

## SHODH SAMAGAM

ISSN : 2581-6918 (Online), 2582-1792 (PRINT)



### A Study on role of ICT in Enabling Judicious Collaboration of Teachers and Students With Special Reference To Primary School In Covid-19

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#### ORIGINAL ARTICLE



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Received on : 20/09/2021

Revised on : -----

Accepted on : 27/09/2021

Plagiarism : 09% on 20/09/2021



Plagiarism Checker X Originality Report

Similarity Found: 9%

Date: Monday, September 20, 2021

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A STUDY ON role of ICT in enabling judicious collaboration of teachers and Students with SPECIAL REFERENCE TO PRIMARY SCHOOL IN COVID-19 CHARITA GUPTA Research Scholar, Education Jiwaji University, Gwalior (M.P.) Dr. (Smt.) KAMLESH SINGH Professor, Department of Education Jain College, Gwalior (M.P.) ABSTRACT This research paper deals with the topic entitled "A Study on Role of ICT in enabling Judicious Collaboration of Teachers and Students with Special Reference to Primary School in COVID-19".

#### ABSTRACT

*This research paper deals with the topic entitled "A Study on Role of ICT in enabling Judicious Collaboration of Teachers and Students with Special Reference to Primary School in COVID-19". As we know that in 2019, the Corona Virus Disease was declared as a Public Health Emergency of International Concern, which stopped everything and it was in turn a great hindrance in Student's Education. So, this paper attempts to analyze the role that ICT has played in enabling collaboration of students and teachers to sustain over the social distancing due to disease COVID-19. Information and Communication Technology has not only enabled children's education but also it has come up with productive results in some way. To take the study ahead, a self-made questionnaire was constructed for the verification of the hypothesis formed for this study. A sample of 50 students and 50 teachers is considered from the Primary Schools of Greater Gwalior. It is found that there is significant role of ICT in enabling judicious collaboration of teachers and students of primary school in COVID-19.*

#### KEYWORDS

**ICT, Judicious Collaboration, Students, Teachers, Primary School.**

#### INTRODUCTION

Information and Communication Technology has the potential to contribute the most in our educational Life. It is providing a plethora of opportunities for educational institutions to

enhance the use of technologies to complement and support the teaching and learning process. If we use ICT in a appropriate manner that we will find ICT has left no stone unturned in the field of education It has made the process of teaching and learning very easier. ICT has introduced flexibility, convenience, management in learner's life in much way. A learner can learn, educate himself despite of being underprivileged.

In these tough times when COVID-19 had brought huge loss of lives, economy, children's education, Information and Communication Technology (ICT) has emerged as a key means for both; resolving challenges caused by the pandemic and responding to the new reality of the everyday.

It enabled Children's education, earlier Children were not supposed to sit in the classroom together to study but ICT has proved to be blessing in disguise, a ray of hope to continue with their education. ICT has replaced the subsistence of a physical classroom by Collaborative learning. ICT tools have the preeminence to make teachers reach a huge number of students which is not at all possible in a physical classroom. Using ICT tools are also environment friendly as it saves paper and hence it ends up saving millions of trees. It also saves teachers' time as they can crack lots of problems, doubts in a single go and also in assessment process as their papers, assignment, projects can be checked quickly and feedback can be given immediately.

## **OBJECTIVES OF THE RESEARCH**

Following are the main objectives of the research :

- To study the Impact of Information and Communication Technology in promoting Collaborative learning.
- To study the Impact of Information and Communication Technology on Teachers in promoting judicious Collaborative learning.
- To study the Impact of Information and Communication Technology on Students in promoting judicious Collaborative learning.

## **HYPOTHESIS OF THE RESEARCH**

- There is no significant role of ICT in enabling judicious collaboration of teachers and students of primary school in COVID-19.

## **Delimitations of the study**

- Area : The study restricted to Greater Gwalior in Madhya Pradesh.
- Sample is collected from teachers and students (respondents) of 2 different Primary Schools.

## **Method of Investigation**

In this research the survey method is used. The sample consists of 100 respondents out of which, 50 are Teachers and 50 are students Note that the teachers and students belong to Primary schools of Greater Gwalior.

## **Research Tools and Techniques**

Self-made Questionnaire for students and teachers were constructed in order to analyze opinions or views of primary school teachers and students under the supervision of the subject experts.

## **Statistics Used**

- Percentage
- Chi- Square

## Data Analysis

### Hypothesis : 1

There is no significant role of ICT in enabling judicious collaboration of teachers and students of primary school in COVID-19.

**Table No. 1:** Role of ICT in enabling judicious collaboration of teachers and students of primary school in COVID-19 at various levels

S.N.	Group	High	Average	Low	Total
1.	Teachers	15(30%)	27(54%)	8(16%)	50
2.	Students	18(36%)	25(50%)	7(14%)	50
	Total	33	52	15	100

(Source : Primary Data)

The above table no. 1 shows role of ICT in enabling judicious collaboration of teachers and students of primary school in COVID-19 at various levels of teachers- 15(30%), Average 27 (54%) and 8 (16%) and students- High 18 (36.00%), Average 25 (50 %) and Low 7 (14%).

**Table No. 2:** Impact of ICT on Teachers in promoting judicious Collaborative learning

$F_o$	15	27	8	50
$F_e$	16.666667	16.666667	16.666667	50
$F_o - F_e$	-1.666667	10.333333	-8.666667	
$(F_o - F_e)^2$	2.78	106.78	75.11	
$(F_o - F_e)^2 / F_e$	0.17	6.41	4.51	11.08

(Source : Primary Data)

**Observed Frequency ( $F_o$ )**

**Expected Frequency ( $F_e$ )**

$$t^2 = \sum \left( \frac{(F_o - F_e)^2}{F_e} \right)$$

$$= 0.17 + 6.41 + 4.51$$

$$= \mathbf{11.08}$$

(Degrees of Freedom) or  $df = (r-1)(c-1)$

Where,  $r$  = No. of rows

$c$  = No. of columns

$df = 3-1 = 2$

The above table no. 2 shows the scores of three levels High, Average and Low and  $\chi^2$  is applied on the scores of teachers. In which according to frequency, the Observed Frequency ( $F_o$ ) in High is 15, Average is 27 and Low is 8. Whereas, The Expected Frequency ( $F_e$ ) in High is 16.666667, Average is 16.666667 and Low is 16.666667 and the value of  $\chi^2$  is 11.08.

It is inferred from the above table that for 2 df the standard value of  $\chi^2$  at 0.01 level of significance is 9.21 and at 0.05 level of significance it is 5.991. The calculated Value of  $\chi^2$  is 11.08, is more than these two standard values, hence significant.

**Table No. 3:** Impact of ICT on Students in promoting judicious Collaborative learning students

$F_o$	18	25	7	50
$F_e$	16.666667	16.666667	16.666667	50
$F_o - F_e$	1.333333	8.333333	-9.666667	
$(F_o - F_e)^2$	1.78	69.44	93.44	
$(F_o - F_e)^2 / F_e$	0.11	4.17	5.61	9.88

**Observed Frequency ( $F_o$ )**  
**Expected Frequency ( $F_e$ )**

$$t^2 = \sum \left( \frac{(F_o - F_e)^2}{F_e} \right)$$

$$= 0.11 + 4.17 + 5.61$$

$$= \mathbf{9.88}$$

(Degrees of Freedom) or  $df = (r-1)(c-1)$

Where,  $r$  = No. of rows

$c$  = No. of columns

$df = 3-1 = 2$

The above table no. 3 shows the scores of three levels High, Average and Low and  $\chi^2$  is applied on the scores of students. In which according to frequency, the Observed Frequency ( $F_o$ ) in High is 18, Average is 25 and Low is 7. Whereas, The expected Frequency ( $F_e$ ) in High is 16.666667, Average is 16.666667 and Low is 16.666667 and the value of  $\chi^2$  is 9.88.

It is inferred from the above table that for 2 df the standard value of  $\chi^2$  at 0.01 level of significance is 9.21 and at 0.05 level of significance it is 5.991. The calculated Value of  $\chi^2$  is 9.88, is somehow more than these two standard values, hence significant.

From Table 2 and Table 3, we can say that both calculated values of Chi-Square is higher than the significant values ending up with the rejection of the hypothesis. Therefore, there is significant role of ICT in enabling judicious collaboration of teachers and students of primary school in COVID-19.

### Findings

- It is found there is significant impact of Information and Communication Technology in promoting Collaborative learning.
- It is found there impact of Information and Communication Technology on Teachers in promoting judicious Collaborative learning.
- It is found there impact of Information and Communication Technology on Students in promoting judicious Collaborative learning.

### Suggestions for Further Research

1. A similar Study can be conducted to analyze the role of ICT in High School Students.
2. A similar Study can be conducted to examine the views of Students and Teachers on Information and Communication Technology as Classroom 2.0
3. A similar Study can be conducted to analyze the role of ICT in collaborative learning in other districts.

4. A similar Study can be conducted to examine the impact of ICT in e-learning or web based learning

## REFERENCES

1. Abdullellah Abdullah Al-Sulaimani (2010) The Importance of Teachers in Integrating ICT into Science Teaching in Intermediate Schools in Saudi Arabia: Ph.D. School of Education College of Design and Social Context RMIT University RMIT University.
2. Singh, K. D. (2012). Internet Enhanced Learning. *NCTE Journal* New Delhi. Vol. (n.d.) 2012.
3. Vanja, M. and Others, (2016), *Information & Communication Technology (ICT) In Education*, Neelkamal Publication.
4. <https://shodhganga.inflibnet.ac.in>

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