



## Inclusion of e-education in higher education Applied study: Zoom and Moodle

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### **Abstract:**

The study aims to heed the most important aspect of higher education institutions seeking to control to top the competition, namely e-education, especially after the coronavirus outbreak around the world, which led to the closure of schools, universities and colleges. Most States have fully recommended the use of e-learning programmes, applications and educational platforms that educational institutions and professors can use to reach distance learners and reduce interruption of education. E-learning depends on the evolution of information and communication technology. In this article, the most important advantages and disadvantages of e-learning will be addressed. Does it affect the quality of higher education and will identify the "Moodle and Zoom" technologies, which are among the most important applications used in this type of education.

**Key Words:** higher education, quality, e-learning, e-learning quality.

**JEL Classification:** I23

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### **Introduction:**

E-learning has been widely disseminated in recent times, and has seen considerable technical progress in communication and information technologies. This has benefited all sectors. The most important is higher education. This progress has been effectively invested either by integrating these developments into the traditional process or by creating advanced, integrated education based mainly on the availability of high-quality and efficient means and technologies of communication. Online education, e-learning, e-learning, distance learning and other terminology

On the other hand, the stagnation in the world caused by the coronavirus crisis, which threatened all sectors to stop, most notably higher education, where it was impossible for teachers and students to be in university to curb the spread of the virus.

Algeria has also adopted this type of education to ensure the importance of higher education by activating scientific research codes through electronic platforms, including: Moodle and Zoom are programmed for all levels of study and in all disciplines to address and compensate for lectures and activities after the suspension decision and from it e-learning has become a basic choice after it has been an alternative The State has begun to work on the production of e-learning



programmes and plans and the transformation of courses into an electronic environment through specific programs. Hence the problem of studying: What is the impact of e-learning on the quality of higher education and to answer the problem raised the study addresses three main themes:

First Erasure: Learning about e-learning

Second theme: The quality of e-higher education has been addressed

Axis III: Recognize Moodle and Zoom Apps

### **I. Definition of e-learning:**

The term "e-learning" defines many definitions. It is an innovative way of communicating accessible learning environments, which are well designed, interactive and centred around the learner, to any individual, anywhere or anytime, by leveraging the characteristics and resources available in many digital technologies together with other types of educational materials suitable for open and flexible learning environments(آل محي، 2006)

That kind of education that depends on the use of electronic media in communication and receiving information, acquiring skills, interacting between the student and the teacher and between the student and the school and possibly between the school and the teacher, This type is linked to electronic means and information and communication networks, most notably the International Information Network, which has become an active broker of e-learning. Education is done through communication and communication between the teacher and the learner and through interaction between the learner and other electronic means of education such as e-lessons, e-library, e-book, etc.

E-learning is a concept that refers to the use of modern electronic means in the field of education, which:

- It is possible to store, collect and communicate information on various subjects of study in order to achieve the efficiency and effectiveness required for the education system.
- - E-education concerns all persons who have the responsibility to carry out the process of education, with the need to have the practical experience necessary to deal with modern technical means that can be used in the process of education.
- Modern electronic means relate to all the advanced technical means that can be used and utilized in the education process. Computers are one of its main pillars, as well as all the devices and equipment that can be connected and software needed to operate them, as well as all the means of communication that can be used in this field, such as different computer networks, Intranet, Extranet and the Internet.
- E-learning is a concept that refers to the use of modern electronic means of learning, through which information about different subjects can be summoned, collected and stored by the person wishing to learn.



- E-learning relates to all people who want to learn, with the need for practical experience to deal with modern technical means that can be used in the learning process-(د.زياد و أ.خليل، 2012)

## II- E-Learning Objectives :

The use of e-learning by institutions is desirable and clearly targeted, otherwise it will not bother to do so. This is based on the many benefits provided by e-learning. The following is a compilation of the most important e-learning objectives as follows: (الأحمدي، 2023)

- Upgrading education, learning and creativity.
- Reducing the cost of education.
- Create an interactive learning environment through new electronic technologies and diversity in sources.
- information and experience.
- Strengthening the relationship between parents and school, and between school and the outdoor environment.
- Support the process of interaction between students, teachers and assistants by exchanging educational experiences, opinions, discussions and dialogues aimed at exchanging views and using different communication channels such as e-mail, conversation and virtual classes.
- Provide teachers with technical skills to use modern educational techniques.
- Moodleing and delivering education in a standard format.
- Develop the teacher's role in the educational process in order to keep pace with ongoing and successive scientific and technological developments.
- Expand student connections through global and local telecommunications networks - and not be limited to the teacher as a source of knowledge while linking the educational site to other educational sites so that the student can enlist.
- Creating educational networks to organize and manage the work of educational institutions.
- Provision of education suitable for different age groups taking into account the individual differences between them.

## III- Features and characteristics of e-learning:

E-learning has several different features according to each of the technological means used. The most important features of e-learning can be explained below:

- Teach large numbers in a short time.
- Teaching a large number of students without limitations of time and space.
- Prompt and quick assessment and identification of results and correction of errors
- Encourage self-learning.
- Multiple sources of knowledge, dealing with thousands of sites.
- Easy and fast updating of electronic information content.



- Provision of financial expenditures.

#### **IV- Générations of e-Learning:**

learning has been going through three generations since the early 1980s:

##### **1. The first generation:**

where the electronic content was on CD-ROMs, traditionally transmitted to the student. The educational process is managed by means of communication such as mail and fax. This type of learning is limited to exceptional cases where the student cannot attend university.

##### **2. Second generation:**

Started with the beginning of Internet usage, the way content is transmitted has evolved, and the process of interaction and communication has evolved from being individual to being a group in which a number of students share with a specific teacher, but the management of the teaching process has continued to use traditional means.

##### **3. Third generation:**

With the emergence of the concepts of electronic commerce and cyber security in the late 1990s, the online educational process can be managed. This has been accompanied by a rapid development in multimedia techniques, which has provided an opportunity for the development of the third generation of e-learning, where a virtual environment is created that is very similar to the traditional university in terms of student's student, administrative and academic services. This style of learning has opened the way for a large number of those wishing to do so through an interactive learning environment as a variety of experiences that enrich the debate.

#### **V- Challenges to e-learning:**

##### **1. Technical challenges:**

One of the most limited challenges to e-learning is the ability of educational institutions to establish large networks and provide large numbers of equipment and equipment. In addition to their modernization, information and communication technologies are experiencing multiple developments and transformations in a rapid and sustained manner, making it difficult to acquire different technologies. In terms of software, the lack of e-learning applications in Arabic posed a major challenge, in addition to their multiplicity and the need for uniformity among them, to choose the appropriate software. The ministries concerned, in particular the ministries of education and the Ministry of Communication and Information Technology, had to coordinate among themselves in order to produce local software that took into account the different specificities of education and learners.

##### **2. Legislative environment:**

To ensure a smooth transition to an e-learning system, laws and instructions must be adapted to ensure the dynamism of the educational system, to align fast-paced modern developments. Laws must provide the cover for the protection of freedom of thought, the acquisition of knowledge and, most importantly, the generation of



knowledge, requiring the amendment of certain laws that are an obstacle to electronic interaction.

### **3. Human resources:**

The Movement for Change and the Orientation towards E-Education is a challenge for many teachers who are accustomed to the traditional system, and therefore this trend will face many resistance against this system, and therefore it is necessary to raise awareness, motivation and determination in order to accept this change.

### **4. Funding(عبد العزيز، 2008)**

Investment in education is one of the areas that does not attract companies and financiers to invest in and therefore lack of funding for this sector as well as the cost of operation, maintenance and renovation and the cost of producing the necessary contents for the educational process is a real challenge. and therefore Governments had to give particular priority to this area by encouraging partnership and supporting projects by stimulating relationships and expanding partnership between the telecommunications sector, information technologies and the education sector to support and develop e-learning systems.

## **VI- Impediments to the application of e-learning:**

e-education, like other methods of education, has a number of impediments to effective and effective implementation (الموسى، 2021)

### **1. Standards Development:**

E-learning faces difficulties that may quickly turn off its glamour and hinder its spread. The most important of these is the issue of the criteria adopted. What are these criteria and what makes them necessary?

If we look at some curricula and curricula in universities or schools, we find that they need to make many adjustments and updates as a result of different developments every year, sometimes every month. If the University has invested in purchasing teaching materials in the form of books or CDs, it will find that it is unable to modify anything in it unless these books and discs are rewritable, which is complicated even if possible. To ensure the protection of an e-learning adopter's investment, a customizable and readily modifiable solution is required.

### **2. Compensatory Regulations and Incentives:**

One of the requirements that motivates and encourages students to e-education: e-education continues to be blurred in the systems, methods in which education is clearly conducted, and the lack of a decision on the issue of incentives to encourage the education environment is one of the obstacles to the effectiveness of e-learning.

### **3. Guaranteed and effective delivery of educational environment:**

- Lack of support and cooperation for the effective nature of education.
- Lack of standards for the development and operation of an effective and independent programme.
- Lack of incentives for content development

**4. Curriculum or methodology science: (عبد الحى رمزي أحمد 2005)**

technicians are dependent on their personal uses and experiences, and the user's interest is often not taken into account. When it comes to education, we need to develop a standard plan and programme because it directly affects the teacher (how he knows) and the student (how he learns). This means that most or at least most e-learning professionals are technical professionals, while curriculum, education and education professionals have no say in e-learning, or at least are not decision makers in the educational process. It was therefore important to include educators, teachers and trainers in the decision-making process.

**5. Privacy and confidentiality (ibid):**

Attacks on key websites on the Internet have affected teachers and educators and have many questions in mind about the impact on e-learning in the future. Hacking content and exams is one of the most important impediments to e-learning.

**6. Digital liquidation:**

Is the ability of persons or institutions to determine the contact surroundings and time for persons and whether there is a need to receive their contacts, and then whether such contacts are restricted or not, and whether they cause damage and damage, by placing filters or filters to prevent or close communication to unwanted contacts as well as advertising and advertising.

- Students' responsiveness to and interaction with the new style.
- Monitor the methods of integration of classrooms with immediate education and ensure that the curriculum proceeds according to the planned plan.
- Increase the focus on the teacher and inform him of his personality and importance to the educational institution and ensure that he does not feel irrelevant and that he has become a traditional heritage.
- Awareness of society are aware of this type of education and do not have a negative attitude towards it.
- It provides a wide area of electromagnetic space and expands the field for wireless communication.
- The continuing need to train and support learners and administrators at all levels. This is all the old rules that impede innovation and the development of new ways of promoting innovation everywhere and time to advance education and demonstrate the efficiency of the type of education needs continuous training in accordance with the renewed technique.
- The need to train learners how to teach using the Internet.
- The need to disseminate curriculum contents at a high level of quality, as competition is global.
- Adjustment and ingenuity.



## VII- Necessity of quality in higher education institutions:

Harvey and Knight, 1996 identified five entry points for thinking about educational quality:

- Quality in education can be seen as a distinctive exception that can meet the highest standards.
- Quality in education means a state of compatibility between administrative and educational processes through the standardization of matrices to reach a level of zero defects.
- Consider quality from the point of view of the purpose of the product or service.
- Quality is a financial value that arises from efficiency and effectiveness.
- Gateway V views quality as qualitative, formal or cognitive transformations and changes that are appropriate for educational institution(s) (السعيد بن علي، (2012)
- Quality has become a common theme for each institution; For the benefit of the use of quality concepts, institutions of higher education have faced many circumstances which have forced them to seek and apply quality to achieve the desired goals. These conditions include:
  - Technological revolution and the resulting knowledge and information that transformed the world into a small, competitive and evolving village.
  - The gradual adoption of the "new public administration", which requires officials to demonstrate the effectiveness of public expenditure.
  - States agreed to grant greater autonomy to higher education institutions to improve their central administration in exchange for quality assurance
  - The role of higher education in the formation of knowledge workers contributes to economic growth.
  - Developing towards a new economy urges students and employers to further higher education.
  - The need to improve the quality of university graduates and this according to the requirements of the labour market which is also known is a qualitative leap.
  - The huge amount of universities and students make education lose somewhat known as quality.
  - The need to improve curricula within global criteria for classification.
  - Investing in human capital is the objective of the educational process, so it must be invested best.
  - Attempt to improve the educational system in general.
  - The formation of a highly competent university graduate infrastructure to integrate into the knowledge economy (OECD, 2008)





### **VIII- The importance of quality in higher education:**

Quality is of strategic importance both at the level of organizations, whatever their activity or at the community level. This importance has emerged since the 1950s, and access to quality management is not easy. In particular, education plans and various types have included attention to quality and quality and the individual's productivity is affected by the amount and quality of the education he has received, so that the individual has a distinct ability, and high productivity determines the location of the country on the global map which can be achieved if the overall quality of educational organizations is applied (العبادي و فوزي، 2020) Examine and meet society's requirements and the needs of its members.

- Perform the business properly, at the lowest time, at least effort and at least cost.
- Develop many values that relate to teamwork and team work.
- Satisfy the needs of learners and increase the satisfaction of all employees of the educational organization.
- Improve the reputation and image of the educational institution in the eyes of students, teachers and members of the community
- Local, and develop the spirit of competition among different educational institutions.
- Achieve learner quality in both cognitive, skill and ethical aspects.
- Building trust among employees of the educational institution and strengthening their affiliation with it.
- Provide information and clarity in the various elements of the educational process.
- Achieve good cohesion and effective communication between different departments, departments and units in educational organizations.
- Contribute to solving many problems that impede the good functioning of the educational process.
- Effective and continuous oversight of the learning and education process.
- Achieving material gains and qualitative expertise for educational personnel and community members in solving problems and crises.

### **IX- Classification Standards Global Quality Standards for Universities:**

موقع جامعة ديالى العراقية (2021)

It has been the practice for years for some bodies and universities to work out the criteria for evaluation and classification of universities. A number of international academic institutions are interested in classifying universities around the world. Some of these classifications have become accredited by many academic institutions in the world. The classification of these institutions is based on several criteria that vary from one classification to another, and one of the most important classifications.





### **1. Classification QS British Times:**

A classification issued by the British Foundation founded in 1990, a professional education company, The Times QS World University Ranking aims to identify universities with the highest levels through their national performance and local mission in their societies to a global level. The Times QS World University Ranking has achieved international prominence among educational and scientific research institutions through its reliance on evaluation criteria that address the structural structure of each of these universities. This classification is based on the following criteria in the classification of universities (quality of research - recruitment of graduates - world view of university - quality of education)

### **2. Classification of Jiao Jung Shanghai University:**

It is a classification issued by China's Jiao Tong Shanghai University, known as the Academic Classification of Universities. The first classification, World, was issued in 2003 by the University's Institute of Higher Education, The purpose of its publication was to find out the location of Chinese universities among the world's universities in terms of academic performance and scientific research,

This classification is based on objective criteria that have made it a reference in which the world's universities compete for a prominent position and refer to it as one of the most important global classifications of universities and institutions of higher education. This classification is based on the examination of the world's 2,000 universities out of the approximately 10,000 registered UNESCO universities with primary qualifications for competition. The classification is based on the university's scientific production rate, the extent to which it is awarded the Nobel Prize or the Fields Mathematics Award, and the classification method is based on four main criteria (Quality of education - Quality of teaching staff - Research production - Academic achievement compared to the size of the scientific institution).

### **3. Spanish Webometric Classification for the Evaluation of Universities and Institutes:**

A Madrid laboratory in Spain known as the National Research Classification (NRC), which began in 2004, **Webometric** with a ranking of 16,000 universities, aims primarily to urge the world's academics to present their scientific activities reflecting their outstanding scientific level on the Internet. January and July of each year a classification of universities, but a ranking of the university's website, and depends on measuring the performance of universities through their websites among the following criteria of size - reference to research - public impact

### **4. International Classification of Universities' Web Site**

It is an Australian global ranking, similar to that of Spanish Webmatrix, but is interested in measuring the popularity of universities' websites that have gained academic accreditation from international organizations or bodies, and is announced every six months.

All universities involved in the classification are required to add and update their data monthly. This classification contains 9,000 colleges and universities that are classified according to the fame of their website in 200 countries. This



classification aims to rank international colleges and universities according to the fame and mass of the universities' website virtually.

It does not classify higher education institutions based on the quality of education or the level of services provided, and the classification is based on three objective and independent measures on the Internet derived from three search engines (Google Page Classification - Internal Links to Yahoo - Alexa Traffic Classification.)

## X- Quality Concept in Distance Learning

The concept of quality in education generally falls under six main themes:

- **Quality means achieving goals:** It is a high-quality higher education institution that sets specific goals for it and achieves them well.
- **Quality of inputs and processes:** Achieving objectives depends on many factors, the most important of which are the quality of the physical and human inputs used and the range of methods and processes used to invest these inputs.
- **Standard quality:** The term quality is standard. Performance is assessed as excellent, good or bad according to specific benchmarks and benchmarks
- **Quality vs. quantity:** Good education is the balance between quantity and type.
- **Technical quality:** Applying the scientific curriculum in terms of scientific knowledge and technology to enable the educational system to meet the technological and economic needs of society.
- **Triquality:** a combination of three subtypes:
  - Design quality in which specifications and characteristics that must be sponsored in planning and work are determined.
  - Quality of performance: doing business according to the established criteria.
  - Quality of the outlet: Access to an educational product and services according to the expected characteristics and specifications and appropriate to the needs of the labour market.

## XI -Pilot study using Moodle and Zoom applications

Following ministerial instruction No. 288 dated 29 February 2020, which included the preparation of the content of the lessons and the work directed, it became necessary to prepare the lessons by the professors and place them at the disposal of the students for access and upload them electronically.

And from here I will touch on the two most recent platforms in Algeria, Zoom and Moodle.

### 1. Digital Platform Moodle(2018، حسينة)

#### 1.1. Platform Moodle

Moodle is an interactive online service package that offers learners access to information, tools and resources to qualify and manage online learning, the virtual



learning surroundings, which is a free and user-friendly open platform and it should be noted that the word "Moodle" is an abbreviation of the words **modular object-oriented dynamic learning environment**.

which means that the system is built with purpose-oriented programming techniques to secure a dynamic learning environment. The Moodle system emerged and developed in Australia in 1999, and was designed by Martin Dugimas to assist teachers in offering online learning courses, while ensuring interactive and collaborative content building as well as continuously developing the content of these courses. The first version of Moodle was launched on 20 August 2002

### 1.2. Moodle Features:

- An appropriate tool for building electronic curricula (compilation, tab, display).
- A forum where teachers discuss topics relevant to the educational process.
- The system supports forty-five languages, including Arabi (أحمد بن محمد، 2013).
- Takes care of the lesson module to create several pages displaying content or part thereof, and at the end of each page can add a question or link to a next, previous or other page.
- A good opportunity is given to the learner to send his duties and tasks assigned by the teacher and upload them on the site in different formats in order to present them to the teacher power point, word
- Follow up the student from the beginning of his entry into the system until his exit with the availability of a report for each student.
- Includes various tools to evaluate tasks, activities, tests, questionnaiver (أحمد بن محمد، 2013)
- Glossary includes dictionaries of the terms used in the curriculum, and students can be assigned to write the terms for evaluation by the teacher before presenting them.
- The system allows the professor to postpone his students or automatically postpone themselves without recourse to their teachers.
- Correction and postponement of grades automatically according to criteria determined by the teacher for multiple selection tests, correctness, error or other test patterns.
- The teacher can make discussion groups according to the tasks and educational content or is configured by the system.
- Chat rooms and educational dialogue forums are available in the system.
- The system supports universal SCORM standards (ريما سعد، 2008).



### 1.3. Moodle System Components:

- **Lesson module:** to create multiple pages displaying the curriculum or part at the end of each page Adding a question or linking to the next page or previous or other
- **Forum module:** is given the possibility of discussion through which summaries or questions about the curriculum can be provided , Calendar units, tests and questionnaires.
- **Glossary terminology dictionary:** unit to make dictionary terminology used in the curriculum and learners can be assigned to write terminology for evaluation by the teacher before presenting it.
- **Resource module:** to provide the curriculum with electronic resources to support the curriculum such as links to other websites, text pages, web pages, linking with uploads
- **Book Unit :**is to create educational resources in the form of an e-book.

### 1.4. Steps to Activate Moodle Platform(أحمد بن محمد، 2013)

(university, 2022)

Activating Moodle's e-decisions requires taking several steps that need time, effort and huge funding.

- Modify the teaching method at the school level so as to make the curriculum a supporting tool in the educational process at all levels.
- The establishment of a district-level committee to undertake the development process consisting of a working group comprising a group of specialists in several areas such as curriculum development and education technology.
- Study the reality of the use of technology in schools, i.e. inventory of the devices and educational programs available in them.
- Allocate a substantial budget to integrate electronic curricula into general education courses, to cover the costs of teacher training, the recruitment of experts and trainers, the maintenance of a modal system for the management of electronic courses, and the procurement of devices and programmes.
- Establishing a technological infrastructure, including Internet access to schools, providing schools and institutions with computers and accompanying tele-learning devices and educational programmes, and replacing old (if any) devices with other sophisticated modern ones.
- Prepare students to manage all the information they will deal with in the course, and ensure that -
- Students are able to communicate with the teacher and with each other and the content of the course with the provision of feedback, communication between students and teachers, and that the objectives, scientific subject and list of course subjects are clear, and strong teacher support.



## 2. Zoom Digital Platform

### 2.1. Platform Zoom

Most educational institutions have followed for study, work and meeting in most countries of the world to use the Zoom app to keep operating normally in view of the coronavirus outbreak, which has made it very important to use it in the field of distance education.

The Zoom app is a platform that hosts online events and meetings, as well as is useful for online lectures. It is a simple, user-friendly and inexpensive tool, through which you can reach the limits of 1000 participants at the same time and through the use of the broadcast itself.

The Zoom Platform is a dedicated video call platform through which you can hold meetings and lectures online, where you are hosted by a caller, and then invite others by sending the call link, knowing that the host has all the powers, as the Zoom program is currently the perfect solution for meetings and interactive work meetings, which may have 500 employees or less. (university, 2022)

- **Uses of Zoom**(2020 (الأوسط و الشرق الأوسط، 2020) Technology that allows online meetings and electronic rooms for teacher meeting with learners.
- The app is free and available on Google Play Store and Apple Air, and runs on smart computers.
- The zoom program connects teachers and learners with high quality for different internet connection speeds.
- Registration with the program only needs email or via your computer with social media programs such as Facebook.
- Zoom software provides meeting rooms with audio and video, and can be stored on the computer for use

### Conclusion:

- The shortcomings must be addressed through the university's orientation from computers and the provision of Internet services to the training of the faculty and students in the skills of using new applications for e-learning
- Establishment of committees or cells to assess the quality of e-higher education through the adoption of a multimedia design of scientific material by professors and specialists in higher education
- Develop rigorous plans that determine the stages of transition to e-education by identifying the realities of higher education institutions and the possibilities available to adopt this type of education
- The need for coordination between ministries concerned with e-education. For example, coordination between the Ministry of Higher Education and Scientific Research and the Ministry of Information and Communication in order to present educational programmes at all levels of education, while providing and ensuring high-quality Internet flow, so that teachers can offer lessons, lectures and work with students in every way.



- The Ministry of Higher Education must engage a specialized and competent technical staff composed of photographers and directors who assist professors in their assignment.
- The Ministry of Higher Education and Scientific Research must provide the necessary means for students, such as electronic paintings or computer device to pursue e-learning.
- The need to allocate and provide an appropriate period of time at the level of public channels for e-learning.
- E-mail, YouTube or Facebook channels, and all possible social outreach sites should be used to view educational programs, and raise concerns, distractions and possible problems. Each professor has the opportunity to present his or her lessons at specific times, with the possibility of postponing and presenting classes at later times with the opportunity to upload them.

### Bibliographic References :

- أحمد بن محمد الجري، أثر استخدام نظام إدارة التعلم الإلكتروني موودل Moodle على تحصيل الدارين بتعليم الكبار في مقرر الفقه للصف الثاني ثانوي بمدينة الرياض، رسالة ماجستير في الأدب تخصص وسائل وتكنولوجيا التعليم، جامعة الملك سعود، السعودية، 2013
- الأحمدى سعدة، 2015 ، التعليم الإلكتروني، ماجستير تقنيات تعليم، متوفر على الموقع
- آل محي، عبد الله يحي. "الجودة في التعليم الإلكتروني: من التصميم إلى استراتيجيات التعليم." ورقة عمل مقدمة إلى المؤتمر الدولي للتعليم عن بعد 27-29 مارس 2006 مسقط. عمان
- جامعة الشرق الأوسط، منصة ZOOM، منشور على الموقع. 24-07-2020 <https://meu.edu.jo>
- حسينة أحمد، درجة رضا الأساتذة الجدد على مخطط التكوين تصميم وبناء و استعمال درس على منصة MOODL، مجلة العلوم الاجتماعية، جامعة سطيف، المجلد 15 ، العدد 06 ، 2018
- د.زياد هاشم السقا ، أ . خليل الحمداني، 2012 دور التعليم الإلكتروني في زيادة كفاءة و فعالية التعليم المحاسبي ، مجلة أداء المؤسسات الجزائرية، العدد 02
- ربحا سعد الجرف، (24-25 ماي 2008 )، متطلبات تفعيل مقررات موودل الإلكترونية بمراحل التعليم العام بالملكة العربية السعودية ، مداخلة في الملتقى الأول للتعليم الإلكتروني في التعليم العام، المنعقد بوزارة التربية والتعليم، الرياض، المملكة العربية السعودية
- سعيد بن علي العضاضي، ( 2012 ) ، معوقات تطبيق إدارة الجودة الشاملة في مؤسسات التعليم العالي، دراسة ميدانية، المجلة العربية لضمان جودة التعليم الجامعي، العدد 9 ، المجلد الخامس



- العبادي، هاشم فوزي دباس(2007). إدارة التعليم الجامعي: مفهوم حديث في الفكر الإداري المعاصر. عمان : مؤسسة الوراق. أبرز تصنيفات الجامعات العالمية- موقع جامعة ديالي العراقية -الموقع : <http://www.scr.uodiyala.edu.iq/PageViewer.aspx?id=46> تاريخ التحميل 2021-05-01
- عبد الحلي، رمزي أحمد. 2005 التعليم العالي الالكتروني: محدداته ومبرراته ووسائله. الإسكندرية: دار الوفاء.
- عبد العزيز، حمدي أحمد. 2008 التعليم الالكتروني : الفلسفة، المبادئ، الأدوات، التطبيقات. عمان، دار الفكر.
- الموسى، عبد العزيز". التعليم الالكتروني: مفهومه، خصائصه، فوائده، عوائقه " ورقة عمل مقدمة إلى ندوة مدرسة المستقبل في الفترة 16 1423 هـ جامعة الملك-8/17/ سعود. متوفر على الموقع <http://www.ksu.edu.sa/seminars/future-school/index2.htm> تاريخ الاطلاع: 2021-05-25.
- [www.kutub.pdfbook.com](http://www.kutub.pdfbook.com) تاريخ الولوج 8 فيفري 2023
- Cornell University 2022-08-25: What's a Zoom Meeting? What's a Zoom Webinar?, it.cornel 1.edu, Retrieved
- OECD, (2008) Assurer et améliorer la qualité dans l'enseignement supérieur : Repères pour l'élaboration des politiques, Direction de l'éducation, Division des politiques d'éducation et de formation.