

# **An Assessment of the Factors Affecting E-Learning in Jordan Primary Schools: A Critical Concept of Acceptability**

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**Abstract.** There have been several attempts to foster the developmental contribution to the entire standard of education in Jordan. However, with the huge rise in population growth through the migration of other nationalities into Jordan, the standard of the primary education has been faced with a huge lack of adaptation of the technology driven world. This has negatively affected the productivity of the Jordanian nationalities studying abroad. Several studies have attempted to deal with the issue of the higher institutional level; which seems tough due to the negative perception of the parents of the pupils in primary education to embrace E-Learning. A major setback is seen through the negative impact of the ICT to the cultural, religious and willingness to accept E-Learning. This is thus a huge problem that needs addressing to mitigate the effects of technological denial in primary school. This study aims at addressing, assessing and investigating the factors that affects the implementation and use of E-Learning in Jordan primary school setting. When E-Learning is added into the primary education, the major transformation will thus bring about better policy formulation, academic competition and the overall knowledge impact of the country will be better off. It will thus be significant in policy framing for a better globalization in Jordan Educational stability.

**Keywords:** E-Learning, Jordan, UTAUT, Religious, Educational, Culture.

## **INTRODUCTION**

Electronic Learning (e-Learning) as widely called has been one of the most important form of knowledge actualization in the recent decades. The old conventional form of learning has been slightly reduced due to the high emergence of technological relationship enclaving the world. This term e-Learning is usually termed as the way, form and manner of knowledge acquiring and sharing using the Internet, devices and electronic installations. There has not been an official definition of E-Learning, however, the most common definition of E-Learning according to (Dublin, 2003) has themed the definition based on the application domain, learning methods, specialization and processes (Rossi,

2009). This therefore makes it difficult to actualize a general definition for E-Learning. In (Oblinger & Hawkins, 2005), it is thus submitted that there no common definition for the general acceptability of E-Learning. Several researchers and organization have proved keen intention to form an acceptable way of its description. Recent findings in (M. Abbad, 2011; M. M. Abbad, Morris, & De Nahlik, 2009) described E-Learning as the means of leaning that is enabled in a way ahead of the conventinal board and chalk as electronically. European Commision (2001) submitted that the use and reuse of multimedia driven approaches and the Internet to increase the fundamental quality of accessing facilities, services in close or geo-locational distances is reffered to as E-Learning.

E-learning in this study shall adopt the submission of (Dublin, 2003), (Oblinger & Hawkins, 2005) to refer to it as a form of information, knowledge, process and services of knowledge acquiring using the technological devices, environment and plartfom on remote and Interconnected network (Internet) termed E-Learning. This therefore is seen as a form of acceptability through intention, motivation and skills of disseminating knowledge electronically. E-learning has received huge implementation and acceptability in decades in most developed countries and lesser implementation in developing countries and almost at the infancy in under-developed countries.

The case of Jordan is termed and categorized among the developing countries. Jordan has been an historical hub of educational developments since the early years of the Arab peninsula. Its popularity as a nation is most suitable in description among the Arab teachers known as (*Mualim, Ulama*) teachers/scholars. With the developmental revolution in teaching and learning as described in (Jennex, 2005), (Jennex & Croasdell, 2005), (Twigg, 2003), the long cultural form of writing and reading on leaves, skins and slates are not acceptable. Therefore the need to subscribe into the future of electronic aiding in learning is of the most essence. E-learning in Jordan has low or little acceptability in implemetation especially among the secondary school phase. Electronic devices, gadgets and other forms of learning aside the black and white boards are alien to the society especially among younger pupils. This is thus seen as a backward declination to the international education competition of the Jordanians when they meet the developed country peers. Inculcating the form of learning into the younger generation is thus a gigantic task to the instructors and tutors.

Earlier in history, home education has been the most fruitful form of the Jordan populace to meet the need of achieving basic education. With the advent of the Internet, the need to migrate from the cultural direction became necessary. However, due to some societal influence and control, young age pupils are denied the flexibility of using the most common disposable form of E-Learning device (i.e. the mobile phone). This thus has not been a good source of bridging the wide acceptability of E-Learning in primary schools. In line with this condition, this study has seen the worthiness of accepting the Unified Theory of Acceptance and Use of Technology (UTAUT) as a bridging aid to curtail the societal disposition of the use of the technology among Jordanian pupils.

Consequently, several factors have been noticed to affect the adaptation of E-learning in developing countries like Jordan. So investigating the needed factors is of the essence

following the popular phrase of "catch them young". It is thus worthy to inculcate few modes of E-Learning to primary schools for pupil development.

In conformity with the theory, much is expected from the teacher's perspective to the pupil's positive usage of the E-Learning approaches to better the standard of education in the cultural Jordanian education process. The Gender as described in UTAUT has significant influence to the pupil of the secondary school. This study shall study and assess the factors of education affectability in Jordan by introducing some elements and variable among other factors such as Age of the teachers, the experiences, family income rates and opportunities and the willingness of accepting the Information and Communication Technology (ICT) form of disseminating knowledge among primary school pupils.

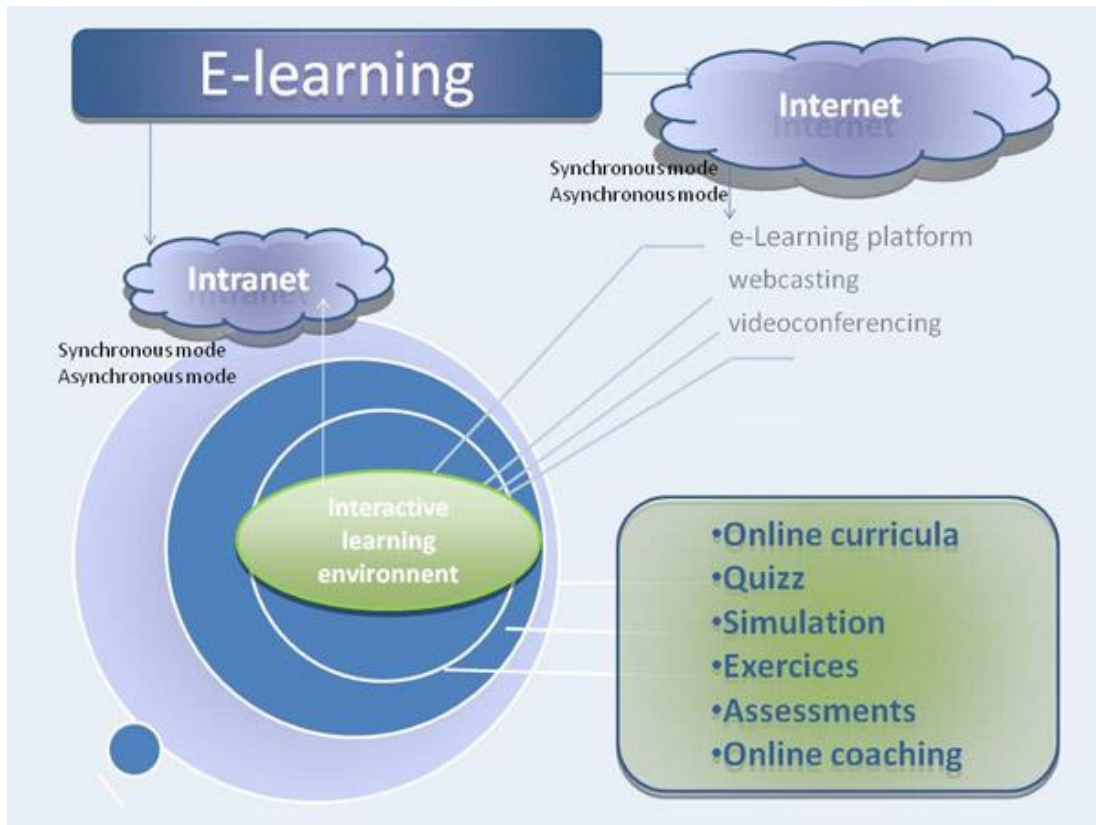
## **RELATED STUDIES AND MOTIVATION**

Interestingly, E-Learning has been classified in different folds and dimension. Among the most popular E-Learning classification is the classification by (ALGAHTANI, 2011). The study categorized E-Learning into two distinct folds namely: the computer based and the Internet-based E-Learning. Its categorization takes the form of naming the computer-based driven as a standalone systems that include the basic softwares, hardwares and the middleware (instructors). In this categorization, the computer based is a transformation of the traditional form of teaching with its extension of representing the data into computer softwares and files for storage purposes. In the computer-based category, the traditional semantics of the learning process is preserved.

Consequently, the Internet based category of the E-Learning is driven by the general inter-network connectivity to domains, stations and remotely and sparsely distributed locations of the Internet to aid the E-Learning procedure. This includes socialization, emailing, real time and online applications that could identify queries, and metadata representation. The major advantage of the Internet-based learning, it has the flexible ability of dissociating the teacher through availability or proxy class learning process (Almosa, 2002; Almosa & Almubarak, 2005). This has widely been adopted and used in advanced countries as conferences, telephony, teleconference, skype chatting, Internet classes, courseware among other examples. Other studies by (Zeitoun, 2008) used the features available for E-Learning categorization. The study itemized the classes as mixed-blended mode, assisted mode and full online modes of Internet E-Learning. The wide range of coverage and influence of having to connect to the Internet is a major concern for this study as Jordanian parents are finding it extremely difficult to allow for the free interconnectivity of the devices to their wards in primary schools.

The E-Learning can be seen as a system that synchronously and asynchronously manage the extension of knowledge using timing options in delivery (ALGAHTANI, 2011). The synchronous timing of the e-learning is thus as described as a middleware (instructor) interactivity of the student, teachers and the learners. The major advantage seen in synchronous could be of relative importance to our study through the added monitoring of the use and misuse of the pupils of Jordan primary schools. In synchronous E-Learning the instructor provides, monitoring and guidance during the session of teaching. However, it is mostly connected to the Internet as the resources are seen as

repositories and flexible to share with probably the higher of junior ministries curriculum updates (ALGAHTANI, 2011; Almosa, 2002; Almosa & Almubarak, 2005). The asynchronous on the other side provides the provision of proxy or slightly absence monitoring of the learning process. This provides interactivity with the physical absence of the Instructor. This does not support the direct response or instantaneous feedback as described for the former.



**FIGURE 1.** E-Learning Overview (source: [www.learn-online.com](http://www.learn-online.com))

As depicted on Figure 1. E-learning could also be represented based on the Internet and Intranet perspective. The Intranet as previously described is termed partially standalone. The coverage involves saving the data on a computer based platform. However, the Internet synchronous and asynchronous provides services such as web learning, video teaching and online interactivity. For a developing nation like Jordan, the basics needs to be established before having to connect instructors and class pupils to the Internet. Therefore, vending into asynchronous is an option with better implementation at a short run. In terms of cost and objectivities, this option provides a soft acceptance to the parents of the wards and pupils due to its partial dissociation with the Internet. Jordanian parent's major point of disagreement is the misconception of kids having to waste more time watching movies on the Internet.

This thus, serves as part of the motivation to the investigation of the effects of adopting E-learning in Jordan.

**TABLE 1.** A comparison between Synchronous and Asynchronous E-Learning

<b>When, Why, and How to Use Asynchronous vs. Synchronous E-Learning</b>		
	<b>Asynchronous E-Learning</b>	<b>Synchronous E-Learning</b>
When?	<ul style="list-style-type: none"> <li>■ Reflecting on complex issues</li> <li>■ When synchronous meetings cannot be scheduled because of work, family, and other commitments</li> </ul>	<ul style="list-style-type: none"> <li>■ Discussing less complex issues</li> <li>■ Getting acquainted</li> <li>■ Planning tasks</li> </ul>
Why?	<ul style="list-style-type: none"> <li>■ Students have more time to reflect because the sender does not expect an immediate answer.</li> </ul>	<ul style="list-style-type: none"> <li>■ Students become more committed and motivated because a quick response is expected.</li> </ul>
How?	<ul style="list-style-type: none"> <li>■ Use asynchronous means such as e-mail, discussion boards, and blogs.</li> </ul>	<ul style="list-style-type: none"> <li>■ Use synchronous means such as videoconferencing, instant messaging and chat, and complement with face-to-face meetings.</li> </ul>
Examples	<ul style="list-style-type: none"> <li>■ Students expected to reflect individually on course topics may be asked to maintain a blog.</li> <li>■ Students expected to share reflections regarding course topics and critically assess their peers' ideas may be asked to participate in online discussions on a discussion board.</li> </ul>	<ul style="list-style-type: none"> <li>■ Students expected to work in groups may be advised to use instant messaging as support for getting to know each other, exchanging ideas, and planning tasks.</li> <li>■ A teacher who wants to present concepts from the literature in a simplified way might give an online lecture by videoconferencing.</li> </ul>

Synchronous platform provides live classroom, virtual classroom for proxy consultation and deliberation. Video and webinars with the advantage of distance tolerance. Asynchronous on the other hand, provides the E-Learning proper, recorded audio and video and self study materials when the instructors are readily disposable.

Another strong motivation is the challenges that have been attributed to the background of the life performance of the students at different level through the inability to achieve the basic foundations. It has been noticed that the lack of inculcating the ICT-based learning platform to the Jordanian system could be a hindereing factor to the future productivity of the country at large. This is inline with the UNESCO Education counts: Benchmarking progress in 19 WEI countries, world education indicator that involved Jordan among the contries selected. In 2006. This is the quest to improve the standard of education of the developing countries which included: Argentina, Brazil, Chile, Egypt, India, Indonesia, Jamaica, **Jordan**, Malaysia, Paraguay, Peru, Philippines, the Russian Federation, Sri Lanka, Thailand, Tunisia, Uruguay and Zimbabwe. These selected countries comprised 72% of the entire world population (UNESCO, 2006).

The following statistic serves as a motivation for the study to increase the educational awareness of Jordan through E-Learning.

Distribution of the population between the ages of 25 and 64 years by highest level of education completed; and gender disparities for the proportion of the population between these ages by level of education

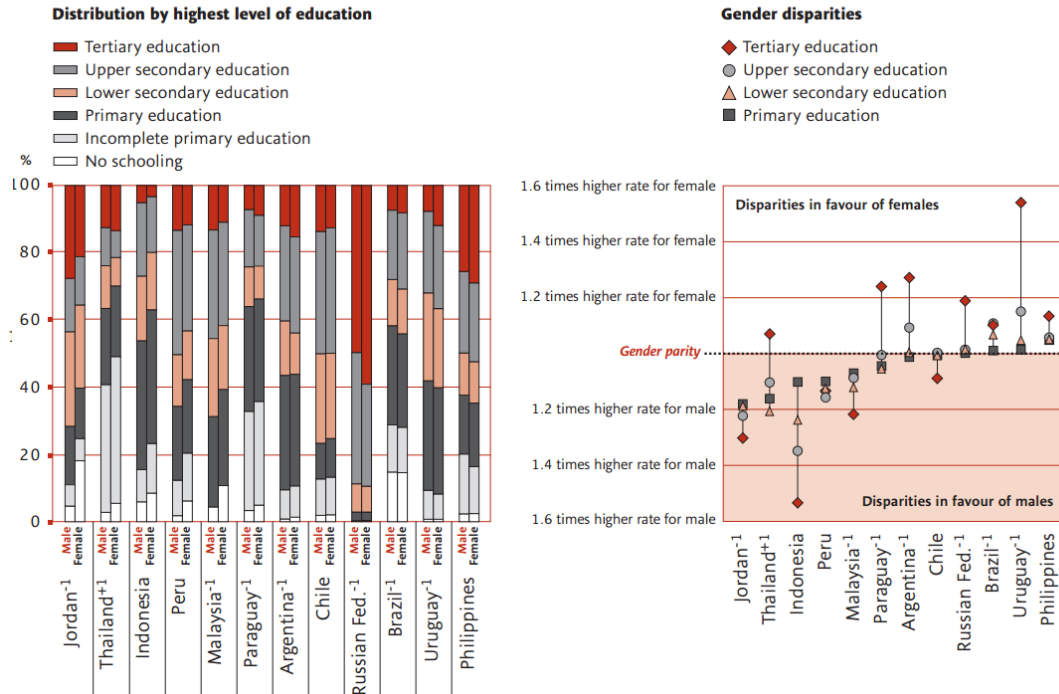


Figure 2: UNESCO Statistics; (Source: UNESCO Institute for Statistics)

## FACTORS AFFECTING E-LEARNING IN JORDAN

Factors have been seen as the challenging veils of achieving the adoption of E-Learning in Jordan primary schools. These among other factors include:

1. Lack of sufficient ICT awareness in the communities: Internet activities have received strong condemnation particularly among the old. Their perception of its benefits is carelessly seen as negative. A strong justification of belief is thus needed as a sanitization effect to juxtapose the yearn benefits of its help to the children in Jordan.
2. The Gender sensitivity, especially among female pupils: Due to the conservative nature and shyness found in the Arab cultural heritage, parents are strict in letting their daughters engage in ICT related activities. This perception is also seen as a probable detachment of embracing E-learning.
3. Age: Barrier is the age brackets of who to use the ICT E-learning facilities.



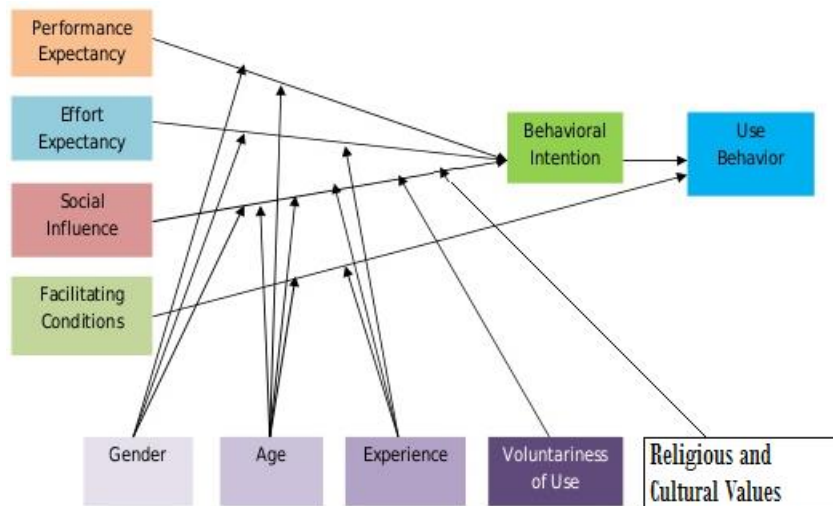
4. Societal and cultural influence: In relation to the so-called western modernization, parents perceived E-learning and ICT as a societal maneuver to influence their kids into ICT, E-learning addiction.
5. Family background and opportunities (income): It is thus seen advantageous to the children of the well to do parents. They benefit more on the E-learning and technology embracement. Thus, a factor of availability and accessibility place them in a loftier position than their folks.
6. Willingness and volunteer of using ICT for E-Learning: The natural willingness is low. Therefore, it is also a factor affecting the use of E-learning.
7. Availability and accessibility of the Internet and Computers: It is also presumed that if a product of resource is readily available, it could influence its usage and participation.
8. Teacher characteristics: From the notion of train the trainer, a teacher that does not go through the use of E-learning and ICT related education, cannot also offer. This is thus a challenge that needs tackling to aid in transferring the wellness of ICT to the pupils.
9. The role of design and contents of the E-Learning materials: Several benefits modules of coursework are supposed to be carefully administered to suit a particular group and grade of student's category. Misplacement of the coursework as it relates to the level of students' class could negatively influence the benefits of E-learning.
10. Intention of use of E-learning: Very important variable is the Intention to use ICT.

The above listed factors have negated the intention of family adoption to the use of the ICT as an instructional tool for their wards in the primary educational study. This study shall propose and assess to provide the willingness of the parents, teachers and the general Jordanian society to encourage and adopt the E-Learning paradigm in the primary education to boost the quality of the education to meet International and United Nations quest of educational standard. The willingness of the parents has therefore been identified as a solution to aid in encouraging and rekindling the believe of the parents of the primary school pupils to allow the adequate use of the ICT facilities to teach the pupils.

## CONCEPTUAL MODEL

The proposed concept aims to adopt the UTAUT model to fashion out the pressing issues that are faced by Jordan educators. It is worthy to mention that few among the families maintain a strong hold that the religious tolerance affects their willingness to embrace ICT.

This conceptual submission sets a direction for the involvement of some religious and cultural values as itemized in the factors affecting the E-learning.



**Figure 3:** UTAUT with Religious and Cultural Values

## CONCLUSION

Evidently, problems associated to the lack of adaptation E-Learning in the primary schools and general Jordan schools include, administrative challenges, cultural institution, lack of facility and maintenance culture, technological incapability of handling the software's and hardwires, ethical challenges such as socio-cultural declination, political affiliation, societal perception and negative judgments about the Internet, willingness of the teachers, inferiority among the teachers among others.

Therefore, the need to research on the effects and devising models that would mitigate the fears and improve the willingness of the people of Jordan to allow the inculcation of the e-learning to their wards is of enormous benefit. Adapting the E-Learning will benefit the knowledge-base of the country, add values to the digital world by joining the global era and thus enhance the overall quality of standards of education (Vrana, Fragidis, Zafiroopoulos, & Paschaloudis, 2010). Little efforts have tried to evaluate the causes of lack of adding the E-Learning to the educational setting of the primary school have been presented.



There is thus a need to propose a conceptual framework that will increase the willingness of adding E-Learning to Jordan curriculum (AL-Sabawy, 2013; Alsabawy & Cater-Steel, 2012). Large sets of the studies have left out the overall feelings of the parent's willingness to agree its implementation. There is therefore need to improve the investigation of E-Learning, adaptability through evaluating, pupils, teachers and parents.

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