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## **Effectiveness of Blended ICT in teaching Science Method to B. Ed. Students**

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### **Abstract :-**

In recent years, ICT has paved the way for accelerating the paradigm shift through providing more flexible way of learning. Blended Learning is an educational formation that integrates online learning techniques with traditional teaching methods. This study was undertaken to study effectiveness of blended ICT approach over the conventional method in teaching science method to B.Ed. students. The research method used in this study was an experimental method with parallel group design. Pretest-posttest equivalent group design was followed for this study. The result showed that the students learning through blended ICT are found to be better than students learning through traditional method of teaching.

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**Keywords :-** Blended learning, ICT, Online learning.

### **Introduction :-**

Blended learning is a planned combination of online learning and face-to-face (F2F) instruction using a variety of learning resources(1). It is flexible learning that combine scientific and technological advances of online learning with instruction and participation of conventional F2F

classroom learning. Blended learning is a way of meeting the challenges of tailoring and development to the need of individuals by integration the innovative and technological advances offered in best of conventional learning Moreover, in the fastly growing world where there is a explosion of knowledge it is expected the oral or written words aone to convey the volume of relevant information to the learner(2).

In this sense. ICT (Information communication Technology) is a unique medium with features of quality audiovisual recording and instant feedback The use of such technology in the universities and colleges will motivate the teaching community and create better learning conditions, further involvement of teachers in the process reduces the dependency of teachers on technology expert.

Most of the academicians follows conventrional / traditional method in teaching science methodin B.Ed. since the classes are crowed, they can not capture the attention of studnets studying in B. Ed. are teachers of future hence the method more clearty content cum methodology (CCM) should be clearty understood by them and it will be possible by using blending ICT to develop the potential in them towards science method study. Hence keeping all these in view the investigators attempted an experiment to study the effectiveness of Blended-ICT in teaching science method to B. Ed. Students.

### **Need of the Research :-**

Investigators in the field of education and methodology of teaching have brought in to consider various methods of teaching contents cum methodology of science and their effectiveness However It is observed that most of teachers uses lecture method for teaching science method to B. Ed. students but it one can use the advanced ICT-blending technology to teach concepts in science then it will definitely increase the level of understanding of pupil teachers studing in B. Ed.

### **Objective of the study :-**

The main objectives of the study are :-

- \* To Study the effectiveness of blending ICT approach over the traditional method in teaching science method to BEd students
- \* To develop a multimedia ICT packages to teach science method to B.Ed. students
- \* To compare the effectiveness of blended ICT technique in teaching science method with traditional method of teaching science method.

### **\* HYPOTHESIS OF THE STUDY :**

The following will hypothesis have been formulated

1. There is no mean significant difference between the experimental group and control group and control group in achievement of science method at pretest level
2. There is no mean significant difference between the experimental group and control group in achievement of science method at posttest level.
3. There is no mean significant difference between the pretest and posttest in achievement of Science method for experimental group
4. There is no mean significant difference between the pretest and posttest in the achievement of science method for the control group.

### **\* Methodology**

To achieve the objectives of the study the experimental method has been used.

### **\* Sample :**

The total sample consist of 80 students of science method studying in B.Ed. from Biyani College of Education, Bhusawal & M.J College of Education, Jalgaon The

Sampling was done through random sampling procedure. The students of experimental group were given one month training in the selected units in ICT for control group the same units were taught through conventional method after the teaching the two groups were tested for their achievement level and in between the teaching. To find out the effectiveness of ICT for control group the same units were taught through conventional method after the teaching the two groups were tested for their achievement level and in between the teaching. To find out the effectiveness of blended ICT in teaching science method the researchers used the tools like pretest and posttest.

**Tools used :**

- 1) Pretest on the selected topic developed by researchers
- 2) ICT blended package to teach the experimental group.
- 3) Achievement test on the selected topic developed by the investigator.

**Analysis and Interpretation :-**

Table 1 - Mean difference between the experimental group and control group in their pretest.

Category	Number of students	Mean	Standard Deviation	't' Value
Control group	20	58.01	10.80	
Experimental Group	20	58.0	10.40	0.04

Table II - Mean Difference between the Experimental group and control group in their post-test.

Category	Number of students	Mean	Standard Deviation	't' Value
Control group	20	50.20	14.50	
Experimental Group	20	77.12	13.88	8.22

It has been interred from table 1 that the calculated 't' value between the experimental group and control group with respect to their acheivement in pretest is tower than the table value at 0.05 level of significance. Hence there is no significant difference in the achievement of the experimental. Group and control group in the pretest. In table 2 the calculated 't' value between the experimental group and the control group with respect to their achievement in posttest is higher than the table value of 0.05 level of significance.

### **Conclusion :-**

On the basis of the above results and personal discussion in the meeting of science method teaches it is concluded that blended ICT teaching is most effective in teaching science method as new web based softwares and high technologies like animation software and photoshop can easily gain by colleges and institutions which can also helps student in understandings various aspects of science method.

### **Suggestions for the further research :**

- 1) Majority of units can be taken up to analyze the effectiveness of ICT.
- 2) Effectiveness of ICT may be extended to other methods of B. Ed. course.
- 3) Studies on effectiveness of Blended ICT may be extended to other educaional level like primary, Secondary, Graduation & post Graduation.

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