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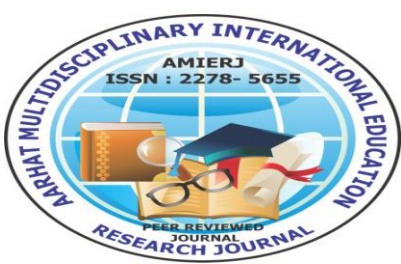
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**EXTENT OF APPLICATION OF ICT IN TEACHING – LEARNING PROCESS:
PERCEPTION OF SECONDARY SCHOOL STUDENTS**

Dr. Minikutty A.

Associate Professor
School of Pedagogical Sciences
Mahatma Gandhi University
Kottayam.

Mrs. Sindhu P.G.

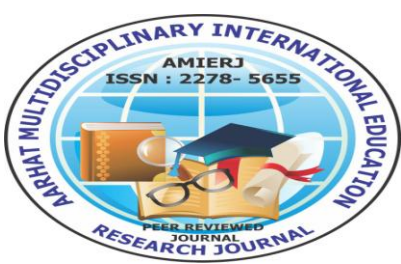
Research Scholar
School of Pedagogical Sciences
Mahatma Gandhi University
Kottayam.

Abstract

Information and Communication Technology (ICT) covers all the technologies used for handling and communication of information and their use in education. They enrich the process of teaching – learning in various subjects of education. ICT based education is about using computers and technology as tools to enrich learning in various subjects of education. Present study intends to find out the perception of secondary school students regarding the extent of application of ICT in teaching – learning process. Normative survey method was adopted for the study. Students from rural and urban areas were selected for the study. Statistical techniques like measures of central tendency, dispersion, skewness, kurtosis and test of difference between means were calculated.

Introduction

Technological advancements are making dynamic changes in the society. It has impacted different facets of life and redefined living. Education also gets benefitted with these advancements. These advancements make education easy and accessible to all at a minimum cost. Information and Communication Technologies (ICT) are basically information handling tools – a varied set of goods, applications and services that are used to produce, store and process, distribute and exchange information. ICT covers all the technologies used for the handling and communication of information and their use in education. ICT will not replace teachers but act as a fundamental component of education complementing and enriching educational institutions, educational delivery systems and instructional materials. In this sense,



ICT contributes to the whole system of knowledge dispersal and effective learning. That is, ICT based education is about using computers and technology as tools to enrich learning in various subjects of education.

The use of ICTs in education shifts the teaching learning approaches. ICTs help to adapt learning and teaching to individual needs. Schools have to respond favorably to these technical innovations. As put by (Bransford, Brown, and Cocking, 1999) cited in Volman (2005), there is a common belief that the use of ICTs in education contributes to a more constructivist learning and an increase in activity and greater responsibility of students. This limits the role of the teacher to supporting, advising, and coaching students rather than merely transmitting knowledge. The gradual progress in using computers changes from learning about computers, to learning computers, and finally to learning with computers (Volman, 2005), with respect to introducing ICT technologies in schools.

The investigators find it necessary to understand the extent of usage of ICTs in the various phases of pedagogical practices. Hence the investigator entitled the topic of study as ‘Application of ICT in Education: Perception of Secondary School Students’.

Objectives of the study

1. To find out the perception of secondary school students regarding the extent of usage of ICT in teaching –learning process.
2. To compare the perception of secondary school students regarding the usage of ICT in Teaching – learning process based on the following sub groups:
 - (i) Gender – Boys/Girls
 - (ii) Locale of school – Rural/ Urban

Methodology

Survey method was adopted for the present study. The study was conducted on a sample of 61 secondary school students. Students from rural and urban areas were selected for the study. Data was collected using a three point scale consisting of statements to understand the extent of usage of ICT among various phases of the pedagogical practices. i.e., for introduction,

presentation, evaluation and follow – up of the teaching – learning process of secondary school students.

Analysis and Interpretation

Statistical techniques used were measures of central tendency, dispersion, skewness, kurtosis and Test of Significance of difference of difference between means. The details of analysis of data are given below.

1. To find out the level of perception of secondary school students on the usage of ICT in teaching -learning, descriptive statistic values of the test scores were calculated. Details are given in the following table.

Table 1.1

Measures of Central Tendency, Dispersion,Skewness and Kurtosis of scores on perception of secondary school students on the usage of ICT in teaching - learning

	No.	Mean	Median	SD	Skewness	Kurtosis
Total	61	11.85	12	4.80	0.40	-1.07
Boys	31	11.58	12	4.06	0.56	-0.52
Girls	30	12.13	11.5	5.52	0.26	-1.48
Rural	30	11.47	9.5	5.03	0.61	-1.18
Urban	31	12.23	12	4.62	0.21	-0.76

Maximum score of the test was 30. The arithmetic mean of boys and girls are 11.58 and 12.13, urban and rural areas are 11.47 and 12.23 respectively. The median values are 12 and 11.5, 9.5, 12 respectively. The obtained meanvalue is less than half the total score for the test item. This reveals that the application of ICT in schools is very low. The data are positively skewed. As the values obtained for kurtosis are less than 0.263, the distribution is leptokurtic.

2. Comparison of the perception of secondary school students regarding the extent of application of ICT in the teaching – learning process.

The Mean and standard deviation of different subsamples based on gender- Boys and Girls and Locale of the school – Rural and Urban were found. The difference between mean were tested for significance by calculating Critical Ratio and is given in the following table.

Table 2.

Test of Significance of Difference between Mean Scores of Perception of secondary school students on the extent of usage of ICT in the teaching – learning process based on Gender and Locale of school.

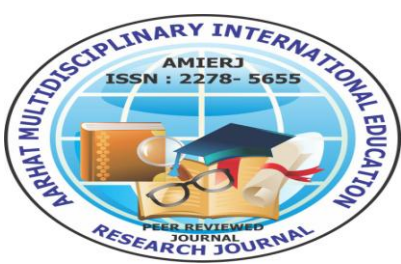
	Groups	No.	Mean	SD	CR
Gender	Boys	31	11.58	4.06	0.44
	Girls	30	12.13	5.52	
Locale of School	Rural	30	11.47	5.03	0.613
	Urban	31	12.23	4.62	

Since the table value is 2.58 at 0.01 level and 1.96 at 0.05 level, the obtained critical ratio for the group based on gender is 0.44 which is not statistically significant (CR=0.44, $p>0.05$).

From the value of critical ratio for the group based on the locale of school, it is clear that the difference between the rural and urban groups are not statistically significant (CR=0.613). i.e., there is no significant difference in the perception of secondary school students regarding the extent of application of ICT in the teaching – learning process. This reveals that irrespective of the locale of the school, the usage of ICT for the enhancement of the process of teaching - learning is not appealing.

Conclusion

It is clear from the study that the extent of application of ICT in teaching – learning process is very low. This may sometimes be due to the unavailability of proper infrastructures like computers, internet facilities etc. or due to the negative attitude of teachers, towards this.



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Proper measures should be taken to encourage the use of ICT in the class rooms. Teachers should be encouraged to use these facilities to support teaching – learning process. Government should take necessary measures to provide proper infrastructure facilities, learning packages etc. in every school. Teachers should be given proper training for the effective application of ICT in their class rooms. Usage of ICT by the teachers should be considered for the promotion purpose, or they should be encouraged by providing incentives, honor etc. Thus the extent of application of ICT in the teaching – learning process can be uplifted.

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