Usability Evaluation of E-School System in Thi Qar Province

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ABSTRACT

Over the past thirty years, the world has seen fast evolution in information Technology, and the applications of this science have become available to most governments over the world, including Iraq. Accordingly, the ministry of education in Iraq, since 2003 is making an effort to introduce the ideas of the e-learning technology to take advantage of the benefits of this technology by applying a set of information technology projects so as to prove and develop the education level over Iraqi students. This paper, considers the analysis of the students ' acceptance of e-school system, which is applied in more than forty Iraqi school in Thi-Qar province, so as to identify the most important factors that have a role in accepting students to apply e-school system. 100 questioners were distributed over the students, but only 76 were returned, SPSS software was utilized in order to analysis four factors had elected based on the related work and literature review. The finding represented in; the ease of use was not impact issue of the students acceptance and the important issue for the students is the belief of students that e-school is usefulness for enhancing their grades and education level. Finally, the outcomes can be employed to boost the guidelines on future work.

Index Terms— Usability evaluation, learning management systems, e-learning, e-School.

INTRODUCTION

In every person's life the education is fundamental core, in the other hand the development of countries depends on the level of education of their citizens. Absolutely, all governments are keen to raise the level of education by using the modern ways. One way that has proven an effective in developing education is by using Information Technology (IT) tools, which has opened a great new wide possibilities and facilities for human life [1]. Nowadays, Information technology tools, e-learning software and an international experience have become accessible over the world.

E-learning system is one of IT applications that contains a lot of approaches and tools which employed to develop the educational process over the world [2]. Furthermore the integration of IT and educational process will raise the education level. It is a modern successful technique to improve the knowledge by using and exploiting the Internet and networking [3, 4].

According to all above, Ministry of Education in Iraq is trying to introduce the concepts of e-learning in secondary schools, but most of those efforts have not yielded successful results [5]. In fact, e-school application is one of Ministry of Education projects that applied to enhance the education level. Accordingly, in Thi-Qar province , the team were five employees, who were connected with this project since 2014, according to the administrative order of the Directorate of Education in Thi Qar Province No. (15673, in 22/4/2014). The team's mission was supervision and follow-up of the e-school application in which is extended from popular system that was widely used abroad. Figure 1, shows the interface of the application (E-School Online) that used in this project. However, this project path was not gone well, in other words, the project was unsuccessful and terminated.

Figure 1. Thiqar E-School Online Interface.

According to the previous studies such as [2], in our country we have to build our own product design which is suitable and compatible with our economy, our society and our culture , not using someone else's. The progress significantly depends on the current situation in the country, we cannot easily extend popular applications that are widely used abroad [2]. Based on the fact above, this investigative study had proposed to expose the factors that influential in the success or failure of the e-school application and to get the student's opinion on using the new e- learning services with old traditional based system.

1. TERMINOLOGY
1.1 E- Government

The impact of information technology and Internet services has been visibly demonstrated in the private sector, such as media, tourism, travel and e-commerce. Therefore, governments over the world have worked on

this issue with great efforts to set up electronic government (e-government) to exploit the benefits of this electronic revolution [6, 7]. Governments of many countries have been consistently pursuing software of e-government based on the motivation that will result in improved the quality of life of their citizens [8].

E-government represented in the using of IT applications by citizens, business organizations, education and other stakeholders to get access to various government services online, without any third party intervention [9]. The benefits of e-government are assessed by its capacity to enhance transparency and accessibility of government programs [10, 11]. In Iraq, e-learning has been very important issue of the national effort to modify and enhance the public education.

On one hand, for Ministry of Education, e-learning is one of e-government successful program which can be used to improve the knowledge by using and exploiting the Internet and networking [3]; on the other hand, government of Iraq is making an attempt to use the e-government applications in public sectors.

1.2 E-learning

E-learning is a teaching method that uses web and information technology tools to facilitate teaching and learning [12]. It is, an enhanced method that allows students to undertake personalized learning in a flexible manner in terms of time and place, and may also reduce the operational costs of teaching [13]. Based on the anticipated benefits of e-learning for students, many education institutions around the world have made substantial investments in this technology, and e- learning now thought to be the fundamental tool to gain a high level of education [14].

Types of E-learning:

According to [15], the e-learning is classified on the presence of the learner and teacher at the same time or vice versa as well as where they are located

   i. **Distance Education**: A teaching method in which the means of communication such as the internet and networks are the solution tools to solve the problem of the distance between the students and the teacher

   ii. **Blended Learning**: A model in which there is a combination of traditional education and e-learning tools. Also named integrated learning.

   iii. **Mobile Learning**: A model when, there is use of mobile devices and wireless network to ensure that the students have access to educational content from anywhere at any time.

While, online learning is classified be into two types: asynchronous and synchronous [5, 16].

1- **Synchronous Learning**: The learning pattern combines both the teacher and the learner with teaching tools such as virtual classes, Bb Collaborate, instant chat, or chatting Whiteboard, Virtual classes, Video conferencing (video, audio) and Chat rooms. The teaching is an on-air or live education that requires learners to be present at the same time in front of computers to conduct discussion and conversation between learners themselves and between teachers. This discussion is conducted by various e-learning tools.

The advantages
- The learner has immediate feedback.
- Reduce cost.
- Do not go to school.

The disadvantages
- Its need for modern equipment and good network.

2- **Asynchronous Learning**: It is indirect education that does not require the learner and the teacher are present at the same time. the learner can get to study at any time he wishes. Asynchronous Learning tools include: Educational forums, social networks, digital educational content, e-mail, blogs and encyclopedias. Web, mailing lists, discussion groups, files transfers, and CDs.

The positives:
- Learner access to study according to the appropriate times.
- Receive the education according to the effort that the learner wishes to provide.
- Be able to re-study the material and refer to it electronically as needed.

The disadvantages:
- The learner does not receive immediate feedback from the teacher.
- Leads to introversion in education because it isolates it.
- Coeducation

Simultaneous and asynchronous uses are used sometimes, according to the activities proposed by the teacher; it gives the learner more freedom and achieves a kind of social in education.

1.3 Electronic School (E-School)

E-school system is one of the e-government applications which follow to the e-learning field; it is online software that uses computers and communication networks to deliver digital information to learners, both inside and outside the school walls. The characteristics of electronic school are the achievement of education (teaching material means not a target) and

transfer the status of the educational system from teacher to learner with the continuous development of programs and curricula of education, one of its objectives, achieve an education depends on understanding the characteristics of students and take into account differences.

The e-school software in this study is a website has been designed by Ministry of Communications in cooperation with a private software company as a one of e-government applications in Thi-Qar city. It contains a set of activities, similar to the traditional activities of the department, carried out by the teacher and student together at the same time regardless of their location. It is also scheduled e-planned uses in its design activities, educational materials based on the computer, it contents rich components of interactive multimedia software are supported on a local network or the Internet

The main interface in Arabic language, in addition to the English language option. The login to the website includes four options: student, teacher, guest and administrator; surely each user has different authorization than the other**.** Also, the main website page contains a list of the schools name through which the student can choose and connect with his school as shown above in Figure (1).
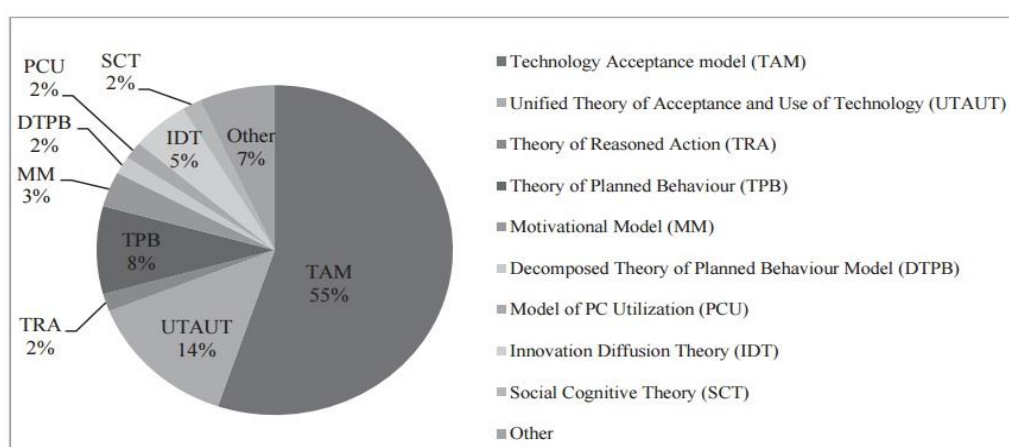
2.LITERATURE REVIEW

This study aims to detect what are the elements that impact on the acceptance of e-school application among the Iraqi students. The previous studies and related work are very important in order to achieve this objective. Large number of researches and approaches have tended what are the factors of the students' acceptance in developing; such as Iraq and developed countries. However, only few studies have discussed this issue on Iraqi situation. Previous studies such as [17, 18], indicated that the factors associated with acceptance of technology in general and e-learning differ from those in developed countries in developing countries such as Iraq [17, 18], Iraq is one of the developing countries [13], therefore this literature focuses on the acceptance's factors in developing country. Table (1), summarized some of studies that discussed the acceptance in developing countries like Iraq.

However, not all information technology applications are succeeding; it is related to the extent to the degree to which the user accepts the project and the continuity to use it. Furthermore, researchers in this area viewed e-learning as a kind of technology, and this rationale led the majority to believe that the reason why an individual student does not take up e-learning, is because they do not accept this technology [19].

Therefore, the scientists have proposed a lot of theories, models and approaches in order to determine what are the effecting factors, Figure (2) shows the most familiar approaches that used in this objective.

" Technology Acceptance Model " (TAM) is a widely-used approach that has been created by Davis (1989)), ground on the " Theory of Reasoned Action " (TRA); to know "What causes people to accept or reject information technology?" [20]; Figure (2) shows that in the acceptances of e-learning area, of the authors of (42) published research papers, more than half grounded their research on the TAM model; it is a successful measuring and also it use to understand how to improve user acceptance'[21].


Figure 2. TAM Used Ratio in   E-learning

Author(s)	Year	Objective(s)	model	factors(s)	Findings
"Iraqi University EFL Learners' Acceptance of Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use Technology (UTAUT) E-learning Models"	2016	Measure- Acceptance - e-learning Higher Education / Kurdistan -**Iraq.**	TAM and UTAUT	"Perceived- Usefulness -Perceived -Ease of Use - IT Knowledge -Perceived - Playfulness -Facilitating Conditions -Attitude toward Use"	Addressed: equipment , motivation and skills of using technology as obstacles to e-learning
"Measuring the Acceptance and Adoption of E-Learning by Academic Staff" [22].	2011	Acceptance - e-learning by lecturers (**Jordan**).	Theory of a Reasoned Behavior (TRA) & (TAM)	"Perceived - usefulness, -Perceived- ease of use -Normative pressure -Experience -Computer anxiety -Computer knowledge -Management support -Intention to adopt"	**Positive relationship**: -usefulness-intention to adopt - management support - computer knowledge - ease of use **-A negative relationship**: -for intention to adopt – normative pressure - computer anxiety--.

"Looking under the Bonnet: Factors Affecting Student Adoption of E-Learning Systems in Jordan" [23].	2009	Measure -Acceptance -e-learning / students **(Jordan)**	(TAM) developed	"-Perceived-usefulness, -Perceived- ease of use -Intention_ to Use -Subjective Norms -Internet Experiences -System Interactivity -Self_Efficacy -Technical Support"	self-efficacy –higher effect on -ease of use& ease of use a relationship:- computer -self-efficacy & ease of use. A student's experience - higher effect- ease of use A student's experience - no effect -usefulness.
"Determinants of E-Learning Acceptance: An Empirical Study in the Tunisian Context" [24].	2013	Measure-Acceptance- -e-learning- **Tunisian** employees.	Model (TAM).	"-Perceived_ usefulness, -Perceived _ease of use -Voluntariness of use -Technics Assistance -Content quality -Interpersonal influence -Self-Efficacy -External influence -Attitude towards use -Intention to use"	main factors: ease of use & IT experience& proposed technique
"Learner Differences in Perceived Satisfaction of an Online Learning: an Extension to the Technology Acceptance Model in an Arabic Sample" [5].	2015	Measure – satisfaction-Arabic students - online e-learning	modified TAM	"-Learning styles -Gender diversity) -online self_efficacy -Perceived_ usefulness -Perceived -ease of use -Perceived satisfaction"	usefulness - higher impact on -self-efficacy ease of use - no impact on-satisfaction styles & gender - no direct influence on-dependent factors.
"Factors Affecting Students' Acceptance of e-Learning Environments in Developing Countries: A Structural Equation Modeling Approach" [25].	2013	Measure -Acceptance -e-learning - students, **Iraq.**	extended TAM	"-Perceived Ease -Use -Perceived_ Usefulness -Usage Behaviour -Quality of Work Life -Behavioural Intentions"	Usefulness & ease of use & social Norms& lifestyle effect on -students' behavioral intention
"E-Learning acceptance in a developing country: A case of the Indonesian Open University" [26].	2007	Detect the factors of Acceptance-E-learning **Indonesia**	(TAM)	"-Computer Self-Efficacy -Convenience -Instructional Design -Technological Factor -Instructor's Characteristics -Perceived -Ease of Use -Perceived_ Usefulness -Intention to_ Use"	Instructional design & technological - a high effect on the ease of use & usefulness convenience & instructor's characteristics- no effect on- ease of use. ease of use - strong effect -usefulness & intention to use. .
"Applied the Technology Acceptance Model in Designing a Questionnaire for Mobile Reminder System" [27]	2017	Detect the factors of acceptance Mobile Reminder System	(TAM)	"-Perceived _ usefulness items -Perceived Ease _ Use Items -User _Satisfaction -Attribute _of Usability"	Usefulness & user satisfaction & Attribute of usability & ease of use - a higher effect - overall satisfaction

Table 1: E-learning Researches in (Developing Countries).

TAM posits; there are two particular beliefs that impact on a client's attitude towards system adoption: perceived ease of use (PEU) and perceived usefulness (PU) [20]. PU, refers to the degree to which an individual believes that the use of a new enhances their job performance [20]. 'Perceived ease of use' is defined as the degree to which an individual believes that the use of that system does not require an increase in effort: see Figure (3).
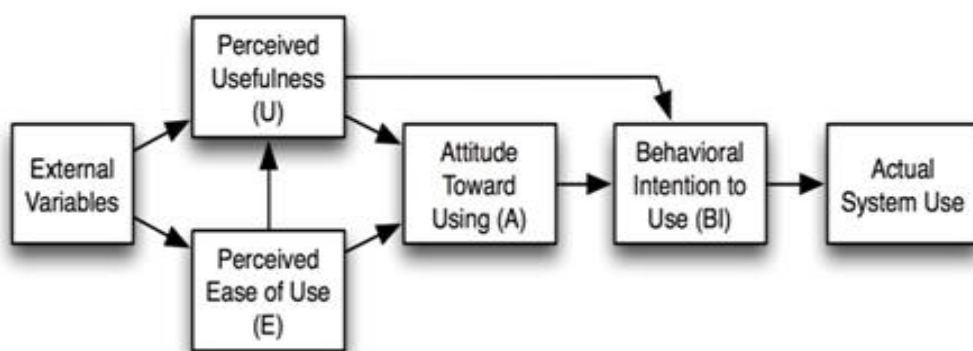
Figure 3. TAM Model

3.RESEARCH METHODOLOGY AND TOOLS

Kothari (1990, p. 8) defined the research methodology as " a way to systematically solve the research problem" and "research methods do constitute a part of the research methodology".

This study was conducted in Iraqi schools in Thi-Qar state. E-School system has been established for students in more than 40 public schools in Thi-Qar city. To understand the effectiveness of using the e-school application, this research focused on the interface design and content of the e-school system to detect factors relevant to users' continuance intention to use the application. To elicit the data used in the study, 100 questionnaires were distributed to the students through the teachers; however, only 76 copies (representing a response rate of 76 %) were collected back from respondent.

The questionnaire contained 15 questions answered by ticking the box that reflects the conviction of the participant as shows in the Appendix. All questions format taken from previous studies that addressed in the same subject of this study such as . Questionnaires are formatted based on five point of Likert-scale questionnaire; the most commonly used to measure the emotional factors, it ease and successful [28]. All questions were translated into native (Arabic) language for students. The statistical

software, (SPSS V.22) is used in this research for the purpose of analyzing the results of the questionnaire.

3.1Theoretical Framework

As shown in the literature review, a lot of studies on the acceptance of e learning have used the original model of TAM [29, 30]. As well as in some previous studies such as [31], the external factor are not included in this study since, there is no need to include external factors before investigate the factors [30]. In the same context, this study used the original model without external variables as shows in Figure (4).
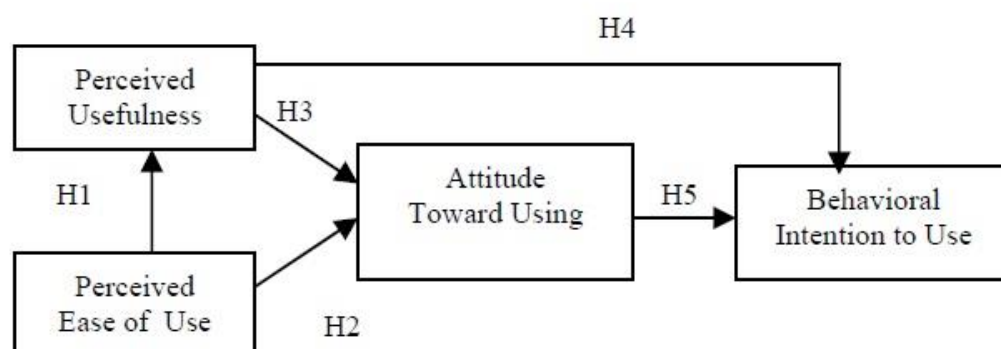
Figure 4. The Theoretical Framework (adapted from [31])

Therefore, based on the previous researches that using TAM model , five hypotheses are created for this research as follows:

H-1: PEU has effect on the PU

H-2: PEU has effect on Attitude Toward Using (ATU).

H-3: PU has effect on ATU

H-4: PU has_ effect on intention to use.

H-5: Attitude towards using_ has a significant effect on intention to use.

3.1Measures

At first, a pilot study has been done for 30 participants in order to making sure that the questions are understandable to the participants and to ensure there is no misunderstanding, all values scores are above 7.00. Although, the formats of questions were drawn from the previous study, measurement of validity and reliability had evaluated and supported by Cronbach alpha scales. Furthermore the values scores for all 76 samples are above 0.842. Table 1 shows the reliability of the measurement scales. Hence, the results shows that all the questionnaire is a reliable [32].

Scale	Cronbach's alpha
✓ PEU	0.941
✓ PU	0.859
✓ Attitude towards using	0.874
✓ Intention to use	0.842

Table 2. Reliability by Cronbach alpha

4.Results and Discussion

This study considers the analysis of e-school application that applied for more than forty schools in Thi-Qar province, so as to identify the most important factors that have a role in accepting students to apply e-school system. SPSS software was utilized in order to analysis 76 questioners to detect the impact factors among four factors had elected based on the related work and literature review.

As shown in Table (4) and Frequency Tables in the Appendix, the analyses of the questionnaire
shows the following findings :

- For the first factor (Perceived Ease of Use), the ratio: between (1.66/5 = 33.%) and (1.83/5 =36%) ; this means that all students confirmed that the application (e-school), is not easy to use and this corresponds to the opinion of the teachers and the team. It supposed, difficulty of using the application will have a negative effect on the students accept e-school.
- For the rest of the three factors, all have achieved a high ratio above (4.38/ 5 = 87.6%); it is positive ratio for the acceptance of the e-school project.

From all above, the students' feeling and belief that e-learning will yield positive results in developing their abilities and scientific level make them accept the idea of e-learning, although the tools are not easy because, students have to improve their grades. therefore accept any project they believe will achieve this result However, the applications that are easy to use will certainly be better for improving student learning.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Ease of Use					
▪ Q1	76	1	5	1.83	.855
▪ Q2	76	1	5	1.75	.835
▪ Q3	76	1	4	1.66	.684
▪ Q4	76	1	4	1.74	.737
Perceived Usefulness					
▪ Q1	76	2	5	4.46	.621
▪ Q2	76	2	5	4.43	.660
▪ Q3	76	2	5	4.38	.673
▪ Q4	76	2	5	4.43	.680

Attitude Toward Using					
▪ Q2	76	4	5	4.76	.428
▪ Q3	76	2	5	4.64	.582
▪ Q1R	76	4	5	4.64	.482
▪ Q4 R	76	4	5	4.71	.457
Intention to Use					
▪ Q1	76	3	5	4.42	.659
▪ Q2	76	2	5	4.22	.776
▪ Q3	76	3	5	4.45	.598
Valid N (listwise)	**76**				

Table 3. Descriptive Statistics

References

[1] M. Tarek, E. K. Mohamed, M. M. Hussain, and M. A. Basuony, "The implication of information technology on the audit profession in developing country: extent of use and perceived importance," *International Journal of Accounting & Information Management,* vol. 25, 2017.

[2] L. Andreicheva and R. Latypov, "Design of E-learning System: M-learning Component," *Procedia-Social and Behavioral Sciences,* vol. 191, pp. 628-633, 2015.

[3] V. Stara, M. P. Penna, and S. Mocci, "E-learning, Usability and Accessibility: a systemic synergy for web based training," 2005.

[4] A. D. Basha, S. H. Mnaathr, K. Abdulrazzaq, A. Alminshid, and I. N. Umar, "Importance Applications Mobile Agent technology for Virtual E-learning Environment: Proposed Model."

[5] A. Al-Azawei and K. Lundqvist, "Learner Differences in Perceived Satisfaction of an Online Learning: An Extension to the Technology Acceptance Model in an Arabic Sample," *Electronic Journal of e-Learning,* vol. 13, pp. 408-426, 2015.

[6] Z. Huang, "Usability and credibility evaluation of electronic governments: users' perspective," Brunel University, School of Information Systems, Computing and Mathematics, 2010.

[7] S. H. MuhammadA, A. MustaphaB, and K. HarunaC, "Massive Open Online Courses: Awareness, Adoption, Benefits and Challenges in Sub-Saharan Africa."

[8] P. Suri, "Measuring E-Governance Performance," in *Strategic Planning and Implementation of E-Governance*, ed: Springer, 2017, pp. 25-39.

[9]   K. Bhaskaran, H. J. Forbes, I. Douglas, D. A. Leon, and L. Smeeth, "Representativeness and optimal use of body mass index (BMI) in the UK Clinical Practice Research Datalink (CPRD)," *BMJ open,* vol. 3, p. e003389, 2013.

[10]   R. Kumar, A. Sachan, and A. Mukherjee, "Qualitative approach to determine user experience of e-government services," *Computers in Human Behavior,* vol. 71, pp. 299-306, 2017.

[11]   S. K. Srivastava and P. K. Panigrahi, "The Impact of E-government and E-business on Economic Performance: A Comparative Study of Developing and Developed Countries," *Journal of Contemporary Issues in Business and Government,* vol. 22, pp. 36-50, 2016.

[12]   J. G. Ruiz, M. J. Mintzer, and R. M. Leipzig, "The impact of e-learning in medical education," *Academic medicine,* vol. 81, pp. 207-212, 2006.

[13]   S. Mehta, F. Clarke, and P. Fleming, "An assessment of student experiences and learning based on a novel undergraduate e-learning resource," *British Dental Journal,* vol. 221, pp. 131-136, 2016.

[14]   S. H. Mnaathr, A. D. Basha, K. Abdulrazzaq, A. Alminshid, and R. Jamaludin, "The opportunities and Difficulties for M-learning to Enhancing students learning results."

[15]   J. Bidarra and E. Rusman, "Towards a pedagogical model for science education: bridging educational contexts through a blended learning approach," *Open Learning: the journal of open, distance and e-learning,* vol. 32, pp. 6-20, 2017.

[16]   S. Hrastinski, "Asynchronous and synchronous e-learning," *Educause quarterly,* vol. 31, pp. 51-55, 2008.

[17]   W. Bhuasiri, O. Xaymoungkhoun, H. Zo, J. J. Rho, and A. P. Ciganek, "Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty," *Computers & Education,* vol. 58, pp. 843-855, 2012.

[18]   A. Ngampornchai and J. Adams, "Students' acceptance and readiness for E-learning in Northeastern Thailand," *International Journal of Educational Technology in Higher Education,* vol. 13, p. 34, 2016.

[19]   B. ŠUmak, M. HeričKo, and M. PušNik, "A meta-analysis of e-learning technology acceptance: The role of user types and e-learning technology types," *Computers in Human Behavior,* vol. 27, pp. 2067-2077, 2011.

[20]   F. D. Davis, R. P. Bagozzi, and P. R. Warshaw, "User acceptance of computer technology: a comparison of two theoretical models," *Management science,* vol. 35, pp. 982-1003, 1989.

[21]   H. Chen, W. Rong, X. Ma, Y. Qu, and Z. Xiong, "An Extended Technology Acceptance Model for Mobile Social Gaming Service Popularity Analysis," *Mobile Information Systems,* vol. 2017, 2017.

[22] B. A. Al-alak and I. A. Alnawas, "Measuring the acceptance and adoption of e-learning by academic staff," *Knowledge Management & E-Learning: An International Journal,* vol. 3, pp. 201-221, 2011.

[23] M. M. Abbad, D. Morris, and C. De Nahlik, "Looking under the bonnet: Factors affecting student adoption of e-learning systems in Jordan," *The International Review of Research in Open and Distributed Learning,* vol. 10, 2009.

[24] B. Rym, B. Olfa, and B. M. B. Mélika, "Determinants of E-Learning Acceptance: An Empirical Study in the Tunisian Context," *American Journal of Industrial and Business Management,* vol. 3, p. 307, 2013.

[25] A. Tarhini, K. Hone, and X. Liu, "Factors affecting students' acceptance of e-learning environments in developing countries: a structural equation modeling approach," *International Journal of Information and Education Technology,* vol. 3, p. 54, 2013.

[26] R. Hussein, U. Aditiawarman, and N. Mohamed, "E-learning acceptance in a developing country: a case of the Indonesian Open University," in *German e-Science conference*, 2007.

[27] H. M. Abu-Dalbouh, M. Al-Buhairy, and I. Al-Motiry, "Applied the Technology Acceptance Model in Designing a Questionnaire for Mobile Reminder System," *Computer and Information Science,* vol. 10, p. 15, 2017.

[28] T. Nemoto and D. Beglar, "Likert-Scale Questionnaires," ed: JALT, 2014.

[29] W. Money and A. Turner, "Application of the technology acceptance model to a knowledge management system," in *System Sciences, 2004. Proceedings of the 37th Annual Hawaii International Conference on*, 2004, p. 9 pp.

[30] M. N. M. Salleh1u, R. A. Yaacob2u, A. H. M. Shapri, and N. F. M. Shapri, "The relationship between perceived ease of use, perceived usefulness, and intention to use of IEEE Xplore among students and lecturers at SoME in University Malaysia Perlis."

[31] M. Masrom, "Technology acceptance model and e-learning," *Technology,* vol. 21, p. 81, 2007.

[32] T. Raykov, "Scale reliability, Cronbach's coefficient alpha, and violations of essential tau-equivalence with fixed congeneric components," *Multivariate Behavioral Research,* vol. 32, pp. 329-353, 1997.

APPENDIX

Study Questionnaire in Arabic

أعزائي الطلبة

هذه الدراسة حول العوامل المؤثرة على قبول الطلبة في استخدام مشروع المدرسة الالكترونية الذي هو احد تطبيقات التعليم الالكتروني . هذا المشروع تشرف عليه وزارة التربية في العراق – المديرية العامة للتربية في محافظة ذي قار , بالتعاون مع وزارة الاتصالات العراقية . لغرض دعم عملية التعليم في المدارس الابتدائية والثانوي

هدف الاستبيان : الحصول على بيانات تتعلق بتقبل الطلبة للمشروع:

يرجى منك قراءة الاستبيان ومن ثم اختيار الإجابة التي تناسبك أكثر من غيرها، حيث لا توجد اجابة خاطئة او اجابة صحيحة ، الاجابة هنا تعبر عن رأيك الحقيقي في استخدام المدرسة الالكتروني.

نبذة عن التعليم الإلكتروني: يعتبر وسيلة لتوصيل مواد ا لتعلم من خلال استخدام أدوات التكنلوجيا او الموبايل والانترنيت لتسهيل توفير معلومات ودروس التعلم في أي مكان واي وقت.

المدرسة الالكترونية : هي حزمة برمجية (Software) جهزت على خادم Server ،، (صممت لدعم وإدارة عمليات التعليم الإلكتروني ومساعدة المعلمين والمدرسين على,

استخدام الأنترنت في عملية ا لتعلم والتواصل مع الطلبة، ونشر مواد التعليم بطريقة سهلة دون المعرفة العميقة بأساليب البرمجة

إن مشاركتك في الاستبيان اختياري ولك حرية الانسحاب في أي و قت دون إبداء اي اسباب

كما إن إجابتك وبياناتك سوف تكون سرية ولا يذكر فيه اسمك. أن الوصول لهذه البيانات, سيكون مقتصرا على الباحث . كذلك نؤكد بان اجابتك لن تكون جزأ من تقيمك في المقررات الخاصة بك وانما تستخدم لأغراض البحث فقط

ولكم الشكر الجزيل مع التقدير...

الاسئلة:

يرجى وضع علامة في المربع الذي يعبر عن رأيك مقابل السؤال في الجدول ادناه.

لا أوافق بشدة	لا اوافق	غير متأكد	اوافق بشدة	أوافق	العبارة	التسلسل
					لقد وجدت المدرسة الإلكترونية سهلة الاستخدام	1
					تعلم استخدام المدرسة الإلكترونية سيكون من السهل بالنسبة لي	2
					كان تفاعلي مع المدرسة الإلكترونية واضحا ومفهوما	3
					سيكون من السهل بالنسبة لي العثور على المعلومات في المدرسة الإلكترونية	4
					استخدام المدرسة الإلكترونية تعزيز لدراستي في التعلم	5
					استخدام المدرسة الإلكترونية من شأنه تحسين مستواي في الدروس	6
					استخدام المدرسة الإلكترونية من شأنه زيادة تعليمي	7
					لقد وجدت المدرسة الإلكترونية مفيدة.	8
					أنا لا أحب فكرة استخدام المدرسة الإلكترونية.	9
					لدي موقف إيجابي عموما تجاه استخدام المدرسة الإلكترونية	10
					أعتقد أنه (سيكون) فكرة جيدة لاستخدام هذا المدرسة الإلكترونية لدراستي	11
					استخدام المدرسة الإلكترونية هي فكرة غبية	12
					أعتزم استخدام المدرسة الإلكترونية خلال دراستي	13
					سوف اعود لتصفح المدرسة الإلكترونية في كثير من الأحيان	14
					لي نية لزيارة المدرسة الإلكترونية في كثير من الأحيان لغرض دراستي بالطبع	15

Study Questionnaire in English:
Statements are with : 5- Strongly Agree, 4- Agree, 3- Uncertain, 2- Disagree and 1- Strongly Disagree
   A. Perceived Ease of Use (PEOU)
   1- EASE1: I found E-School easy to use.
   2- EASE2: Learning to use E-School would be easy for me.
   3- EASE3: My interaction with E-School was clear and understandable.
   4- EASE4: It would be easy for me to find information at E-School.
   B. Perceived Usefulness (PU)
   5- USE1 : Using E-School would enhance my effectiveness in learning.
   6- USE2 : Using E-School would improve my course performance.

7- USE3 : Using E-School would increase my productivity in my study.

8- USE4 : I found E-School useful.

C. Attitude Toward Using (ATTITUDE)

9- ATT1: I dislike the idea of using E-School. (R)

10- ATT2: I have a generally favorable attitude toward using E-School.

11- ATT3: I believe it is (would be) a good idea to use this E-School for my Study.

12- ATT4: Using E-School is a foolish idea. (R)

Note: R = reversed item

D. Intention to Use (ITU)

13- INT1: I intend to use E-School during the semester.

14- INT2: I will return to E-School often.

15- INT3: I intent to visit E-School frequently for my course work.

Frequency Table

Perceived Ease of Use -Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	28	36.8	36.8	36.8
	Disagree	38	50.0	50.0	86.8
	Uncertain	7	9.2	9.2	96.1
	Agree	1	1.3	1.3	97.4
	Strongly Agree	2	2.6	2.6	100.0
	Total	76	100.0	100.0	

Perceived Ease of Use -Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	31	40.8	40.8	40.8
	Disagree	38	50.0	50.0	90.8
	Uncertain	4	5.3	5.3	96.1
	Agree	1	1.3	1.3	97.4
	Strongly Agree	2	2.6	2.6	100.0
	Total	76	100.0	100.0	

Perceived Ease of Use -Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	33	43.4	43.4	43.4
	Disagree	38	50.0	50.0	93.4

	Frequency	Percent	Valid Percent	Cumulative Percent
Uncertain	3	3.9	3.9	97.4
Agree	2	2.6	2.6	100.0
Total	76	100.0	100.0	

Perceived Ease of Use -Q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	30	39.5	39.5	39.5
	Disagree	39	51.3	51.3	90.8
	Uncertain	4	5.3	5.3	96.1
	Agree	3	3.9	3.9	100.0
	Total	76	100.0	100.0	

Perceived Usefulness -Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Uncertain	2	2.6	2.6	3.9
	Agree	34	44.7	44.7	48.7
	Strongly Agree	39	51.3	51.3	100.0
	Total	76	100.0	100.0	

Perceived Usefulness -Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.6	2.6	2.6
	Uncertain	1	1.3	1.3	3.9
	Agree	35	46.1	46.1	50.0
	Strongly Agree	38	50.0	50.0	100.0
	Total	76	100.0	100.0	

Perceived Usefulness -Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.6	2.6	2.6
	Uncertain	2	2.6	2.6	5.3

		Frequency	Percent	Valid Percent	Cumulative Percent
	Agree	37	48.7	48.7	53.9
	Strongly Agree	35	46.1	46.1	100.0
	Total	76	100.0	100.0	

Perceived Usefulness -Q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.6	2.6	2.6
	Uncertain	2	2.6	2.6	5.3
	Agree	33	43.4	43.4	48.7
	Strongly Agree	39	51.3	51.3	100.0
	Total	76	100.0	100.0	

Attitude Toward Using -Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	18	23.7	23.7	23.7
	Strongly Agree	58	76.3	76.3	100.0
	Total	76	100.0	100.0	

Attitude Toward Using -Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Uncertain	1	1.3	1.3	2.6
	Agree	22	28.9	28.9	31.6
	Strongly Agree	52	68.4	68.4	100.0
	Total	76	100.0	100.0	

Intention to Use - Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Uncertain	7	9.2	9.2	9.2
	Agree	30	39.5	39.5	48.7
	Strongly Agree	39	51.3	51.3	100.0
	Total	76	100.0	100.0	

Intention to Use - Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	3.9	3.9	3.9
	Uncertain	7	9.2	9.2	13.2

		Frequency	Percent	Valid Percent	Cumulative Percent
	Agree	36	47.4	47.4	60.5
	Strongly Agree	30	39.5	39.5	100.0
	Total	76	100.0	100.0	

Intention to Use - Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Uncertain	4	5.3	5.3	5.3
	Agree	34	44.7	44.7	50.0
	Strongly Agree	38	50.0	50.0	100.0
	Total	76	100.0	100.0	

Attitude Toward Using -Q1 R

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	27	35.5	35.5	35.5
	5	49	64.5	64.5	100.0
	Total	76	100.0	100.0	

Attitude Toward Using -Q4 R

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	22	28.9	28.9	28.9
	5	54	71.1	71.1	100.0
	Total	76	100.0	100.0	

تقبل الاستخدام لنظام المدرسة الالكترونية في محافظة ذي قار

الخلاصة

على مدى السنوات الثلاثين الماضية، شهد العالم تطورا سريعا في علم تكنولوجيا المعلومات واصبحت تطبيقات هذا العلم متوفرة لمعظم حكومات دول العالم ومنها العراق. تبعا لذلك , فان وزارة التربية في العراق ومنذ العام 2003 تبذل جهدا لأجل إدخال مفاهيم تكنلوجيا التعليم الإلكتروني في المؤسسات والمدارس التابعة لها للاستفادة من فوائد هذه التكنلوجيا ولدعم وتطوير مستوى التعليم بين الطلبة من خلال تطبيق مجموعة من مشاريع تكنلوجيا المعلومات. هذا البحث يتضمن دراسة وتحليل لمدى تقبل الطلبة لمشروع نظام المدرسة الإلكترونية, احد مشاريع وزارة التربية في هذا المجال لأكثر من اربعين مدرسة في محافظة ذي قار ولتحديد العوامل التي قد تؤثر في نجاح أو فشل هذا المشروع. تم توزيع مائة استبانة بين الطلبة ، ولكن فقط ستة وسبعون استمارة استبانة تم استلامها من المشاركين في الاستبيان والتي تم استخدامها فعليا في هذا البحث. البرنامج الاحصائي المعروف (SPSS) , قد استخدم لغرض تحليل نتائج أربعة عوامل تم اختيارها استناداً إلى استعراض الدراسات والبحوث والأدبيات السابقة ذات الصلة. نتائج هذه الدراسة اظهرت أن عامل سهولة الاستخدام لنظام المدرسة الالكترونية لم يكن عاملا مؤثرا في تقبل الطلبة لاستخدام التكنلوجيا, وان العامل المهم بالنسبة لتقبل الطلبة هو اعتقادهم وايمانهم بأن المدرسة الإلكترونية ستكون مفيدة لتعزيز درجات التقييم ومستوى تعليمهم. وأخيرا، هذه الدراسة تساهم في مجال البحث العلمي بان نتائجها يمكن استخدامها في الدراسات البحثية لتقديم توصيات للعمل في المستقبل.