An Investigation of Administrative and Supporting Challenges of E-learning in Elementary Schools’s Teachers from the View Point of Primary School Teachers in Julfa (Iran)

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ABSTRACT

The purpose of this study is to investigate the relationship between E-learning challenges in primary schools and executing e-learning from the viewpoint of primary school teachers in Julfa region in 1390-1391 school year. The research method is applicable in purpose and correlative in type. The sample of this research are all 270 teachers in primary schools of Julfa region, 170 women and 100 men. The volume of the sample was reached by using Morgan Table and Adjustment formula, 100 persons (63 women and 37 men) and by Random sampling about 1/3. Researcher’s made questionnaire was used to collect data. Validity of the questionnaire was reached by using the supervisor and the advisor professors’ views and also eight honorable professors, and the reliability was measured by preliminary execution of 30 persons and by using cronbach’s alpha that was 0.89. Results of the research showed that: There is a significant relationship between challenging factors of e-learning due to administrative and supporting infrastructures and executing e-learning.

KEYWORDS: e-learning challenges, administrative and supporting infrastructure.

INTRODUCTION

The increasing availability of hardware and application for e-learning in particular development of the World Wide Web has opened a new horizon facing educational institutions. It seems that using these training facilities helps to meet certain standards which are called educational quality factors such as learner-centered, lifelong learning, active learning, interaction and multimedia learning. The advancement of technology and the cheaper cost of using e-learning technologies and new E-learning tools lead to new reforms in this area.

Information technology and communication lead to the emergence of new institutions, universities and institutions of teaching and learning. These technologies in different countries vary due to economical, cultural and technology conditions, today almost every country with the help of this technology started to create virtual universities and institutions or is planning for it.

It is for more than two decades that, educational systems in the world use new educational technology in dealing with the challenges and issues of new educational technology and have gained experience in this field. Increasing demand for education, the diversity of people's expectations from educational centers, the impact of new training centers and creating competition among them are among challenges which move these systems towards using distance learning, video conferencing and virtual learning. Iranian educational system has also faced some of these challenges and cannot rely on traditional methods of education, so it has taken steps to use new technologies (Zareh, 2006).

Recognizing the challenges of e-learning because of its important role as technology in education, particularly in achieving the goals of education and in broad range of schools, teachers, and staff has minimal importance. Lack of proper attention to e-learning can have an impact on the attitude and humanistic performance in school and impose irreparable effects on the labor costs and education.

REVIEW OF THE RELATED LITERATURE

In expressing the development of school-based e-learning it is necessary to consider 13 principles as follows (Attaran, 2011).
1 - Arberi (1994): The role of teachers and schools. In development of e-learning schools, schools should strengthen the role of school and teacher in the process of learning and teaching. One of the fundamental principal of the school is children learning how to behave in public, because if a student does not learn this behavior, he cannot perform his...
social and citizenship responsibility in a free society. Learning in school is not merely learning personal and individual actions, but the learning of social values is one of its applications.

2 – Observing nature: technology doesn’t have to take away touching joy and observing natural phenomena from children.

3 – Considering individual differences: Virtual schools and e-learning materials should create harmony among different learning styles and curriculum materials.

4 - Considering rational thinking and problem solving skills: according to Isik and Barnes (1996) it is in learning process of different information combined with critical thinking and analysis of information that knowledge is created.

5 - Considering social characteristic of humans: fostering more efficient knowledge generation, knowledge sharing, collaboration, learning and collective decision-making are what we expect from these schools.

6 – Matching the time of learning and development: we should first pay attention to the psychological abilities of children, abilities such as self-discipline, morality identification, and sympathetic, and then computer training should performed.

7 - Considering the knowledge needs of informative society: the experience of different countries showed that it is better that information literacy based on its concept in the context is included in courses, including science and social studies.

8 - Using a variety of resources in the curriculum: in addition to considering electronic content such as multimedia, to achieve the goals of education resources such as the Internet needs also more attention.

9 - Emphasizing on structure-oriented approach: fostering creative people and knowledge construction will be realized with structure-oriented approach.

10- Emphasis on the role of new teachers in virtual schools: in changing role of the teacher we should consider factors such as changing the teacher from wisdom on the scene to guidance in the margin, turning teacher into students, facilitating and covering the needs of all students, student helper to learn the right questions, the designer of the curriculum materials.

11 – Considering various aspects of the virtual school

12 – Considering the element of morality by Education Office: it is better we set a legal and moral code for consumers and users of Internet so that the user has legal and social implications until they inappropriately uses the network, which socially and personal damages others.

13 - Dedication to art and aesthetic education: the overuse of technology has racked the human soul and considering artistic literacy help to soften the space.

Attaran (2010) believed that creating educational judgment and eliminating digital gap and inequality in education is essential in the digital era is important to consider.

Official Technical Support: One of the reasons that teachers are hesitant to use digital technology in education is technical obstacles that they themselves cannot solve and may put them into trouble in classroom.

• Technical support from friends and family: we can form a social network within the Internet through social groups like Facebook, Google Groups, or Yahoo group and so on, in a friendly atmosphere through which we can users' knowledge improve.

• Having access to hardware, software and Internet connections: differences of hardware among individuals’ leads to disparities in having access to the Internet. Kind of hardware and software affects deepening the digital gap or eliminating it. Low quality of hardware prohibits the benefits people can benefit from directly or indirectly.

• Access to meaningful content, high quality and user according to his language: the development of digital content into different languages, beside translation machines which translate many pages of a web is one way to provide the content in their native language and familiarize users with common language of the world.

• Having access to teachers who know how to use digital tools and resources: The first line of progress in the development of ICT in education is the teacher. If they are not adequately trained or are not interested in this subject, the schooling does not happen in practice.

• Administrative access to high-quality research on the application of digital technology to improve learning: Researchers in the field of ICT should conduct researches on different areas of the Internet and its services which develop and enhance learning of learners and show internet users how they can benefit ICT in educational opportunities.

Taghvaei (2005) in his Master's thesis entitled: Review of barriers to virtual learning in high school from the viewpoint of high school managers in Tehran, stated e-learning barriers respectively, technical barriers (equipment), financial barriers, human barriers (attitudinal and skills), organizational barriers.

Gholizadeh (2011) in his master’s thesis entitled "Evaluation of the effectiveness of e-learning courses for in-service training of staff, Headquarters, Ministry of Health and Medical» After comparing learning between young
workers and new forces with old forces came to the conclusion that young forces are very interested in the use of electronic technology tasks assigned and along with new technologies are interested in education and e-learning utilization and consider doing their job electronically to be easier and time saving and an effective way of using electronic methods.

Talaei (2004) in his doctoral dissertation entitled 'Different patterns of student use of ICT in home and its impact on academic achievement and social growth and behavior of the students' with a sample size of 3000 students from age three (entry to pre-school) to 19 (entering the job market or college) in England in comparison with Iran emphasized that, there is no difference in the direction of arrival of ICT developments in education in both countries has been based on experience and testing. But the important thing is that after two and half year of training in England, they concluded that they should use teacher as the teacher not computer engineer comes to teach production of electronic content. Of course, teacher’s age is one of the factors influencing the use of ICT and his willingness in the teaching process, this means the older the teacher is, the lower his interest rate is (Bahrami, 2011).

Gholizadeh (2003) in his Master's thesis entitled, "prioritization strategies to develop a virtual training system for Broadcasting staff" after identify the strengths, weaknesses, opportunities and threats found out that lack of proper infrastructure, the lack of a national document in the development of information technology, information technology custodians, imbalance of IT officials, lack of property law, inconsideration of standards in e-learning, financial constraints, unfamiliarity of high levels managers with the concept of IT and its application and failure to use educational technology to enhance staff training are among the threats make e-learning development difficult in Iran.

METHODS AND MATERIALS

The study population included all teachers (male and female) of schools (public and nonprofit) in urban and rural elementary school of Julfa of the East Azerbaijan Province, (Iran) in 1391-1390 school year, all teachers in elementary schools at the post of teaching were selected, with the total number of 270 persons, among which 170 were females and 100 males. In this study the sample volume was 100 using Morgan table and adjustment formula in order to investigate challenging e-learning factors in primary schools through random sampling.

A questionnaire was used to gather information about challenging factors of e-learning in primary school from the view point of teachers in Julfa district. This questionnaire consisted of 28 items which measures challenging factors caused by infrastructure challenging factors. In order to reply to this questionnaire Likert scale of 5 levels was used. To determine the reliability of the questionnaire limited sample of 30 Tabriz teachers have been implemented, with the Cronbach's alpha of 0/89.

RESULTS

1. There is a relationship among the challenging factors of e-learning caused by infrastructure, administrative support and implementation of e-learning.

Table 1: Comparison between challenges factors of e-learning and their infrastructures

<table>
<thead>
<tr>
<th>Challenging factors</th>
<th>Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative and supporting infrastructure</td>
<td>10/16</td>
<td>15/26</td>
</tr>
</tbody>
</table>

According to the information shown in Table 1 Average challenges of e-learning infrastructure and support is 16/10.

Table 2: Correlation coefficient between each of challenging factors caused by e-learning infrastructure

<table>
<thead>
<tr>
<th>Correlation coefficient</th>
<th>30/0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significance level</td>
<td>002/0</td>
</tr>
<tr>
<td>Number</td>
<td>100</td>
</tr>
<tr>
<td>DF</td>
<td>98</td>
</tr>
</tbody>
</table>

According to the data from Table 2, the correlation coefficient between infrastructure and administrative support and implementation of e-learning from the perspective of teachers was -30/0, correlation coefficient and level of significance was 0/002; degree of freedom was 98. This represents a significant inverse correlation between of 05/0 between the factors causing challenge of e-learning infrastructure and administrative support and implementation of e-learning.
2. A challenge of e-learning is not different when considering elementary teacher’s duration of service.

Table 3: Comparison of the challenges of e-learning infrastructure and its connection with duration of service of teachers

<table>
<thead>
<tr>
<th>Statistical Indicators</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>Sig</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low in duration</td>
<td>10</td>
<td>19.02</td>
<td>0.81</td>
<td>1.07</td>
<td>0.07</td>
<td>16</td>
<td>0.42</td>
</tr>
<tr>
<td>High in duration</td>
<td>90</td>
<td>11.31</td>
<td>3.27</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The data in Table 3 showed, comparing average of low duration of service teachers (x=2/19) and experienced teachers (x=31/11) e-learning challenging factors significance level of 0/05 <16 778 =1 07 7 there aren’t statistically significant differences in the scores of the two groups, regarding implementation of e-learning.

3. Given the challenges of e-learning, there is no difference in educational level of elementary teachers.

Table 4: Comparison of average of e-learning challenges caused by infrastructure and its relation to teacher educational level

<table>
<thead>
<tr>
<th>Statistical Indicators</th>
<th>Number</th>
<th>Mean</th>
<th>Variance</th>
<th>t</th>
<th>sig</th>
<th>t</th>
<th>Df</th>
<th>Sig(2-tailed)</th>
<th>%95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>14</td>
<td>12.63</td>
<td>3.28</td>
<td>1.05</td>
<td>0.47</td>
<td>0.9</td>
<td>98</td>
<td>0.35</td>
<td>12.15</td>
</tr>
<tr>
<td>Associate degree</td>
<td>49</td>
<td>12.59</td>
<td>3.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA and above</td>
<td>37</td>
<td>13.22</td>
<td>3.13</td>
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</table>

According to the data listed in Table 4 and comparing of E-learning challenges’ Average of Teacher Education having Diploma (x=63/12), with the average of teachers’ having Associate degree (x=13 / 22) and 35/0 (sig= - 2 and a=05/0 and a 35/0> 05/0 ) there is no difference in e-learning challenges regarding education degrees of teachers. This means that diploma, all teachers having with diploma ,BA and higher degrees are challenged in e-learning caused by infrastructure in primary schools.

Conclusion

Challenges of e-learning is one of the most important issues concerning the implementation of e-learning and for various reasons which are related to labor practices has found its way in education. How to train future teachers should be different from the past. Raring up the citizens of the information age is basically different from old age. If we highlight the role of the teacher, we should reconsider teacher training methods.

REFERENCES


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