



# ICT SKILLS OF XI STANDARD STUDENTS ON THEIR ACADEMIC ACHIEVEMENT

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## ABSTRACT

The present investigation focuses on the study of ICT Skills of XI standard students and their academic achievement. The survey method was adopted in this present study. In this study, 500 higher secondary students were taken as sample through the Stratified random sampling technique. Mean, standard deviation, 't'- test, and correlational analysis were used to analyse the data. The results revealed that there is no significant correlation between ICT Skills and Academic Achievement of XI standard students

**Key words :** ICT skills, XI standard students ,academic achievement

## INTRODUCTION

ICT's is the abbreviation for Information Communication Technology. Transmission of media is the device that provides access to ICT. It is the use of information technology that integrates Internet, PDAs (Personal Digital Assistant) and other remote systems for communication. Digital innovations provide new methods for source by rehearsing text, voice over IP and video conferencing to interface individuals with each other throughout the world monitoring self-paced learning. Today, advances in ICT have created "worldwide community" where people can talk to others around the world as if they were living nearby and share information. Thus, a global platform for learning is formed through ICT enabled learning. Information and communication technology (ICT) covers two aspects, namely information technology and communication technology. Information technology includes all things related to the process, use as a tool, manipulation, and information management. Communication technology covers all things related to the use of tools to process and transfer data from one device to another (Rahim, 2011).

The goal of educational institutions today is to prepare the students for job market with requisite skills one among which is ICT. ICT enabled learning makes them future ready too. Students with ICT skills surpass their fellows in academic achievement. Therefore, the student does not rely on the instructor for learning, they can surf the internet and find relevant information. In conclusion, ICT promotes both the instructional and learning part of the educational system.

## Use of ICT in the Classroom

ICT gives worth to instruction. ICT empowers the student with an exceptional method of instruction, which helps learning at their own pace and time. Furthermore, using ICT helps students to stage their talents and gain confidence in learning. Students can also work at home and participate in learning. Again, ICT could unlock student's hidden ability for those with connection challenges or issues. One of the benefits of using ICT is that students can show their achievement in ways that are incredible to be achievable with

customary strategies. Furthermore, the upsides of using ICT in education include allowing undertakings to be tailored to fit particular skills and capabilities.

### **Role of Teacher in an ICT Classroom**

Teaching students, with the aid of ICT, is not complete in itself. By structuring and upgrading the learning process of the students through ICT, the teachers can identify the appropriate method of integrating them into the teaching process. Well-equipped teachers in ICT improve productivity, individualized learning, and give enhanced learning for the students. ICT helps the professional development of the teachers and makes them updated in teaching. While in-person support is constantly required to train teachers, particularly those new to innovation, ICT can provide an amazing scope for teachers to take an interest in ICT based teaching and learning.

### **SIGNIFICANCE OF THE STUDY**

ICT is incredibly valuable for every alternate method of learning as it constitute a significant part of beneficial outcome to the students. ICT stimulates and motivates interest in learning and element of recognizing the concepts to be learnt and enhances interest in learning. With the utilization of ICT, learning becomes progressively versatile and dynamic leading to an all round development of the learner. ICT engages network correlated learning with minimal indication of the withdrawal from learning. ICT influences and expands the motivation through hands-on-development, visual depictions and improved techniques for presentation of the content. The use of ICT tools has the positive impact on students' development through resource-investigation, sharing of ideas, and involvement in different project work(Hossain,2015).

### **OBJECTIVES OF THE STUDY**

1. To find whether there is any significant difference between male and female XI standard students in their ICT skills.
2. To find whether there is any significant difference between rural and urban XI standard students in their ICT skills.
3. To find whether there is any significant difference between Tamil and English medium XI standard students in their ICT skills.
4. To find whether there is any significant relationship difference between ICT skills and Academic Achievement of XI Standard Students.

### **HYPOTHESES OF THE STUDY**

1. There is no significant difference between male and female XI standard students in their ICT skills.
2. There is no significant difference between rural and urban XI standard students in their ICT skills.
3. There is no significant difference between Tamil and English medium XI standard students in their ICT skills.
4. There is no significant relationship between ICT skills and Academic Achievement of XI Standard Students.

### **Method for the study**

Methodology of a research is the core of research under investigation. The researcher on knowledge gained through literature reviews, identified research gap comes to the conclusion of research method to be used to obtain the intended objectives. At some instances the reviews guide the researcher for a particular method of research design since it is researched and checked for validity and consistency in similar research. Likewise, where one wants to study the exact nature or factual information is to be used most researchers are in favour of survey method. The investigator adapted survey method for the present study

## Population of the study

In the present study, the population constitutes the XI standard students out of which the target population are XI students of select schools of Coimbatore district.

## Sample of the study

Probability sampling method was followed in the study. Through stratified random sampling method, the population was stratified into groups based on the regional division, thus Coimbatore district was selected for final study. The sample was taken from 5 schools of Coimbatore district comprising of both rural and urban area. The total Sample for the present study consists of 500 higher secondary students.

## Tools used in the Study

Construction of tool is another important step in a research study. The tool were developed and validated by the investigator

## DATA ANALYSIS

### Null hypothesis 1

There is no significant difference between male and female XI standard students in their ICT skills.

**Table 1: ICT Skills of XI Standard Students based on Gender**

Gender	No.of students	Mean	Standard deviation	Calculated 't' value	Table value	Remarks at 5% level of significance
Male	248	129.88	19.006	2.365	1.96	Significant
Female	252	125.65	20.976			

From the above table, it is seen that the 't'-value of ICT score of male and female XI standard students is 2.365 which is significant at 0.05 level. It can be concluded that XI standard students differ significantly in their level of ICT skills. The mean score of male students is 129.88 and female students is 125.65 which shows a difference. Hence the null hypothesis "There is no significant difference between male and female XI standard students in their ICT skills" is **rejected**. It may, therefore, be concluded that male and female students show statistically significance of difference in their ICT Skills and the hypothesis is restated as "There is significant difference between male and female XI standards students in their ICT skills"

## Null hypothesis 2

There is no significant difference between rural and urban XI standard students in their ICT skills

**Table 1: ICT Skills of XI Standard Students based on Locality**

Locality	No.of students	Mean	Standard deviation	Calculated 't' value	Table value	Remarks at 5% level of significance
Rural	127	130.87	19.893	2.034	1.96	Significant
Urban	373	126.68	20.105			

From the above table, it is seen that the 't'-value of ICT score of rural and urban XI standard students is 2.034 which is significant at 0.05 level. It can be concluded that XI standard students differ significantly in their level of ICT skills. The mean score of rural students is 130.87 and urban students is 126.68 which shows a difference. Hence the null hypothesis "There is no significant difference between rural and urban XI standard students in their ICT skills" is **rejected**. It may, therefore, be concluded that rural and urban students show statistically significance of difference in their ICT Skills and the hypothesis is restated as "There is significant difference between rural and urban XI standards students in their ICT skills".

## Null hypothesis 3

There is no significant difference between Tamil and English medium XI standard students in their ICT skills.

**Table 3 ICT Skills of XI Standard Students based on Medium**

Medium of instruction	N	Mean	S.D	Calculated 't' value	Table value	Remarks at 5% level
Tamil	223	128.30	21.458	0.555	1.96	Not Significant
English	277	127.30	18.992			

From the above table, it is viewed that the 't' value of ICT Skills score of Tamil medium and

English medium XI standard students is 0.555 which is not significant at 0.05 level. It can be identified that XI standard students do not differ significantly in their level of ICT Skills sub grouped on the basis of medium of instruction. The mean score of Tamil medium students is 128.30 and English medium students is 127.30. Hence the null hypothesis "There is no significant difference between Tamil medium and English medium XI standard students in their ICT Skills" is **accepted**



## Null hypothesis 4

1. There is no significant Correlation between ICT skills and Academic Achievement of XI Standard Students.

**Table 4: Correlation between ICT Skills and academic achievement of XI Standard Students**

Correlation	$\sum x^2$	$\sum y^2$	$\sum xy$	Correlation Value	Table Value	Remarks
ICT Skills and Academic Achievement	8361674	74275168	24161678	0.006	1.96	Not Significant

From the above table, it is inferred that there is no significant correlation between ICT Skills and Academic Achievement of XI Standard students. The calculated correlation value is (0.006). which is not significant at 0.05 level. Hence null hypothesis is accepted. "There is no significant correlation difference between ICT Skills and academic achievement of XI Standard students"

## Educational Implications of the Study

- The study confirmed the predictability of ICT and the academic achievement of the students, hence cognizance can be taken into account while framing objectives and curriculum for school children.
- Understanding the learners in relation to the upgraded knowledge in society is indispensable. On this line the study gives a descriptive picture of the status and needs of the higher secondary students in Coimbatore district.
- Students with sound and ICT use exhibit better academic achievement, hence the curricular activities may be planned with incorporation of the said with the evaluation of their outcomes.

## Recommendations of the Study

- A knowledge of ICT skills strategies and its use in classrooms can be introduced in the teacher education curriculum
- Teachers may be given in-service training in ICT skills both for the benefit of the teachers and the students.
- From the above research finding the academic achievement is not influenced by the ICT.
- The place of stay affects ICT skills; the educational institutions should provide extra classes or infrastructure facilities for the hostel to hone their ICT Skills.
- Though the government schools have computers at schools, there is lack of internet facility. This should be checked by the government as merely having computers do not help the learners to get access to information. Coupled with internet solves the purpose. So steps can be taken to extend internet facility to all schools, encompassing the management of schools other than government institutions.

## 5.8 Conclusion

Personalizing education as one method fits all method does not match up with a diverse population and the potential of new technologies; furthermore, findings in cognitive psychology and new technologies makes it likely to create effective learning activities to meet individual student needs and interests. Teachers equip the students to learn effectively and efficiently. Creating awareness among the learners and training them to channelize their potential for maximum outcomes in terms of achievement is imperative today. We live in a competitive world where people with varied opportunities and capabilities are tested in the same way through competitive exams. Grooming them to fight in the levels of higher education is left in the hands of teachers and all the stakeholders of education. The study thus helps the learner as well as the teachers to overcome the hurdles in academic achievement through enhanced the ICT skills

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