

CHAPTER 5

Summary, Conclusion & Suggestion

5.1 Introduction

Educational psychology, the science of education aims at improving the products of education. It supplies the means and ways as well as the science and technology for helping the teachers, the trainees, the educational planners in their respective areas of activity so that they will be able to assist the younger

The Teaching learning activities in the classroom constitute the instructional generation in their pursuit of education method. The conventional instructional method features the teacher talking, children listening, the textbook structuring all classroom activities, with a lot of copying from the blackboard and memorization and recitation of Factual information. The Teacher is the centre of the process. He is a designer of instruction and planner of lessons.

Knowledge \rightarrow teacher \rightarrow student

The Traditional concept of a teacher as the transmitter of knowledge. This approach is likely to be motivationally and instructionally ineffective. It is also unsuitable for helping students achieve higher-level learning objectives. Not all methods are suitable for all situations the choice of a method will have to depend among other things like the children being taught, the teachers own abilities, the facilities available.

The instruction method which may active the recipients and the learning becomes a mutual process like use of audio-visual aids. The ever expanding horizon of knowledge today is so much diversified that

demands our consistent effort to evolve scientific teaching methods with objectivity as their foci. The curricula must invariably involve the simultaneous use of scientific equipments called as Multimedia programmes The development of multimedia technologies could soon offer access to knowledge far superior than that of most subject teachers, the students are in active role rather than the passive role moreover recipient of information transmitted by a teacher, textbook. Technology use allows many more students to be actively thinking about information. making choices and executing skills that is typical in teacher led lessons. The teacher's is no longer the center of attention as the dispenser of information but rather plays the role of facilitator setting Therefore scientific selection of multimedia programmes is also as vital as using them scientifically. Multimedia programmes are the most effective variety of aids. The evolution of television and computer has further diversified the utilities of multimedia programmes far and wide without being deviated from the primary focus of objectivity Multimedia does not occupy the place of the teachers .they are effective means for achieving desirable goals in teaching and learning. as an affective means their function is great and a teacher should be aware of their functions in order that he may use them as per need, purpose and situation.

5.2 Statement of the problem

Comparative study of the Effectiveness of Traditional and multimedia approach to teaching of Educational Psychology on Pre-service Teacher Trainees Achievement, and Attitude.

Objectives of the Study

- 1. To develop multimedia package in teaching Education Psychology.
- 2. To compare relative effectiveness of conventional and multimedia approach on Achievement of pre-service teacher trainees in Educational Psychology.
- 3. To compare relative effectiveness of conventional and multimedia approach on attitude of pre-service teacher trainees towards educational Psychology.
- 4. To study the relative Retention in learning through Conventional and Multimedia faced approach.
- 5. To study the effect of Locus of control on the achievement of pre service teacher trainees.
- 6. To study the effect of Locus of control on the Attitude of preservice teacher trainees towards Educational Psychology.

5.4 Hypothesis

- 1. There will be no significant difference in the mean achievement score between the students studying through conventional approach and multimedia based teaching approach.
- 2. There will be no significant difference in the mean attitude score between the students studying through conventional approach and multimedia based teaching approach.
- 3. There will be no significant difference in the relative retention of learning through the conventional and multimedia based approach.

- 4. There is no significant difference in mean achievement score between the students of External and internal Locus of control, studying through conventional approach and multimedia based approach.
- 5. There is no significant difference in mean attitude score between the students of internal and external locus of control, studying through conventional approach and multimedia based approach.

5.5 Variables

The independent variables of the study are -

- Teaching approaches
 - a. Conventional teaching approach
 - b. multimedia based approach
- Intelligence
- Locus of control

The dependent variables of the study are

- Attitude
- Achievement

5.6 Sample

Sample of this study is B.Sc., B.Ed. II year students. Of Regional College Bhopal. Size of the sample is 25 students in each Experimental and Control group. Their age (chronological) is between 19-21 years and their socioeconomic status is middle class. There are total 50 students, only 2 students are boys rest all are girls. They all have passed B.Sc., B.Ed. 1st year exam and much difference in their I.Q. level is not expected.

5.7 Design of the study

The design followed for the study is experimental two group design. The input given to both groups were the two approaches of teaching education psychology. Two groups of students were equated on the basis of intelligence test. So it is The Post test only, Equivalent-Groups Design.

5.8 Procedure of Data collection.

It was completed in four phases

Phase I - Sampling

The sample B.Sc. B.Ed. II year students was subjected to Intelligence Tests and Test for Locus of Control. After computing the result, the students of High Intelligence and Low Intelligence, External and Internal Locus of control were randomly and equally divided into Control and Experimental groups of 30 students each.

Phase II - Treatment

The Experimental group was allowed to learn Piaget theory through Multimedia based approach using power point presentations, videos (based on Piaget's theory) and related sites on the Internet, in four sessions of one hour each ,in the absence of the teacher, whereas the control group was allowed to learn by the traditional approach i.e. Lecture method by the teacher, in four sessions of one hour each.

Phase III - Results

After the Treatment Experiment and Control group were subjected to post-test to measure their Achievement and Attitude..

Phase IV - Retention Test

After one month of treatment the Experiment and Control group were once again subjected to another Achievement test to compare their relative retention levels.

5.9 Data gathering Tools

To select or construct appropriate tools for the study is an important aspect of any research study. Sometimes the researcher uses tools which have been constructed by others, which are standardized; sometimes the researcher has to construct tools to fulfill his/ her purpose .In the present study the researcher has used two standardized tools and herself has constructed two tools keeping in view the objectives of the study .

Intelligence test

Standard Progressive Matrices, revised edition (2000) by J. Raven, JC. Raven and JH. Court. Design and use it was constructed to measure the Educative component of \mathbf{g} as defined in Spearman's theory of Cognitive ability. Educative ability is the ability to forge new insights , the ability to discern meaning in confusion, the ability to perceive, and the ability to identify relationships, the essential feature of eductive ability is the ability to generate new, largely nonverbal, concepts which make it possible to think clearly. The test has been described as one of the purest and best measures of \mathbf{g} or General Intellect functioning available.

Rotter's Locus of control scale

Design and use

It's a standardized test which consists of 29 items. Each item consists of two statements one in favour of External locus of control other in favour of Internal locus of control. Subject can pick up a statement he/she believes in. Individuals with a high Internal locus of control believe that events result primarily from their own behavior and actions. Those with a high External locus of control believe that powerful others, fate or chance primarily determine events. The respondent will choose the answer in which he believes and accordingly the total score will determine whether he has high/low locus of control

Attitude Test

The purpose of this scale would be to know whether or not the students have developed favorable Attitudes towards Educational Psychology as a discipline. The underlying assumption being that one of the outcomes of teaching educational psychology is the development of positive attitude towards the subject. As there is a lack of standardized attitude scale researcher has herself developed an attitude scale.

Achievement test

The purpose of this scale was to measure difference of achievement in learning of Piaget theory between control group and experimental group. It was prepared by the researcher herself.

Retention test

To measure the relative retention in learning through traditional approach and the multimedia approach the researcher has developed an another achievement test of similar level which was administered

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after 20 days of the treatment. For the construction of the Test similar procedure as for the construction of the Achievement Test was adopted.

5.10 Statistical techniques used

To understand the distribution of variables, basic statistic such as mean and standard deviation were calculated for all the variables involved in the study for the total sample, as well as the sub group of the sample .Attitude, and achievement will be compared and t – test is used.

5.11. The Limitations

The constraints under which the study was conducted remained confined to the following limitations-

- 1. The study is limited to pre-service teacher trainees of only one college.
- 2. The study is confined to comparison of learning only in Piaget's theory.
- 3. The treatment was given only for four days.

5.12 Major findings of the study

The following findings flow from the interpretation of data presented in the following chapter.

- 1. There is no significant difference in the mean achievement score between the students studying through conventional approach and multimedia based teaching approach.
- 2. There is no significant difference in the mean attitude score between the students studying through conventional approach and multimedia based teaching approach
- 3. There is no significant difference in mean achievement score between the students of External and internal Locus of control.

- 4. There is no significant difference in mean attitude score between the students of External and internal Locus of control.
- 5. There is no significant difference in mean achievement scores of the Retention test of the students, studying through conventional approach and multimedia based approach.

5.13 Conclusions of the study

- 1. Teaching through multimedia based teaching approach or traditional approach does not bring any difference in the Achievement. There is no impact of either of the methods on the achievement of the students and achievement does not depend on method of instruction.
- 2. Teaching through multimedia based teaching approach or traditional approach does not bring any difference in the Attitude. There is no impact of either of the methods on the Attitude of the students and Attitude does not depend on the method of instruction.
- 3. Teaching through multimedia based teaching approach or traditional approach does not bring any difference in the retention level of the students. Either of the method has no impact on the academic retention of the students and Retention does not depend on the method of instruction.
- 4. Locus of control is not a factor affecting the Achievement of the students.
- 5. Locus of control is not a factor affecting the Attitude of the students.

5.14 Suggestions for further research

Looking to the constraints under which the study was conducted, the findings not warrant wide generalisations. It is therefore felt that replication of this study, on larger sample is requisite to arrive at precise results. However studies may be undertaken on the following topics and themes -

- The study may be used in conjunction with other methods of teaching, accordingly then the impact can be explored.
- Its effect can be studied mentally retarded learner and those having low attitude towards the subject can also be studied
- The findings can be validated with other subjects as well.
- Different grade level of students can also be selected.
- It has tremendous promise and potential for the future.

As schools and colleges of future will be increasingly asked to prepare children and youth to face uncertainties in the complex society of tomorrow In order to enable students to cope with the challenges of change, the teacher must such methods which solicit greater involvement of the pupils and encourage them. The curriculum developers should take adequate steps to prepare instruction material for teaching various subjects in order to meet the future instructional needs of the students.

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