Creating Awareness among Tenth Standard Students of Mira Bhayander Municipal Corporation towards ICT

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Abstract – Present paper is an attempt to create awareness among tenth standard students of Mira Bhayander Municipal Corporation towards ICT by using computer and internet as an effective means to actively engage them in day to day teaching learning process.

The rational for selection of the topic is to update students’ knowledge with latest approach of ICT and make them aware so that they do not face much difficulty in this modern competitive world as everything is globalized revolutionary with modern new technology.

The present study uses experimental method and the main objectives of present research was to develop modules for creating awareness among secondary school students, implement the module on the experimental group. The main objectives of the study was to compare the pretest and posttest mean scores of ICT awareness of experimental group, to compare the pretest and posttest mean scores of ICT awareness of control group, to compare the pretest mean scores of ICT awareness of Experimental and control group and to compare the posttest mean scores of ICT awareness of Experimental and control group. The sample consists of 100 students i.e., total sample was divided into two groups 50 students for control group and 50 students for experimental group. The data were analysed by t-test and it reveals that hypotheses 1 and 4 were significant while hypotheses 2 and 3 were non-significant.

Keywords: Awareness, ICT, Education, Students

INTRODUCTION

In today's time Information and communication technology has become an integral part of every individual’s life. It is not a surprise that the use of the internet has been increased at a rapid rate. But there is a huge impact of internet on student’s lives of Mira Bhayander Municipal Corporation and this has been evident as the schools are increasingly transforming into smart schools. Teachers turn ICT from Zero to Hero as schools cannot deny the use of ICT as distractors.

OBJECTIVES

The objectives of present research are:

1. To compare the mean scores of ICT awareness of pretest experimental group and posttest experimental group.
2. To compare the mean scores of ICT awareness of pretest control group and posttest control group.
3. To compare the mean scores of ICT awareness of pretest experimental group and pretest control group.
4. To compare the mean scores of ICT awareness of posttest experimental group and posttest control group.

In order to achieve the objectives the researcher framed the null hypotheses which are stated as follows:

SIGNIFICANCE OF THE STUDY

ICT has brought changes in almost all aspects of our lives. It has changed our day to day activities like communication with each other, enjoy our leisure time, how to study and complete the given task or assignment given in school etc. The present study is beneficial to teachers, students and parents at large because it helps them to easily communicate with teacher as it helps them to check their wards attendance and result.
1. There is no significant difference in the mean scores of ICT awareness of pretest experimental group and posttest experimental group.

2. There is no significant difference in the mean scores of ICT awareness of pretest control group and posttest control group.

3. There is no significant difference in the mean scores of ICT awareness of pretest experimental group and pretest control group.

4. There is no significant difference in the mean scores of ICT awareness of posttest experimental group and posttest control group.

**TOOL**

Keeping in view the objectives of the study, the researcher conducted test on the topic ICT Awareness. The researcher developed a tool for the study and prepared questions on the topic of Introduction to ICT, Awareness about importance of ICT in Business, Entertainment, Banking, Travel and Tourism, Weather Forecasting, Education and Space and technology. The researcher carried out the face validity, content validity and item analysis. Reliability of the test was found out by the split half method and the reliability coefficient of ICT awareness was 0.71.

**METHODOLOGY**

The present study uses Experimental Method for collecting data. Experimental Method (Two groups randomized subjects, pretest and posttest design). In this design subjects are assigned to the experimental group (50 tenth standard students) and the control group (50 tenth standard students) at random and are given a pretest. The treatment is introduced only to the experimental group, after which the two groups are measured. The difference in scores or gain scores with respect to the pretest and posttest is found for both the groups. The difference in scores of both the groups is compared in order to ascertain whether the experimental treatment has produced a significant change or not. For the purpose of the research the students were divided into two groups. One group of students was the experimental group and the other group was control group.

**ANALYSIS AND INFERENCES**

The present study involves the t-test for testing the null hypotheses and t-test was computed to find out the significant differences in the mean scores of ICT awareness of control group (both pretest and posttest) and experimental group (both pretest and posttest).

Null Hypothesis 1: There is no significant difference in the mean scores of ICT awareness of pretest experimental group and posttest experimental group.

The following table shows the relevant statistics of mean scores of ICT awareness of pretest experimental group and posttest experimental group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t (cal)</th>
<th>t (tab)</th>
<th>L of Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest Experimental</td>
<td>50</td>
<td>98</td>
<td>47.24</td>
<td>6.1</td>
<td>1.21</td>
<td>47.24</td>
<td>6.13</td>
<td>0.05</td>
</tr>
<tr>
<td>posttest Experimental</td>
<td>50</td>
<td>59</td>
<td>139.72</td>
<td>5.96</td>
<td>1.96</td>
<td>139.72</td>
<td>5.96</td>
<td>0.05</td>
</tr>
</tbody>
</table>

From the preceding table, it is evident that the calculated t-value for pretest experimental group is 47.24 and 6.13 respectively, which is significant at 0.05 level with df = 99. It reflects that mean scores of pretest of experimental and posttest of experimental groups differ significantly. Hence the null hypothesis that there is no significant difference in the mean scores of ICT awareness of pretest experimental group and posttest experimental group is rejected.

Further the mean scores of posttest of experimental group (139.72) is significantly higher than that of the pretest of experimental group (47.24).

It may therefore be said that posttest experimental group was found to possess significantly higher level of ICT awareness as compared to pretest experimental group.

Null hypothesis 2: There is no significant difference in the mean scores of ICT awareness of pretest control group and posttest control group.

The following table shows the relevant statistics of mean scores of ICT awareness of pretest control group and posttest control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t (cal)</th>
<th>t (tab)</th>
<th>L of Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest Control</td>
<td>50</td>
<td>98</td>
<td>47.72</td>
<td>4.9</td>
<td>0.97</td>
<td>47.72</td>
<td>4.9</td>
<td>0.05</td>
</tr>
<tr>
<td>posttest Control</td>
<td>50</td>
<td>59</td>
<td>47.84</td>
<td>4.8</td>
<td>0.12</td>
<td>47.84</td>
<td>4.8</td>
<td>0.05</td>
</tr>
</tbody>
</table>

From the preceding table, it is evident that the calculated t-value for pretest control group & posttest control group is 47.72 and 47.84 respectively.
respectively, which is not significant at 0.05 level with df = 99. It reflects that mean scores of pretest of control and posttest of control group do not differ significantly. Hence the null hypothesis that there is no significant difference in the mean scores of ICT awareness of pretest control group and posttest control group is accepted.

Null hypothesis 3: There is no significant difference in the mean scores of ICT awareness of pretest experimental group and pretest control group.

The following table shows the relevant statistics of mean scores of ICT awareness of pretest experimental group and pretest control group.

<table>
<thead>
<tr>
<th>Hy Groups</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t (cal)</th>
<th>t (tab)</th>
<th>L. of Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest Experimental</td>
<td>50</td>
<td>98</td>
<td>47.24</td>
<td>6.1</td>
<td>1.11</td>
<td>0.43</td>
<td>1.96</td>
<td>NS at 0.05</td>
</tr>
<tr>
<td>pretest Control</td>
<td>50</td>
<td>47.72</td>
<td>4.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the preceding table, it is evident that the calculated t-value for pretest experimental group & pretest control group is 47.24 and 47.72 respectively, which is not significant at 0.05 level with df = 99. It reflects that mean scores of pretest experimental group & pretest control group do not differ significantly. Hence the null hypothesis that there is no significant difference in the mean scores of ICT awareness of pretest experimental group and pretest control group is accepted.

Null hypothesis 4: There is no significant difference in the mean scores of ICT awareness of posttest experimental group and posttest control group.

The following table shows the relevant statistics of mean scores of ICT awareness of posttest experimental group and posttest control group.

<table>
<thead>
<tr>
<th>Hy Groups</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t (cal)</th>
<th>t (tab)</th>
<th>L. of Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>posttest Experimental</td>
<td>50</td>
<td>98</td>
<td>139.72</td>
<td>5.96</td>
<td>1.06</td>
<td>84.89</td>
<td>1.96</td>
<td>S at 0.05</td>
</tr>
<tr>
<td>posttest Control</td>
<td>50</td>
<td>47.84</td>
<td>4.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the preceding table, it is evident that the calculated t-value for posttest experimental group & posttest control group is 139.72 and 47.84 respectively, which is significant at 0.05 level with df = 99. It reflects that mean scores of posttest experimental group & posttest control group differs significantly. Hence the null hypothesis that there is no significant difference in the mean scores of ICT awareness of posttest experimental group and posttest control group is rejected.

Further the mean scores of posttest of experimental group (139.72) is significantly higher than that of the posttest of control group (47.84).

It may therefore be said that posttest experimental group was found to possess significantly higher level of ICT awareness as compared to posttest control group.

FINDINGS

The major findings of the study are as follows:

1. There is a significant difference in the mean scores of ICT awareness of pretest experimental group and posttest experimental group.
2. There is no significant difference in the mean scores of ICT awareness of pretest control group and posttest control group.
3. There is no significant difference in the mean scores of ICT awareness of pretest experimental group and pretest control group.
4. There is a significant difference in the mean scores of ICT awareness of posttest experimental group and posttest control group.

CONCLUSION & DISCUSSIONS

For hypothesis 1 - There is a significant difference in the mean scores of ICT awareness of pretest experimental group and posttest experimental group.

It may therefore be said that posttest experimental group was found to possess significantly higher level of ICT awareness as compared to pretest experimental group.

Discussion on ICT awareness of experimental group - The analyses revealed posttest of experimental group was found to possess significantly higher level of ICT awareness than the pretest of experimental group.

The possible reason for ICT awareness among students of experimental group is higher than the pretest group because of the treatment given. It may be possible as nowadays students get maximum information through e-learning with minimum efforts and time. Also ICT has an impact
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on curriculum, motivates students for learning and e-learning is popular among students.

For hypothesis 2 - There is no significant difference in the mean scores of ICT awareness of pretest control group and posttest control group.

It may therefore be said that pretest and posttest group was found to possess almost same level of ICT awareness.

For hypothesis 3 – There is no significant difference in the mean scores of ICT awareness of pretest experimental group and pretest control group.

It may therefore be said that pretest and posttest of Experimental and control group was found to possess almost same level of ICT awareness.

For hypothesis 4 – There is a significant difference in the mean scores of ICT awareness of posttest experimental group and posttest control group.

It may therefore be said that posttest experimental group was found to possess significantly higher level of ICT awareness as compared to posttest control group.

Discussion on ICT awareness of experimental group - The analyses revealed posttest experimental group was found to possess significantly higher level of ICT awareness than the posttest control group.

The possible reason for ICT awareness among students of posttest experimental group is higher than the posttest control group because it may be due to the fact that the control group received traditional learning while experimental group was taught using visual contents of ICT. Also nowadays students are aware about importance of ICT in Business, in Entertainment, in Banking, in Travel and Tourism, in Weather Forecasting, in Education and in Space and technology.

REFERENCES


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