ATTITUDES OF HIGHER SECONDARY SCHOOL TEACHERS TOWARDS THE USE OF ICT IN TEACHING LEARNING PROCESS: A STUDY.

Abhijit Saha.

Ph.D. Research Scholar, Assam University, Department of Education, Silchar.

ABSTRACT

Information and Communication technology (ICT) is one of the best alternative to provide qualitative education to the demographic pattern of India. Realizing the fact the Government of India started its initiative long before though proper implementation in the teaching learning process in all levels is far away to reach. But the key resource for proper implementations of ICT in teaching learning process is the teacher. And the success of any project depends on the attitudes of concerned human resource. So it is for the teachers too. The main purpose of the study is to know the attitudes of Higher Secondary teachers in using ICT in teaching learning process. For this teachers from 22 schools, who are teaching in the +2 stage in the Cachar District (Assam) are taken as the population. A questionnaire has been administered to gather data. The study revealed that the teachers have the positive attitudes towards the using of ICT in teaching learning process. The study also found out the relation of attitudes with sex and place of work.

Keywords: Attitudes, Higher Secondary Teachers, ICT, Teaching - Learning Process.

INTRODUCTION

This era is the era of science and technology. Science and technology has contributed almost in every aspects of our lives. It simplified our way of living. Hence it is obvious that the field of education cannot be an exceptional. Information and Communication Technology (ICT) is the contribution of modern science and technology having its wide range of applications starting from morning to night. Looking at the impact of ICT the educationists, the psychologists, the policy makers suggested the very need of using ICT in teaching learning process.

India is committed for free and compulsory education for all children until the complete the age of 14 years. Also the fundamental right of equality as provided by Indian constitution is meaningless unless we can provide equal opportunities for his/her education. India is a big country with a variety of socio-economic patterns and a spectrum of cultures. To provide the
equal opportunities as well as quality education to the young generations is a challenge. To meet the challenge, ICT is an appropriate option. India is trying to explore the uses of ICT in education. With this objective Indian Government has launched “National Mission on Education through ICT” in 2009 which is facilitating quality education irrespective of “time and space”. ICT can not only enhance learning environment but also can equip the next generation for future and careers (Wheeler, 2001).

But no project can be successful until and unless the related persons are involved physically and mentally. Kersiant, Horton, Stohl and Garofald (2003) got that teachers with positive attitudes towards technology are more ease with using it and also integrate it with their teaching. Woodrow (1992) suggested that any paradigm shift in educational practice essentially needs the development of positive attitudes of the users towards the new technology. Watson, 1998 stated that the development of teachers’ positive attitudes towards ICT is a key factor for both enhancing computer integration and get rid of teachers’ reluctance to use computers.

ICT

1. can improve the quality of education
2. has the potential to provide more accessibility
3. is quite good to reduce the cost of education.

The present study is an endeavor to know the attitudes towards use of ICT in teaching learning process of higher secondary teachers, who are teaching in the +2 stages, and whether there is any difference of attitudes with respect to their sex and place of work.

**OBJECTIVE OF THE STUDY**

1. To study the attitudes of H. S. teachers towards the use of ICT in teaching learning process.
2. To study the attitudes of rural and urban H. S. teachers towards the use of ICT in teaching learning process.
3. To compare the attitudes of urban male and urban female H. S. teachers towards the use of ICT in teaching learning process.

**HYPOTHESIS FORMED**

1. There is no significant difference in attitudes score of rural and urban H. S. teachers towards the use of ICT in teaching learning process.
2. There is no significance difference in attitudes score of urban male and rural female H. S. teachers towards the use of ICT in teaching learning process.
METHOD OF THE STUDY

To study of attitudes of higher secondary teachers’ attitudes the researcher has adopted the descriptive survey method. Out of 28 Assam Govt. provincialized schools the researcher surveyed 24 schools, 4(all) from urban area and 20 from rural areas of Cachar District of Barak Valley, in the Southern Part of Assam. The sample consists of 86 higher secondary teachers of both the sexes.

Tool of the Study: A self-made questionnaire, which were checked for validity and reliability, has been used to collect the data. Likeart’s attitude scale is used to access the attitudes of higher secondary teachers toward the application of ICT in teaching-learning process. There are 20(twenty) questions and 5(five) points scale such as Agree, Strongly Agree, Undecided, Disagree, Strongly Disagree. The maximum score of the questions can be 100 and minimum 20. The positive questions are assigned as-

Strongly agree-5, Agree-4, Undecided-3, Disagree-2, Strongly Disagree-1, whereas the negative questions are assigned as

Strongly agree-1, Agree-2, Undecided-3, Disagree-4, Strongly Disagree.

RESULTS AND INTERPRETATIONS

The focus of the study were to know the attitudes of higher secondary teachers in application of ICT in teaching learning process and compare their attitudes with respect to sex and place of work of teachers.

Table 1: Mean attitudes score of teachers towards use of ICT.

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>Scores</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>3291</td>
<td>38.27</td>
</tr>
<tr>
<td>Negative</td>
<td>2819</td>
<td>32.78</td>
</tr>
<tr>
<td>Total</td>
<td>6110</td>
<td>71.05</td>
</tr>
</tbody>
</table>
Table 2: Z Scores

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>71.64</td>
<td>75.27777778</td>
</tr>
<tr>
<td>Known Variance</td>
<td>68.3104</td>
<td>21.92284</td>
</tr>
<tr>
<td>Observations</td>
<td>50</td>
<td>38</td>
</tr>
<tr>
<td>Hypothesized Mean</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z</td>
<td>-2.588411318</td>
<td></td>
</tr>
<tr>
<td>P( Z&lt;= z) one-tail</td>
<td>0.004820989</td>
<td></td>
</tr>
<tr>
<td>Z critical one-tail</td>
<td>1.644853627</td>
<td></td>
</tr>
<tr>
<td>P( Z&lt;= z) two-tail</td>
<td>.0009641977</td>
<td></td>
</tr>
<tr>
<td>z critical two-tail</td>
<td>1.959963985</td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:**

We compare the Alpha value 0.05 to the P value (two-tail)

Here P-value (0.0096) is larger than Z value (-2.5884) and P value is smaller than Alpha value. We reject the null hypothesis that is there is no significance difference between the mean of each Sample. So we can conclude that there is no significant difference of attitudes between the Rural and Urban teachers towards the use of ICT in teaching-learning process.
Table 3: F Test for t-test

F-test Two Sample for Variances. To compare the attitudes of male and female teachers towards the use of ICT in teaching-learning process.

<table>
<thead>
<tr>
<th></th>
<th>Variable-1</th>
<th>Variable-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>76.833</td>
<td>75.705</td>
</tr>
<tr>
<td>Variance</td>
<td>23.205</td>
<td>14.345</td>
</tr>
<tr>
<td>Observations</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>df</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>F</td>
<td>1.6176</td>
<td></td>
</tr>
<tr>
<td>P( F&lt;=f) one tail</td>
<td>0.1710</td>
<td></td>
</tr>
<tr>
<td>F critical one tail</td>
<td>2.3167</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: t-test (Two samples Assuming Unequal Variables).

<table>
<thead>
<tr>
<th></th>
<th>Variable 1</th>
<th>Variable 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>78.833</td>
<td>75.705</td>
</tr>
<tr>
<td>Variance</td>
<td>23.20</td>
<td>14.34</td>
</tr>
<tr>
<td>Observations</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Hypothesize Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>0.77195</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one tail</td>
<td>0.22290</td>
<td></td>
</tr>
<tr>
<td>t Critical one tail</td>
<td>1.69388</td>
<td></td>
</tr>
<tr>
<td>P( T&lt;=t) two-tail</td>
<td>0.44580</td>
<td></td>
</tr>
<tr>
<td>t critical two-tail</td>
<td>2.03693</td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:

Here, - t critical value< t stat< + t critical

i.e. -2.0369< 0.7719< 2.0369

We do not accept the null hypothesis.
Therefore the observed difference between the sample means is not convincing enough to say that the attitude between the male and female teachers towards the use of ICT in Teaching-Learning process differs significantly.

CONCLUSION

Proper education is the main force to accelerate the economic, social and cultural growth of a nation. Hence, no option should be left out to provide quality education to all, irrespective of their geographical locations or economic conditions. Indian constitution is committed to education for all up to age of 14 years which is a challenge for the nation. Integration of ICT in teaching-learning process can contribute positively in this regard. But the installation of ICT does not confirm success rather the attitudes the teachers to use this in their teaching is essential. In the present study we have seen that the teachers, both male and female, urban or rural, have shown their positive attitudes towards the uses of ICT which is very encouraging for all stakeholders. It may be for the reason that teachers realized the importance of technology of this era and hopeful about its positive impact in teaching-learning process.

REFERENCES


Anju, & Manisha.(2014). The Role of ICT in Higher Education in India.

Balakrishnan, Ramia.(2006). Environmental “Awareness” And “Attitudes” Towards Environmental Education Among The Undergraduate And Post Graduate Students In Arunachal Predesh.


Thapliyal, Upasana. (2013). Equity in Higher Education: Exploring the Role of ICT.