

# Survey of the Factors in promoting E-learning in a Virtual University in the Noor Tuba University

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**To Link this Article:** <http://dx.doi.org/10.6007/IJAREMS/v2-i5/256> DOI:10.6007/IJAREMS/v2-i5/256

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**Published Online:** September, 2013

## Abstract

This paper has focused on Survey Factors in promoting e-learning in a virtual university in the Noor tuba university; According to the accessed results by means of questionnaires the organization factors in the promotion of e-education in universities have direct and significant effects. The environmental factors in the promotion of e-education in universities have direct and significant. Technological factors in the promotion of e-education in universities have direct and significant effects. Development of the virtual university and in general, the virtual education demands a deep and true understanding of this education, and also a comprehensive planning with respect to the grounds and cultural and economical constructions.

**Keywords:** E-Learning, Virtual Education, Universit

## Introduction

We are transforming from an industry based society to an information based one. In other words, we are moving to a virtual world from a physical world(Franks and Oliver,2009). To enter the world of information and to live an efficient life in the information based society demands an understanding of its features(DigCCurr ,2012). In the current era, the caravan of knowledge and technology moving forward with an extraordinary and incredible speed, and if societies wish to accompany this caravan, they should stop their slow and traditional movement and, take a rapid and quick step. Otherwise, they miss the caravan and this means that they will lose their link with other societies which will end in isolation(Knight, S. 2010). In this cycle of developments and progress of technology, what is most influential among all the

societies is the emergence of information and communication technology. One of the institutions which will go under the vast changes is the institution for education and learning in the general and high levels(Lunney,2012). In transforming to an informative society, the main role is upon the educated cast of the society, and teaching and learning should be devised according to the new approaches(Birch, 2009). The pre- requirement to enter such an area is the rapid and vast development of electronics education from down to the top of the educational system of the country. Existence of the extensive communicative networks like the internet, and the advanced tools and learning facilities has transformed the learning methods. The ability of electronics learning to help to generalize the training, to create the learning opportunities and, to remove learning inequalities, and to complete the school and university programs is a necessity(Baik and Greig, 2009). Now, a majority of learners can be covered with these facilities under educational network, and in spite of the traditional and common methods in learning, without the need to be present in the sessions, the scientific trainings can be performed in all over the world. With the usage of internet and learning software it is possible for different educational courses to be held in different levels virtually and according to the learning standards. With the use of the internet and multimedia equipments, we can assist many uneducated people(Lunney, 2012).

In electronics learning, training can be simplified with putting the texts on internet and, to use slides, audio and visual files, CDs etc[11-14]. Also, among the advantages of this kind of learning is the access to the digital library and the search in different websites while studying which in turn results in saving time and costs. Division of materials logically into distinct and suitable parts increases the rate of learning[15].

Tutors and learners also are in online contact with each other in virtual classes and it is possible for them to talk via texts and hearing the voice of tutor[11-5]. Learners can also ask their questions with mails or online and to get the answers. In electronics learning, the quality of teaching is very important because this method is a substitution of traditional training in schools for learners, and the main point is that its output should be similar to the traditional teachings(DigCCurr ,2012).

The institutions for electronics learning have been established in each country based on the necessities of that country. In a country like Australia, the extension of the land and the spread of population is the most important reason for formation and promotion of the electronics learning. In a country like China and India, the main factor to tend for electronics learning is the lack of the existing higher educational capacities and the limitations of the learning budget. In countries like Germany, USA, France, Japan, and England, the question of the adults learning and the continuation of their training and teaching new skills and sciences is of the important factors of the establishment of electronics learning institutions(Nelson, and collogues, 2006).

In most African countries, insufficiency of the elementary education, high school training and higher education and the economical problems has caused the electronics learning as a low cost system to be replaced for the traditional system.In our country, the abundant amount of volunteers to enter the university, the need for training school teaching staff, and to make it possible for clerks to continue their studies has played an important role in the establishments of electronics learning institutions. Now, we have three million and hundred thirty five thousand people who missed education and many people waiting to enter to the universities(Abersek and Popov, 2004). The suitable solution to deal with this problem is to use electronic education besides the traditional teaching, and also to find a solution to promote the electronics learning in the country.

**Question statement:**

In the recent years, the increasing demands to enter the university, and to continue study in the desired fields is clear for everyone. The growth of youth population on the one hand, and the country's need for the experts in industry and agriculture and other fields on the other hand, reveals the importance of attention to the new educational methods and also virtual learning. However, for development of electronics and virtual learning in universities all over the country, the efficient factors in promoting should be recognized and also preventing elements should be considered, and with use of the learned experiences, to find a suitable strategy for speeding up the process of the virtual learning development. To respond the increasing demand of volunteers for entering the university, different strategies have been applied. The virtual education which is formed through the electronics communication can be efficient as a supportive option for the educational system in the geographical and content development of education(Nelson and coligues,2006).So far, the quantitative development of the university course as full participation and semi participation has continued. The extension of the evening programs in universities, formation and development of distance courses, the opening of the faculties by private section and, also cooperation with the abroad universities has been among the common ways. In the recent years, the use of the virtual education is also in the working plan of the most famous universities all over the world. This new method is so promising that Even the newly established universities have been formed completely[13-16]. In other words, the universities which had no existence before the appearing of the electronics learning on websites like the virtual university of Hungry Mind and the virtual center of Unsexes which have now thousands students exist now(Abersek and Popov, 2004). For this purpose, this research is to probe into which factors can be effective in promotion of the electronics learning? And each of these factors is in which level of priority?

**Hypotheses:**

- The organization factors in the promotion of e-education in universities have direct and significant effects.
- The environmental factors in the promotion of e-education in universities have direct and significant.
- Technological factors in the promotion of e-education in universities have direct and significant effects.

**Material and methods:**

The participants are all the full-time or part-time fellow members of Noor Tuba university in the year 2011-2012.in order to get the statistic sample the Cochran test has been used and the simple random sampling method has been conducted for the statistical analysis. Accordingly, the sample consist of 92 factually of Noor Tuba University .Data collection was done via two different methods: Library and field methods

In order to clarify the theoretical framework and achieving the required information in terms of the effective factors in promoting and improving the electronic education, library method has been utilized. This methodology has been used for the review of literature section of this research. By studying books, articles, digital library, and other studies, we have collected our required data.

**Field method:**

In order to collect the required data regarding the effective factors in promoting and improving e-education, a field method has been used. Having discussed our purpose with the Noor Tuba officials, we distributed a questionnaire among the university teachers (on the basis of statistical population) and analyzed the data.

**Instrument**

The instruments are devices which help the researcher to analyze the collected data and discover the facts (Hafiz nia, 2005).

*Questionnaire*

The questionnaire includes questions composed of variables regarding the research and the informants are asked to fill it out whether directly or indirectly (hafiz nia, 2010).

**Data Analysis:**

One of the most suitable analytical methods in behavior research is multi-variable analysis. Since the nature of these issues is its multi-variable entity. And it cannot be assessed via a bi-variable method (considering only one dependent or independent variable). Accordingly, in this research, to prove or disclaim the hypotheses, structural equation and specifically road analysis has been utilized. The road analysis is a technique illustrating the interrelations of variables (independent, mediator, and dependent). Its purpose is to identify the effects between the variables of the semantic model of this research. The structural model estimating the standard and equation indices will be discussed later. Diagrams 21.4 and 22.4 depict the effects of independent variable on dependent one. The results can be seen in table 9.4. Regarding the output of the structural model, we can analyze the research hypotheses.

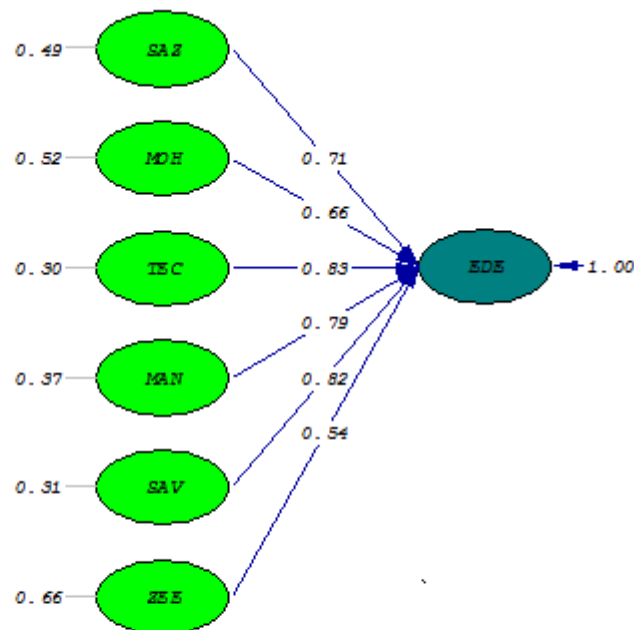
The organization factors in the promotion of e-education in universities have direct (0.71) and significant effects (7.42). So the first hypothesis is proved (table1).

The environmental factors in the promotion of e-education in universities have direct (0.66) and significant (6.49). So the second hypothesis is proved (table1).

Technological factors in the promotion of e-education in universities have direct (0.83) and significant effects (9.44). So the second hypothesis is proved (table1).

In testing the research hypotheses by using the structural equations, the software output shows the appropriateness of the structural model for testing the hypotheses ( the ratio of  $\chi^2$  to df is less than 3). RMSEA = 0.080 also shows the appropriateness of structural model. In other words, the data is adaptable to a great extent to the semantic model. The amounts of GFI, AGFI, and NFI are 0.93, 0.92, 0.97 respectively which are indicative of the relatively high value of this model.

Graph1 : semantic model



Chi-Square=399.80, df=183, P-value=0.00000, RMSEA=0.080

Table1:  
Results of Hypotheses

Results	t-value	R <sup>2</sup>	Effect	Hypotheses
o.k	7/42	0/504	0/71	The organization factors in the promotion of e-education
o.k	4/49	0/436	0/66	The environmental factors in the promotion of e-education
o.k	9/44	0/689	0/83	Technological factors in the promotion of e-education

**Results and Discussion:**

In the recent years, the electronic learning has experienced many ups and downs. However, one of its features that have remained the same is its growth and application development in different aspects. Anyway, the virtual education due to its capacities promises us a desirable outlook with the development of the university trainings.

Development of the virtual university and in general, the virtual education demands a deep and true understanding of this education, and also a comprehensive planning with respect to the grounds and cultural and economical constructions. The American Council for Construction Education (ACCE) is pushing construction education to become more focused on developing students for leadership roles. In particular, the ACCE specifies that the curriculum

in construction education should be responsive to social, economic, and technical developments, and should reflect the application of evolving knowledge in construction and in the behavioral and quantitative sciences. Achieving this goal in the educational setting without adequate

access to construction-site activities limits the students' level of appreciation for concepts and principles covered in class. An agent-based virtual learning environment is one step toward filling this gap. Through this approach, instructors can assess the intellectual rigor of field activities within construction courses. In addition, an agent-based virtual learning environment will give the students an opportunity to become active learners. Within an agent-based virtual learning environment, the students direct their study of the targeted construction processes and formulate their own conclusion based on the data they collect. Clearly, the fulfillment of the requirements of this framework will go a long way preparing construction students for their future leadership roles as construction managers (Franks, 2009).

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