table 9.T-Test results for the gender variable in the overall score of the D2L system evaluation

The variable	(n=132) Females		(n=51) Males		t	Sig.
	Mean	Std. Deviation	Mean	Std. Deviation		
The D2L system Evaluation	32.25	5.96	30.31	5.95	1.97	0.05

It is clear from Table 9: There is a statistically significant difference between the mean scores of males and females in the D2L system evaluation in favor of females. This means that females feel more positive about the D2L system than males.

So the research found statistically significant difference between the mean scores of males and females in the D2L system evaluation in favor of females, and on the other hand There is no statistically significant difference between the average scores of males and females in Blackboard system evaluation. This may be due to the fact that the D2L system was implemented firstly at Umm Al-Qura University, and literature agreed that females communicated more, have a greater social presence, and are more satisfied with online courses than males (Johnson, 2011;

Gonzalez-Gomez, Guardiola, Rodríguez, & Alonso, 2012; Al-Sharif (2016), and this mean that they feel more positive about the D2L system than males, while the Blackboard system was applied at a later stage, and therefore the use of e-learning systems became not a new and mysterious matter for students, and dealing with it became common among various students(males and females). and therefore, there is no statistically significant difference between the average scores of males and females in Blackboard system evaluation.

5.Conclusion & Recommendations

The evaluation of e-learning systems periodically and regularly is an important matter that must be taken into account to maintain the efficiency and success of these systems in achieving educational goals, in light of the diversity of students 'needs and the cultural and social variables that affect societies, especially Arab societies. In light of the results of the research by identifying the level of satisfaction of students at Umm Al-Qura University in the Kingdom of Saudi Arabia about e-learning systems (D2L & blackboard), as well as exploring the relationship between university students

’evaluation of these two systems in light of the gender variable (males and females). A set of recommendations and proposals are presented as follows: Directing the attention of those in charge of decision-making at universities and higher education institutions to improve the students' satisfaction in e-learning environments effectively. Adopting the strategic planning for e- learning implementation in higher education institutions. Providing the necessary funds for e- learning application in education institutions, distribution the awareness of e-learning importance among students and faculty members in higher education, providing training courses to enhance e- learning skills required for students and faculty members in higher education institutes, providing financial and promotional rewards for creative individuals in submitting proposals to develop e-learning system. Creating independent unites for evaluating e-learning systems periodically at Saudi institutes and universities, as well exploring the relation between e- leaning evaluation and different variables. Providing the best approaches and models for designing e-learning to create an educational environment that suits interests and needs of diverse students within higher education institutes. The research also suggests more research to scope the most effective solutions to overcome the obstacles that prevent the effective application of e-learning systems within educational institutions.

6.References:

•*Abdulhamid, M. (2005). Scientific research in educational technology. Cairo: The World of Books. Abuallam, R (2007). Research methods in psychological and educational sciences. 6th edition, Cairo: University Publishing House* .

•*Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. Computers in Human Behavior,102(2020), 67-86.*

•*Alharthi, D., Spichkova, M., Hamilton, M, & Alsanoosy, T (2018). Gender-Based Perspectives of eLearning Systems: An Empirical Study of Social Sustainability, 27th International Conference on Information Systems Development (ISD2018), Lund, Sweden Al-Helo, M. (2006). Educational Psychology "Contemporary View". 4th edition, Gaza: Afaq Library. Al-Qahtani, M., Al-Qahtani, M., & Al-Misehal, H. (2014). Learner*

•*Satisfaction of e-Learning in Workplace Case of Oil Company in Middle East. In Proceeding of The Sixth International Conference on Information, Process, and Knowledge Management, March 23 - 27, Barcelona, Spain Al-Shagran, A., & Sahraoui, A. (2017). Assessment of E-learning Systems: A Systems Engineering Approach System. International Journal of Computer Science and Software Engineering, 6 (8), 173-179.*

•*Al-Sharif, M. (2016). Attitudes of Shaqra University Students Towards E-Learning. Journal of the College of Education, Al-Azhar University, 35 (168), 891-930.*

•*Aroyo, L., & Dicheva, D. (2004). The New Challenges for E-learning: The Educational Semantic Web. Educational Technology & Society. 7(4), 59–69.*

•*Awad, M., & Hallas, M. (2015). Attitudes Toward Distance Learning Technology and Its Relation to Some Variables for Postgraduate Students in Palestinian Universities, Al-Aqsa University Journal, 19 (1), 219-256*

•*Bahati, B., & Mukama, E. (2019). Measuring Learner Satisfaction with Formative e- Assessment Strategies. International Journal of Emerging Technologies in Learning (iJET), 14(7), 61-79.*

•*Basak, S., Wotto, M., & Paul, B. (2018). E-learning, M-learning and Dlearning: Conceptual Definition and Comparative Analysis. ELearning and Digital Media, 15(4),191-216*

•*Bhuasiri, W., Xaymoungkhoun, O., Zo, H., JeungRho, J.,& Andrew, C. (2012). Critical Success Factors for E-Learning in Developing Countries: A comparative Analysis Between ICT Experts and*

•*Faculty. Computers & Education, 58(2), 843-855.*
•*Chang, V. (2016). Review and discussion: e-learning for academia and industry. International Journal of Information Management, 36(3), 476-485.*
•*Cuadrado-García, M., Ruiz-Molina, M-E, Montoro-Pons, J. (2010). Are there gender differences in e-learning use and assessment? Evidence from an interuniversity online project in Europe. Procedia-Social and Behavioral Sciences,2(2), 367–71.*
•*Djalev, L., & Bogdanov, S. (2019). Age and Gender Differences in Evaluating the Pedagogical Usability of E-Learning Materials.*
•*English Studies at NBU, 5(2), 169-189 Dziuban, C., Moskal, P., Thompson, J., Kramer, L., DeCantis, G., & Hermsdorfer, A. (2015). Student Satisfaction with Online Learning: Is It a Psychological Contract? .Online Learning, 19(2).*
•*Ghoniem, S., Aljahdali, S., & Fahmy, A. (2010). A dedicated WebBased Learning System. Universal Journal of Computer Science and Engineering Technology, 1(2), 84-92.*
•*Goh, T., & Chen, N-S. (2008). Evaluating Learner Satisfaction in a Multiplatform E-Learning System. In Lumsden, G(Eds). Handbook of Research on User Interface Design and Evaluation for Mobile Technology (2 Volumes), Portland: Book News Inc,1079-110.*
•*Gonzalez-Gomez, F., Guardiola, J., Rodríguez, Ó., & Alonso, M. (2012). Gender differences in e-learning satisfaction. Computers & Education. 58(1), 283-290.*
•*Hadullo, K., Oboko, K., & Omwenga, E. (2017). A model for evaluating e-learning systems quality in higher education in developing countries. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 13(2), 185-204*
•*Hong, K.S. (2002) Relationships between students' and instructional variables with satisfaction and learning from a Web-based course. Internet and Higher Education, 5(3), pp. 267- 281.*
•*Horton, W. (2006) Evaluating E-Learning. Alexandria, VA: American Society for Training and Development. Hung M-L., Chou, C., Chen C-H, & Own, Z-Y(2010). Learner readiness for online learning: Scale development and student perceptions. Computers & Education,55(3),1080–1090. Johnson, R. (2011). Gender Differences in e-learning: Communication, Social presence, and Learning Outcomes. Journal of Organizational and End User Computing (JOEUC). 23(1):79–94.*
•*Jun, H., & Freeman, L. (2010). Are Men More Technology-Oriented Than Women? The Role of Gender on the Development of General Computer Self-Efficacy of College Students. Journal of Information Systems Education, 21(2), 203–212.*
•*Ke, F., &Kwak, D. (2013). Constructs of student-centered online learning on learning satisfaction of a diverse online student body: A structural equation modeling approach, Journal of Educational Computing Research,48(1), 97–122.*
•*Kim, J., Forsythe, S. (2008). Adoption of virtual try-on technology for online apparel shopping. Journal of Interactive Marketing, 22(2), 45–59.*
•*Kishabale, B. (2019). Modeling E-learning interactivity, learner satisfaction and continuance learning intention in Ugandan higher learning institutions. International Journal of Education and Development using ICT, 15(1).*
•*Kuo, Y-C., Walker, A., Belland, B., & Schroder, K. (2013).A predictive study of student satisfaction in online education programs. The International Review of Research in Open and*
•*Distributed Learning,14(1), 16–39. Lanzilotti, R., Ardito, C., & Costabile, M. F., & De Angeli, A. (2006). eLSE Methodology: a Systematic Approach to the eLearning Systems Evaluation. Educational Technology & Society, 9 (4), 4253.*
•*Li, N., Marsh, V., & Rienties, B. (2016). Modelling and Managing Learner Satisfaction: Use of Learner Feedback to Enhance Blended and Online Learning Experience. Decision Sciences Journal of*

•*Innovative Education,14(2), 21-242*
•*Lim, K., Nam, Y., Eom, S., Jang, Y., Kim, D., & Kim, M. (2020). Structural Gender Differences in LMS Use Patterns among College Students. Sustainability,12(4465), 1-9.*
•*Lu, H-P, & Chiou, M-J. (2010). The impact of individual differences on e-learning system satisfaction: A contingency approach. British Journal of Educational Technology, 41(2), 307–23.*
•*Mallinson, B., & Nyawo, N. (2008). A proposes Theoretical Model for*
•*Evaluating E- Learning. International Conference e-Learning (IADIS) ,414-418.*
•*Ong, C-S, & Lai, J-Y(2006). Gender differences in perceptions and relationships among dominants of e-learning acceptance. Computers in Human Behavior, 22(5), 816–829.*
•*Ozkan, S., & Koseler, R. (2009). Multi-Dimensional Evaluation of ELearning Systems in the Higher Education Context: An Empirical Investigation of a Computer Literacy Course. Paper presented at 39th ASEE/IEEE Frontiers in Education Conference, October 18 - 21, San Antonio, TX Palloff, R., & Pratt, K.(2007). Building Online Learning Communities: Effective Strategies for Virtual Classroom. San Francisco, CA: Jossey-Bass*
•*Peng, L., Yin, X., Rong, J., Yang, J, & Cong, G. (2020). Analysis of User Satisfaction with Online Education Platforms in China during the COVID-19 Pandemic. Healthcare,8(200),1-26. Pour, M., Hosseinzadeh, M., Azar, M., & Taheri, F. (2017).*
•*Developing a new framework for evaluating e-learning systems: integrating BSC and FAHP. Kybernetes, 46(8), 3031324. https://doi.org/10.1108/K-02-2017-0060.*
•*Puspitasari, A. (2014). Brand Awareness, Ad Attıtudes and Ad Features Toward Engagement on Youtube: an Empırıcal Study of Green Automobıles. Asia Pacific Management and Business Application, 2(3), 170-183.*
•*Ramírez-Correa, P., Arenas-Gaitán, J., & Rondán-Cataluña, F.(2015). Gender and Acceptance of E-Learning: A Multi-Group Analysis*
•*Based on a Structural Equation Model among College Students in Chile and Spain. PLoS One. 10(10): e0140460.*
•*Rashid, A. (2010). The effect of using reciprocal teaching in engineering teaching on the development of some critical thinking skills and the trend towards engineering among middle school students and the maintenance of their learning impact. Journal of Studies in Curricula and Teaching Methods, Egypt, 154, 111-173.*
•*Reeves, T., & and Hedberg, J. (2003) Interactive Learning Systems Evaluation. New Jersey: Educational Technology Pubs.*
•*Rienties, B. (2014). Understanding academics' resistance towards (online) student evaluation. Assessment & Evaluation in Higher Education, 39(8), 987–1001. Sanchez-Franco, M., Villarejo-Ramos, A., & Rondan-Cataluña,*
•*F.(2006). Male and Female Professors. A theoretical Analysis Regarding the Web Acceptance and Use. In Proceeding of the 5th International Congress of Marketing Trends,Venice, Italy*
•*Saraya, A. (2007). Individualized education technology and innovation development "an applied vision". Amman: Wael House for Publishing and Distribution. Singh, G., & Hardaker, G. (2014). Barriers and Enablers to Adoption and Diffusion of eLearning: A Systematic Review of the Literature-A Need for an Integrative Approach. Education+ Training.56(2-3), 105-121.*
•*Sofianti, T., Prawira, A., & Indrayadi, Y. (2015). Developing E*
•*Learning System to Support Teaching and Learning Activities*
•*Using DSDM Approach. Performa, 14(1), 41-52. Sun, P.C., Tsai, R.J., Finger, G., Chen, Y.Y. &Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. Computers and Education, 50(4), pp. 1183-1202 Tahrishi, A. (2018):*

•*: E-learning Strategy and justifications for its Use in Teaching. Educational Journal, Sidi Belabes University, Algeria, 5 (3), March 1-10 .*
•*Tarigan, J. (2011). Factors Influencing Users Satisfaction on ELearning Systems. Jurnal Manajemen Dan Kewirausahaan, 13(2), 177-188*
•*Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. Decision Sciences, 39(2), 273–315.*
•*Voigt, C., & Swatman, P. (2004) Contextual e-learning evaluation: a preliminary framework. Journal of Educational Media, 29(3), 175-187.*
•*Zahir, A. (2009). E-courses Design, Production, Publishing, Implementation, and Evaluation. Cairo: Alam Al- Qutub.*
•*Zerihun, Z., Beishuizen, J., & Os, W. (2012). Student learning experience as indicator of teaching quality. Educational Assessment, Evaluation and Accountability, 24(2), 99–111.*

Students' Perception of eLearning Adoption as a New Dimension of Education in Nigeria. A case study of Ladoke Akintola University of Technology, Open and Distance Learning Centre, Ogbomoso (LODLC)

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A B S T R A C T

The rapid advancement of digital technology has revolutionised global education, bringing in the emergence of eLearning as a new paradigm for teaching and learning. The COVID-19 pandemic has brought about significant changes in the global education landscape, leading to the widespread adoption of eLearning as a viable alternative to traditional teaching methods. Nigeria, like many other countries, had to close schools in response to the pandemic, which impacted a staggering number of over 39 million students across all levels of education, from primary to tertiary. This study examines students' perceptions of eLearning adoption in Nigeria, concentrating on the Open and Distance Learning Centre at Ladoke Akintola University of Technology in Ogbomoso (LODLC). The present study evaluated data obtained from a survey of 379 undergraduate students at LODLC about their attitude and perspective towards the utilisation of e-learning in the domains of teaching, learning, and research. Accessibility, effectiveness, interactivity, and satisfaction with the online learning environment were among the aspects of eLearning that were investigated. A descriptive survey approach was employed, with 286 students completing a web-based questionnaire consisting of closed-ended questions through Google Forms.. Descriptive statistics were used to analyze the data using SPSS. Questionnaires received were analyzed putting the students' perceptions in relation to gender, age,knowledge of computers, and attitudes to advantages and disadvantages of e-learning. Result showed that students have positive attitude towards eLearning, access to personal computer (PC), smart phones and internet with reliable internet connection. Also, students prefer the use of eLearning platform, as a blended approach that combines both synchronous and asynchronous learning, where learning materials can be accessed at their own pace. In addition, students perceived the availability of a variety of digital resources and multimedia tools as enhancing their educational experience. However, technological infrastructure issues, limited internet connectivity, and the need for enhanced digital literacy were identified as potential barriers to the widespread adoption of eLearning in the Nigerian context. The study concluded that eLearning offers an effective way to acquire knowledge and skills, providing greater flexibility and convenience compared to traditional classroom-based learning. Additionally, it offers enhanced access to educational resources and opportunities.. The findings contribute to the ongoing discussion on leveraging digital platforms to improve educational outcomes and provide policymakers and educational institutions with recommendations for addressing the identified challenges and ensuring a more inclusive and effective eLearning experience for students in Nigeria.

Keywords: Synchronous, Asynchronous learning, Perception, Digital Technologies, Accessibility

1. Introduction

The COVID-19 pandemic has disrupted education systems around the globe, compelling many schools and universities to adopt eLearning as an alternative method of education delivery. In Nigeria, the pandemic caused the closure of schools, affecting over 39 million pupils in primary through tertiary education. In order to ensure the ongoing provision of education, the Nigerian government has made it compulsory for all educational institutions to use eLearning as a method of instruction. The adoption of eLearning has presented the Nigerian education sector with new challenges and opportunities. While eLearning holds promise for enhancing flexibility and expanding access to education, it also poses challenges such as insufficient internet connectivity, inadequate infrastructure, and a shortage of technical skills among both educators and students. The purpose of this study is to investigate how Nigerian students view eLearning as a new educational dimension. The objective of the study is to comprehend students' experiences with eLearning, their attitudes toward it, and the obstacles they face when adopting eLearning. The findings of this study will provide valuable insights into the current status of eLearning adoption in Nigeria and will inform policymakers on the steps necessary to enhance the eLearning experience for students. Numerous initiatives exist to increase the federal government's adoption of elearning in Nigerian institutions, but its impact has not been extensively studied. Adoption of e-learning can improve the quality, accessibility, and attractiveness of tertiary education, fostering "a more democratic and competitive higher education system, with the potential to improve access to education and enhance the integration of education into daily lives as part of lifelong learning."

Alimi et al. (2020) theorized that e-learning adoption consists of conventional training, such as courses, ad-hoc training, selected learning objects, formalization via document collections, and community formation that can be attained through social software. Furthermore, the recent shift in students' perceptions and attitudes toward eLearning adoption and its applications serves as ample motivation for research of this nature.. Adoption of eLearning in Nigeria refers to the use and assimilation of electronic technologies, digital resources, and online platforms in the Nigerian educational system (Adelakun et al., 2022). It entails the use of virtual learning environments, online courses, digital content, and multimedia tools to facilitate teaching and learning processes (Egielewa, et al., 2022) In recent years, the adoption of eLearning in Nigeria has gained momentum due to a number of factors, including the increasing availability of internet connectivity, the expanding use of smartphones and other digital devices, and the demand for flexible and accessible education (Dwivedi, et al., 2020). Throughout history, the persistent issue of limited awareness regarding students' perceptions of e-learning adoption has posed a significant barrier to education. However, only a small number of studies have been conducted in this subject, as revealed by a review of the existing research on eLearning. This lack of research is especially worrisome in developing nations, particularly Nigeria, when compared to the vast amount of research available in developed countries. Consequently, it is imperative that the present study fill this void and cast light on the issue.

Aim and Objectives

This study aims to investigate students' attitudes toward eLearning and their propensity to engage in online learning activities. The specific objectives are to evaluate the impact of eLearning on student academic performance and to investigate the influence of

infrastructure, technological access, and digital literacy on students' perceptions of eLearning.

2. Literature Review

Infrastructure and Connectivity

Ndibalema (2022) posited that the adoption of eLearning in Nigeria is contingent upon the availability and reliability of infrastructure, such as internet connectivity and electricity. The lack of high-speed internet and the digital divide challenge the broad adoption of eLearning in some areas. Infrastructure helps develop productive capacity by, among other things, bridging connectivity gaps, reducing distribution and trade costs, and facilitating the distribution of growth's benefits to impoverished groups and communities. One without the other is likely to be ineffective; however, the simultaneous presence of both characteristics can produce superior advantages (Singh and Kathuria, 2016).

Government Initiatives

The Nigerian government recognizes the potential of eLearning to increase educational opportunities and has taken measures to promote its adoption. The National Information Technology Development Agency (NITDA) eLearning portal, Ladoke Akintola University of Technology, Open and Distance Learning (LODLC), and the National Open University of Nigeria (NOUN) have all contributed to the expansion of eLearning in Nigeria (Abbad, 2021).

Educational Institutions

In Nigeria, numerous universities, colleges, and institutions have embraced eLearning by offering online courses, virtual classrooms, and blended learning models. Institutions are investing in learning management systems, digital content development, and faculty eLearning pedagogy training (Egbe Adewole-Odeshi, 2014). The Nigerian educational system is structured into various levels: basic education, junior secondary school, secondary school education, and higher education. According to Nigeria's National

Policy on Education (2004), basic education comprises nine years of compulsory instruction, consisting of six years of primary school and three years of junior secondary education. After completing their elementary education, students proceed to three years of senior secondary education. In Nigeria, the tertiary education system is divided into two sectors: university and non-university. Polytechnics, Monotechnics, and colleges of education comprise the non-university sector. The entire tertiary sector offers a variety of undergraduate, graduate, vocational, and technical education opportunities (Ogunode et al., 2020).

Digital Literacy

Students, instructors, and administrators must possess a high level of digital literacy for eLearning to be successfully adopted. There is a current focus on developing digital skills and implementing training programs to enhance the ability of stakeholders to successfully use eLearning technologies (Silvi Indri Novitasari et al., 2023). In the 21st century, the rapid development of information and communication technologies (ICT) and the pervasive use of the internet have led to significant progress and expansion in a variety of sectors, including finance, transportation, commerce, and education. These

developments have created new opportunities for individuals, highlighting the need for a wide variety of abilities, competencies, and skills to navigate the technological era and acclimate to its demands (Reddy, Sharma and Chaudhary, 2020).

Access to Devices and Resources

The adoption of eLearning is greatly influenced by the accessibility of digital resources and online platforms, as well as the presence of devices such as desktops, laptops, tablets, and smartphones. The affordability and accessibility of these devices and resources for students is being addressed ((Yuli Rohmiyati et al., 2023). The use of mobile devices can reduce information barriers between educators and students. Mobile devices have been used to create personalized learning environments and facilitate the sharing of educational resources among formerly disadvantaged students at auniversity. The data analysis, which included interactions between students and educators on mobile devices and student evaluations of the platform's value via blogs, revealed that students view mobile devices as tools that facilitate access to resources created by their peers, encourage focused engagement, and foster learning experiences that transcend specific contexts (Prakasha, Muniyal and Acharya, 2019).

Pedagogical Approaches

The transition to eLearning necessitates a reevaluation of pedagogical approaches and teaching methods. In virtual learning environments, educators are investigating innovative ways to engage students, encourage active learning, and provide interactive experiences ((Scott et al., 2013).

Quality Assurance

Ensuring the integrity of eLearning programs and courses is essential for effective adoption. To maintain high educational standards, accreditation, course design standards, and evaluation processes are being developed as quality assurance mechanisms in eLearning initiatives (Heddle et al., 2016).

Challenges and Opportunities

Although the adoption of eLearning in Nigeria presents numerous opportunities for enhancing educational access and learning outcomes, it also encounters challenges. Among these obstacles are the digital divide, limited technical support, inadequate localization of content, and the need for continuous infrastructure development. As eLearning adoption evolves in Nigeria, it is crucial to address these factors and leverage the potential of technology-enhanced learning to improve educational experiences, bridge educational gaps, and empower learners across the nation. This concept emphasizes on the obstacles and challenges that students face when utilizing eLearning. It includes obstacles such as limited internet connectivity, deficient access to devices, a lack of technical support, and concerns regarding social interaction and motivation in online learning environments (Alhamdawee, 2023).

Attitudes towards eLearning

This concept explores the beliefs, opinions, and attitudes of students regarding eLearning as a novel educational dimension. It includes their opinions regarding the efficacy, convenience, and applicability

of eLearning in comparison to traditional classroombased teaching (Bostjan Sumak et al., 2011).
The Internet plays a significant role in increasing student access to high-quality education, transforming the classroom into a collaborative learning community where knowledge is exchanged and negotiated. Therefore, Internet access is crucial for ensuring continuous engagement in the learning community. Computer access and the importance of Internet connection to preferred eLearning delivery modes are strongly related. Although there are other ways to make eLearning available to students, the majority of eLearning systems are delivered via the Internet. Thus, literature has emphasized the pivotal role of Internet connectivity in eLearning.

Henderson (2005) utilized the Technology Acceptance Model (TAM) in his study on how Internet access influences business students' adoption of e-learning in the US. The findings indicated that Internet access did not have a significant impact on the perceived effectiveness of eLearning. The fact that Students' access to the Internet had no impact on their impression of how it will influence their academic achievement. Conversely, it was shown that the availability of Internet connectivity significantly influenced the students' ability to use eLearning. This shows that the degree to which students expect eLearning to be user-friendly depends on their level of Internet access.

A student's decision on which eLearning distribution channel to use may be impacted by their financial constraints. In a case study of East Asia, Ono (2005) found that people who earned more were more likely to have a computer at home. Henderson (2005) discovered that socioeconomic characteristics, such as higher salaries, may affect eLearning acceptance through computer and Internet access, which validated this discovery. These findings were supported by Cutler, Hendricks, and Guyer (as cited in Cheah & Chun, 2013), who noted that "individuals from high-income families were more likely to live in a household with a computer" (p. 58). Conversely, in Malaysia, income was found to have no significant effect on computer ownership (Loke & Foo, 2010).
Based on the preceding discussion, it is clear that family income may have an impact on a student's preference for an eLearning delivery method, either directly or indirectly.

Perceived Benefits of eLearning

This concept examines the perceived benefits and advantages that students associate with the adoption of eLearning. It delves into their perspectives on scheduling flexibility, access to a vast array of learning materials, enhanced interactivity, and personalized learning experiences (Kurucay & Inan, 2017).

Future Adoption, Acceptance and Delivery.

This concept relates to the future intentions and willingness of students to continue using eLearning. It investigates whether or not students view eLearning as a viable and preferred mode of education, and whether or not they would recommend it to others (Dečman, 2015). Two fundamental eLearning delivery modes have been identified in the literature: hybrid and entirely online modes. In completely online learning, students receive content via the Internet, and all communications between students and teachers occur online without face-to-face meetings. Conversely, mixed mode encompasses event-based activities such as in-person education, live online instruction, and self-paced learning. Singh (2003) defines blended learning as a combination of several delivery methods that work together to enhance learning and the application of taught behaviours. In contrast, completely online learning relies on a single delivery channel..

Theoretical Review

Multiple theories may be used to comprehend students' view of eLearning adoption as a novel facet of education in Nigeria. These include:

Technology Acceptance Model (TAM)

According to Siti, Melor, and HaRwati (2019), TAM suggests that the acceptance and utilization of technology by consumers are influenced by two primary factors: perceived usefulness and perceived simplicity of use. Perceived utility refers to the user's belief that the technology will assist them in achieving their goals, whereas perceived simplicity of use refers to the user's perception of the technology's usability. In the context of eLearning adoption in Nigeria, the TAM can be used to comprehend students' attitudes and motivations regarding eLearning. Consequently, the model suggests that predictors of perceived utility have no influence on perceived simplicity of use and vice versa.

Diffusion of Innovation Theory

This theory suggests that five factors influence the adoption of new technology: relative advantage, compatibility, complexity, trialability, and observability. Relative advantage refers to the perceived benefits of the new technology in comparison to existing alternatives. Compatibility refers to the degree to which the new technology is consistent with users' values and experiences . TheDiffusion of Innovation Theory can be applied to the context of eLearning adoption in Nigeria in order to comprehend the factors that influence students' adoption of eLearning and how educational institutions can promote its adoption (James and Jeffrey, 2018).

Social Cognitive Theory

This theory suggests that learning is influenced by three factors: personal factors, environmental factors, and behavior. Personal aspects include cognitive and affective processes, such as motivation, self-efficacy, and goals. Environmental factors include social, cultural, and physical contexts, such as peer pressure, family support, and access to resources. Behavior refers to the actions and strategies used by the learner to achieve their goals. Within the framework of eLearning implementation in Nigeria, the Social Cognitive Theory may be used to comprehend how students' individual elements, such as motivation and self-efficacy, as well as contextual aspects, such as technological accessibility and available resources, affects their acceptance and utilisation of eLearning.

Empirical Review

A study by Olayemi, Adamu and Olayemi (2021) found that students in Nigeria have a positive perception of eLearning, with over 50% of respondents indicating its effectiveness. The research further discovered that the availability of technology and internet connection had a crucial role in determining students' acceptance of eLearning. Similarly, research by Al Rawashdeh et al. (2021) revealed that students' perception of eLearning was influenced by factors such as the quality of learning resources, ease of use of the eLearning platform, and support from instructors. Students favored a blended learning approach combining online and offline methods. Furthermore, 80% of students

believed eLearning increased contact between students as well as between students and teachers. Because of growing social isolation, 73% of students reported that they allocate more time to engaging with social media platforms rather than interacting with individuals personally. According to 70% of students, parents' lack of electronic literacy hinders their ability to monitor their children's electronic activities. It is essential for prospective e-learners to comprehend the distinctions between an e-learning classroom setting and a traditional classroom setting, as the advantages and disadvantages of eLearning in both environments may affect their overall performance as students. Another study by Zacchaeus, Joel, and Esther (2021) identified poor internet connectivity, deficient access to technology, and a lack of instructor support as hindrances to eLearning adoption among Nigerian students. Students preferred synchronous eLearning, where they could interact with their instructors in realtim. The findings revealed that e-learning was utilized for a variety of learning aspects, including lectures (87.7%), assessments (37.8%), assignments (69.6%), practical classes (15.2%), and exams (17.4%). The majority of respondents indicated that they understood the concept of e-learning, compared to 12% who stated they did not. Only 9.2% of respondents maintain complete focus during online sessions. The majority of the overall sample, including more than 70%, expressed indifference towards online learning, while just a small proportion of 9.3% favored it above conventional education. To maximize the effectiveness of e learning after the COVID-19 pandemic, the research concluded that educational stakeholders need to improve and broaden its advantages.

Additionally, a study conducted at the University of Lahore utilizing a questionnaire research tool collected data from 205 students at random in order to examine the effect of the learning approach on students' motivation. The study, comprising 21 questions, each using a three-point Likert scale (Agree, Neutral, Disagree), concluded that e-learning serves as a motivational tool for students. It not only enhances their academic performance but also fosters self-learning and provides a sense of ease in use and interaction. Furthermore, e-learning promotes greater flexibility in learning time. The study conducted by Abooki and Kitawi (2014) at Strathmore University in Kenya compared the academic performance of students in subjects that utilised information and communications technology (ICT) with those that did not. The results of the study concluded that the implementation of e-learning strategies had a positive influence on the students' academic performance during the first semester of 2008. Nevertheless, this is subject to variation depending on the specific research (Elfaki, et. al., 2019).

3. Methodology

To investigate students' perception of eLearning adoption as a new dimension of education in Nigeria, a descriptive survey method was used. The study made use of quantitative data from a sample of students in Nigeria. The study employed random sampling technique to select participants who are currently enrolled in Ladoke Akintola University of Technology, Ogbomoso and have experienced with eLearning. The survey was administered using Google Forms, and the data were analyzed using descriptive statistics.

The descriptive method was used to ascertain the current status of the level of professional development among the learners enrolled in LODLC degree programs. The population of the study involved all the learners pursuing a degree program in LODLC across all the departments. LODLC‘s data records showed a total of 7058

learners enrolled in a degree programme across six departments (Nursing, Accounting, Marketing, Agricultural Economics, Agricultural Extension and Rural Development and Computer Science) operating in LODLC as of the 2022/2023 academic session. Three hundred and seventy-nine(379) samples consisting of learners in LODLC were randomly selected from the six departments i.e., Agricultural extension and rural development, Agricultural economics, Computer science, Marketing, Accounting, and Nursing with the use of the questionnaire using Slovin formula with 95% confidence interval to determine the sample size. The minimum sample size of 379 respondents was calculated using Slovin's formula, which determines the appropriate sample size.

$$n = \frac{N}{1 + N\alpha^2}$$

$$n = \frac{7058}{1 + 7058x0.05^2}$$

$$n = \frac{7058}{1 + 17.645}$$

$$n = \frac{7058}{18.645} = 379$$

Where:
n = sample size
N = Population size
a = level of significance (0.05)

The sample after employing Slovine_s formula comprises of 379 respondents.
Data collected was analyzed using simple tabulated frequency count, mean score, and percentages.

Ethical Considerations

The study adhered to ethical guidelines for research involving human participants. Participants were informed of the purpose of the study, and their consent obtained before they are included in the study. Confidentiality and anonymity were ensured in the collection, storage, and analysis of data.

4. Results and Discussion

4.1. Demographic Distribution of Respondents

Table 1 revealed the demographic distribution of the respondents, the findings show that the majority of the respondents are female with 173(60.5%), 175 representing 61.2% of the respondents are between the age range 16-30 years, 102(35.7%) of the respondents are 400 level students, while 160 representing 55.9% of the respondents are of Accounting department.

Table 1: Demographic Distribution of Respondents

Demographic Distribution		F	%
Gender	Male	113	39.5%
	Female	173	60.5%
	Total	**286**	**100.0%**
Age	16-30 years	175	61.2%
	31-40 years	66	23.1%
	41-50 years	35	12.2%
	51-60 years	10	3.5%
	61 years and above	0	0.0%
	Total	**286**	**100.0%**
Level	100l	1	0.3%
	200l	46	16.1%
	300l	74	25.9%
	400l	102	35.7%
	500l	63	22.0%
	Total	**286**	**100.0%**
Department	Accounting	160	55.9%
	Agric	0	0.0%
	Agric Eco	0	0.0%
	Marketing	26	9.1%
	Computer science	20	7.0%
	Nursing	80	28.0%
	Total	**286**	**100.0%**

Source: Field Survey, 2023

4.1.1 Access to personal computer or laptop

The table 2 showed that the majority of the respondents have access to a personal computer or laptop with 181(63.3%), while few of the respondents don‘t have access to personal computer or laptop with 105(36.7%).

Table 2: Do you have access to a personal computer or laptop

Response	Frequency	Percentage
Yes	181	63.3%
No	105	36.7%
Total	**286**	**100.0%**

Source: Field Survey, 2023

4.2.2 Access to Smartphone or Tablet

Table 3 stated respondents access to smartphone or table, the majority of the respondents have access to smartphone with 275(96.2%), while 11(3.8%) of the respondents don't have access to smart phone or tablet.

Table 3: Do you have access to a smartphone or tablet

Response	Frequency	Percentage
Yes	275	96.2%
No	11	3.8%
Total	**286**	**100.0%**

Source: Field Survey, 2023

4.2.3 Access to internet

Table 4 revealed respondents access to internet, the majority the respondents (278(97.2%) have access to the internet, while few of the respondents 8(2.8%) does not have access to the internet.

Table 4: Do you have access to the Internet

Response	Frequency	Percentage
Yes	278	97.2%
No	8	2.8%
Total	**286**	**100.0%**

Source: Field Survey, 2023

4.2.4 Reliability of Respondent's internet connectivity

The table 5 represented the reliability of respondent's internet connectivity, 101(35.3%) have a very reliable internet connection, 87(30.4%) of respondents have a reliable internet connection, while 98(34.3%) of the respondents do not have a reliable internet connection.

Table 5: How reliable is your internet connection

Response	Frequency	Percentage
Very reliable	101	35.3%
Reliable	87	30.4%
Not reliable	98	34.3%
Total	**286**	**100.0%**

Source: Field Survey, 2023

4.2.5. Internet Connectivity

Table 6 illustrated respondents experience of internet connectivity issues during eLearning session, 237(82.9%) of the respondents have encountered internet connectivity issues during eLearning session, while 49(17.1%) of the respondents have not.

Table 6: Have you ever experienced internet connectivity issues during an eLearning session

Response	Frequency	Percentage
Yes	237	82.9%
No	49	17.1%
Total	**286**	**100.0%**

Source: Field Survey, 2023

The findings from table 1-table 6 agreed with that of Ndibalema (2022), who posited that the adoption of eLearning in Nigeria is contingent upon the availability and dependability of infrastructure, such as internet connectivity and electricity. In some regions, the digital gap and limited access to high-speed internet present obstacles to the widespread implementation of eLearning. The findings also corroborated Yuli et al., (2023) who opined that access to digital resources and online platforms, as well as the availability of devices such as desktops, laptops, tablets, and smartphones, play a significant role in eLearning adoption. The affordability and accessibility of these devices and resources for students is being addressed.

4.3 Impact of eLearning on students' Academic Performance

Table 7 revealed the impact of eLearning on students' academic performance; ―eLearning provides an effective way to acquire knowledge and skills‖ (Mean =4.02) was ranked highest by their mean score rating, followed by ―eLearning is more flexible and convenient than traditional classroom-based learning‖ and ―eLearning adoption provides greater access to educational resources and opportunities‖ (mean = 3.98), while ―eLearning is preferably to traditional classroom-based learning‖ (mean = 3.74) was ranked lowest by their mean score rating, followed by ―eLearning provides an opportunity to interact with instructors and peers‖ (Mean = 3.80). Table 7

Items	SA	A		U		D		SD			
	F	F	%	F	%	F	%	F	%	Mean	Std Dev.
eLearning provides more flexibility and eLearning adoption	74	168	58.7%	19	6.6%	17	5.9%	8	2.8%	3.98	.904
provides eLearning provides an opportunity to	66	178	62.2%	24	8.4%	9	3.1%	9	3.1%	3.98	.852
eLearning provides an effective way eLearning is preferably to traditional	52	169	59.1%	35	12.2%	18	6.3%	12	4.2%	3.80	.948
	66	180	62.9%	28	9.8%	4	1.4%	8	2.8%	4.02	.798
	48	156	54.5%	50	17.5%	25	8.7%	7	2.4%	3.74	.922
Weighed Mean = 3.90											

Source: Field Survey, 2023

4.4 Preference for eLearning Delivery

Table 8 showed the findings of the preference for eLearning delivery; ―I prefer to use the eLearning platform‖ (Mean = 3.91) was ranked highest by their mean score rating, followed by ―I prefer a blended approach that combines both synchronous and asynchronous learning‖ (Mean = 3.78), and ―I prefer asynchronous learning where I can access materials at my own pace‖ (Mean = 3.64), while ―I have encountered difficulties in using eLearning platforms‖ (Mean = 3.12) was ranked lowest by their mean score rating,followed by ―I prefer synchronous learning where I can interact with instructors and peers in real-time.‖ (Mean = 3.48).

Table 8: Preference for eLearning Delivery

Items	SA		A		U		D		SD			
	F	%	F	%	F	%	F	%	F	%	Mean	Std Dev
I prefer synchronous learning where I can interact with instructors and peers in real-time.	26	9.1%	141	49.3%	75	26.2%	33	11.5%	11	3.8%	3.48	.946
I prefer asynchronous learning where I can access materials at my own pace	37	12.9%	158	55.2%	50	17.5%	34	11.9%	7	2.4%	3.64	.935
I prefer a blended approach that combines both synchronous and asynchronous learning.	51	17.8%	159	55.6%	47	16.4%	21	7.3%	8	2.8%	3.78	.918
I prefer to use the eLearning platform	53	18.5%	183	64.0%	31	10.8%	10	3.5%	9	3.1%	3.91	.843
I have encountered difficulties in using eLearning platforms	11	3.8%	125	43.7%	56	19.6%	77	26.9%	17	5.9%	3.12	1.042
I have faced challenges in adopting eLearning.	45	15.7%	136	47.6%	45	15.7%	43	15.0%	17	5.9%	3.52	1.107
Weighed Mean = 3.57												

Source: Field Survey, 2023

5. Conclusion and Recommendations

Conclusion

Based on the aforementioned findings, the study concluded that eLearning provides an effective way to acquire knowledge and skills. As for the academic performance, it is more flexible and convenient than traditional classroom-based learning .It provides more opportunities for accessing to education,as well. Apart from this, the students have positive attitude towards eLearning, access to personal computer (PC), smart phones and internet with reliable internet connectivity. Finally, students prefer the use of eLearning platform, as a blended approach that combines both synchronous and asynchronous learning, where learning materials can be accessed at their own pace.

Recommendations

Based on the conclusion of the study, the following recommendations are proposed:

1. Students should endeavor to have access to upgraded smartphones, PC and/or computers, with strong bandwidth and internet connection.
2. eLearning should be encouraged among students as it gives room for active participation of students and instructors.
3. Adequate user-education should be provided for students, to expose them to the positive side of eLearning.

4. References

5. Abbad, M. M. M. (2021). Using the UTAUT model to understand students' usage of e-learning systems in developing countries. Education and Information Technologies.

6. 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.

7. Adelakun, N. O., Omolola, S. A., Mosaku, A. O., & Saint Adebola, M. (2022). Empirical Study on Electronic Learning System: Benefits, Challenges and Prospects. International Journal of Science Education and Cultural Studies, 1(2), 109-119.

8. Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., ... & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. International journal of information management, 55,

9. Abooki, P., and Kitawi, A. (2014). Impact of E-learing strategy on students' academic performance at Strathmore University, Kenya. Makerere Journal of Higher Education, 6(1), 99-108. http://doi.org/10.4314/majohe.v6i1.6

10. Agelyia, M., George, T. B. S. and Agnes, L. W. L. (2017). Technological Readiness of UiTM students in Using Mobile Phones in The English Language Classroom. Malaysian Online Journal of Educational Technology. 5(2)

11. Al-Rawashdeh. A. Z., Enaam, Y. M., Al Arab, A., R., Alara, M and Al-Rawashdeh, B. (2021). Advantages and Disadvantages of Using e-Learning in University Education: Analyzing Students' Perspectives. The Electronic Journal of e-Learning, 19(2), pp. 107-117.

12. Alhamdawee, N. O. (2023) Online Learning in Iraq: Challenges and Opportunities. European Journal of Humanities and Educational Advancements (EJHEA) Available Online at: 4 (1) ISSN: 2660-5589

13. Alimi, A. A, Adeyemo, I. A, Arulogun, O. T., Fajobi, D. T,Osunniyi, J. S, A deoye , M. A. & Ojo, O. S. (2020). Adoption of Open Educational Resource (OER) Materials by Faculty and Learners: A Framework to Increase Openness Adoption in Open and Distance Learning Program

14. Cheah, Y. K., & Chun, M. N. (2013). Socio-demographic determinants of computer ownership: An empirical view in the city of Gui Lin. Institutions and Economies, 5(1), 57–70.

15. Dečman, M. (2015). Modeling the acceptance of e-learning in mandatory environments of higher education: The influence of previous education and gender. Computers in Human Behavior, 49, 272–281.16. Egbe Adewole-Odeshi. (2014). Attitude of Students Towards E-learning in South-West Nigerian Universities: An Application of Technology Acceptance Model. 1

16. Egbe Adewole-Odeshi. (2014). Attitude of Students Towards E-learning in South-West Nigerian Universities: An Application of Technology Acceptance Model. 1
17. Elfaki, N., Abdulraheem, I., and Abdulrahim, R. (2019). Impact of E-learning VS traditional learning on students' performance and attitude. International Journal of Medical Research & Health Sciences, 8(10), 76-82.
18. Heddle, N. M., Cook, R. J., Arnold, D. M., Liu, Y., Barty, R., Crowther, M. A., Devereaux, P. J., Hirsh, J., Warkentin, T. E., Webert, K. E., Roxby, D., Sobieraj-Teague, M., Kurz, A., Sessler, D. I., Figueroa, P., Ellis, M., & Eikelboom, J. W. (2016). Effect of Short-Term vs. Long-Term Blood Storage on Mortality after Transfusion. New England Journal of Medicine, 375(20), 1937–1945. 1609014
19. Henderson, R. (2005). The role of computer and Internet access in business students' acceptance of e-learning technology. The University of North Carolina.
20. James, W. D. and Jeffrey, G. C. (2018). Diffusion Of Innovations Theory, Principles, And Practice. Doi: 10.1377/hlthaff.2017.1104 Health Affairs 37, NO. 2 (2018): 183–190©2018 Project HOPE—The People-toPeople Health Foundation, Inc.
21. Kurucay, M., & Inan, F. A. (2017). Examining the effects of learner-learner interactions on satisfaction and learning in an online undergraduate course. Computers & Education, 115, 20–37. 12, (5), May-2021 893, ISSN 2229-5518
22. Loke, Y. J., & Foo, C. S. (2010). Computer ownership and home usage: The case of Malaysia. International Journal of Consumer Studies, 34(1): 96-104. Nichols, M. (2008). ELearning in context. E-Primer Series, 2869(1), 1–28. Retrieved from
23. Ndibalema, P. (2022). Constraints of transition to online distance learning in Higher Education Institutions during COVID-19 in developing countries: A systematic review. ELearning and Digital Media, 204275302211075.
24. Ogunode, N. J., Ahmed, L., Deborah, G. and Abubakar L. (2020). Administration Of Public Educational Institutions in Nigeria: Problem And Suggestion. European Scholar Journal (ESJ), Available Online at: (3), ISSN: 2660-5562
25. Olayemi, O. M.; Adamu, H. M.; and Olayemi, K. J. (2021). "Perception and Readiness of Students' Towards Online Learning in Nigeria During Covid-19 Pandemic" Library Philosophy and Practice (e-journal).
26. Ono, H. (2005). Digital inequality in East Asia: Evidence from Japan, South Korea, and Singapore. Asian Economic Papers, 4(3), 116–139. Platt, C. A., Raile, A. N., & Yu, N. (2014). Virtually the same? Student perceptions of theequivalence of online classes to face-to-face classes. Journal of Online Learning & Teaching, 10(3), 489–503.
27. Prakasha, K., Muniyal, B. and Acharya, V. (2019) _Automated User Authentication in Wireless Public Key Infrastructure for Mobile Devices Using Aadhar Card', IEEE Access, 7, pp. 17981–18007. Available at:
28. Razieh, T. N. and Mohammad, S. B. (2012). Bandura's Social Learning Theory & Social Cognitive Learning Theory.https://www.researchgate.net/publication/267750204
29. Reddy, P., Sharma, B. and Chaudhary, K. (2020) _Digital literacy: A review of literature', International Journal of Technoethics, 11(2), pp. 65–94. Available at:
30. Scott, J. L., Moxham, B. J., & Rutherford, S. M. (2013). Building an open academic environment - a new approach to empowering students in their learning of anatomy through ―Shadow Modules.‖ Journal of Anatomy, 224(3), 286–295.
31. Silvi Indri Novitasari, Tessya Lonica Natalia, Pebrianto, T., & Yuni Esa Gresella. (2023). Digital Literacy Inherency within Narratives Subject at SMP Kristen Palangka Raya. 2(2), 648–661.
32. Singh, H. (2003). Building effective blended learning programs. Educational Technology, 43(6),

51–54.
33. Siti, F. A., Melor, Md Y. & HaRwati, H. (2019). A Technology Acceptance Model (TAM): Malaysian ESL Lecturers' Attitude in Adapting Flipped Learning (Technology Acceptance Model (TAM): Sikap Pensyarah ESL di Malaysia dalam Penyesuaian
34. Yuli Rohmiyati, Meriam, S., Noraidah Sahari, Siti Aishah Hanawi, & Qamar, F. (2023). Designing Personas for EResources Users in the University Libraries. 12(3), 48–48.
35. Zacchaeus, A., Joel, O. & Esther, O. (2021). Investigating ELearning Utilisation during COVID-19 Pandemic Lockdown in Southwestern Nigeria. International Journal of Scientific & Engineering Research Volume 12, (5), May-2021 893 ISSN 2229-5518,

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