# EFFECTIVENESS OF LEARNING ADVANCED EDUCATIONAL PSYCHOLOGY THROUGH e-CONTENT MODULE OF PROSPECTIVE TEACHERS.

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#### **ABSTRACT**

A study was undertaken to develop an e-content module on Growth and Development and Learning, which is included in M.Ed First year syllabus of Advanced Educational Psychology, Tamil Nadu Teachers Educational University, Chennai. The primary objective of this learning module is to build a flexible learning environment that combined the learning effectiveness of classroom teaching with various modes of learning material like text, images, animations, audios, and videos. A pre-test and post test equivalent group design was adopted. The Investigator delivered two units through e-content module. Samples of 30 Prospective Teachers learning through Tamil Medium were selected by applying Quota sampling technique and 30 Prospective Teachers learning through Tamil Medium were selected also by using e-content. The objective of the study is to find the difference between the Post test scores of Prospective Teachers learning through Tamil Medium for the Control Group and Experimental Group. The statistical technique used in this study is 't' test. The mean scores of Prospective Teachers learning through Tamil Medium Experimental Group is greater than the mean scores of Control Group Prospective Teachers.

## INTRODUCTION

Education is a wonderfully multifaceted activity, requiring carefully structured and skillfully implemented programs of learning to provide for the complex needs of students. The term psychology has been derived from two words, "psycho' and Logos". Psycho means "soul" and Logos means "science "or" Talk about". Thus psychology means "the science of soul. Educational psychology deals with educational problems. Educational psychology is scientific methods collection of data about individuals and groups to analyze and predict.

Education is one of the most important building blocks for a nation, serving as an instrument of economic and social development, within this context, the all important role of the teacher is well recognized, as imparter of

knowledge and information to students who are the future citizens of tomorrow. In India, the role of the teacher as not only an educator but also a guide, has been emphasized through the centuries. In the present context too, the role remains as critical as ever.

E-content is becoming popular because of its flexibility of time, place and pace of learning. E-content includes all kinds of content created and delivered through various electronic media. E-content is available in many subjects and almost all levels of education. It can be used by wide variety learners with diverse needs, different backgrounds, and previous experience and skill levels. It can be shared and transmitted easily and promptly among unlimited number of users around the world. Teachers, students and others get benefited by the use of well designed and developed e-content. It is advantageous to the educational organizations to make their program accessible to their teachers and students on campus, home and other community learning or resource centers. It has a significant implications for open and distance learning institutions. It is the recognition granted to a learner when all required learning outcomes have been successfully demonstrated.

# REVIEW OF RELATED STUDIES

Po –Jui et all., (2017) conducted a study on "The Effect of Blended Learning in Mathematics Course". With the advent of the digital age, traditional didactic teaching and online learning have been modified and gradually replaced by "Blended Learning." The purpose of this study was to explore the influences of blended learning pedagogy on 120 junior high school student learning achievement and the students' attitudes toward mathematics. To investigate the outcomes of the combination of Moodle online teaching platform and traditional instruction, a quasi-experiment was conducted using a pre-test-post-test control group design. ANCOVA and MANCOVA analyses showed that the blended learning experience benefitted students in the experimental group by having a positive effect not only on the learning outcomes, but also on their attitudes toward studying mathematics in a blended environment. Preliminary results indicated that male students and high-ability students were more motivated in the blended learning environment. Students gave positive feedback on the use of the Moodle learning platform for mathematics after experiencing blended learning.

Rufus et all., (2017) conducted a study on "Effectiveness of Blended Learning and Elearning Modes of Instruction on the Performance of Undergraduates in Kwara State, Nigeria". This study investigated the effectiveness of blended learning and E-learning modes of instruction on the performance of undergraduates in Kwara State, Nigeria. It also determined if the student performance would vary with gender. Quasi experimental that employs pretest, posttest, control group design was adopted for this study. This involves three groups, two experimental (blended learning, and E-learning) and a control group (traditional teaching method). Educational Materials and Methods Performance Test (EMPT) was used for data collection from 30 students that formed the sample for the study. The reliability coefficient of 0.71 was obtained from Kuder-Richardson (KR-20) formula. The Analysis of Covariance (ANCOVA) and Scheffe post hoc test were used to test the hypotheses. Findings of this study showed that: (i) there was significant difference in the performance of the three groups in favour of

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Experimental group 1 (Blended learning), (ii) there was no significant difference in the performance of male and female undergraduates taught with blended learning, (iii) similarly, no significant difference was found in the performance of male and female undergraduates exposed to e-learning mode of instruction. This implies that performance of undergraduates was enhanced when they are exposed to blended learning mode of instruction. Based on the findings, it was recommended that university lecturers should be encouraged to adopt blended learning for teach their students. Also, government and appropriate university authorities should support and encourage the usage of blended learning in Nigerian universities.

## SIGNIFICANCE OF THE STUDY

The investigator is the full-time Research scholar in the Department of Educational Psychology in Tamil Nadu Teacher's Education University. She studied Educational Psychology in both B.Ed and in M.Ed. The concepts studied in Educational Psychology which have a great correlation with our normal life. Although there is a correlation between Educational Psychological concepts and the normal life, but she could not applying this in learning Educational Psychology.

The investigator has given more emphasize to M.Ed Psychology, the reason is that, M.Ed students are the one who take the classes for B.Ed students, where as the B.Ed students are taking class to the school students, and the second reason is also that Psychology is very important for handling school students. Hence is this study.

#### **OBJECTIVES**

- 1) To find the difference between the Pre test and Post test Performance of Control group and Experimental Group Prospective Teachers.
- 2) To find the difference between the Post test Control Group and Experimental Group Prospective Teachers.

#### **HYPOTHESES**

- 1) There is significant difference between the Pre test and Post test Performance of Control Group and Experimental Group Prospective Teachers.
- 2) There is significant difference between the post test Control Group and Experimental Group Prospective Teachers.

# METHODOLOGY OF THE STUDY

An e-content module on Growth and Development and Learning, which is included in M.Ed First year syllabus of Advanced Educational Psychology of Tamil Nadu Teachers Educational University, Chennai. The e-content module includes text, images, animations, audios, and videos. A Pre-test and Post test equivalent group design was adopted. The Investigator taught two units through e-content module.

#### SAMPLE OF THE STUDY

A sample of 30 Prospective Teachers was selected by applying Quota sampling technique for Traditional Method and 30 prospective Teachers by using e-content module.

# TOOLS USED FOR THE STUDY, DESCRIPTION OF THE SCORING PROCEDURE OF THE TOOL

# **Pilot study**

The investigator constructed and validated the Achievement test in Advanced Educational Psychology. A validated questionnaire consist of 100 multiple choice questions. An item answered correctly is scored 1; an item answered incorrectly is scored 0. Based on the values of discrimination indices above 0.20 and difficulty indices between 25% to 75% re items were selected. The reliability of the present Pre/Post-test as measured by Rationale equivalence method is 0.87. This shows that the test scores are reliable for all practical purposes. After the treatment, a post-test was given to the sample.

# STATISTICAL TECHNIQUES

The statistical technique used in this study is 't' test.

# ANALYSIS OF DATA

1) There is significance difference between the Pre test and Post test Performance of Control group and Experimental Group Prospective Teachers.

# Pre – test – Post – test (Control Group)

The table (1) furnishes the scores of the Pre test and Post test Performance of Control group Prospective Teachers.

Table 1
Pre-test Vs Post test

| U.NO | Group     | Mean  | S.D  | 't'  | L.S |
|------|-----------|-------|------|------|-----|
| UI   | Pre test  | 18.53 | 2.87 | 9.58 | S   |
|      | Post test | 31.73 | 6.70 |      |     |
| UII  | Pre test  | 18.47 | 3.00 | 8.78 | S   |
|      | Post test | 30.50 | 7.13 |      |     |

From the table (1) it is inferred that there is significant difference between the Pre-test performance and the Post-test performance (Unit wise) of the Control Group learning through Tamil Medium Prospective Teachers at 0.05 level of significance in favour of the Post-test scores. The mean scores of Post –test performance is greater than the mean scores of Pre-test for the Control Group Prospective Teachers.

# **Pre** – test – Post – test (Experimental Group)

The table (2) furnishes the scores of the Pre test and Post test Performance of Experimental Group Prospective Teachers.

Table 2
Pre-test Vs Post test

| U.NO | Group     | Mean  | S.D  | 't'   | L.S |
|------|-----------|-------|------|-------|-----|
| UI   | Pre test  | 16.67 | 2.99 | 64.51 | S   |
|      | Post test | 75.47 | 4.93 |       |     |
| UII  | Pre test  | 17.33 | 2.29 | 61.57 | S   |
|      | Post test | 74.27 | 5.14 |       |     |

From the table (1) it is inferred that there is significant difference between the Pre-test performance and the Post-test performance (Unit wise) of the Experimental Group learning through Tamil Medium Prospective Teachers at 0.05 level of significance in favour of the Post-test scores. The mean scores of Post –test performance is greater than the mean scores of Pre-test for the Experimental Group Prospective Teachers.

# 2) There is significant difference between the Post test Control Group and Experimental Group Prospective Teachers.

The table (3) furnishes the scores of the Post test Control Group and Experimental Group Prospective Teachers.

Table (3)

Control Group Vs Experimental Group

Post test Performance of Prospective Teachers

| U.NO | Group        | Mean  | S.D  | 't'   | L.S |
|------|--------------|-------|------|-------|-----|
|      | Post – Test  |       |      |       |     |
| UI   | Control      | 31.73 | 6.70 | 34.78 | N.S |
|      | Group        |       |      |       |     |
|      | Experimental | 75.47 | 4.93 |       |     |
|      | Group        |       |      |       |     |
| UII  | Control      | 30.50 | 7.13 | 32.16 | N.S |
|      | Group        |       |      |       |     |
|      | Experimental | 74.27 | 5.14 |       |     |
|      | Group        |       |      |       |     |

From the table (3) it is inferred that is significant difference between the Control Group and Experimental Group learning through Tamil Medium Prospective Teachers in the unit test I&II at 0.05 level of significance in favour of Experimental Group Prospective Teachers. The mean scores of Experimental Group is greater than the mean scores of Control Group.

#### MAJOR FINDINGS OF THE STUDY

- 1) There is significance difference between the Pre test and Post test Performance of Control Group and Experimental Group Prospective Teachers. The mean scores of Post –test performance for Control Group and Experimental Group Prospective Teachers is greater than the mean scores of Pre-test.
- 2) There is significant difference between the Post test Control Group and Experimental Group Prospective Teachers. The mean scores of Experimental Group is greater than the mean scores of Control Group.

#### **EDUCATIONAL IMPLIFICATION**

Teaching is the art of exhibiting one's own competencies in a desired way. It is acquired through continuous practice. Teaching is to make the learning environment more interesting and joyful. The first principle of true teaching is that nothing can be taught. Teacher is a helper and a guide for the students. The aim of education is harmonious, natural and progressive development of the pupil. To fulfill this aim the teacher must have an insight into the working of the child's mind. He/she must know his needs, desires and capacities.

Today we are in technology world. So every student work hard to achieve high economical status. Globalization of technology is need for quality education. The quality of education can be measured by teaching methods and students performance as well as organized planning. By means of it student's technological skill is developed. These methods give a chance to the investigator to encourage students while still providing required content in order to enhance learning outcomes.

# **CONCLUSION**

The Post test performance showed that the unit Evaluation in favour of learning through Tamil Medium Experimental Group prospective teachers. The Post-test mean scores of Experimental Group in unit one and two is greater than the mean scores of Control Group. Since the interest on learning of e-content is high in experimental group, hence they have shown higher score the control group.

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