Usage of information and communication technology among higher secondary students in Kancheepuram district

Dr. K.S. Ramakrishnan  
Assistant Professor, School of Education  
Tamil Nadu Open University, Chennai-15, India

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Abstract

The present study viz., Usage of Information and Communication Technology among Higher Secondary Students in Kancheepuram District is an attempt to find out if there is any significant difference in the usage of information and communication technology among higher secondary teachers with respect to Gender, Type of School and Birth order. The information and communication technology usage scale developed and standardized by the author was administered to 250 XI standard students studying in 15 different schools by applying simple random sampling technique. Mean, Standard Deviation and ‘t’ test were applied to test the hypotheses. The findings of this study revealed that there is no significant difference in the usage of information and communication technology among higher secondary school students with respect to gender, type of school and birth order.

Key words: information, communication technology, type of school, Gender, birth order.

1.0 Introduction

The Ministry of Education, Government of India has started implementing a project of Computer Education in the country. It has been launched as a pilot project for introducing Computer Literacy and Studies in Schools (CLASS) in collaboration with the Department of Electronics. Gradually all schools shall be covered in a phased manner. There was very often been hue and cry when computer has entered into the arena of industry, business, banking, examination and so on. It is usually complained that computers will replace the man and unemployment will be rampant as a result of this.

The role of education is the most important factor in the development of a nation. No country can progress unless it focuses its attention on education. This education needs to be of high quality, because only quality education can bring the desirable changes among the people. If education needs to be qualitative, it should continuously be in track with the contemporary changes and developments in the society. That is why there is a current cry for the changes needed to update, assess and restructure the existing system of education. Teachers of today realize the need for presenting different learning experiences to suit the individual difference among pupils and make attempts to use media and methods generated by Educational Technology. ICT is the main factor in shaping new global economy and
producing fast changes in society. In the past decade, new ICT tools have functionally changed the way people communicate and do business. They produced significant transformation in agriculture, industry, business, medicine, engineering & other fields. They do have the potential in transforming the nature of education, how and where learning takes place and the roles of teachers and students in the learning process.

2.0 Need for the Study

ICT has become an emerging tool in education system. The modern pedagogical subject lies on Information and Communication Technology. Understanding of ICT in education gives an opportunity for both educators and students in creating better, effective teaching-learning process and up-to-date knowledge. The ICT knowledge empowers teachers and learners and also helps in transforming teaching and learning processes from teacher centered to learner centered methods. This transformation increases appropriate learning outcomes of the students, and provides new opportunities for learners to develop their creativity, problem-solving abilities, informal reasoning skills, communication skills and other higher-order thinking skills. We are living in an age of Information and Communication Technology. The ICT is an inevitable part of the society. ICT improves the teaching – learning process.

In today’s scenario ICT plays a significant role in all fields. By using ICT, all fields show a tremendous development. In the education sector also ICT plays a major role by increasing the capacity of the learners. Today’s teacher has to be more competent in order to meet the growing demands in the education field. The focus of ICT is to bring out the attention of students. The teacher has to attract the students by using his/her competencies and skills. The teacher has to understand the student mentality. ICT greatly helps to increase the competencies of the teacher. The education systems around the world are under increasing pressure to use the new Information and Communication Technology. ICT enhances the knowledge and skills of the students in the ensuing years of the 21st Century. The 1998 UNESCO World Education Report insisted on implementing the Information and Communication Technology (ICT) immediately in higher education to pave the way for quality education. Designing and implementing emerging new technologies in higher education will enable us to escape for conventional methods of teaching and learning.

As colleges and universities respond to today’s workforce and demographic needs are challenged, they begin to reexamine their assumptions about teaching by faculty and learning by students and how knowledge is acquired and retained. ICT stimulates the learners to acquire quality research through teamwork, time management, self-management, adaptability, analytical thinking, global consciousness, basic communication, problem solving and guided instruction. No study has been done on the ICT Basic Knowledge of students in Kancheepuram District taking higher secondary students as population. Hence is the present study with an attempt to study the usage of information and communication technology among higher secondary students in Kancheepuram District.
3.0 Objectives of the study

The following objectives are stated for the present study;

1. To find out if there is any significant difference in the usage of Information and Communication technology among higher secondary students with respect to gender.
2. To find out if there is any significant difference in the usage of Information and Communication technology among higher secondary students with respect to type of school.
3. To find out if there is any significant difference in the usage of Information and Communication technology among higher secondary students with respect to birth order.

4.0 Hypotheses of the study

The following hypotheses are stated for the present study;

1. There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to gender.
2. There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to type of school.
3. There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to birth order.

5.0 Methodology

- **Method**
  The information and communication technology usage scale developed and standardized by the author on the lines of Dr.Settlers etal (1997) was used to collect the data.

- **Population of the study**
  All the higher secondary students studying in standard XI in higher secondary schools of Kancheepuram District constitute the population for the present study.

- **Sample of the study**
  From the population, the investigator selected 250 students from fifteen higher secondary schools by using simple random sampling technique.

6.0 Results and discussion

**Hypothesis – 1**

There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to Gender.
Table 1

Significant difference in the usage of Information and Communication Technology among higher secondary students with respect to Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>Calculated Value</th>
<th>Table Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>131</td>
<td>59</td>
<td>6.12</td>
<td>1.42</td>
<td>1.96</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>119</td>
<td>58</td>
<td>6.14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inference

From the above table it is clear that the obtained t value (1.42) is less than the table value (1.96) and not significant at 0.05 level. Hence the stated hypothesis that there is no significant difference in the usage of Information and Communication Technology among higher secondary students with respect to gender is accepted.

Hypothesis – 2

There is no significant difference in the usage of Information and Communication Technology among higher secondary students with respect to Type of School.

Table 2

Significant difference in the usage of Information and Communication Technology among higher secondary students with respect to Type of School.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>df</th>
<th>Sum of squares</th>
<th>Mean squares</th>
<th>Calculated value</th>
<th>Table value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>11.3</td>
<td>0.17</td>
<td></td>
<td>0.45</td>
<td>NS</td>
</tr>
<tr>
<td>Within groups</td>
<td>248</td>
<td>654.12</td>
<td>0.37</td>
<td></td>
<td>3.04</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>665.42</td>
<td>0.54</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inference

From the above table it is clear that the obtained F-value (0.45) is less than the table value (3.04) and not significant at 0.05 level. Hence the stated hypothesis that there is no significant difference in the usage of Information and Communication Technology among higher secondary students with respect to Type of school is accepted.

Hypothesis – 3

There is no significant difference in the usage of Information and Communication Technology among higher secondary students with respect to Birth Order.

Table 3

<table>
<thead>
<tr>
<th>source of variation</th>
<th>df</th>
<th>Sum of squares</th>
<th>mean squares</th>
<th>Calculated ‘F’ value</th>
<th>Table value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>1.87</td>
<td>1.06</td>
<td>0.01</td>
<td>3.04</td>
<td>NS</td>
</tr>
<tr>
<td>Within groups</td>
<td>248</td>
<td>9216.51</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>9218.38</td>
<td>1.08</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inference

From the above table it is clear that the obtained F-value (0.01) is less than the table value (3.04) and not significant at 0.05 level.

Hence the stated hypothesis that there is no significant difference in the usage of Information and Communication Technology among higher secondary students with respect to Birth Order is accepted.

7.0. Findings

1. There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to Gender.
2. There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to Type of School.

3. There is no significant difference in the usage of Information and Communication technology among higher secondary students with respect to Birth Order.

8.0. Recommendations

1. The importance of computers and Information and Communication Technology continues to increase in schools and through society. Multimedia approaches must be included in the planning of curriculum preparation.

2. Online instruction helps students to learn and to develop computer skills and Information and communication Technology literacy. Many experts feel that the knowledge, skills and confidence in using computers and Information and communication technology are some of the most essential lesions that education can provide. Because these skills are so important, equal access to information and communication technology has become a topic of public debate. Experts feel that society must find ways to make computers and newer technologies available at schools.

3. The present investigation finds that the higher secondary school students have better perception of computers and Information and Communication Technology. Hence educationists should plan to train students in Information and communication Technology. It’s is now a popular option among students. It has both shrunk spaces and enabled higher secondary students to acquire knowledge and skills from their schools.

9.0 Conclusion

Computer technologies increase the level of teaching and motivate students to provide information in an interesting and innovative way by making teaching more effective. Teachers can use technology to create suitable environment for teaching. The effective use of the technology facilitates students to apply the learning knowledge in the real situations and also helps in the active participation. Particularly computer technology provides the opportunity to know the world with email or discussion forum to ask questions. It can also stimulate teacher thinking about the process of learning.

References


