



The Effect of using Information and Computer Technology (ICT) for the Development of Learning Capacity and Enhancing Interest in Study of the Students of Village: A Case Study

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Abstract: A study was carried out to assess the effect of use of Information and Computer Technology (ICT) for the development of learning capacity and enhancing interest in study of village students. A school was selected situated at Kokta Village near Bhopal (MP) India for study. Various techniques like PowerPoint presentation, video clips, multimedia, computer and internet was used for teaching for 20 days 6 hours per day for the teaching on 20 selected students with other creative activities.

The study was carried out with science related concepts, student awareness, project work, chart and model preparation and team games and sports activities. The results analysis using various parameters reveals a significant enhancement up to 20.2% in learning capacity and interest in study among the selected students. The present study shows the use of Information and Computer Technology (ICT) may help in the classroom teaching up to a satisfactory level and may be better option for teaching.

IndexTerms - Information and Computer Technology, ICT, Case study, Education.

1. INTRODUCTION:

Present era is the era of computer and information technology. The use of these tools may simplify daily routine of life. In schools especially in remote and poor population areas the use of modern technology may be used to enhance the learning capability and interest of students toward learning and skill development¹.

ICT provides students with instant access to a vast amount of information and resources online. They can use search engines, educational websites, and online libraries to gather information institutions use e-learning platforms to provide students with access to digital course materials, video lectures, interactive quizzes, and assignments. These platforms allow students to learn at their own pace and review materials as needed. Students can learn about responsible and ethical online behavior, including respecting others' work, protecting their privacy, and understanding the implications of online action and solutions. Students interested in technology can explore various careers in the field through online resources, virtual job, and interviews with professionals^{2,3}.

Present study was undertaken to analyze the effect of the use of modern technology especially for students from small village and living in poor economic conditions.

2. METHODS ADOPTED AND TRAINING MODULES:

Present studies were carried out with school students with age group 12-14 years from **Sushila Devi Bansal Public School**, Kokta Village, Raisen Road, Bhopal (MP). A batch of twenty students has been shortlisted with mixed gender (13 boys and 07 girls) for twenty days of training for 5 hours per day for up to 20 days. On first day of training on ten point analysis (given below) has been conducted with all the selected candidates using modern devices like Computer, I pad, Multimedia, Internet, Android mobile Phones⁴.

1. Information share to each other related to course subject
2. Presentation on given topic in the class
3. Preparation of assignment on currant topic
4. Conduction of quiz on computers written and oral
5. Problem solving task completion
6. Survey on family of other five students
7. Attendance, sincerity and attitude during training
8. Leadership ability
9. Work on computer and internet
10. Good ideas and solutions

All the activities were conducted under the supervision of specialized trainers of their subjects and marks were recorded on every point for analysis and observation and evaluation was carried out on every day. The training was conducted daily for five hours up to twenty days excluding Sunday up 20 days.

3. RESULTS ANALYSIS:

Observation and results analysis reveals a significant improvement in capability of students as around 20.2% in increase as shown in Table -1, also the figure -1(Graph) shows clear difference between pre and post studies^{5,6}. Statistical analysis using various mathematical formulas also indicate about significant enhancement learning capacity and enhancing interest in study in selected students.

Arith Mean

Arg. Learning (Day 1) = 45.75
Arg. Learning (Day 20) = 65.95

Result – There is a significant improvement of 20.2% in learning and understanding capacity of selected batch.

Median

Md. (Day 1) = 44
Md. (Day 20) = 65

Result – There is a significant improvement in learning majority sheeted to above 60% which was initially below 50%.

Mode

Mo. (Day 1) = 1st mode 36 , 2nd mode 40
Mo. (Day 20) = 1st mode 65, 2nd Mode 75.

Result – Majority of students improved their learning (above 65% to 75%).

Standard Deviation

S.D. (Day 1) = 11.22
S.D. (Day 20) = 9.09

Result – Deviation reduced to a considerable value i.e. average student also improved their learning.

T – Test

T - Value = 6.10

Result = Day 1 data are found to be in significant.

F – Test

F - Value = 1.34 ($\sim 1^2 > \sigma^2$)

Results - Rate of improvement is found to be significant between two data set.

Results Overall – There was a significant improvement in learning capacity and significant increase in interest in study.

**Table -1. Analysis of Students Learning on Selected Parameters
(Summary)**

S.NO.	CANDIDATE* (C)	DAY 1 SCORE [#]	DAY 20 SCORE [@]
1	C- 1	40	60
2	C -2	64	80
3	C-3	43	78
4	C-4	36	55

5	C-5	43	65
6	C-6	40	55
7	C-7	25	40
8	C-8	36	50
9	C-9	45	65
10	C-10	49	65
11	C-11	60	75
12	C-12	47	80
13	C-13	41	60
14	C-14	49	75
15	C-15	51	69
16	C-16	64	75
17	C-17	36	50
18	C-18	52	65
19	C-19	54	79
20	C-20	40	78
Average		915	1319
Percentage		45.75 %	65.95%

C *Candidate students, Day 1 score[#] Pre study , Day 10 score[@] Post study

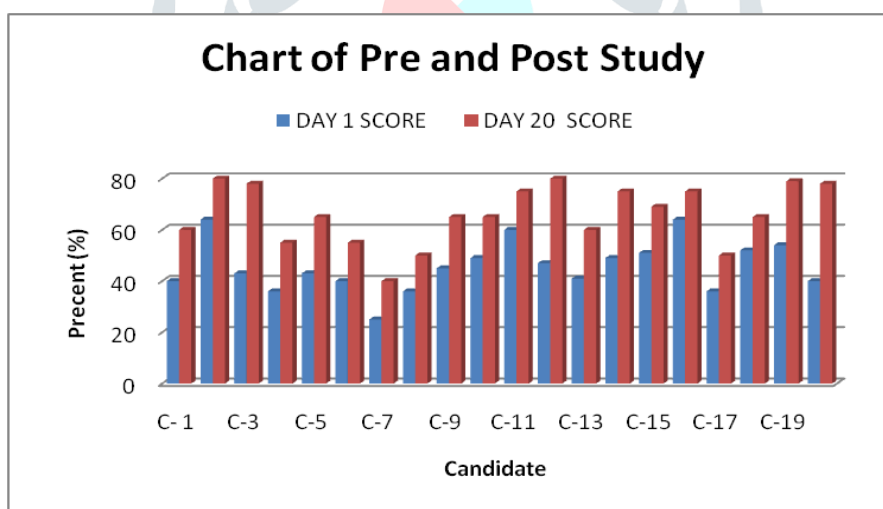


Figure - 1. Bar graph showing Comparative study on selected parameters.

4. SUMMARY AND CONCLUSION:

The results of present findings conclude that the use of modern technology for the study was found to be satisfactory as observation and statistical analysis shows. These tools can help students grasp complex concepts more effectively⁷.

Online language learning platforms with different creative activities can help students practice and improve their language skills through interactive exercises, quizzes, and conversations. Using search engines, databases, and online libraries, students can learn valuable research skills, including evaluating sources, citing references, and synthesizing information. Students can learn about responsible and ethical online behavior, including respecting others' work, protecting their privacy, and understanding the implications of their online actions⁸. The present case study among village students found to be significant enhancement in the overall interest towards study⁹.

Remember that while ICT offers numerous benefits, it's important to strike a balance between digital and traditional learning methods to ensure a well-rounded education. Additionally, educators should provide guidance and support to help students navigate the digital landscape safely effectively. Certainly, information and computer technology (ICT) can be incredibly

beneficial for school students in various aspect of their education. Here are some ways ICT can be utilized to enhance experience for study.

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