



**Full Length Research Article**

**EFFECTIVENESS OF BLENDED LEARNING APPROACH IN TEACHING OF EDUCATIONAL PSYCHOLOGY AMONG B.ED TRAINEES'**

**\*Deivam, M. and Dr. Devaki, N.**

Dept. of Education, Gandhigram Rural Institute Deemed University, Dindigul district, Tamilnadu, India

**ARTICLE INFO**

**Article History:**

Received 03<sup>rd</sup> June, 2015  
Received in revised form  
09<sup>th</sup> July, 2015  
Accepted 26<sup>th</sup> August, 2015  
Published online 30<sup>th</sup> September, 2015

**Key words:**

Blended Learning,  
Educational Psychology,  
B.Ed Trainees'

**ABSTRACT**

Different learning problem required different solutions. Each learners required unique learning and unique style but there is one better solution to all types of learners that is blended learning. Blended learning environment amalgamates the advantages of distance education with the effective aspects of traditional education. The purpose of this study was to find out the effectiveness of blended learning instruction among student trainees' achievement in Educational Psychology. This study was conducted during the fall of the 2013-2014. Participants were hundred (n=100) B.Ed trainees' selected from Usha Latchumanan College of Education, thirukkanur, Puducherry. The Quasi experimental design was adopted for this study. The equal randomization group of control (n=50) and experimental group (n=50) was organised. Data analysed reveals that experimental group achievement score was higher than the control group. There is significant difference in mean scores of achievement in educational psychology of experimental and control group. This result shows that blended learning is more effective than the conventional method of teaching.

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**INTRODUCTION**

Kothari commission has very rightly said, "The destiny of India is being shaped in its classrooms." As the population in India is growing very rapidly day by day the need of well qualified and professionally trained teachers will also increase in the coming years. So lots of efforts should be made to improve teacher education. Blended learning enhances the quality of teachers. Blended learning combines face to face learning with on-line learning to provide the most efficient and effective instructional experience by combining delivery modalities, for example a teacher with more class room enrollment may choose the computer mediated or online elements of instruction, another teacher who is concerned about slow learners may choose face to face interaction where motivation can be infused through gesture voice and communication. The other teacher who would like to have the best of both methods can combine both of these modes by starting with a class room discussion, having some activities, web based course ware, text based job, conference calls, and so on, which may impart a holistic learning experience to the learner.

Graham (2006) saw four possible levels where the blended learning concept can be applied:

- Activity level, where a single classroom meeting could be preceded or following by online study;
- Course level, where online lessons alternate with face-to-face classroom meetings;
- Program level, where totally online courses co-exist with totally face-to-face courses; and
- Institutional level, where both totally online programs and face-to-face programs are often.

Within the face-to-face and electronically delivered strands of blended learning, a long catalog of building blocks can be aggregated from the literature. Kim, Bonk, and Oh (2008), offered a useful selected list for the electronically delivered strand: Webcasting and video streaming, Digital libraries and content repositories, Knowledge management tools, Online simulations, Podcasts, Wireless, mobile, and handheld technologies, Wikis, blogs, and online diaries, E-books, Online gaming; and Support tools. Margaryan, Collis and Cooke (2004) created a list of components for the face-to-face side of blended learning: Kick-off introductions, Product (artifact) development, Exercises. Quizzes, Case studies, Exam preparation, Role play, Group reflection, Instructional feedback, and Real-time polling.

**\*Corresponding author: Deivam, M.,**

Dept. of Education, Gandhigram Rural Institute Deemed University,  
Dindigul district, Tamilnadu, India

Several authors, such as Mason (2005), attempted to sequence how a "typical blended learning course might play out: Reading one or more set books (18 hours), Browsing and analyzing Web resources (16 hours), Working through materials provided in the virtual classroom (8 hours), Group work on a collaborative project (16 hours), E-mail interaction with a tutor (2 hours), Online discussions with other students (4 hours), and Individual assignments (16 hours).

### Need and Significant of the study

Educational psychology is a systematic study of the behaviour of students and teachers in teaching learning process. It includes regular activities like jumping, running, walking, etc., and affective activities like happiness, sadness, anger etc., It includes conscious, sub conscious and unconscious activities. It covers overt and covert behaviour. It includes behaviour of human beings and animals. It is positive developing science of behaviour. Includes prediction, modifiability purposive and purposeful behavior. It employs scientific methods to modify the behaviour of the individual in relation to the environment. Educational psychology which is helpful to understand teacher, the different stages of child development, learner individual difference, intelligences, creativity, personality, guidance and counseling etc., The Blended learning new emerging concept in Educational Technology, limited studies have been conducted in India. Most of the studies reveal that effective instructional learning and students also satisfied blended learning courses.

This study is to enhance the quality of teachers; their professional improvement and training continue to be central to the provision of quality education. Application of ICT, e-learning, m-learning global informational and educational resources should contribute to the improvement of the current situation in education. For future the competencies for ICT in education should be considered. In view of the fact that teacher expertise becomes more and more important, Blended learning in education should continuously facilitate teacher expertise in teaching and learning. Hence it is the demand of hour that the teacher should be sound towards the use of Blended learning. Blended learning has some primary benefits which include enhanced learning performance, improved cost effectiveness, more effective pedagogy, course access at one's convenience, reduction in physical class or space needs, increased opportunities for human interaction and contact, and more participation for introverts (Bonk and Graham, 2006).

### Statement of the problem

Education must be lifelong. It should help people to develop the knowledge, values, attitudes and skills necessary to earn a livelihood. It should also help the individual to develop a sense of place and community, grounded in the local, but embracing the world. Teacher cannot fulfill the individual needs of every learner so teacher has to adopt modern strategy to fulfill needs of individual learners. Blended learning is the best option both the students and teachers which helpful the right learning from right place so present study is entitled "Effectiveness of Blended Learning in Enhancing the Achievement of Educational Psychology among B.Ed Trainees".

### Variables of the study

The independent variable of this study is the blended learning. The dependent variable is the achievement of student's trainees' in Educational Psychology.

### Objectives

- To find out the effectiveness of both conventional way of face-to-face and blended learning instruction for Educational Psychology.
- To compare the Mean posttest scores of experimental and control groups to see the effectiveness of blended learning strategy on the achievement in Educational Psychology.

### Hypotheses

- There is no significant difference between pretest means score of control and experimental group.
- There is no significant difference between posttest means score of control and experimental group.

## MATERIALS AND METHODS

The Quasi experimental design adopted for this study. The equal randomization group of control (n=50) and experimental group (n=50). Blended mode of instruction was selected for the experimental group, traditional face-to-face mode of instruction was selected for the control group. A new innovative instructional strategy design was utilizes for the experimental and conventional method adopted for control group. The 't' test was employed the to find out the means score of achievement in educational psychology of experimental and control group.

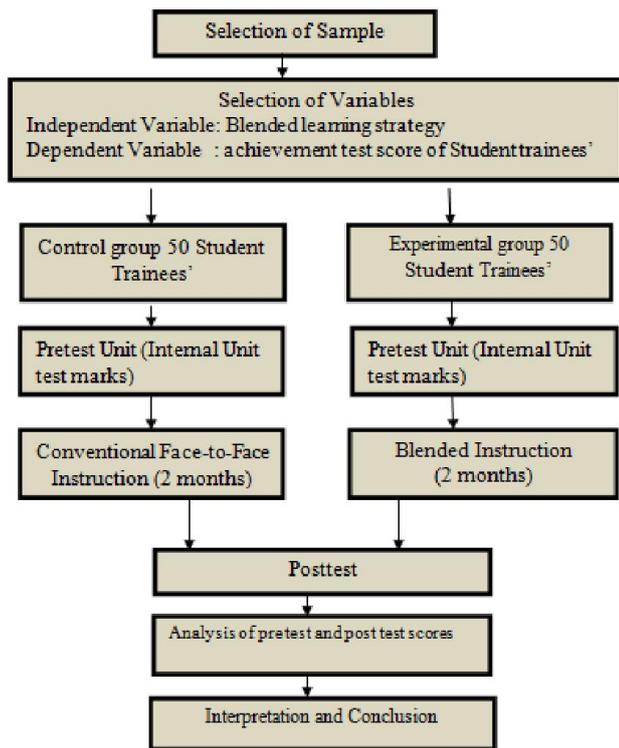
### Treatment

The Student teacher studying B.Ed in Usha Latchumanan College of Education, Thirukkanur, Puducherry UT; A totally 100 samples were selected from section A and Section B using random sampling technique. The investigator created free website ([www.circlebad/deivammuniyandi.com](http://www.circlebad/deivammuniyandi.com)) uploaded materials on website and in addition to created facebook group ULCBED and invited all the students join in ULCBED group. The investigator was taught face-to-face instruction for control group and Face-to-face instruction (lecture method, group discussion, cooperative method, peer tutoring) and online based instruction (prerecorded video posted, PowerPoint, word document, PDF, Online quiz, email chatting, online assignment using Facebook) for experimental group. This experiment was administered totally 2 months, after the treatment investigator conducted post test of control and experimental group.

### Sample

A total of 100 student teachers were selected from Usha Latchumanan College of Education, Thirukkanur, Puducherry UT using simple random sampling techniques. There are two sectional available Section A and Section B, Blended learning strategy was taught to Experimental group (Sectional B) and

Conventional Face-to-Face instruction was taught to Control group (Section A).



**Tool**

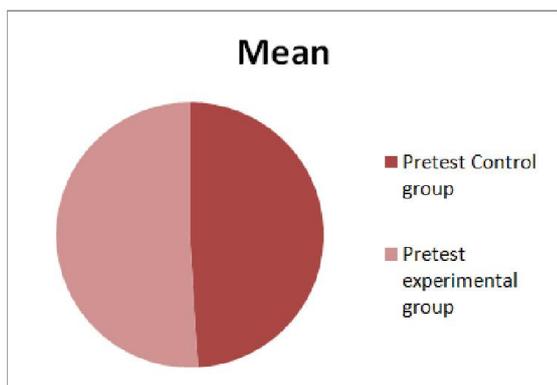
The investigator prepared and structured an achievement test in Educational Psychology. Pre-test consists of 10 objective type questions, ten short answer questions and four essay types question included. The test was administered totally for 50 marks, unit test 1 and 2 of Pondicherry university syllabus of Learning for human development. Post-test consists of 50 objective type questions taken knowledge 15, Understanding 20, application 11 and skill 4 from three units such as intelligence, personality, guidance and counseling

**Data Analysis**

**Hypothesis 1:** There is no significant difference between pretest means score of control and experimental group.

Name of test	Samples	Mean	SD	't'	Remarks
Pretest Control group	50	25.74	3.66	1.79	0.05 Level
Pretest experimental group	50	26.72	2.33		*Not significant

NS - Not significant at 0.05level

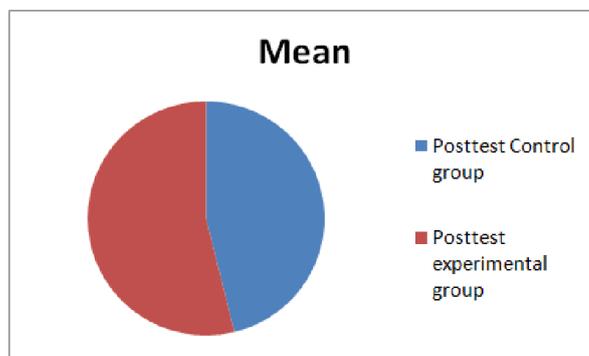


The calculated value of 't' is not significant at 0.05 level of significance. It is concluded that the control and experimental group student teachers do not differ in their achievement in educational psychology in Pre test. Table 1 reveals that mean pre-test scores of experimental and controlled groups are 26.72 and 25.74 respectively. The obtained 't' value (t = 1.79) is insignificant at 0.05level which shows that there is insignificant difference in achievement of student teacher in education psychology of experimental and control groups. The mean pretest scores of experimental and controlled groups are 25.74 and 26.72 respectively. Thus first hypothesis 'There is no significant difference between pretest means score of experimental and control group' is accepted.

**Hypothesis 2:** There is no significant difference between posttest means score of control and experimental group.

Name of test	Samples	Mean	SD	't'	Remarks
Posttest Control group	50	32.98	1.38	15.11	0.05 Level
Posttest experimental group	50	38.46	2.22		**Significant group

\*\* Significant at 0.05 level.



The calculated value of 't' is significant at 0.05 level of significance. It is concluded that there is significant difference between the experimental and control group student teachers in their achievement in Educational Psychology. This makes it obligatory to reject the above said null hypothesis. The experimental group students are at a higher level than the control group students in their achievement in educational psychology. So above null hypothesis was rejected.

Table 2 reveals that mean posttest scores of experimental and control groups are 38.46 and 32.86 respectively. The obtained 't' value (t=15.11) is significant at 0.05 level. From the above interpretation of results it was found that the mean posttest scores of experimental group were significantly higher than that of the control group and significant difference exists between the mean posttest scores of experimental and control groups. The mean posttest scores of experimental and control groups are 38.46 and 32.86 respectively. It reveals that the mean posttest scores are in favor of experimental group. It means the student teachers taught through blended learning strategy showed better performance than the student teachers taught through controlled method.

**Findings**

In the light of above statistical analysis the main findings of the study are given below:

The performance of student teachers in both the groups i.e experimental and control groups do not differ in the pretest achievement scores. The performance of students in Mean posttest scores of the experimental group i.e with blended learning is higher than the Mean posttest scores of the control group i.e with conventional method. The students of the experimental group of the experimental group were looking well and more motivated and ready to learn each day of experimental duration of blended learning treatment than student teachers of the control group.

### Conclusion

Blended Learning is best option, more effective pedagogy, student fully engaged learning, students control over the learning, when he can learn decided himself/herself. Experimental group achievement scores was high than that of the control group (Devaki and Muthuraj, 2015). Comparison of the effect of lecture and blended teaching methods on students learning and satisfaction. Satisfaction of blended learning method was higher than lecture method (Sadeghi, Sedaghat and Sha Ahmadi, 2012). The study shows that the blended learning strategy plays an important role in improving the achievements of educational psychology among student teachers. So a teacher should use blended learning strategy in teaching in the classroom which can make her task easier and students can achieve better.

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