

The reality of the use of Electronic Education in the Faculty of Computer and Mathematics, University of Wassit

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Abstract: During the last quarter of the last century, university education witnessed an essential shift in teaching methods, patterns and fields of education. Many Arab and international universities tended to employ and its application in the educational process. The goal of this study is identifying the extent to which the Faculty of Computer and Mathematics at the University of Wassit is ready to apply Electronic Education and identifying the obstacles facing the implementation and activation of Electronic Education in the University of Wasit, we suggest Providing the necessary infrastructure, material resources, and human potentials for the use of Electronic Education, through providing equipment, sites, and electronic networks and other Internet services efficiently at the university end setting up training courses for faculty members to develop their skills in how to take advantage of Electronic Education and to provide financial support to conduct research and disseminate awareness of this type of education and culture.

1 INTRODUCTIONDURING THE LAST QUARTER OF THE LAST CENTURY, UNIVERSITY EDUCATION WITNESSED AN ESSENTIAL SHIFT IN TEACHING METHODS, PATTERNS AND FIELDS OF EDUCATION. MANY ARAB AND INTERNATIONAL UNIVERSITIES TENDED TO EMPLOY AND ITS APPLICATION IN THE EDUCATIONAL PROCESS. THIS TECHNOLOGY IS TERMED ELECTRONIC EDUCATION. ELECTRONIC EDUCATION BECAME AN INTEGRAL PART OF THE CURRICULUM OF MANY EDUCATIONAL INSTITUTIONS. INTERNATIONAL RESEARCHES SHOWED THE EFFECTIVENESS OF THE COMPUTER AS ONE OF THE EDUCATIONAL TECHNIQUES FOR ELECTRONIC EDUCATION TO IMPROVE EDUCATION IF IT IS ADDED TO THE TRADITIONAL EDUCATION.

The research problem:

The research problem is restricted to what are the necessary requirements to apply the use of Electronic Education in the University of Wassit Faculty of Computer and mathematics?

2. THE OBJECTIVES OF THE RESEARCH

- A- Identifying the extent to which the Faculty of Computer and Mathematics at the University of Wasit is ready to apply Electronic Education.
- B- Identifying the obstacles facing the implementation and activation of Electronic Education in the University of Wasit.

3. E-LEARNING

E-learning is an educational way to introduce academic programs for students at anytime and anywhere by using communication and information technology to provide an educational environment of multiple sources in remote synchronous and non-synchronous method, and it's one of the type of the distance learning that is an educational system and learning method by using modern means of communication to connect the scientific contents and organize management of students during process of their learning and examine all the students. The content will be connected and contact with students at anytime and anywhere which is depending on using electronic media interactive in order to connect between the lecturer and the students, between students and learning content. E-learning tries to make use from modern communication and information technology and employ it in the educational process. [1,2,3,4,5].

4. REQUIREMENTS OF ELECTRONIC EDUCATION

The electronic education is regarded one of the modern learning styles to deliver the information to the learner. Through the use of the Electronic Education, modern techniques of information like computer, networks, multiple voice and image, graphics and electronic libraries as well as online portals whether remote or in any classroom use of technology of all kinds to deliver information to the learner, shortest time ,less effort , and greater interest ,are used. Like other educational systems, Electronic Education has essential requirements related to the educational environment; infrastructure, human resources, and possible environment technical and material requirements in order to lead Electronic Education course in an effective manner necessary to achieve the basic requirements. The following, are the most important requirements [6]:

- 1- Providing the necessary infrastructure; networks, hardware, and software.
- 2- Getting the educational system (teacher, learner, and the educational institution) aware of the importance and effectiveness of Electronic Education.
- 3- Training the (teacher and learner) on how to use technology.
- 4- Legislating the regulations and laws that contribute to the use of Electronic Education in universities.
- 5- Designing and producing educational programs.
- 6- Providing the necessary financial support for the implementation of Electronic Education.
- 7- Providing the technical personnel in order to follow-up and maintenance services.
- 8- Supporting researches and studies in the field of Electronic Education.

The following is a list of instruments to monitor the Electronic Education mechanisms available in the Faculty of Computer and Mathematics University of Wasit:

- 1- Computers.
- 2- Applied and operational software.
- 3- Printers.
- 4- Scanner.
- 5- Internet network and accessories (Router- surfer).
- 6- A display device data (DAT Shaw).
- 7- Fixed and mobile display screens.
- 8- TV devices.

9- The electronic board.

To ensure the success of Electronic Education, the following must be done [7]:

- 1- It is necessary that educators contribute to Electronic Education process.
- 2- Providing the Infrastructure to this type of education; preparing qualified and trained human staffs, and the required contacts lines that help transfer this learning from a place to another.
- 3- Producing the necessary software for this learning.

The following are the advantages of Electronic Education to the student and faculty member [8]:

1. Ease of adjustment and change in the teaching methods used to fit the students whether visible, audible, read, or practical.
2. Electronic Education sources help apply the sources for different and various methods and allow modification according to the best for the student or trainee of the way.
3. Ease of access to the teacher outside the official working times through e-mail, for example.
4. Mastering the learning material as the learner can review the material more than once in different ways and forms.
5. Ease of assessing student and providing immediate evaluation tools and giving the teacher a variety of ways to categorize the students in light of a specific standard.
6. Reducing the administrative burdens for the teacher or faculty member; e.g. receiving the homework and correcting through the email.

These features of the Electronic Education enable the faculty member to benefit the largest number of learners in a neat and attractive way in shortest time and minimal effort.

To achieve quality in the university electronic education system, the following aspects should be available [9]:

1. Accordance between the goals of the college and its message.
2. Administrative system effectiveness.
3. -The effectiveness of faculty members as academics guides.
4. -The effectiveness of academic programs and the accordance of these programs with the message and goals of the college.
5. -The effectiveness of media and publicity for the program.
6. -The effectiveness of evaluation and examination system.
7. The effectiveness of the educational means and methods of teaching in achieving the intended educational outcomes.

The following are some of the means which the professor in the Faculty of Computer and Mathematics should use to develop himself in the use of Electronic Education methods:

- 1- Attending training courses about Electronic Education related topics.
- 2- Taking advantage of online sites with high credibility that helps in the education-related Electronic Education programs.
- 3- Following-up seminars and scientific conferences and workshops about this field and being keen to participate.

Obstacles of the use of Electronic Education:

Despite the various advantages of Electronic Education, but educational institutions still face many obstacles that stand against the achievement of the objectives of the

Electronic Education at the University of Wassit:

- 1- Technical problems; e.g. power outages during search, browsing, and sending.
- 2-Problems relating to trends of faculty members towards the use of modern technologies and the reason for this is the lack of awareness of the importance of the use of this technique and the inability to use.
- 3-The broad gap between the levels of the students' skills in literacy, information and abilities.
- 4-The difficulty of access to various information centers or contact with networks of research for the lack of different possibilities to access it.
- 5-The weakness of educational quality and the lack of adequate knowledge of this kind of education among most of the teaching staff.
- 6- The lack of encouragement and support by the Responsible administrations for the implementation of development plans in universities and colleges.
- 7- The low skills in the use of Computer by faculty members on the one hand and students on the other.
- 8-Sticking to the traditional classical ways of teaching in education and seeing it as the best for the lack of knowledge in how to employ modern technology in education, the lack of English language and technology is seen as one of the tools of globalization.
- 9-The lack of infrastructure for this type of education in terms of

Some studies confirm that the most obstacles in applying electronic teaching in Arabic universities doesn't exist appropriate, necessary and enough expertise by lecturing qualified staff in order to prepare and teaching an scientific and proper subjects for this type of teaching. They have to go through a special training courses in the instructional designs to ensure prepare teaching subjects that fit with distance learning, and in order to direct student to essential and necessary dimensions during studying to guarantee achieve the maximum possible benefit.[10,11,12,13]

There are errors that you should avoid it during the process in applying using E-learning in the Academic foundation, here are some great errors [14]:

- 1- Decision making in applying electronic educational system by supreme management without participation of all concerned and who will supervise in process of taking it.
- 2- There isn't set of clear and detailed plan that includes on identifying the project, goals, execution means, levels of applying and necessary funding for each stage.
- 3- Focusing on financial field or formalist of E-learning during the formulation of the goals.
- 4- Enter additional technics without making sure of using these technics in right way.
- 5- There isn't evaluation studies from time to another to ensure how the goals will be achieved.



5. Recommendations: we include below the most important recommendations

1-Providing the necessary infrastructure, material resources, and human potentials for the use of Electronic Education, through providing equipment, sites, and electronic networks and other Internet services efficiently at the university.

2-Setting up an independent administration specializes in Electronic Education at the university level to move out of traditional education to Electronic Education.

3-Setting up training courses for faculty members to develop their skills in how to take advantage of Electronic Education and to provide financial support to conduct research and disseminate awareness of this type of education and culture.

4-founding a department of educational technology at the College of Education at the university to supply the university with specialists in the field of information technology for designing programs, effective use of Electronic Education, and solving the obstacles.

5-Computing curriculum and submitting them to the university's website.

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