

## The impact of e-learning on the desire to learn through increasing motivation from the point of view of the teachers of Al-Balqa Applied University

Taha Sami Othman

Rasha Ahmad Abu Odeh

Safa'a Ibrahim Al Halalmeh

Mohammad Nassar Almarshad

Princess Alia University College || Balqa Applied University || Jordan

**Abstract:** The current study aimed to determine how the use of e-learning in education leads to affect students' motivation in the field of learning and to investigate the effect of technology on students' motivation, identifying how motivated learners are towards electronic learning, learn about e-learning features, identifying the obstacles and disadvantages of e-learning and Identifying the impact of e-learning on students' grades. The study uses the structural equation model to empirically test the DeLone and McLean models of the success model of the information system in the university e-learning environment. Eight study hypotheses were tested using PLS analysis in survey data. The study reaches many valuable results, the most important of them is, e-learning students to succeed, they must provide an e-learning system that provides the information they need and easy-to-use information. Although the quality of the system (easy to use systems) does not directly contribute to predict personal impact, its impact is indirect. The quality of the system and the quality of the information have a positive impact on user satisfaction. The quality of the information also has a positive impact on the use of the system, which in turn has a positive effect on user satisfaction.

**Keywords:** e-learning, desire to learn, motivation, teachers, Al-Balqa Applied University.

### Introduction:

E-learning (EL) mainly involves the use and application of information and communication technologies (ICT) in websites, personal computers (PC), tablets, mobile phones, learning management systems (LMS), televisions (televisions), radios and other devices. It means improving the teaching and learning process. The e-learning is actually a unified phrase that is used to explain areas related to the Internet, online education and technology (Hey, Saleh & Iahad, 2010: 24). In this sense, e-Learning is essentially becoming a strategy of learning in learning, training and the development of teaching, as well as in many corporate functions. This can be demonstrated by the large-scale development of network technology. Despite this, many academic and business skills training institutions have made significant advances today in the use of more interactive e-learning strategies to effectively improve the overall performance of college students and their employees. In many developed economies, some academic institutions use extremely interactive e-learning to directly improve student performance (Soleymanpour, Khalkhali &

Reayatkoonandeh, 2010: 83). In recent times, technology has become a device that is accustomed to getting rid of physical obstacles, and allows students to learn anytime and anywhere without having to interact physically with a teacher or lecturer. In this context, e-learning can improve the efficiency of student teaching, thus improving the learning efficiency of students. According to Heeger (2010: 8), e-learning allows many students of higher education to take similar plans at the same time. Now, in addition to learning, the educational system has enjoyed more and more of reasonable instructions and, finally, it has had to pass through the campus of the university. The findings of Holley (2012: 118) indicate that the e-learning system allows teaching methods to increase the highest quality associated with the academic performance of students in higher education and higher education. Soleymanpour, Khalkhali and Reayatkoonandeh (2010: 87) explained that higher education students at universities that have exceptional performance in e-learning generally do better than those who rely heavily on face-to-face communication and interact with their mentors . . . Holley (2012: 117) also reported that the number of undergraduate students who generally participate in online or online learning is much better than the traditional method of university students. Due to the advent of educational technology, e-learning is gaining attention in education. Therefore, several colleges and universities are currently implementing e-learning courses. As a result, e-learning has continued to mature in some private and public institutions of higher education in today's world. Most institutions of higher education have realized the impact of e-learning on student performance. From a general point of view, what is commonly referred to as an e-learning facility includes three elements: automatic compliance and compliance, even with personal paperwork (Cooke, 2014: 11).

(Haverila & Barkhi, 2009) have, however, challenged the traditional attitudes to education. Technology suggests many new characteristics that can be applied to make instruction more interesting to learners (Keller & Suzuki, 2004). It is generally believed that new technologies will modify teaching. Many proponents of e-learning believe that everyone should master basic technical knowledge and use it as a means to obtain educational objectives (e-learning, 2013). As a result, many universities use e-learning in an important way. For this reason, the need to use the Internet for the education of academic and technical knowledge has arisen, and this knowledge is becoming the central competence of many teachers. Some scholars predict that the traditional classroom will disappear. E-learning has entered the world of teaching and business in an important way and has completed traditional delivery methods. It makes possible models of traditional education, such as distance learning (Haverila & Barkhi, 2009, Tamrakar and K. Mehta, 2011). Traditionally, online learning in the higher education model (ie, university) has been used to: (1) increase the visibility of universities, (2) expand educational recommendations, and (3) learn "virtualization". In addition,

e-learning is a key device that teachers can use to improve the motivation and education of students (Mateo, Pérezdel Rey and Hernández, 2010).

### **Study problem:**

Through the work of researchers in the field of education for a long time and associated with students found that the acceptance and appropriate use of educational developments does not lead to positive results without prior studies determine the extent of acceptance of the target group and trends and capabilities and capabilities to absorb the developments. When reviewing the literature available in the field of e-learning, there is a lack of information about the motivation of learners towards e-learning in general, and in the Kingdom in particular, as the majority of available studies addressed trends towards the computer. In view of the importance of e-learning in the Kingdom, this study aims to identify the motivation of students towards e-learning.

In this sense, the problem of the study is focused on answering the following questions:

- How can we motivate learners towards electronic learning?
- What are the main of e-learning features?
- How to identify the obstacles and disadvantages of e-learning?
- What is the impact of e-learning on students' grades?

### **Study Objective:**

The research subject is to determine whether use of e-learning in education, leads to affect students' motivation in the field of learning and the effect of technology on students' motivation. The purpose of this study is to describe the research carried out and the outcomes which are focused on the motivation of students participating in the research through:

- Identifying how motivated learners are towards electronic learning.
- Learn about e-learning features.
- Identifying the impact of e-learning on students' grades.
- Identifying the obstacles and disadvantages of e-learning.

### **Study importance:**

For a long time, the traditional teaching system of the university has been a classroom where professors give lectures to students and give them to students who listen and take notes. Communication between teachers and students has been identified as a key learning component of this delivery platform. New singularities in educational delivery systems, such as interactive and reflective schools.

The importance of the study stems from the importance of e-learning as a modern technology in the educational process, which contributes to solving many educational problems such as knowledge explosion, information revolution, the problem of non-observance of individual differences among learners, overcrowded classrooms and shortage of qualified and trained teachers. This study can help officials in the Ministry of Education in the Kingdom identify students' attitudes towards e-learning, which may allow them to focus on the positive aspects of these trends and try to make efforts to provide for the treatment or mitigation of negative trends, towards e-learning

### **Study variables:**

#### **First: - E-Learning:**

Nehme (2010) defines e-learning as technology-supported education.

Al-Jabri (2011) defines e-learning as a method of learning based on the use of modern means of communication from computers, networks, multimedia, voice, image, graphics, search engines and electronic libraries, both remotely and in the classroom; Of all kinds in the delivery of information to the learner in the shortest time and less effort and greater benefit. E-learning from various electronic sources takes tools to improve the learning process, including the use of the Internet in classrooms to connect students and teachers together to form so-called electronic classrooms or to connect them remotely for scientific research, joint studies and follow-up. Local Area Network.

In this study, e-learning includes the learn through the use of computer technologies and technologies, either on-line or using local and international networks, as well as mobile use in learning and learning management systems such as B.b, Moodle, networking, search engines and educational software.

#### **Second: The motivation towards e-learning:**

Ghergulescu & Muntean (2010) argues that motivation is the motivation (a psychological trait) or energy to achieve the goal of achieving knowledge, initiating and maintaining participation in the learning process. Al-Issawi (2011) states that motivation is behavioral as the internal or external condition of the learner, which moves his behavior and performance and works on his continuation and direction as the goal or end. In terms of knowledge, it is an internal state that moves the ideas and knowledge of the learner and its cognitive structure, awareness and attention, as it insists on continuing and continuing performance to reach a state of cognitive and psychological balance. In terms of humanity, it is an internal excitatory state that moves the learner to exploit his full potential in any educational position aimed at satisfying his desires and achieving himself.

**Procedural definition:**

Is the sum of students' acceptance or rejection responses (support or opposition) towards learning through technological applications and computer software, which is considered an e-learning model, and is measured by the total scores obtained by the student to answer the score sheets prepared by the researcher for this purpose.

**E-learning:** There are many definitions of e-learning from educational dictionaries: "E-learning recognizes various types of computer-assisted learning, often using modern technology; CD-ROM. E-learning is especially expanding in the areas of distance education and corporate training" (Prucha, 2003), or Subsequent definitions: "E-learning can be understood as an educational process that uses information and communication technology to create training, distribute learning content, communicate between students and teachers, and study management" (Wagner, 2005). E-learning challenges traditional training and learning methods and provides new solutions to problems. For example, the role of teachers may shift from the importer of knowledge to the disseminator of knowledge (Haverila & Barkhi, 2009). This may be a very good learning practice that can exceed the education you may encounter in a crowded classroom. It is self-developing and actively learning (Obringer, 2002). In addition, e-learning includes different types of educational tools for learning and education. E-Learning and "Technical Enhancement Learning (TEL), Computer Aided Instruction (CBI), Computer Aided Instruction (CBT), Computer Aided Instruction or Computer Aided Instruction (CAI), Internet-based Training (e-learning, 2013), Online Training (WBT), online education, virtual education, virtual learning environment (VLE) (also called learning platform), mobile learning and digital education collaboration. E-learning can refer to different learning environments. In this paper, we use e-learning to It implies that almost all learning environments, including electronic media (such as computers), are used as part of educational delivery systems. These can be extended through the use of e-mail to supplement the distance traveled by printed materials that are completely delivered through computers or the World Wide Web.

**Purpose of e-learning:**

Provide access to education and training for the largest number of community groups. Because it overcame the constraints of space and time, such as the difficulty of transportation or the difficulty of agreeing on a specific time for the lecture. The cost of mobility is almost non-existent either for the student or the trainee, and the lecturers do not receive monthly salaries as in traditional education, but receive a fee for each. In most cases, however, the provision of e-learning does not require huge budgets for the construction of large buildings and classrooms, which usually require allocation of funds for administration and maintenance. The spread of e-learning is also due to the flexibility of learning as the process of education or training is

conducted with great flexibility in time and space. The technical development and the intense competition between the providers of study programs and training have made these programs accessible to large segments of society, which in turn led to the spread of e-learning (Fayyad 2009)

### **History of e-learning:**

The foundations of e-learning have long been planted by many educators to the 1930 so-called programmed books used by US military soldiers as educational programs (not for the teacher to attend) and since then and today that idea is taught and modified and then studied and adjusted until I reached The fruit of which has reached the fruits of many educated in those countries (Namleh, 2006)

### **Literature review:**

The e-learning concept emerged in the mid-1990s and in the transition from the industrial age to the so-called information age, as a result of the widespread spread of information and communication technologies, which enabled universities and educational and training institutions to launch their software online.

E-learning (Mousa 2002) is the process of learning or receiving scientific information through the use of multimedia technologies in isolation from time and space. The communication between students and teachers is accomplished through various means, such as the Internet, intranet, extranet or interactive television.

The process of education according to the place and time and quantity and quality chosen by the learner, according to international standards include the absorption of the student curricula and programs obtained. Learning is primarily the responsibility of the learner himself.

A distinction must be made between e-learning and distance education, as the latter does not require the use of modern communication techniques where students or trainees can obtain scientific or training material in the form of printed books or materials without resorting to computers or multimedia, Or lecture halls. Modern technology affects the way global data is saved, stored and transported.

The vastness of the ability of electronic computers to store vast amounts of data and texts leads to the emergence of electronic messages that enable the user to access information directly (on this led the researchers to declare the disappearance of the traditional pattern of learning, or the traditional formula) CD's or through the form of the book or library. The introduction of the technological system in learning, in libraries and in books has a clear effect to push forward learning. (Mazen 2004).

The e-learning describes the use of information and communication technologies (ICT) to improve learning in education and training. Despite this, e-learning involves the use and application of various tools

and technologies, such as email, websites, blogs, social and commercial media, and the ability to access program elements on the Internet while running completely on the Internet (Heeger, 2010). Although e-learning platforms can be of different types, higher education institutions offer educational programs that involve the use of a web or Internet system to improve the academic performance of students (Lorrain, 2010: 22). Following Oye, Saleh & lahad (2011: 45), e-learning is basically a method of teaching and learning carried out through a network, a system or a separate personal computer (PC). From another perspective, Cooke (2014: 8) defines e-learning as a form of network support that is associated with functions that help teach and learn effectively. Courses and e-learning programs include web-based learning, computer-based learning, digital classrooms, and electronic activities (Heeger, 2010: 7). These programs provide content information for the platform, through intranet or extranet, sound and even MP3 movies, satellite TV transmission and CD-ROM. It is in this context that e-learning was originally called "Internet-based learning", and now e-learning is called "web-based learning". Technically speaking, e-learning is not only the guidance and guidance of mentors, but also includes learning adapted to the needs of specific students. According to Oye, Salleh and lahad (2011: 47), many terms are used to determine learning on the Internet. Therefore, it is considered that online learning and learning have different meanings (Cooke, 2014: 8). While the success of e-learning to improve the academic performance of students depends on the quality of information and communication technologies (ICT), the impact of e-learning on student performance can not be combined with the natural infrastructure of ICT (Niyazazari & Hosseini, 2012: 113). In the highly globalized world of today, the application and application of information and communication technology (ICT) in learning and teaching has achieved remarkable achievements in improving the academic performance of students in many disciplines and universities (Zameni, 2011: 82) Najafi (2012: 38) also confirmed that increasingly advanced multimedia information and communication technologies are used in the teaching process to clearly demonstrate the effectiveness of ICT in education systems. According to Mahdinejad & Amoi (2011: 114), the use of ICT-based teaching and learning in an interactive way can stimulate students' interest in acquiring knowledge and applying the knowledge acquired to solve social and economic problems in the workplace. real life. The use of information and communication technologies (ICT); including desktop computers and personal computers (PC), laptops, Internet and multimedia, has improved the ability to complete tasks more quickly and accurately during teaching and learning.

These characteristics change the functions of teachers and students, promote learning and lead to interactive learning, student autonomy, self-sufficiency and self-confidence (Zameni and Kardan, 2012: 26). By integrating the content and literacy of information, generally in textual and visual form, ICTs generate important academic and learning achievements. In other words, the inclusion of ICT in education has

transformed the role of teachers from purely educational resources to the supervision of the learning process. This increases self-sufficiency and self-confidence in student learning (Zameni et al., 2012: 82). Knowledge of ICT stands out as an effective tool for teaching and learning (Zameni and Karan, 2011: 25). With the widespread use of the Internet, the knowledge of a large number of students has become more effective. The use of ICT promotes the effective participation of students, strengthens learning, reduces the use of teaching methods and materials, responds to the interests and needs of students, trains students to control the progress of learning and speed of execution of the learning plans; Through the learning process Use animations, images and sounds together to achieve interaction between students and materials, students and teachers; By eliminating the limitations of traditional teaching methods and the limitations of time and space, abstract concepts difficult to understand can be solid and easy to learn. (Qaznavi, 2010: 46). The studies carried out by Mahdinejad and Amoi (2011: 108) on higher education institutions show that 54.2% of universities lack a fully equipped computer laboratory. As a result, many universities cannot comply with the ICT facilities required for the effective delivery of the course. This means that only a few universities can achieve quality assurance in the teaching process. This situation will undoubtedly lead to poor student performance. Therefore, it is necessary to further analyze the applicability of information and communication technology facilities, to use and maintain the situation to advise those interested in the higher education sector to improve the provision of technology services. information and communication in higher education institutions. use and storage. (Mahdinejad and Amoi (2011: 112) and Shekari (2010: 78) also found that the use of ICT facilities was low (46%) during the teaching and learning process of higher education institutes because teachers and students lacked sufficient resources To promote the limitations of teaching and learning, this means that teachers and students have limited opportunities and capacities to use ICT facilities to expand their knowledge and skills in curricular teaching, so the quality of the education provided to students will be inadequate and the low results, ICT facilities for higher education institutions in the teaching process include an adequate supply of hardware and software, irregular power supplies, limited opportunities for teacher training and institutional partnerships with agencies professional and legal in technical support. to (Shekari, 2010: 82 The challenges identified are not conducive to an effective teaching and learning process; therefore, most students do not know university ICT. It is considered that the provision of adequate ICT facilities and better management of existing ICT facilities improves the use of ICT facilities in higher education institutions to improve student achievement (Mahdinejad and Amoi, 2011: 11).

Increase the motivation in e-learning: The position of e-learning is different from the position of normal education, as this position includes one party of one of the parties to the educational process, which is the learner alone. Thus, the four elements mentioned above in the normal education position, do not apply to

the position of e-learning. Thus, strategies to increase motivation in a normal learning position are not necessarily effective in increasing the motivation of learners in an e-learning position. Therefore, it is necessary to think of other strategies that are suitable for e-learning. This is what the researchers started to do. The literary heritage in this subject witnessed a number of models, the most important of which are:

Attitude, Relevance, Confidence, Satisfaction (Keller 1987). Its components are:

First, attention: Attention-raising requires the inclusion of the learner in the educational situation using drawings, forms and educational problems. Problems that encourage the learner to search for solutions attract attention. If it turns out that the learner adapts to the situation over time and loses interest in it, the educational problems attract his attention and make him alert.

Second, relevance: Achieving relevance requires the identification of consistent goals that are linked to the learner's past experiences and are consistent with what he or she is doing. Clearly, this element is linked to the goal theory, which believes that goal setting and feedback provide motivation for the learner. Knowing that the goals may be educational goals, and may be goals. They may be close-term (short-term) and may be far-reaching (realized in a long time) (Hodges, 2004).

Thirdly, trust: Confidence-building requires helping learners build their own expectations of success. This element is related to the two theories of self-efficacy and attribution. The theory of self-efficacy emphasizes the individual's belief that he is able to accomplish in a certain way to achieve specific goals. Attribution theory emphasizes how the learner interprets success and failure. The learner may attribute his success or failure to himself or to factors outside himself. The model of attention, convenience, trust and satisfaction is that the educational process must help the learner in responding to the learning outcomes to the factors that are capable of controlling and controlling them.

Fourth, Satisfaction: Satisfaction requires the design of education in a way that enables employees to feel satisfied with education and attention to educational experiences. As it is clear, this element is related to the theory of expectation and value, which believes that employees expect some results from the behavior they perform, and the more the learner evaluates the results, the more willing he is to make the effort. Moreover, students should feel that the amount of work required is appropriate, and that courtesies do not exist. The strategies used to increase satisfaction with learning are verbal reinforcement, motivation, personal attention and feedback (Keller & Suzuki, 2002).

2A model connected to the time of Wlodkowski (model): This model is actually built on the results of research in both cognitive psychology, linguistic psychology and motivation psychology. Although it is similar to the model of attention, convenience, trust and satisfaction, it focuses more on the role that motivation plays in the stages of the learning process. This model divides the process of learning into three very important

stages, the beginning of the learning process, the stage of the learning process and the end of the learning process.

First, the beginning of the process of learning: At this stage, the focus is on building positive attitudes towards learning and working as much as possible to satisfy the needs of the learner, especially physiological needs. One of the most important strategies used to increase the desire to learn is to provide an interesting introduction and to set clear goals for the lesson and various strategies that help the learner develop a clear understanding of what is required for success in the lesson.

Second, the stage during the learning processes: At this stage, the focus is on the excitement (stimulating the learner and suspense). One of the motivational strategies used at this stage refers to engaging the learner through questions and jokes, diversifying the presentation style, and using various teaching methods from lecture to discussion to teamwork.

Third, the end-learning phase: At this stage, emphasis is placed on performance / competency and promotion. One of the motivational strategies used at this stage is feedback from time to time and informing the learner of his progress (Wlodkowski, 1985)

3 / Moshinski 'model' is a modern model that has been welcomed. Moshinsky believes there are two kinds of workers. Those with active lifestyles (usually with internal motivation and little external motivation) and those who have negative attitudes towards life (usually do not have these internal motivation and need more external motivation).

#### **Previous Studies:**

Rovai, Ponton, Wighting, & Baker, (2007) studied on student Motivation in Traditional Classroom and E-Learning Courses, Their study results give evidence that students who are taught by e-learning are more intrinsically motivated than students who go to Traditional Classroom, They found that there were no differences in three extrinsic motivation measures or a motivation. And also, the outcomes showed that graduate students were more intrinsically motivated than undergraduate students in e-learning and traditional education.

Liaw, Huang & Chens' (2007) researchs' aim was to examine learners' approach toward e-learning systems they believed that learners' approaches can be classified four different factors "e-learning as a learner autonomy environment, e-learning as a problem-solving environment, e-learning as a multimedia learning environment, and teachers as assisted tutors in e-learning.

Wan, Wang, & Haggerty (2008) in their study believed that having experience with ICT and virtual competence were two important elements that affected e-learning and had a positive influence on its results, They tested their hypotheses on a sample of 383 students partaking in online courses, Their findings approved

the effect of virtual capability and exposed a nuanced mechanism by which experiences with ICT influenced e-learning results.

Payne et al. (2009) investigated whether an e-learning approach which utilizes constructivist principles can be effectively used to train staffs in a highly specialized skill thought to need expert individuals and extensive prolonged training. Lastly their study displayed that workplace learners can be better assisted by e-learning settings rather than routine training as they let asynchronous learning and private study which are valued by staffs who have other requests on their time and are more relaxed getting tuition privately.

Paechter & Maier (2010) studied about Austrian students' favorite aspects of elearning courses that enable them for learning and about the time students choose online or face-to-face learning, the result of their study showed that Students chose online learning because of providing an obvious structure of learning material and they chose face-to-face learning for communication goals in which a shared comprehension has to be extracted.

Lawa, Lee, Yu (2010) believed that computer programming skills create one of the main proficiencies. Their research showed that improving well programming skills usually needs students to do a lot of training, which cannot stand if they aren't sufficiently motivated. A research model is adopted relating numerous motivating factors, self-efficacy, and also the influence as a result of e-learning system. Moreover the results indicate that a well assisted elearning situation increases learning motivation.

Yengina, Karahocab, Karahocab, & Yücelb, (2010), studied about the roles of teachers in e-learning, in their paper a model of teachers' role in the e-learning system has been discussed, According to the model they provide pathways for teachers to make online courses that involve students into e-learning more successfully.

Mateo et al. (2010) believed Technologies and especially information and communication technologies (ICT) are obstacle breaking in the existing social scenario and their use is becoming crucial for any skilled person, and their scope of use is becoming especially widespread in education due to the existence of communication out of the class through e-learning devices. Universities, which have an innovative role in instruction, are utilizing ICT-based approaches to adjust their learning methodology. In their study, they provide a model where students from first-world universities get ready and adjust course contents for use in educational institutions in developing countries. The finding of Evaluation of E-learning program versus traditional lecture instruction shows Lack of computer skills of students affects their abilities to communicate effectively with the instructor and failed to participate in a variety of online communication methods. Students in the study group were pleased with the e-learning program as a teaching method, but they did not want to take another e-learning program except if they had computer and Internet at home (Abdelaziz, Kamel, Karam, & Abdelrahman, 2011). The role of readiness factors in E-learning showed that organizational

readiness factors have a very imperative effect on E-Learning results; Also teachers' motivation and education are the critical factors in E-Learning (Keramati, Afshari-Mofrad, & Kamrani, 2011). Results about use of e-learning to enhance medical students' understanding showed that most of students were optimistic about the learning experience (O'Neill et al., 2011).

Kim & W. Frick (2011) focused on changes in student Motivation during Online Learning, The results of their study showed that motivation during self-directed e-learning (SDEL) was the best forecaster of positive change in motivation, which forecast learner agreement with SDEL. Crucial success factors for e-learning in developing countries demonstrate the significance of curriculum plan for learning performance.

Bhuasiri, Xaymoungkhoun, Zo, Rho, & Ciganek, (2012) believe that essentials for implementing effective e-learning in developing countries are technology awareness, motivation, and changing learners' behavior. Personalized Learning Course Planner with E-learning indicates that the offered system improved learning efficiency and student contentment. Further investigation of the participants indicated that suggesting a learning course suitable for students' previous test scores and priorities encouraged students to concentrate on the lesson (Jeong, Choi & Song, 2012).

Yacoba, Zuriyati, Kadirb, & Zurairahc (2012) studied about student awareness towards e-Learning in education their findings indicate that males and female are more aware towards e-learning in education at TATIUC. Afzal, Ali, Aslam Khan, & Hamids' (2010) study shows that extrinsic motivation and intrinsic motivation have positive impacts on academic performance of students and academics performance reinforces due to extrinsic motivation and intrinsic motivation. Isa Figueira & Manuel Duarte's (2011) study shows that, students with a deep approach to learning (i.e. intrinsic motivation and deep learning strategies) like to have a higher quality of learning, outcomes of their study demonstrate that the quality of the learning product enhanced with the interference on motivation.

Vermette, Orr, and Hall (1986) examined a study aimed at investigating the attitudes of students and teachers toward the use of computers in education. The study sample consisted of (116) students of primary school in Canada and (50) teachers and teachers. The results of the study showed that the attitudes of students and teachers toward computer use in education were negative.

Almalek (1995) conducted a study to determine the effect of the use of the method of computer education in the achievement of students in the first grade of secondary science in chemistry compared with the normal method, as well as the knowledge of the change in the attitudes of students towards computer. The study sample consisted of 49 students from two male and female schools from the Northern Jordan Valley, divided into two experimental groups of 24 male and female students, Teaching or sex, and the results showed that there was a positive change in the attitudes of the students after the experiment to the computer.

In a study by Soyibo and Hudson (2000), the goal of CAI was to investigate the attitudes of students towards biology and towards computer-assisted learning and its impact on students' understanding of the subject of reproduction in plants and animals, compared to the usual method (lecture and discussion) A study of 77 women in the 11th grade of Jamaica in Kingston, Kingston. In this study, three data collection tools were used: the CAI and the BAT in biology and the identification of trends toward biology.

The results of the study showed that the attitudes of students in the experimental group to the post-test towards biology and towards CAI were much better than those of students in the control group studied in the usual manner. The results also indicated the role of CAI in improving students' understanding of breeding in plants and animals.

The study of Mohammed (2000) investigated the effect of using the method of teaching computer biology in the achievement of the tenth grade students compared to the usual method of teaching, as well as the knowledge of the change in the attitudes of students toward computer after application. The study sample consisted of (68) male and female students (39 males and 29 females) from two schools belonging to the Directorate of Special Education in the Capital Governorate, divided into two groups, one of which is female (20), 14 students and the other experimental students (19) And (15) students. The results of the study showed that there was a positive change in the attitudes of the students of the experimental group towards computer occurred after the experimental treatment.

The study of Abu Jaber and Abu Omar (2000) aimed to identify the attitudes of students and teachers toward the use of computers in public schools in the governorates of southern Jordan. The study sample consisted of (700) students who were randomly selected in a stratified stratum. The sample of teachers consisted of (74) teachers. The results of the study showed that the attitudes of students and teachers were positive towards computer use.

Al-Mustapha (2002) conducted a study aimed at investigating the effect of the use of the method of teaching by computer in the attitudes of the students of the experimental group towards this method. The study sample consisted of (40) students and (40) students who were deliberately selected from the ninth grade students from two schools in the northern Jordan Valley and were divided into two groups in a random way: experimental and control. The results of the study showed that the attitudes of students have changed positively in the way of teaching computer.

## Methodology:

### Study Question

"What are the opinions of the staff members of the Faculty of Education of the Applied University of Al-Balqa to introduce e-learning in their teaching strategies"?

### Sample

Through the use of stratified random sampling techniques, including employees, the 30 participants (61.2%) selected in this study belonged to 49 teachers from the University of Applied Sciences of Al-Balqa.

### Method

A tool (questionnaire) was used to determine the teacher's input into the introduction of e-learning in the educational strategy of the College of Education. The questionnaire included 20 statements of positive and negative wording to exclude any set of responses. Several items were used in other questionnaires in other studies (Fournier, 2002), reformulated the study. The questionnaire is intended to be applied to the research population according to real and perceived working conditions. Use the five-point Likert scale to include: 1) strongly agree; 2) in agreement; 3) uncertain; 4) disagree; 5) strongly disagree.

The first draft of the questionnaire was sent to a panel of judges to determine its relevance and effectiveness. The referee made some minor changes. When re-examining the second draft, the referee's agreement on the design and effectiveness of the questionnaire reached 88.3%, which indicates that the questions used in the questionnaire were strongly verified (Nitko, 1996). Using the value of Alpha-Cronbach to calculate the correlation coefficient of 0.90 to test the internal reliability of the questionnaire, which indicates a high reliability( Nitko,1996, p. 69). The final questionnaire was sent to the study sample by ordinary mail.

### Data Analysis

The descriptive statistics were calculated using the software of the Social Science statistics package (SPSS). The statistical results of the opinion measures found in the questionnaire are shown in Table 1.

| Question | Statement  | Mean | Standard Deviation |
|----------|--|------|--------------------|
| 3        | Saves time and efforts of both teachers and students | 4.57 | .50                |
| 15.      | Technological infrastructure is crucial              | 4.43 | .50                |
| 1.       | Provides rich resources                              | 4.40 | .97                |

| Question | Statement   | Mean | Standard Deviation |
|----------|---|------|--------------------|
| 6.       | Provides massive education for learns                             | 4.37 | .81                |
| 13.      | Needs well prepared online materials                              | 4.33 | .48                |
| 12.      | Needs Sufficient training courses for implementation              | 4.30 | .84                |
| 17.      | Institutional recogrution of e-learning                           | 4.10 | .80                |
| 19.      | Establishing Evaluation mecharusm                                 | 4.10 | .88                |
| 14.      | Sufficient ground work is required                                | 4.07 | .83                |
| 2.       | Provides efficiency in teaching                                   | 4.03 | 1.38               |
| 18.      | Establishing support service such as multimedia                   | 4.03 | .93                |
| 16.      | Variant teaching strategies are required                          | 3.97 | .96                |
| 11.      | Standardize the content of course maternal                        | 3.93 | 1.11               |
| 10.      | Minimizes costs of teaching and learning                          | 3.83 | .95                |
| 20.      | Implementation should be gradual                                  | 3.73 | 1.11               |
| 8.       | Difficulty in mortaring evaluation process                        | 3.67 | 1.09               |
| 7.       | Easy to monitor teaching and learning process                     | 3.43 | 1.17               |
| 9.       | Results in decline in learners achievement                        | 2.73 | 1.17               |
| 5.       | Causes fragrnentation of work and loss of consistency in learning | 2.53 | 1.25               |
| 4.       | Reduces teamwork and collaboration between students               | 2.50 | 1.25               |

The average data shown in Table 1 indicate that there is no negative opinion on e-learning held by teachers who use the Faculty of Education. Only a small percentage (2.5%) of respondents tend to have a negative attitude towards the introduction of e-learning.

The standard deviation also shows that for most projects, the difference in score distribution is small, indicating that teachers tend to have similar views about claims about e-learning. The data collected also indicates to what extent respondents respond or respond in a similar way when answering questions. When the respondents provide the same or very similar answers, the standard deviation of their answers is small, as shown by the survey responses in Table 1. In summary, the data collected show that the teachers of the Faculty of Education generally They present positive opinions. E-learning

The statistical results of the opinion measurements used in the questionnaire are reported as "Frequency" and "Percentage". The analysis uses a frequency program to count the list and calculate the percentage. The resulting percentage sum is divided into five groups: 1) very much in agreement; 2) in

agreement; 3) uncertain; 4) disagree; 5) strongly disagree. The analysis provides results of statistical surveys that measure the contribution of teachers to e-learning in their teaching strategies.

## **Discussion**

The results of the survey show that teachers have a "universal vision" in the introduction of E-learning in the Faculty of Education. These results indicate that teachers tend to have an active look at E-learning. They believe that E-learning will benefit teachers, students and learning in general. The results of this study echo previous research by Kleiman (2000), Minton (2000), and Teather (2000). Despite these positive findings, the data still shows some reservations about e-learning. Most of the teachers surveyed expressed concern that the introduction of e-learning required an increase in the number of employees and students so that e-learning is economically viable.

The results of this study also reveal other broad opinions on the introduction of e-learning:

- E-learning provides a large amount of resources for students and teachers
- E-learning can improve the efficiency of teaching
- E-learning saves time and energy for teachers and students
- E-learning gives students more educational opportunities.

In summary, the results of this survey reinforce the results of similar studies by Haugland and Wright (1997) and Hartly and Robertson (2001).

While it remains to be seen whether e-learning will meet the current expectations and perspectives of teachers, it does indicate that they are open to the possibilities offered by e-learning.

Whether based on reality or illusions, other points of view / points of the Faculty of Education widely accepted are:

- Easily supervise the teaching process through e-learning
- E-Learning minimizes costs
- E-learning can help standardize course content and learning materials

The survey also showed that teachers do not believe that e-learning reduces teamwork and collaboration among students, or that it leads to fragmentation of work, loss of consistency in learning or decreased academic performance.

These findings are encouraging and support the use of e-learning in the College of Education of the Applied University of Al-Balqa. It is expected that electronic learning will meet minimal resistance internally. Still, the survey reveals key weaknesses. The faculty and staff believe that the process of monitoring and evaluation through e-learning can be difficult. The results also show that many requirements must be met

before e-learning can be implemented in a university education academy: teachers and students must receive adequate training; they must be able to obtain well-prepared online courses and instructional materials; an adequate basis must be established to ensure that all participants accept the use of e-learning. More importantly, the survey also showed that the transition to e-learning should be done gradually. In general, the results of this study reinforce the results of previous results of Davidson and Schofield (1997), McKenzie (1998), Mason (2001), Jamlan (2002), and Laurillard (2002).

## **Conclusion**

It is hoped that this study will help to better understand the perspectives of teachers who introduce e-learning in the College of Education of the Applied University of Al-Balqa. In general, the results indicate that teachers tend to have an active look at e-learning. These findings are consistent with the findings in the current literature. Current literature suggests that training must take place before students and teachers are exposed to e-learning. Therefore, a clear strategy is needed before being able to implement e-learning. The survey also showed that step-by-step implementation is desirable until teachers are accustomed to using e-learning techniques and are convinced of its application as a viable teaching / learning strategy. It is hoped that the results of this study will improve e-learning in universities and other distance education institutions in the region and in other parts of the world. Some important results from this study indicate that more research is needed. Many questions have not yet been answered. Will electronic learning increase or decrease teamwork among students? What is the best way to monitor student progress in a particular learning environment? Is standardization better than personalized content? If so, in which case is it better to standardize the content? What is the student's perception of e-learning? Clearly, research in e-learning is as extensive and potentially complex as technology itself. Future research may take the form of cooperation, and Al-Balqa Applied University works with other universities around the world. A similar case of review on whether to implement e-learning and how to do it is in the process of evaluation. There is still temporary experience in e-learning, and a thorough analysis of its results and evaluated effectiveness is needed.

## **Recommendations:**

- 1- Work on spreading e-learning in new majors and specialization.
- 2- Increased attention should be given to e-learning.
- 3- To work on the development of e-learning tools, in order to increase the efficiency of e-learning and its ease of use among learners.
- 4- The need for Jordanian Universities in general and most specially Al -Balqa Applied University to focus on increasing the use of e-learning in their specializations.

5- 5.Work on addressing negatives and enhancing the pros in e-learning.

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## دور التعلم الإلكتروني في زياد القابلية على التعلم من خلال زيادة الحافز من وجهة نظر معلمي جامعة البلقاء التطبيقية

الملخص: هدفت الدراسة الحالية إلى قياس تأثير استخدام التعلم الإلكتروني في التعليم على زيادة حافزية الطلاب على التعلم والتحقق من مدى تأثير التكنولوجيا على تحفيز الطلاب من الناحية التعليمية، وتحديد آلية تحفيز المتعلمين نحو التعلم الإلكتروني، والوسائل الإلكترونية المستخدمة في التعليم، وتحديد معوقات وعيوب التعلم الإلكتروني، وتحديد أثر التعلم الإلكتروني على درجات الطلاب. واستخدمت الدراسة نموذج المعادلة البنوية DeLone و McLean كمنوذج تجريبي لاختبار نجاح نظام المعلومات في بيئة التعليم الإلكتروني بالجامعة، إضافة إلى اختبار فرضيات الدراسة باستخدام تحليل PLS لمسح البيانات. وقد توصلت الدراسة إلى العديد من النتائج؛ من أهمها أنه من أجل نجاح استخدام التعلم الإلكتروني في تعليم الطلاب، لا بد من توفير نظام التعلم الإلكتروني الذي يوفر المعلومات التي يحتاجونها وأن يكون هذا النظام سهل الاستخدام، على الرغم من أن جودة النظام (الأنظمة السهلة الاستخدام) لا تسهم بشكل مباشر في توقع التأثير الشخصي، إلا أن لها تأثير غير مباشر، حيث إن جودة النظام وجودة المعلومات لها تأثير إيجابي على رضا المستخدمين، كما أن جودة المعلومات لها تأثير إيجابي على استخدام النظام، وهذا بدوره له تأثير إيجابي على رضا المستخدمين.

الكلمات المفتاحية: التعلم الإلكتروني، الرغبة في التعلم، التحفيز، أعضاء هيئة التدريس، جامعة البلقاء التطبيقية.