Attitude of B.Ed. Student Teachers towards using Cyber Resources

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Abstract: Cyber resources are a collection of various online resources. As we know that the quality of nation depends on the quality of human capital it has, the quality of human capital depends on the quality of education. And it is very obvious that the quality of education depends on the quality of teacher engaged in teaching work. The study used descriptive method. The study found that the B.Ed student teachers from Shillong have favorable attitude towards using cyber resources. Gender and locale do not affect the attitude of B.Ed teacher trainees towards cyber resources however those who possess own computer have significantly favorable attitude as compared to those BEd student teachers not possessing own computers. The student teachers have felt the need to use cyber resources for obtaining knowledge, further reading, now it is important to teach them about ethical use of the cyber resources.

Keywords: cyber resources, attitude, B.Ed student teachers

1. Introduction

Cyber literally means computer and its related works. The works include surfing, browsing, calculating, editing, uploading, downloading, emailing, attaching files etc. As cited in Cambridge English Dictionary, (2016) “Cyber means anything involving, using or related to computer, especially the internet.” Cyber resource is concerned with internet related resources which is available through worldwide network various servers. It is all those resources which we can get access from the internet. It can be of many ways, may be using of computer or simply using the smart phone in our hands. Cyber resources are a collection of various online resources. As we know that the quality of nation depends on the quality of human capital it has, the quality of human capital depends on the quality of education. And it is very obvious that the quality of education depends on the quality of teacher engaged in teaching work. So ultimately the quality of nation is dependent upon the quality of teacher. So in order to improve the quality of teacher, they should be equipped with all the modern technologies which includes use of cyber resources. It has been observed that in our country there are many teachers who are not well acquainted with the knowledge of computer. There are teachers who have different types of attitude towards cyber use and cyber resources. Basically the term attitude means a favorable or unfavorable evaluative reaction toward something or someone that shows ones behavior and intension towards them. It is a social orientation an underlying inclination to respond to something either favorably or unfavorably. Adding to this Madhusudhan,(2015) wrote that, “The use of the cyber resource in the educational environment has enabled easy access to many resources and information sharing has been significantly increased. Moreover the prevalence of this sharing has brought additional benefits is that these resources can be used in any location and anytime”. Thus we could understand the role and importance of cyber resources in educational environment. We can say that with the change in the world, the education system has also changed and teacher education too cannot remain untouched from these global changes. Cyber learning has opened the doors of classrooms and made knowledge accessible even for those sitting at home. The preparation of teachers has also changed with the change in the need and expectations of the society as the cyber world are affecting both individuals and society. And also it is very important to study what are teacher students’ attitudes toward cyber world and it related uses.

Cyber resource is concerned with computer related resources which is a world-wide network of computerized devices and servers. It is all those things which we can get using computer network.

2. Type of Cyber Resources

Cyber resources are resources which we can assess using computer. So we can say cyber resources are of following types:

a) Audio files- There exists audio of different qualities available on internet related to education given by different institution like IGNOU, agencies and experts. Students as well as teachers can access these audio as the source of information.

b) Video resources- There are many educational websites which provide video files of different resolution which sometimes acts as our source of information. Example IGNOU website. There are some non-educational websites which provides educational information. Example: YouTube, Yahoo videos etc.

c) Power point presentation (PPT) – According to WhatIs, (2017) “It is a file extension for a presentation file format used by Microsoft PowerPoint, the popular presentation software commonly used for office and educational slide shows. All text images, sound, video used in the presentation are contained in the PPT files. PPT files can be viewed by PowerPoint, PowerPoint Viewer or the open office software suite”

d) PDF pages file – As mentioned in Adobe Acrobat DC, (2017) “Portable Document Format is a file format used to present and exchange documents reliably, independent
of software, hardware, or operating system”. It was invented by Adobe cofounder Dr. John Warnock in year 1991.

e) **Images and maps and diagrams**- There are some cyber resources in the form of image, map and diagram which has detailed information. For example, atlas maps, google map are provided with zoom options so that we can access it with details.

f) **Editable resources**- There are certain websites which provide editing options. It helps the learner to update the existing information with latest one. For example, Wikipedia.

### 3. Need and Justification of the Study

The development of the society means development in all the aspects of life. The parameter of the judgment of the quality of the nation may include the use of modern technologies in the production sectors, the per capita income of citizens of the nation and the ability of the nation to compete internationally, especially in the field of technologies. But in order to achieve the above said condition, the standard of education that it imparts to its citizens has to be taken into account. The quality of education depends much on the availability of the competent and dedicated teachers. Teachers can share new and innovative ideas and different methods of teaching with suitable examples among themselves from anywhere in the world through cyber resources. This approach emphasizes and enhances teacher’s professional competency. Not only this but also the usage of cyber resources helps the teacher to get updated with what new is happening in the world. It provides a global level platform for the researchers and research scholars. So we can say cyber resources and cyber facilities are necessary component in the today’s hi-tech classroom. Thus, teachers and pre-service teachers like B.Ed students should develop a positive attitude towards using cyber resources. But sometimes we find that the dependency of teacher on cyber resources has increased which in a way carries a wrong message. Therefore, the investigators attempted to study the attitude towards using cyber resources of B.Ed., students.

### Objectives of the Study

The objectives of the present study are as follows:

1. To study the attitude of B.Ed. students towards using cyber resources.
2. To study the attitude towards using cyber resources between male and female B.Ed. students.
3. To study the attitude towards using cyber resources of B.Ed. students from urban and rural area.
4. To study the attitude towards using cyber resources of B.Ed students having own computer and those who are not having own computer.
5. To find out the attitude towards using cyber resources among B.Ed students having different method paper.

### Hypotheses of the study

H0: There is no significant difference in the attitude towards using cyber resources between male and female B.Ed students.

H0: There is no significant difference in the attitude towards using cyber resources between urban and rural B.Ed students.

H0: There is no significant difference in the attitude towards using cyber resources between the B.Ed students owning computer and those without computer at home.

H0: There is no significant difference in the attitude towards using cyber resource among students having following method papers- Language and Science, Language and Social science and Science and Social science

### 4. Methodology

The present study intends to find out the attitude towards using cyber resources among B.Ed students of Shillong. Hence, 200 B.Ed students in Shillong both government and private college were the population. A represented sample of 180 B.Ed students was chosen for the extensive study. The tool used for the study was The Attitude Towards Using Cyber Resources Scale (ATUCRS) developed by Dr. S. Rajasekar.

### 5. Result

**Attitude of B.Ed. students towards using cyber resources**

The attitude towards using cyber resources among the B.Ed students of Shillong.

**Table 1**: Frequency and percentage of scores of attitude towards using cyber resources of male and female B.Ed. students of Shillong

<table>
<thead>
<tr>
<th>Scores</th>
<th>Interpretation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 - 30</td>
<td>Highly Unfavorable Attitude</td>
<td>00</td>
<td>0%</td>
</tr>
<tr>
<td>31 - 50</td>
<td>Unfavorable Attitude</td>
<td>00</td>
<td>0%</td>
</tr>
<tr>
<td>15 - 89</td>
<td>Neutral Attitude</td>
<td>159</td>
<td>88.33</td>
</tr>
<tr>
<td>90 - 109</td>
<td>Favorable Attitude</td>
<td>21</td>
<td>11.66</td>
</tr>
<tr>
<td>110 - 120</td>
<td>Highly Favorable Attitude</td>
<td>00</td>
<td>0%</td>
</tr>
</tbody>
</table>

The scores were analyzed using the frequency and percentage table 1. It was found that 159 students have Neutral Attitude towards using cyber resources which is equal to 88.33% of students. Moreover it was found that 21 students which is equal to 11.66% of B.Ed students fall under the score ranging between 90 to 109 which symbolize Favorable Attitude towards using cyber resources. The table shows that there was no students in the other three category ie, Highly Unfavorable Attitude, Unfavorable Attitude, Highly Favorable Attitude. So we can say that majority B.Ed students (88.33%) of Shillong have Neutral attitude towards using cyber resources.

**Attitude of male and female B.Ed. students towards using cyber resources**

The difference between the attitude of male and female B.Ed. students towards using cyber resources.
Hypothesis one

Table 2: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of male and female B.Ed students of Shillong

<table>
<thead>
<tr>
<th>Attitude towards using Cyber Resource</th>
<th>Gender</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>&quot;t&quot; value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>43</td>
<td>82.47</td>
<td>7.49</td>
<td>0.09</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>137</td>
<td>82.58</td>
<td>6.12</td>
<td>0.9</td>
<td>Significant at 0.05 level</td>
</tr>
</tbody>
</table>

From table no. 2, it can be said that the mean scores of attitude towards using cyber resources of male students is 82.47 and of female students is 82.58. The observed t-value was 0.09 with df=198. This was found to be not significant at 0.05 level. The attitude level of female students is higher (M=82.58, SD=6.12) as compared to male students (M=82.47, SD=7.49). It was found that there is no significant difference between the mean scores of male and female in the levels of attitude towards using cyber resources. Thus, the null hypothesis, ‘there is no significant difference between the attitude of male and female B.Ed students towards using cyber resources’ is accepted. This indicates that both male and female B.Ed students of Shillong have same attitude towards using cyber resources.

The attitude of B.Ed. students of urban and rural area towards using cyber resources

The third objective was to study the difference between the attitude of B.Ed. students of urban and rural area towards using cyber resources.

Hypothesis two

Table 3: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of urban and rural B.Ed students of Shillong

<table>
<thead>
<tr>
<th>Attitude towards cyber resource</th>
<th>Locale</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>&quot;t&quot; value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>112</td>
<td>82.84</td>
<td>6.79</td>
<td>0.77</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>68</td>
<td>82.07</td>
<td>5.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table no. 3, it can be said that the mean scores of attitude towards using cyber resources of urban students is 82.84 and the mean scores of attitude towards using cyber resources of rural students is 82.07. The observed t-value was 0.77 with df=198. This was found to be not significant at 0.05 level. The attitude level of urban students is higher (M=82.84, SD=6.79) as compared to rural students (M=82.07, SD=5.86). It was found that there is no significant difference between the mean scores of urban and rural students in the levels of attitude towards using cyber resources. Thus, the null hypothesis, ‘there is no significant difference between the attitude of urban and rural B.Ed students towards using cyber resources’ is accepted. This indicates that both urban and rural B.Ed students of Shillong have same attitude towards using cyber resources.

The attitude towards using cyber resources of B.Ed students having own computer and those who are not having own computer

The difference between the attitude of B.Ed students having own computer and those who are not having own computer, towards using cyber resources.

Hypothesis three

Table 4: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of B.Ed students of Shillong having their own computer and those without own computer

<table>
<thead>
<tr>
<th>Attitude towards using cyber resource</th>
<th>Possession of computer</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>&quot;t&quot; value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Own</td>
<td>115</td>
<td>82.98</td>
<td>6.66</td>
<td>0.77</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td></td>
<td>Don't Own</td>
<td>65</td>
<td>81.78</td>
<td>6.06</td>
<td>0.98</td>
<td>Not significant at 0.05 level</td>
</tr>
</tbody>
</table>

From table no. 4, it can be said that the mean scores of attitude towards using cyber resources of computer owning students is 82.98 and the mean scores of attitude towards using cyber resources of students without own computer is 81.78. The observed t-value was 1.28. This was found to be significant at 0.05 level. The attitude level of computer owning students is higher (M=82.98, SD=6.657) as compared to students without own computer (M=81.78, SD=6.056). It was found that there is significant difference between the mean scores of students owning computer and the students without own computer, in the levels of attitude towards using cyber resources. Thus, the null hypothesis, ‘there is no significant difference in the attitude towards using cyber resources between the B.Ed students owning computer and those without computer at home’ is not accepted. This indicates that B.Ed students of Shillong having own computer and those not having their own computer have significantly different attitude towards using cyber resources.

The attitude towards using cyber resources among B.Ed students of Shillong with different method paper

The fifth objective was to evaluate the difference between the attitude of B.Ed students having different method paper, towards using cyber resources.

Hypothesis four

Table 5: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of B.Ed students of Shillong having Language and Science method papers

<table>
<thead>
<tr>
<th>Attitude towards using cyber resources</th>
<th>Method Paper</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>&quot;t&quot; value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Language</td>
<td>58</td>
<td>81.78</td>
<td>5.82</td>
<td>0.98</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>52</td>
<td>82.96</td>
<td>6.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table no 5, above shows that the mean scores of attitude towards sing cyber resources of students with science is 82.96 and Language is 81.78. The observed t-value was 0.98. This was not found to be significant at 0.05 level. The attitude level of student with Science as method paper is higher (M=82.96, SD=6.802) as compared to students with Language as their Method paper (M=81.78, SD=5.825). It was found that there is no significant difference between the mean scores of B.Ed students with Science and Language as method papers, in the levels of attitude towards using cyber resources. Thus, the null hypothesis, ‘There is no significant difference between the attitude towards using cyber resource among students having Language and Science as method papers’ is accepted.
Hypothesis five
H0- There is no significant difference between the attitude towards using cyber resource among students having Language and Social Science method papers.

**Table 6**: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of B.Ed students of Shillong having Language and Social Science method papers.

<table>
<thead>
<tr>
<th>Method Paper</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>'t' value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>58</td>
<td>81.78</td>
<td>5.82</td>
<td>0.98</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td>Social Science</td>
<td>66</td>
<td>82.91</td>
<td>6.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table no 6, the mean scores of attitude towards using cyber resources of students with Social Science method paper is 82.91 and Language is 81.78. The observed t-value was 0.98. This was not found to be significant at 0.05 level. The attitude level of student with Language as method paper is lower (M=81.78, SD=5.825) as compared to students with Social Science as their Method paper (M=82.91, SD=6.865). The t score = 0.98. It was found that there is no significant difference between the mean scores of B.Ed students with Language and Social Science as method papers, in the levels of attitude towards using cyber resources. Thus, the null hypothesis, ‘There is no significant difference between the attitude towards using cyber resource among students having Language and Social Science as method papers’ is accepted.

Hypothesis six
H0- There is no significant difference between the attitude towards using cyber resource among students having Science and Social Science method papers.

**Table 7**: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of B.Ed students of Shillong having Science and Social Science method papers

<table>
<thead>
<tr>
<th>Method Paper</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>'t' value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>52</td>
<td>82.96</td>
<td>6.80</td>
<td>0.04</td>
<td>Not significant at 0.05</td>
</tr>
<tr>
<td>Social Science</td>
<td>66</td>
<td>82.91</td>
<td>6.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table no 7, the mean scores of attitude towards using cyber resources of students with science method paper is 82.91 and science is 82.96. The observed t-value was 0.04. This was not found to be significant at 0.05 level. The attitude level of student with Science as method paper is higher (M=82.96, SD=6.802) as compared to students with Social Science as their Method paper (M=82.91, SD=6.865). The t score = 0.04. It was found that there is no significant difference between the attitude towards using cyber resource among students having Science and Social Science as method papers’ as accepted.

Hypothesis seven
H0- There is no significant difference between the attitude towards using cyber resource among students having Science and Mathematics method papers.

**Table 8**: Mean, Standard Deviation and t-Value of Mean Scores of attitude towards using cyber resources of B.Ed students of Shillong having Science and Mathematics method papers

<table>
<thead>
<tr>
<th>Method Paper</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>'t' value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>52</td>
<td>82.96</td>
<td>6.802</td>
<td>0.337</td>
<td>Not significant at 0.05</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>82.50</td>
<td>4.04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table no 8, the mean scores of attitude towards using cyber resources of students with science method paper is 82.96 and mathematics as method paper is 82.50. The observed t-value was 0.337. This was not found to be significant at 0.05 level. The attitude level of student with Science as method paper is higher (M=82.96, SD=6.802) as compared to students with Mathematics as their Method paper (M=82.50, SD=4.041). The t score = 0.337. Thus, the null hypothesis, ‘There is no significant difference between the attitude towards using cyber resource among students having Science and Mathematics as method papers’ is accepted.

Hypothesis eight
H0- There is no significant difference between the attitude towards using cyber resource among students having Language and Mathematics method papers.

**Table 9**: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of B.Ed students of Shillong having Language and Mathematics method papers

<table>
<thead>
<tr>
<th>Attitude towards using cyber resources</th>
<th>Method Paper</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>'t' value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>58</td>
<td>81.78</td>
<td>5.82</td>
<td>0.98</td>
<td></td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>82.50</td>
<td>4.04</td>
<td>2.44</td>
<td>Significant at 0.05</td>
<td></td>
</tr>
</tbody>
</table>

From table no 9, the mean scores of attitude towards using cyber resources of students with mathematics as method paper is 82.50 and Language is 81.78. The observed t-value was 2.44. This was found to be significant at 0.05 level. The attitude level of student with Language as method paper is lower (M=81.78, SD=5.825) as compared to students with Mathematics as their Method paper (M=82.50, SD=4.041). The t score = 2.44. Thus, the null hypothesis, ‘There is no significant difference between the attitude towards using cyber resource among students having Language and Mathematics as method papers’ is rejected. This indicates that B.Ed students of Shillong having Language and Mathematics as their method papers have significantly different attitude towards using cyber resources. Teacher trainees with mathematics have significantly favourable attitude towards cyber resources as compared to those with language as method paper.

Hypothesis nine
H0- There is no significant difference between the attitude towards using cyber resource among students having Social Science and Mathematics method papers.

**Table 10**: Mean, Standard Deviation and t-Value of attitude towards using cyber resources of B.Ed students of Shillong having Social Science and Mathematics method papers

<table>
<thead>
<tr>
<th>Method Paper</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>'t' value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science</td>
<td>66</td>
<td>82.91</td>
<td>6.86</td>
<td>0.117</td>
<td>Not significant at 0.05</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>82.50</td>
<td>4.04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table no 10, the mean scores of attitude towards using cyber resources of students with mathematics as method paper is 82.50 and social science is 82.91. The observed t-value was 0.117. This was not found to be significant at 0.05 level. The attitude level of student with Social Science as method paper is higher (M=82.91, SD=6.865) as compared to students with Mathematics as their Method paper.
the attitude towards using cyber resource among students having Social Science and Mathematics as method papers is accepted.

6. Recommendations for Improvement of Attitude towards cyber resources

Based on the interpretation of the findings, the investigators suggest the following recommendations in order to improve the attitude towards using cyber resources among the B.Ed students:

1) Regular seminars and workshops may be conducted to enhance presentation and working skills.
2) E-journals can be published every month that will greatly increase their confidence of writing online and using computer resources for developing their skill.
3) B.Ed students can be taught in using smart classrooms to increase their teaching and planning skill as how to use cyber resources.
4) They should be taught all the basics in excel, SPSS and other relevant software to use them in Attendance record, calculations and other action research etc.
5) The enthusiastic involvement of B.Ed students in Computer using attitude could be supplemented with inclusion of certain computer packages like Tally, AUTOCAD etc. in B.Ed syllabus.
6) Suitable learning activities for the reinterpretation of the content, procedures for writing algorithm, drawing flowcharts, writing programs are to be made clear by the teachers using LCD supported CD-ROMs.
7) For enhancing the professional competency of B.Ed teachers, it is recommended that policy makers should conduct refresher programmes that keep teachers abreast of the latest development in the field of computer science. So that they can be role models for their students so that their attitude towards using cyber resources in improved.
8) Students with personal computer of their own are found to be better than students without personal computer in their attitude towards computer. The investigator opines that if sufficient number of computer systems is provided and if they are monitored to be in good working conditions, students will learn all the concepts relating to computers thoroughly and this would help all the learners to develop positive attitude towards computers.
9) Classes conducted by private organization like INTEL, MICROSOFT can be arranged as activities of extended learning, through computer science club of the school.
10) It is suggested that teachers should train students to browse net for gathering information, take up online reading programme and attend online examinations.
11) It is also suggested to conduct workshops by college management that help parents to understand the importance in encouraging their students to learn and use internet properly.
12) It is suggested to the authorities of all institutions to extend students’ working at computer laboratory after school working hours.
13) Proper attempts like providing rich learning environments supported by multimedia software etc. will remove their abstractness in the way of improving attitude towards using cyber resources.

7. Conclusion

The B.Ed students from Shillong have Favorable Attitude towards using cyber resources. Gender and locale do not affect the attitude of BEd teacher trainees towards cyber resources however those who possess own computer have significantly favorable attitude as compared to those B Ed student teachers not possessing own computers. There is an expectation that contemporary teacher education programs prepare graduates to use computer effectively as an integral dimension of their teaching and their students ‘learning'. Moreover the modern classes includes teaching with audio visual teaching aids and other electronic aids which need computer to get operated. Thus it is very much necessary for the student teachers to have favorable attitude towards using cyber resources. And for this at B.Ed levels it is not only the responsibility of students but also of the college managements to organize some seminars, workshops and conferences on the usage of cyber resources in the teaching learning process. This would definitely enhance the attitude of using cyber resources effectively, efficiently and intelligently in academic and professional field.

References

www.searchsecurity.techtarget.com/definition/cybercrime

