Role of E-Learning in Promoting Higher Education

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Abstract: The study was designed to find out the relationship between e-learning and Higher Education. The proposed study was descriptive in nature. The study was qualitative & quantitative. The total population of the study was drawn public sector universities of AJ&K, which were two in number i.e. Azad Jammu & Kashmir university Muzaffarabad and Poonch university Rawalakot. The population of the study comprised of university students and HODS. The sample size of the study was 328 students. Descriptive statistics i.e mean, standard deviation and chi square test were employed for statistical analysis of the data through SPSS. The findings reveal that e-learning improves the capacity of students (Higher Education) to manage with the technological advancement. E-learning improves quality of instruction for formal and non-formal education. E-learning improves quality of the learning experience through information technology. Teachers can easily modify digital learning resources according to the learning style of students. Chi square test analysis shows that there is a significant relationship between e-learning and Higher Education. Based on findings, it was recommended that Public universities of AJK may be replace face to face teaching by digital media

Keywords: E-learning; Higher Education.

1. Introduction

E-learning is seen as a necessity for the development of information technology and its potential to meet the challenges posed by access to knowledge. The main influence on communication and learning technology is still being explored, constantly seeking new ways to attract the attention of learning, actively work, but a customizable, learning environment where learning is stimulated and you want to learn continuous learning using different types of IT tools (Bottino, 2004).

Now one day, e-learning is playing an important role in spreading education in an effective and efficient manner. Talking through e-learning with students with their teachers can help students improve their learning processes and experience. E-learning is engaged in using any computer or electronic device
in any way to present any educational or learning content, and to improve the performance of students (Agarwal, Doo, Das, 2004).

E-learning is used to give you the opportunity to learn interactive electronic at any time, at any time, electronically-developed. E-learning includes web based learning, computer-based, official classroom, digital collaboration, audio and video tape, internet or satellite TV, and CD-ROM (Islam and Selim, 2006).

Learning in different learning is set up, such as learning distance, learning online and networking network (Wilson 2001). In the context of this paper, all these examples will be described using information communication technology (ICT) to promote academic interactions between students, lectures and communities learning (Holley, 2002).

Volery, T., & Lord, D. (2002) stated that the speed and expansion of relevant technical developments, combined with social demands for limited budget and better access to higher education, encouraged students to introduce e-learning courses for universities.

According to Andrews and Haythornthwaite (2007) e-learning is the use of technologies in learning opportunities, encompassing flexible learning as well as distance learning; and the use of information and communication technology as a communications and delivery tool, between individuals and groups, to support students and improve the management of learning.

The environment of higher education is evolving. Rising costs, shrinking budgets, and an increasing need for distance education. (New Media Consortium, 2007) are causing educational institutions to reexamine the way that education is delivered. In response to this changing environment, e-learning is being implemented more and more frequently in higher education, creating new and exciting opportunities for both educational institutions and students.

The e-learning models of higher education today find their roots in conventional distance education. Initially introduced to allow individuals in remote and rural areas to gain access to higher education, distance learning has evolved significantly over time. Technological advancement has been the major inspiration for change, beginning with the integration of radio broadcasting in the 1920’s (Huynh, Umesh and Valachich, 2003).

According to Kanovsky and Or-Bach (2001), integrating e-learning in HEIs should be done gradually because it involves several groups of interest like students, lecturers, technicians, policy makers among others.

The use of ICT in HEIs has the potential to enhance the quality of teaching and learning. However, despite the existence of e-learning platforms, HEIs in developing countries have not fully optimized their use and benefits. This may be attributed to existence of barriers such as lack of appropriate frameworks that hinder successful integration of e-learning in education systems (Kituyi et al. 2012; Bada and Khazali, 2006; Sankale, 2006; Nodumo, 2007).

ICTs are changing the organization and delivery of higher education because they are adopting alternatives to the traditional classroom pedagogy and developing a variety of e-learning courses (VanFossen & Berson, 2008). Research also suggests that ICTs offer new learning opportunities for students (e-learning), develop teacher’s professional capabilities (e-pedagogy) and strengthen institutional capacity (e-education) and most universities today offer some form of eLearning (El-Hussein & Cronje, 2010).

Changes in how higher education is carried out through the use of e-learning are particularly apparent in developed countries in Europe and North America (Bates, 2001). However, what is the situation in areas categorized as developing countries? Many developing countries’ efforts to take up e-learning in higher education are, according to Sife, Lwoga, & Sanga (2007), still at a preliminary stage compared to developed countries. Even those developing countries wanting to implement e-learning as a tool in higher education often encounter various obstacles; for example, poor infrastructure and information access, lack of support from institutions, necessary resources or Internet access, poor technological skills, and so on (Sife et al., 2007). Denis (2014) believed that, in practice, the
implementation of e-learning relies on the fact that the university is forced to train or hire staff to work with the technological aspects as well as changing teaching strategies.

The researcher conducted the research on role of e-learning in promoting Higher education. The main objective of the research is to find out the relationship between e-learning and Higher Education.

2. Hypotheses of the study

Hypothesis 1. There is insignificant relationship between e-learning and Higher Education

Hypothesis 2. There is a significant relationship between e-learning and Higher Education

3. Materials and methods

3.1 Population

All the public universities of Azad Jammu & Kashmir were explored from AJK planning and development and universities statistical departments. It was find out there are 5 public universities of AJK. All the faculties of these five universities were find out.

The total population of the study was drawn public sector universities of AJ&K, which were two in number i.e. Azad Jammu & Kashmir university Muzaffarabad and Poonch university Rawalakot. The population of the study comprised of university students serving in department’s of CS&IT, zoology & mathematics of both universities were included.

3.2 Sample and sampling technique

In proportionate stratified sampling, the quantity of components apportioned to the different strata is corresponding to the representation of the strata in the target population. The size of the sample has been decided by consulting L.R. Gay’s table for selecting sample size in which sample size against 2239 population was specified as 328 (Gay, 2005).

3.3 Research Design and instruments

The research was quantitative and qualitative in nature. The descriptive method was used for this study. Questionnaire for students and interview guide for Heads of departments was developed Five point Likert scale (strongly agree, agree, uncertain, disagree and strongly disagree) and interview guide was used.

3.4 Pilot testing, validity and reliability

Pilot testing was performed to check whether the items of questionnaire were relevant and understandable for the target respondents. In the light of setting up the questionnaire, Women University Bagh was taken for pilot testing. The instrument validated with respect to face validity, content validity, and criterion validity. Some items were found weak and were deleted. Some were rephrased for the sake of better understanding of the respondents. Then its final items were prepared in the light of the suggestions of the experts. Cronbach’s Alpha was used to calculate the reliability of instrument. The cronbach Alpha was found 0.94 for student’s questionnaire.

3.5 Data collection and analysis

The questionnaire was administered by the researcher, to the respondent of the study (students) for the data collection. Data was analyzed through statistical packages for the social sciences (SPSS). Mean, standard deviation, and chi-square.

4. Results

The study was descriptive and mix method study that was planned to find out the relationship between e-learning and Higher Education. One self developed questionnaire was used for gathering information from the respondents. After collection of data, it was properly organized, classified, tabulated, and analysis through descriptive statistics, mean, standard deviation, chi square.
Table 1: Technological advancement assists to develop student’s collaboration. * Social learning is hastened through e-Learning. Cross tabulation

<table>
<thead>
<tr>
<th>Social learning is hastened through e-Learning.</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
<th>Total</th>
<th>Chi-square value</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological advancement assists to develop student’s collaboration.</td>
<td>SDA</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>106.454^a</td>
<td>16</td>
</tr>
<tr>
<td>DA</td>
<td>6</td>
<td>30</td>
<td>1</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UD</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>6</td>
<td>25</td>
<td>13</td>
<td>65</td>
<td>29</td>
<td>138</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>6</td>
<td>17</td>
<td>6</td>
<td>37</td>
<td>33</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>81</td>
<td>29</td>
<td>122</td>
<td>68</td>
<td>328</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table no 1 shows that the respondents which were satisfied with the Technological advancement assists to develop student’s collaboration and Social learning is hastened through e-Learning. The chi square value is 106.454^a, degree of freedom is 16 and significance value is 0.000 which is less than 0.05 therefore null hypothesis is rejected and there is a statistical difference between the variables.

Table 2: Informational technology enables the users for their timely delivery. * E-learning replaces the face to face teaching by digital media. Cross tabulation

<table>
<thead>
<tr>
<th>E-learning replaces the face to face teaching by digital media.</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
<th>Total</th>
<th>Chi-square value</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational technology enables the users for their timely delivery.</td>
<td>SDA</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>19</td>
<td>184.782^a</td>
<td>16</td>
</tr>
<tr>
<td>DA</td>
<td>5</td>
<td>64</td>
<td>3</td>
<td>22</td>
<td>8</td>
<td>102</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>18</td>
<td>11</td>
<td>60</td>
<td>16</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
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<td>18</td>
<td>35</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>91</td>
<td>29</td>
<td>127</td>
<td>67</td>
<td>328</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table no 2 shows that the respondents which were agree with the Informational technology enables the users for their timely deliver and E-learning replaces the face to face teaching by digital media. The chi square value is 184.782^a, degree of freedom is 16 and significance value is 0.000 which is less than 0.05 therefore null hypothesis is rejected and there is an association between variables.

Table 3: Higher retention of learning is not always ensured through e-Learning. * E-learning has also changed the perspective of distance learning. Cross tabulation

<table>
<thead>
<tr>
<th>Social learning is hastened through e-Learning.</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
<th>Total</th>
<th>Chi-square value</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>Higher retention of learning is not always ensured through e-Learning.</td>
<td>SDA</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>209.339^a</td>
<td>16</td>
</tr>
<tr>
<td>DA</td>
<td>5</td>
<td>44</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>UD</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>12</td>
<td>4</td>
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<td></td>
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<tr>
<td>A</td>
<td>4</td>
<td>6</td>
<td>18</td>
<td>98</td>
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<td>SA</td>
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<td>26</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>62</td>
<td>35</td>
<td>147</td>
<td>65</td>
<td>328</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table no 3 shows that the respondents which were agreed with the Higher retention of learning is not always ensured through e-Learning and Social learning is hastened through e-Learning. The chi
square value is 209.339⁴, degree of freedom is 16 and significance value is 0.000 which is less than 0.05 therefore null hypothesis is rejected and there is a statistical difference between the between variables.

Table 4: E learning is growing in language teaching. * E- Learning makes students dependent on information technology. Cross tabulation

<table>
<thead>
<tr>
<th>E- Learning makes students dependent on information technology.</th>
<th>Total</th>
<th>Chi-square value</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDA 28 24 2 2 2 58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA 7 32 38 10 3 90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UD 1 18 24 14 6 63</td>
<td></td>
<td>184.800⁴</td>
<td>16</td>
<td>.000</td>
</tr>
<tr>
<td>A 5 12 20 33 12 82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA 0 2 4 15 14 35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 41 88 88 74 37 328</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 4 shows that the respondents which were strongly disagree with the E learning is growing in language teaching and students more likely to dependent on information technology. The chi square value is 184.800⁴, degree of freedom is 16 and significance value is 0.000 which is less than 0.05 therefore null hypothesis is rejected and there is a statistical difference between the statements.

4. Discussions

The present research is based on role of e-learning in promoting Higher Education. One self questionnaire was developed for collecting information from the respondents.

Nawaz & Qureshi, (2010) stated that begins to learn basic knowledge that is a special technical understanding and purpose and the ideas of behavior, but dependent on the computer's mediation. E-learning is now moved away from a traditional-based education computer, in one form communication through the teacher learning material where the teacher learns to focus on less collaboration with context. (Shabha, G. 2000) stated that technology has not only improved the methods of teaching but it also includes an authority to integrate the regulatory structure. This approach shows that universities should have a flexible organizational structure for full use of technical development in higher education.

Shank 2002) stated that teachers should be involved in all the steps of learning. E learning, including future audience identities and the aim of learning and best cooperation. This offer emphasizes the need to train teachers only, not only to implement e-learning technology for higher education, but to focus on the ideas behind distance learning education.

5. Conclusions

The findings show that e-learning play a significant role in higher education. Informational technology enables the users for their timely deliver and E-learning replaces the face to face teaching by digital media. The overall analysis, interpretation and findings of the data show that e-learning facilitates teaching and learning processes. E-learning improves the capacity of students (Higher Education) to manage with the technological advancement, the quality of education increased by E-learning.

6. Recommendations

Public universities of AJK may be improving quality of the learning experience through information technology. Public universities of AJK may be improving the capacity of students (Higher Education) to manage with the technological advancement. Government may develop some productive websites for the promotion of e-learning. Moreover these websites will help students to get easy access to international and local academic work.
7. References
Bada, J. K., & Khazali, B. (2006, July). An empirical study on education strategy to e-learning in a developing country. In null (pp. 1-2). IEEE.