Attitude of college teachers towards web based learning

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Abstract: This study was conducted to explore the Attitude of College teachers towards web-based learning. The sample of this study included 278 College teachers. The self developed questionnaire was used by the investigator to access Attitude of College teachers towards web-based learning. The objectives of the study were to study the significant difference in the attitude of govt. aided and unaided College teachers. To study the significant difference in the attitude of male and female rural and urban science and arts College teachers. The results supported that there is no significant difference in the attitude of lectures towards web based learning they beliefs that web-based learning is an important tool for enhancing the teaching learning process in a classroom situation. It made an enormous contribution to improving education.

Keywords: Attitude, Web Based Learning, College teachers.

Introduction

In the 21st century teacher is not only the source of knowledge of information because of globalization. Traditional approaches of teaching and learning have been challenged by new and innovative approaches based on the latest advances in computer and internet technology. The vast resources and opportunities that computers and internet provide have brought about new tools, approaches, and strategies in teaching and learning. At education system, technology is main facilitator that provides to contribute system under requiring needed knowledge. Technology provides us to know and follow all issues with the help of the basic item, which is Internet. Internet is a wide range of supporter by providing all contacts requirements and all types of information, searching facilities with its various digital tools. Technology has impact on education with today’s contemporary term as Educational Technology. Technological advancements also became an integral part of higher education instruction because higher education deals with the critical thinking. These technological advances have enabled electronic commerce system, anytime, anyplace data retrieval and updating education, professional development, and the rapid growth of e-learning. With increased the usage of instructional technology, the use of electronic textbooks are slowly making their way into the higher education system. The rapid development of computer and Internet technologies has dramatically increased the ways of teaching and learning. Among these new approaches, online Web based education has become a promising field. Various web based technologies have made an enormous contribution to improving education and to the development of learning tasks. Increasing competitiveness, technological change and the re-engineering of production and social processes require continuous upgrading of skills and personal growth. Increased competitiveness and the resulting need to improve and diversify the training the offer means that trainers must have the theoretical as well as practical knowledge in new techniques for delivering training. Only a creative and enthusiastic teacher can incorporate the modern development of ICT in the classroom very successfully. For analyzing data ANOVA one way classification and t-test were used as statistical techniques.

Need and significance

World is becoming global today, people are connected virtually. Social and technological changes have salutary effects on all walks of human life including teaching and learning. In the last decade of last century and the first decade of the present millennium, education sector is under rapid change. Changes that are seen is relating to the information and communication technologies. Teachers of schools, faculty in colleges are busy in downloading important updated material. Face to face teaching is replaced by virtual learning environment and web based learning. Teacher’s role has been changed and has become the facilitator who creates connections between net workings. Teachers at higher education sector prefer to have web based teaching and learning. Therefore Web based learning is now considered as an alternative to classroom face to face teaching. The Web has also expanded opportunities for the increasing information to enhance the traditional classroom instruction. Currently, there is greater possibility of accessing up-to-date content, as updating information on the web can be done faster and more easily than with textbooks. Web based learning transforms the passive students to the active students, with instructor guidance and facilitating aiding them in the tasks of analyzing and synthesizing information. Educators in web based learning become more like coaches and facilitators linking students directly to desired resources and sources of information rather than acting in the traditional role of
delivering information. It is a transformative vehicle for increasing the piece of change and reform in higher education. This technology facilitates and delivers distance learning courses. Computers and online learning are rapidly becoming important components in fundamental curriculum of Education. The computer and online learning curriculum have been incorporated into all levels of the educational systems. However, the instructional effectiveness of computer and online learning are related to many factors including students’ attitudes towards these technologies. The main purpose of this research was to study the attitudes of teachers towards instructional technology and specifically web based support material for the classroom. Given its increased use, it is important to understand how instructional technology and the technologically rich environments are influencing teacher’s attitudes toward learning. This study examines how teachers perceive the incorporation and use of computer technology resources, in particular online concordance software, in vocabulary teaching practices. The study specifically investigated teachers’ attitudes towards and approaches to using these resources in their vocabulary instruction. The main purpose of this research was to study the attitudes of teachers towards instructional technology and specifically web based support material for the classroom. Given its increased use, it is important to understand how instructional technology and the technologically rich environments are influencing teacher’s attitudes toward learning.

Objectives of the study

1. To study the significant difference in the attitude of govt. aided and unaided College teachers.
2. To study the significant difference in the attitude of male and female College teachers.
3. To study the significant difference in the attitude of rural and urban College teachers.
4. To study the significant difference in the attitude of science and arts College teachers.
5. To study the significant difference in the attitude of high experienced (above 10 year) and low experienced (below 5 year) College teachers.

Hypotheses of the study

1. There is no significant difference in the attitude of government, aided and unaided College teachers.
2. There is no significant difference in the attitude of male and female College teachers.
3. There is no significant difference in the attitude of rural and urban College teachers.
4. There is no significant difference in the attitude of science and arts College teachers.
5. There is no significant difference in the attitude of high experienced (above 10 year) and low experienced (below 5 year) College teachers.

Sample

This investigation was conducted in three districts of Punjab, state in INDIA such as Jalandhar / Amritsar/ Kapurthala and took a sample size of 278 lecturers to assess their attitude towards web based learning. For this Descriptive survey method was used.

Tool used

An Attitude scale was used by the investigator as a result tool in the present study. It consisted of 35 statements. All the statements are related with web based learning. It was 3 point scale. The responses were presents in the three forms agree undecided and disagree and weights of 3, 2, and 1 are given in order for the favourable statements and the unfavourable statements.

Results and Interpretation

ANOVA (One Way Classification)

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Sum</th>
<th>Average</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Govt.</td>
<td>38</td>
<td>3101</td>
<td>81.60</td>
<td>35.71</td>
</tr>
<tr>
<td>Aided</td>
<td>138</td>
<td>10942</td>
<td>79.29</td>
<td>27.73</td>
</tr>
<tr>
<td>Private</td>
<td>102</td>
<td>8905</td>
<td>87.30</td>
<td>4508.41</td>
</tr>
</tbody>
</table>

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Table 1.1

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean sum of squares</th>
<th>F</th>
<th>Table value of F</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between the Group</td>
<td>3805.829</td>
<td>2</td>
<td>1902.914</td>
<td>1.1364</td>
<td>At 0.05 Level=3.028</td>
<td>Not significant</td>
</tr>
<tr>
<td>Within the Group</td>
<td>460469.1</td>
<td>275</td>
<td>1674.433</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46427.9</td>
<td>277</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result shows the significance of difference of means of attitude of Govt./Aided/Private College teachers towards web based learning. The mean score of the Govt. College teachers is 81.60 and the mean score of Aided College teachers is 79.72 and the mean scores of private College teachers is 87.30. The critical ratio comes out to be 1.1364 which is insignificant at 0.05 level of significance. This means the tabulated value of ‘F’ is greater than the calculated value of ‘F’. So null hypothesis is accepted this means the there is insignificant difference in the attitude of Govt./Aided/Private College teachers towards web based learning.

Table 2. Attitude of Male and Female College teachers towards Web Based Learning.

<table>
<thead>
<tr>
<th>Sample group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Degree of freedom</th>
<th>t-value</th>
<th>Tabulated value of ‘t’</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>80.06</td>
<td>145</td>
<td>4.87</td>
<td>276</td>
<td>0.4812</td>
<td>At 0.05 level=1.96</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Female</td>
<td>80.09</td>
<td>133</td>
<td>5.05</td>
<td></td>
<td></td>
<td>At 0.01 level=2.97</td>
<td></td>
</tr>
</tbody>
</table>

The result shows the significance of difference of means of attitude of male and female College teachers towards web based learning. The mean score of the male College teachers is 80.06 and the mean score of female College teachers is 80.09. The critical ratio comes out to be 0.4812 which is insignificant at 0.05 level of significance. This means the tabulated value of ‘t’ is greater than the calculated value of ‘t’. So null hypothesis is accepted this means the there is insignificant difference in the attitude of male and female College teachers towards web based learning.

Table 3. Rural and Urban College teachers towards web based learning.

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>Degree of Freedom</th>
<th>t-value</th>
<th>Tabulated value of ‘t’</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>128</td>
<td>79.75</td>
<td>5.306362</td>
<td>276</td>
<td>0.083</td>
<td>At 0.05 level=1.96</td>
<td>Not significant</td>
</tr>
<tr>
<td>Urban</td>
<td>150</td>
<td>80.66</td>
<td>5.617363</td>
<td></td>
<td></td>
<td>At 0.01 level=2.97</td>
<td></td>
</tr>
</tbody>
</table>

The result shows the significance of difference of means of attitude of rural and urban College teachers towards web based learning. The mean score of the rural College teachers is 79.75 and the mean score of urban College teachers is 80.66. The critical ratio comes out to be 0.083 which is insignificant at 0.05 level of significance. This means the tabulated value of ‘t’ is greater than the calculated value of ‘t’. So null hypothesis is accepted this means the there is insignificant difference in the attitude of rural and urban College teachers towards web based learning.

Table 4. Attitude of Arts and Science stream College teachers towards web based learning.

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>Degree of Freedom</th>
<th>t-value</th>
<th>Tabulated value of ‘t’</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>115</td>
<td>80.23</td>
<td>5.47</td>
<td>276</td>
<td>0.3085</td>
<td>At 0.05 level=1.96</td>
<td>Not significant</td>
</tr>
<tr>
<td>Science</td>
<td>163</td>
<td>79.62</td>
<td>5.53</td>
<td></td>
<td></td>
<td>At 0.01 level=2.97</td>
<td></td>
</tr>
</tbody>
</table>

The result shows the significance of difference of means of attitude of Arts and Science stream College teachers towards web based learning. The mean score of the Arts College teachers is 80.23 and the mean score of Science
College teachers is 79.62. The critical ratio comes out to be 0.3085 which is insignificant at 0.05 level of significance. This means the tabulated value of ‘t’ is greater than the calculated value of ‘t’. So null hypothesis is accepted this means the there is insignificant difference in the attitude of Arts and Science stream College teachers towards web based learning.

Table 5. Attitude of High experienced and Low experienced College teachers towards web based learning.

<table>
<thead>
<tr>
<th>Sample Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Degree of freedom</th>
<th>t-value</th>
<th>Tabulated value of ‘t’</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Experienced</td>
<td>113</td>
<td>80.87</td>
<td>4.96</td>
<td>276</td>
<td>0.1702</td>
<td>0.05 level=1.96</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Low Experienced</td>
<td>165</td>
<td>80.27</td>
<td>5.45</td>
<td></td>
<td></td>
<td>0.01 level=2.97</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The result shows the significance of difference of means of attitude of High experienced and Low experienced College teachers towards web based learning. The mean score of the High experienced College teachers is 80.87 and the mean score of Low experienced College teachers is 80.27. The critical ratio comes out to be 0.1702 which is insignificant at 0.05 level of significance. This means the tabulated value of ‘t’ is greater than the calculated value of ‘t’. So null hypothesis is accepted this means the there is insignificant difference in the attitude of High experienced and Low experienced College teachers towards web based learning.

Findings of the study

1. The hypothesis of the study was there exist a positive attitude of college lecturers towards web based learning. To test this hypothesis Q1 and Q3 were calculated. On the basis of the result it is concluded that there exist a positive attitude of college lecturers towards web based learning.

2. The hypothesis of the study was that there is no significant difference in the attitude of Govt/Private/Aided college lecturers towards web based learning. To test this hypothesis the mean score, standard deviation and F-value were calculated then the result shows that there is insignificant difference in the attitude of Govt/Private/Aided college lecturers towards web based learning.

3. The hypothesis of the study was that there is no significant difference in the attitude of male and female college lecturers towards web based learning. To test this hypothesis the mean score, standard deviation and t-test were calculated then the result shows that there is insignificant difference in the attitude of male and female college lecturers towards web based learning.

4. The hypothesis of the study was that there is no significant difference in the attitude of Rural and urban college lecturers towards web based learning. To test this hypothesis the mean score, standard deviation and t-test were calculated then the result shows that there is insignificant difference in the attitude of Rural and urban college lecturers towards web based learning.

5. The hypothesis of the study was that there is no significant difference in the attitude of Arts and science stream college lecturers towards web based learning. To test these hypothesis the mean score, standard deviation and t-test were calculated then the result shows that there is insignificant difference in the attitude of Arts and Science stream college lecturers towards web based learning.

6. The hypothesis of the study was that there is no significant difference in the attitude of High Experienced and Low experienced college lecturers towards web based learning. To test this hypothesis the mean score, standard deviation and t-test were calculated the the result shows that there is insignificant difference in the attitude of High Experienced and Low experienced college lecturers towards web based learning.

Conclusions and implications

The access to digital communication technology with multi capability has made learning more vivid, interesting and joyful. The WWW has a vast collection of information of various subjects which is not always available in an organized array. Teachers or lecturers are an important element in the educational network. So the teachers should be encouraged, through training and support, to the use of Web and other information technology systems in their teaching. They need example and awareness of good practice, and standards should be set in relation to how teachers present information and manage the learning environment.
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