

CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

Education has been a dynamic process enabling the community to bring in social reforms. Society is never static, social changes result from the revolting minds either through peaceful means or through violence. If we look into the past. It can be seen that political leaders have made use of education as a means of indoctrinating the people. It is possible to bring light into the dark corners of the society through education. The trusted, rebellious youth of today is a symbol of the unimaginative system of education prevalent in the country. Education is essentially a study of man both in his individual and social contexts. It involves the change of behaviour in the descriptions of behaviour of an ideal citizen, including his knowledge, abilities, skills and values.

1.2 TEACHING LEARNING PROCESS

“Teaching Learning Process” is a term used to refer to the very complicated interaction that occurs between instructor and trainee as training proceeds. The term suggests that the process involves in behaviour of both the instructor and the trainee. But the important part is

represented by the hypothesis the transactions which comprise the process.

It implies that what is done by each party in this process is introduced by about is done by the other. There is no simple, cause – and – effect relation between the behaviour of one and the behaviour of the other. It implies, therefore, that instructional practices can not be fully understood without taking into account the persons involved and the relationship between them. It draws attention this relationship and the factors affecting it other important elements such as :

- Attitudes, beliefs and need of each person as he takes parts in the transaction.
- Outside influences on the persons taking part and on their relationship.
- Each person's views of the other parts of process – other persons, their actions, the training situation, and so firm.
- The relationship between the instructor and trainee, and the interaction of this with the other parts of the process.

1.3 ATTITUDE

Attitudes, values and ideas that are propagated by education, play a significant role, in building the personality, individuality and the entire

mental make up of an individual. Attitudes are the prime movers of thought and action. It is necessary to understand the meaning of attitudes. So as to utilize the concept clearly.

Attitude is a broad term covering almost all the important field of human knowledge, especially prominent in the fields of Education, psychology, sociology and policies. It is guiding force behind all human actions.

1.4 DEFINITION OF ATTITUDE

Good (1945) in the dictionary of education calls it a “state of mental and emotional readiness to react to situations, persons or things in a manner in harmony with a habitual pattern of response previously conditioned to or associated with these stimulate”.

Doob (1967) has defined attitudes in behavioural terms and way of the opinion that “attitude is an implicit response with drive strength which occurs within the individuals as a reaction to stimulates, patterns and which affects subsequent over responses”.

Fishbein (1967) was of the opinion that “Attitudes are learned predispositions to respond to an object or class of objects in a favourable or unfavourable way.”

Smith, Branner & White (1956) presented their ideas in the following form: Attitude is predisposition to experience, to be motivated by and to act toward a class of objects in a predictable manner”.

1.5 ACTIVITY BASED LEARNING (ABL)

The ABL concept has been taken from the Rishi Valley practices. This has been introduced in the Corporation Schools of Chennai with slight modifications. Seeing the success of the scheme this has been introduced in the Panchayat Union Schools later.

Activity Based Learning approach as a strategy of teaching learning aims at securing maximal participation of students in the teaching – learning process.

The ABL approach is unique and attractive to school children. The teachers who are involved in adopting this method have developed activities for each learning unit which facilitated readiness for learning, instruction, reinforcement and evaluation. ABL has transformed the classrooms into hubs of activities and meaningful learning.

Activity based learning is child centered learning. It brings out potentiality talent, and originality of the child. The novelty of the child is the objective of ABL.

1.6 ABL – AN INNOVATIVE APPROACH

Initially, a core team was asked to investigate the current practices of classrooms process and find out the reasons of the low achievement of children. As the team members had rich exposure in the field of primary education they had strong faith on children, parents, teachers and the government that they would not be responsible for low achievement of children. Then, after close study in some of the schools in the corporation area, the team identified the following as the malady of conventional process.

- Teacher dominates the classroom always.
- Rare use of teaching learning materials.
- Most of the time the lecture method was followed.
- Importance is given to rote learning.
- Teachers are under the assumption that they know everything and children do not know anything.
- Teacher assumes uniform learning pace and uniform level of achievement among children.
- The gap between teacher and children are more.
- Focus is given on teaching rather than learning.
- No scope to cover the loss of learning during the period of absence of children.

- Multi grade and multi level is not addressed.
- Traditional way of evaluation.
- Absence of joyous based extra activities.
- Absence of play way and learning by doing activities.
- Less chance for mutual and self learning.
- Coverage of syllabus by the teacher and not by the children.
- Classroom with fewer facilities for learning activities.
- Instructional materials are neither intensive nor attractive.
- Lack of learning freedom – more of time restricted environment.

To overcome the above malady in teaching learning process a suitable called Activity Based Learning (ABL) was evolved and implemented.

Active learning methodologies require that the student must find opportunities to meaningfully talk and listen, write, read and reflect on the content, ideas, issues and concerns of an academic subject.

1.7 ATMOSPHERE FOR EFFECTIVE ACTIVITY BASED LEARNING

Best structure for active learning

- Where there is no competition

- Where seating favours discussion and peer learning
- Where it is explicit that class space is for learning by ‘doing some things’ and
- The ‘doing is defined such that it can be seen as meaningful and applied in other contexts
- Mixed age environments are also a possibility.

1.8 MERITS OF ACTIVITY BASED LEARNING

- Students are involved in learning
- Less emphasis is placed on transmitting information and
- Greater emphasis on developing students skills
- Students are involved in higher order thinking (analysis, synthesis, evaluation)
- Students are engaged in activities (e.g., reading, discussing, writing) and
- Greater emphasis is placed on students exploration of their own attitudes and values.

“Active learning shifts the focus from the teacher to the student and from delivery of subject content by teacher to active engagement with the material by the student. Through appropriate inputs from the

teacher, students learn and practice how to apprehend knowledge and use them meaningfully”.

1.9 THE PROCESS OF ABL APPROACH

- Competencies are split into different parts/units and converted into different activities.
- Each part/unit is called a milestone.
- In each subject, the relevant milestones are clustered and linked as chain and this chain of milestones is called LADDER.
- Each milestone has different steps of learning process and each step of learning is represented by logo.
- Milestones are arranged in a logical sequence from simple to complex and also activities in each milestone.
- To enable the children to organize in groups – group cards are used.
- Evaluation is in built in the system. Separate cards / activities are used for this purpose.
- Each child is provided with work book/work sheet for further reinforcement activities.

- Children's progresses are recorded through annual assessment chart.
- Each milestone has different type of activities such as introduction, reinforcement, practice, evaluation, remedial and enrichment activities represented by different logos.

1.10 BENEFITS OF ABL APPROACH

- Children learn on their pace.
- Group learning, mutual learning and self learning are promoted.
- Teachers teaching time is judiciously distributed among children. Only needy children are addressed by teachers.
- Children's participation in every step is ensured in the process of learning.
- Periodical absence of child from school is properly addressed.
- Classroom transaction is based on child's needs and interests.
- Freedom to child in learning as he chooses his activity.
- Multi grade and multi level in learning is effectively addressed.
- Attractive cards and activity create interest among children.
- Scope for child's development in creative and communicative skills.

- Children will have a feel of security as they sit in rounds in the groups.
- Children are allowed to move in the classroom as they choose their activity.

1.11 STATEMENT OF THE PROBLEM

The research problem selected for the investigation is “**A study on the attitude of teacher training students towards activity based learning approach in Tiruchirapalli district**”.

1.12 NEED FOR THE STUDY

This ABL method is a unique method in primary school teaching brought in place of conventional lecture method. This ABL method provides opportunities to every learner to participate in the classroom learning. The method includes play way technology, self learning materials, etc. It increases the interest in the children towards learning this would definitely bring out fruitful learning in the minds of the children. This is the best method to be followed in every future. So its high time that we had understood the attitude of the student teachers. Hence this study tries to understand the attitude of the secondary grade teacher trainees towards teaching use in the ABL method.

1.13 SCOPE OF THE STUDY

The ABL method is supposed by found to be an appropriate teaching methodology at secondary level. Hence there are wider opportunities in bringing newer approaches in the same for future researchers in the ABL field are also wider. Resent researchers state that the ABL method inevitably include learners response in copious amount. Therefore researches in studying the involvement of learners are also possible. The study also triest find or check dial measures. The research also measure the active participation of the teacher trainees.

1.14 OBJECTIVES OF THE STUDY

- (i) To study the attitude of teacher trainees towards activity based learning. (ABL) method
- (ii) To find out significant difference if any in the attitude of male and female teacher trainees towards ABL method.
- (iii) To find out the significant difference between the attitude of type of management teacher trainees belonging to different type of institution towards ABL.
- (iv) To find out the significant difference if any between the attitude of rural and urban teacher trainees towards ABL method.

- (v) To find out the significant difference if any between the attitude of teacher trainees hailing from nuclear and joint family towards ABL method.
- (vi) To find out the significant difference if any between the attitude of teacher trainees hailing from different educational status towards ABL method.
- (vii) To find out the significant difference if any between the attitude of teacher trainees belonging to Hindu and Christian towards ABL method.

1.15 HYPOTHESES OF THE STUDY

1. There is no significant difference in attitude of teacher trainees towards ABL method with regards to their nature of gender.
2. There is no significant difference in attitude of teacher trainees of Government and Aided institutions towards ABL method.
3. There is no significant difference in the attitude of teacher trainees of Government and Self - finance institutions towards ABL method.

4. There is no significant difference in the attitude of teacher trainees of Aided and Self - finance institutions towards ABL method.
5. There is no significant difference in the attitude of teacher trainees hailing from urban and rural residence towards ABL method.
6. There is no significant difference in the attitude of teacher trainees of rural self – finance and urban self – finance institutions towards ABL method.
7. There is no significant difference in the attitude of teacher trainees hailing from joint family and nuclear family towards ABL method.
8. There is no significant difference in the attitude of teacher trainees of educational status towards ABL method.
9. There is no significant difference in the belonging to Hindu and Christian teachers trainees towards ABL method.

1.16 DELIMITATION OF THE STUDY

Research studies in general will have limitations due to many factors. It is the responsibilities of the researcher to see that study is

conducted with maximum care in order to reliable. However, the following limitations were unavoidable in the present study.

- (i) The study was confined to only teacher training students of Tiruchirapalli district in Tamilnadu.
- (ii) The study was not done with more variables, only gender, locality, type of managements, family size, educational status and religion were taken as the variable.
- (iii) Only 160 samples of teacher training students were collected.

Inspite of the above cited limitations, sufficient care has been taken in selecting the sample, constructing the tool, gathering reliable data and applying appropriate data and statistical analysis etc.

1.17 ORGANIZATION OF THE THESIS

The dissertation is presented in five chapters.

Chapter I

First chapter deals with introduction, need and scope for the study, objective of the study, hypothesis and delimitation of the study.

Chapter II

The review of related literature is presented in the second chapter.

Chapter III

Third chapter deals with methodology adopted for this study. Further construction at the tool, selection of the sample and data gathering procedure are explained in detailed manner.

Chapter IV

The tabulation, analysis and interpretation of the data collected for this study is given in this chapter.

Chapter V

In this chapter deals with the findings and conclusion of the study. It also includes suggestions for further research on the topic, bibliography and appendices follow this hypothesis.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

Review of literature is of paramount importance for it helps the researchers in making concept clear, provide evidence that the researcher is familiar with what is already known and what is still unknown and untested. The background of the study can be developed with literature review. The effective research is based on previous knowledge this step helps to eliminate the duplication to what has been done and provides useful hypothesis and help suggestion for significant investigation.

Review of related literature is one of the pre – requisites of the investigator to have identified her research problem more reliable and purposeful more than that in a systematic way. It gives the depth in a subject in which the investigator is involved herself in finding situations for the problem, he has selected for this research study. On this line it is a vital need of every investigation to see what happened in the area of her present study in the part in this connection as many information as possible through all the ways and means and bring value to her investigation.

2.2 PURPOSE OF THE REVIEW OF RELATED LITERATURE

The review of related literature helps the investigator to know that this problem does not exist in vacuum and that considerable work has already been done on topics as which are directly related to his proposed investigation and the success of his efforts will depend on small measure in the advances both empirical and theoretical made by previous studies. Survey of the studies made earlier enable the researcher to have a better understanding of the topic of his own and take various factors connected with study in the light of earlier research.

2.3 NEED FOR THE RELATED LITERATURE

For most scholars and scientists crucial reading of the literature serves as a stimulus for thinking and creativity. Review of literature to a problem makes the researcher familiar with the summary of previous research and the writings of recognized experts with what is already known, what it still unknown and untested and thus provides a back ground of the present study.

2.4 STUDIES CONDUCTED IN INDIA

PANDA AND TAPAN KUMAR BASANTIA (2004) conducted a study entitled “Activity Based Joyful Learning Approach” A strategy for the Achievement of interdisciplinary competencies”.

A study was conducted in a co-educational English medium primary school. Students from Classes I-V study there. The school admits students from varying backgrounds. Students (forty for control group and forty for experimental group) were selected from class III for the present experiment. Simple random method was followed for selection of the subjects.

There is a significant difference between the activity based joyful learning and conventional method of learning approach. The experimental group had shown better performance in their post-test scores in comparison to their pre-test scores, but such result hasn't found always in case of control groups. In some cases, after the treatment, the control group even had shown low performance in post-test results in comparison to their pre-test results.

THANGARAJATHI AND ADLIN VIOLA (2007) conducted a study entitled "Cooperative Learning Approach in Learning Mathematics".

A conventional sampling is used for this study. A sample of 48 students studying IX standard of both sexes was taken from 2 schools of Tuticorin District. 24 students were selected from each school, were the students selected belonged to the classes suggested by the principal of

the institute. The cooperative learning approach was found to more effective than the conventional method.

A conventional method can make improvement in the achievement of the pupil to a certain extent. But when compared with the cooperative learning approach the conventional method is not as much effective.

SIVAKUMAR (1999) conducted a study entitled “Effectiveness of Improvised Aids in Teaching Mathematical concepts at primary Level”.

The investigator used the experimental method for the present study. In the current investigation, the primary aim of the investigator was to study the effectiveness of improvised aids on teaching mathematical concepts at primary school level (I STD). The study has two groups, namely control and experimental. The control group was taught the selected mathematical concepts through traditional methods, whereas the experimental group was taught the same mathematical concepts by making use of improvised aids. The groups were selected from the students studying in the Municipal Primary School.

There is significant difference between the experimental and control group on the post. The improvised teaching aids were used for

teaching mathematical concepts till the post-test stage for experimental group. Hence the difference in the test performance of control and experimental group might have arisen in the study.

ANUPA SUSAN CHERIAN (2007) conducted a study entitled “Effectiveness of Language Games in Teaching Vocabulary in English”.

In this study, the investigator adapted experimental cum Survey Method for testing the effectiveness of Language Games. The sample selected for the study consisted of 143 students of Standard VII from two schools in Kottayam district of Kerala. The study revealed that the students of the Language Game Method score significantly higher marks than the students of the Lecture Method Group. It is common place that young children can learn better through play or at least can be induced to go along with teaching that is tempered by ‘fun’ activities. While playing the game, learners’ attention is more on the message and not on the language.

This leads to an unconscious acquisition of language. Motivation gets enhanced by the play and competition involved in it. Language games generate fun and excitement and these two aid pupils in learning their language simply.

HENRITA (2007) conducted a study entitled “Effectiveness of Improvised Aids in Teaching Science concepts at the primary level”.

The investigator used the experimental method for the present study. The sample selected for the study consisted of 160 students of standard VIII from four schools in Tiruchirappalli Educational district. Based on their scores in the pre-test, they were grouped into two groups namely control (80 students) groups. Improvised aids have a powerful effect in teaching. It provides greater education opportunities for children. Improvised aids based lesson helps in bringing new kinds of experience for children in schools to make education more interesting and really meaningful. This research study reveals that pupil learns better through improvised aids than the conventional method and their interest in learning through improvised aids is greater. Therefore it is desirable that more number of improvised aids based lesson should be made available to schools for learning the various subject concepts at school level.

2.5 STUDIES CONTUCTED ABROAD

DUNLAP, WILLIAM PHILLIP (2007) conducted a study entitled “A comparison of the effects of Diagnostics and Remedial

Arithmetic Programs upon the Achievement and Aptitude Development of Fourth Grade Children”.

For 23 days, 147 fourth-grade pupils used either a textbook approach ($n = 74$) involving paper-and-pencil activities or a laboratory approach ($n = 73$) involving “extensive use of games, puzzles, patterns, and the manipulation of physical objects by children”. On a standardized test, no significant differences were found for concepts ($p = .05$) or computational skills ($p = .01$), although differences favored the laboratory group on the concepts test. Data analyzed by schools indicated that the laboratory approach resulted in better attitudes toward arithmetic in more schools.

EDWARDS, KEITH AND DEVERIES, DAVID (2006)

Conducted a study entitled “Learning Games and Student Teams: Their Effects on Student Attitudes and Achievement”.

Seventh graders ($n = 117$) using the “Equations” game had more positive attitude toward mathematics classes than did pupils having quizzes. For low and average ability pupils, term rewards were reviewed more positively than individual rewards.

EDWARDS, KEITH; DEVRIES, DAVID; AND SNYDER, JOHN (2005) conducted a study entitled “Games and Teams: A Winning Combination”.

Seventh graders (n = 96) using the “Equations” game in four-member teams twice a week for nine weeks achieved significantly greater gains on computation and divergent solutions tests than did groups having only regular instruction. Low achievers did especially well on the divergent solutions test.

GOLEBERT, ROBERT KENNADY (2005) conducted a study entitled “A Comparison of Three Instructional Approaches Using Manipulative Devices in Third Grade Mathematics”

In one school, third graders (n = 124) manipulating materials individually for addition and subtraction with two-digit numbers scored significantly higher than students watching the teacher manipulative materials or hand line in groups of four or five children. In a second school, no significant differences were found.

JOHNSON, RANDALL ERLAND (2004) conducted a study entitled “The Effect of Activity Oriented Lessons on the Achievement and Attitudes of Seventh Grade Students in Mathematics”

Activity-oriented instruction did not appear to be more effective for seventh graders (n = 160 students) than instruction with little or no emphasis on activities for units in number theory, geometry, measurement, and rational numbers.

MACY MURRAY (2002) conducted a study entitled “The Effectiveness of Representative Materials and Additional Experience Situations in The Learning and Teaching of Fourth Grade Mathematics”

Pupils from one fourth-grade class (n = 28) were matched with those from another fourth-grade class, with each group altering use and non-use of manipulative materials and an “enriched experience program” for two week periods. No significant difference ($p < .05$) in achievement was found between the groups either during or following the treatment period.

ROPES, GEORGE HARDCASTLE (2000) conducted a study entitled “The Effect of Mathematics Laboratory on Elementary School Students”.

Twenty-two pupils from grade 6 were randomly selected to participate in a mathematics laboratory; 22 other peoples from each grade formed control groups. Experimental group peoples spent one 45-minute period per week for 14 weeks in the laboratory, which

“conducted a variety of manipulative materials and activity sheets related to each”. No significant differences ($p < .05$) were found in attitude or achievement (although laboratory group pupils spent 20 % less time on the regular content tested).

VANCE, JAMES AND KIEREN, THOMAS (2000) conducted a study entitled “Mathematics laboratories – More Than Fun?”

For ten weeks, laboratories were used once a week with some seventh and eighth graders. No significant differences in achievement of work covered in the regular program were found, although one-fourth of mathematics class time was spent in informal exploration. Students strongly preferred the laboratory method. Both laboratory and class-discovery groups scored higher than students in the regular program on cumulative achievement, transfer, and divergent-thinking tests.

WLLACE, PEARLENE (1999) conducted a study entitled “An Investigation of the Relative Effects of Teaching a Mathematical Concept Via Multisensory Models in Elementary School Mathematics”.

Pupils from grades 4, 5, and 6 ($n = 154$) were taught fraction concepts for three weeks using Cuisenaire rods and magnetic fraction parts or with a traditional approach. The materials group scored significantly higher than the traditional group on both achievement and

manipulative tests. No significant differences were found between welfare and non-welfare recipients.

WEBER, AUDRA WHEATLY (1998) conducted a study entitled “Introduction Mathematics first Grade Children: Manipulative vs. paper and pencil”.

With six classes of first graders, three from low and three from high SES schools, mathematical concepts were reinforced for one month through use of (1) paper-and- pencil follow-up activities or (2) manipulative and concrete materials for follow-up activities. No significant difference in achievement was found between groups, although a trend favored the use of materials, especially for low SES pupils.

WILKINSON, JACK DALE, (1997) conducted a study entitled “A Laboratory Method to Teach Geometry in Selected Sixth Grade Mathematics Classes.

Sixth graders (n=232) were taught geometry for 20 days using (1) laboratory units, with worksheets and manipulative materials requiring experiments and data collection, (2) laboratory units which included cassette tapes, or (3) a” more conventional approach”. No significant

differences in achievement and attitude were found between the approaches.

SWICK, DANA (1995) conducted a study entitled “The value of Multi-Sensory Learning Aids in the Teaching of Arithmetic Skills and problem solving – An Experimental Study.

Students in grades 2 through 5 ($n = 404$) made significantly greater gains during the nine-week period when a variety of materials was used than were expected on the basis of their scores for the previous nine weeks.

HENRY, KERMIT MAXSON (1994) conducted a study entitled “The Effect of Games on Cognitive Abilities and on Attitudes Toward Mathematics”

No significant differences in achievement or attitude were found between groups of seventh graders ($n = 182$) who used or did not use the games “Equations” or “Tac-Tickle”.

CROWDER, ALEX BELCHER (1992) conducted a study entitled “A comparative study of Two Methods of Teaching Arithmetic in the First Grade.

A group of 242 first-grade pupils using the Cuisenaire program was compared with a group of 183 pupils using a conventional program. The Cuisenaire group's arithmetic achievement was significantly greater ($p > .01, .001$). Upper and middle socioeconomic groups scored higher than lower SES groups.

ALLEN, LAYMAN AND ROSE, JOAN (1990) conducted a study entitled "Improving skill in Mathematical Ideas: A preliminary report on the Instruction Gaming program at Pelham Middle School in Detroit".

Ten eight-grade mathematics classes ($n = 237$ students) were rested on computation problems after using the "Equations" game; scores increased.

2.6 CONCLUSION

The review of literature helped the investigator in providing necessary in sight to carry out the research study effectively. Having described the review of related literature the investigator presents the methodology of the study in chapter – III.

CHAPTER III

METHODOLOGY

3.1 OVERVIEW

This chapter deals with the design and procedure adopted for the present study. The sample for the present study, instrumentation, process of data collection and statistical techniques used for data analysis are discussed in this chapter.

3.2 METHODOLOGY OF RESEARCH

In every study, the research method is the medium by which one can arrive at a solution for the problem. For the problem like this the survey method is found to be useful and appropriate one.

Surveys are only concerned with conditions or relationship that exist opinions that are held, processes that are going on, effects that are evident or trends are developing. They are primarily concerned with the presents but at times do consider the past events and influences as they relate to the current conditions. Thus in surveys, variables that exist on have already occurred are selected and observed.

The investigator therefore decided to take up survey method in order to collect data from the population to study the attitude teacher

training students towards activity based learning in Tiruchirapalli District.

3.3 POPULATION FOR THE STUDY

Most educational phenomena consist of a large number of units. It would be impracticable, it not impossible to test or to interview or observe each unit of the population under controlled conditions in order to arrive at principles having universal validity. Some populations are so large that their study would be expensive in terms of time energy.

A population refers to any collection of specified group of human beings or non human entities such as objects, facilities available, educational institutions, geographical areas etc. some statisticians call it universe.

In this study the investigator has selected teacher training students studying at Government. Govt – Aided and Self – finance institutions in Tiruchirapalli district as population for the study.

3.4 SAMPLE FOR THE STUDY

The investigator applied stratified random sampling technique for selecting the sample for this research. In this method, the population is divided into several groups that are individually more homogeneous than the total population and than the select items for each stratum to

constitute a sample. Since each stratum is more homogeneous than the total population, the nature and qualities of the population are prevalent and also identified in the sample.

A sample of five teacher training institute was selected for the research work using the stratified random sampling technique. After selecting teacher training institutes 160 students (61 male students and 99 female students) were selected randomly from these institutes in Trichirappalli district. The students were selected both from Government, Govt - Aided and Self - finance institutes.

Table – 3.1
Distribution of Sample

S. No	Name of the institute	Management	Location	Number of students
1	Govt Teacher Training Institute	Govt	Rural	40
2	Periyar Teacher Training Institute	Govt – Aided	Urban	20
3	Periyar Maniyammai Teacher Training Institute	Govt – Aided	Urban	20
4	Periyasamy Teacher Training Institute	Self finance	Urban	40
5	JJ Teacher Training Institute	Self finance	Rural	40

3.5 TOOLS USED FOR THE STUDY

The investigator decided to construct a tool in the form of attitude scale which is appropriated to find out the attitude of teacher training students towards activity based learning. The tools consist of two parts.

- (i) General information about the student attitude.
- (ii) Attitude scale regarding the teacher training students attitude towards activity based learning method. Part two contains 50 statements.

3.6 PILOT STUDY

For the pilot study, the investigator gave questionnaire of eighty items to twenty five students of Gandhi Teacher Training institute, Coimbatore. They were requested to answer the questionnaire carefully. The investigator provided adequate time for the response. The responses given by them were considered and a tool of fifty items was finalized for the study.

3.7 RELIABILITY OF THE TOOL

The reliability of the tool refers to the consistency of scores obtained by the same individuals on difference occasions or with different sets of equivalent items. The reliability of tool or test is generally calculated by one of the following methods

3.7.1 Test re – test method

Once a test has been given to group of students, their score are noted. After sometime, the same test is given to the same group of students, and scores are noted. Now, if the correlation between the results fist obtained and those obtained second time is sufficiently high, the test said to be reliable.

3.7.2 The Split – half method

This method also yields what is sometimes called a co – efficient of equivalence. The test is split into two equivalent halves usually by pooling the odd numbered item for one score and even numbered items for another score. This usually makes the two scores obtained from a single test reasonably equivalent. In this way, tow scores for each pupil are obtained.

3.7.3 Parallel form method

According to this method, a parallel forms of the test can be administered to the same group under similar conditions the parallel test items are similar in their form, content and difficulty. The correlation of co-efficient between these two forms is taken as reliability coefficient. This method is generally used in psychological and educational tests where the parallel forms are available.

3.7.4 Kuder Richardson Method

The fourth method of determining the reliability of a test is the one known after it's originated, Kuder and Richardson. This method also known as the method of internal consistency the method of rational equivalence.

3.7.5 Inter observer reliability

Having two persons independently score the same set of test papers and then calculating a correlation between their scores can obtain it. In the above methods the test – retest and parallel form methods would consume more time. The split – half method is not quite suitable here, because there is no natural classification of even and adds items and therefore, it is used in this instance. The method of rational equivalence represents an attempt to get an estimate of the reliability of a test. A sample approximately is often useful to teachers and others who want to determine quickly the reliability of short – objective classroom examinations.

The investigator established reliability by applying the split half method, the co – efficient of correlation was found to be 0.82 which is highly reliable one and the r is found to be positive. Therefore the tool is treated as highly reliable tool for the use of this research investigation.

3.8 VALIDITY OF THE TOOL

According to Lindquist, “the validity of a test may be defined as the accuracy with which it measures that which it is intended to measure.” Validity of a test can be reported in general, terms “No test has high or low validity in the abstracts.

3.9 TYPES OF VALIDITY

Five major types of validity are frequently used in the field of educational research. They are as follows

3.9.1 Face validity

Face validity means that the given test appears or seems to measure what it is to measure. This validity does not refer what the test actually measures but refers to what the test seems to measure.

3.9.2 Content validity

Content validity also means logical or curricular validity. Content validity is best considered in relation to achievement test. An achievement test has content validity if it represents faithfully the objectives of a given instructions sequence and reflects the emphasis accorded to this objectives as the instruction was carried out.

3.9.3 Construct Validity

Construct validity of a test refers to the extent to which the test measures a particular characteristic of the individual. If a test valid from the 'construct' point of view, it can indicate the individual actual achievement of instructional objectives.

3.9.4 Predictive Validity

Predictive validity determines the future success of the test. We need a test having high predictive validity when we wish to use it for predicting the future status of an individual. The predictive validity of a test is determined on the basis of an established criterion.

3.9.5 Concurrent Validity

Tests are said to have concurrent validity when they can distinguish between two or more groups of individuals who state as at the time of testing this different.

For the present study, the researcher gave the tool to the juries, experts, and their suggestions were carefully incorporated in the tool which ensures the reliability of a tool used in the study.

Finally pilot study consists of 50 statements. (Item reduced as 50 statements by pilot study).

3.10 VARIABLES SELECTED FOR THE STUDY

The investigator selected the following variables as independent variables.

- Gender of the teacher trainees (Male and Female)
- Nature of the institutions (Government, Aided, Self – finance institutes)
- Locality of the institute (Rural and Urban)
- Type of family (Nuclear and Joint family)
- Educational status (+2 / Degree / Others)
- Religion of the student (Hindu / Christian / Muslim)

3.11 DATA GATHERING PROCEDURE

The investigator met the principal of the institute and the investigator explained about the study and requested permission for data gathering. Questionnaire was given to five teacher training institutes. All the students gave responses in the response sheet which they feel correct and appropriate. After they completed their responses, the investigator collected the response sheet from the students.

3.12 SCORING PROCEDURE

Each response was given a numerical indicating his / her degree of agreement or disagreement based on five point responses such as strongly agree, disagree, moderate, disagree, strongly disagree. The sum of the numerical scores assigned to all the separate items of each questionnaire gives his total score which is interpreted as favourable and unfavourable attitude towards the statement. Score was given to each statement on the basis of favourable and unfavourable answer for favourable statement the scoring order was 5, 4, 3, 2, 1. For the unfavourable statement the scoring order has 1, 2, 3, 4, 5. The same scoring procedure was followed for all the subjects of the study.

3.13 STATISTICAL TECHNIQUES USED IN THE STUDY

Keeping in view the nature of the hypothesis of the study, the investigator used descriptive as differential statistics mean, standard deviation was calculated as descriptive analysis. 't' test was used as differential statistics.

Having discussed the methodology of the present investigation in this chapter the investigator has presented the analysis and interpretation of the data collected for the present investigation in the further coming Chapter IV.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

4.1 INTRODUCTION

Analysis and interpretation of data are the major steps in the research study. The research may obtain in general of two steps, the gathering of data and analysis these data. The data gathered through the administration of the tools may be inadequate, valid and useless it is carefully edited or organized, systematically classified and tabulated, scientifically analyzed, intelligently interpreted and rationally concluded.

Analysis of data means studying the tabulated materials in order to determine the inherent facts on meanings. Data collected by the investigator get their meaning when they are channelised into the process of statistical analysis. It will give the investigator an insight into the problem.

It simplifies the masses the number of facts and prevents them in an understandable manner. Therefore analysis must lead to interpretation of data.

The purpose of present investigation is the attitude of teacher training students towards activity based learning. The data for the study were collected from the 160 teacher trainees.

4.2 DESCRIPTIVE ANALYSIS OF THE DATA

The following table shows the classification of the attitude towards ABL method of teacher trainees.

Table – 4.0

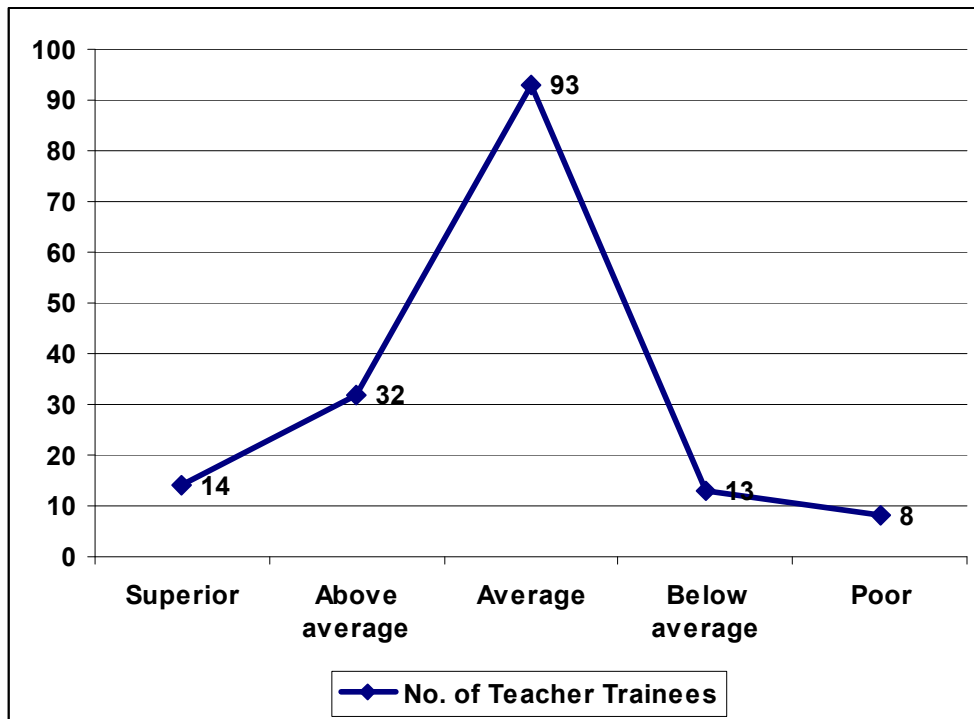
Classification of Attitude towards ABL method of Teacher trainees

Category	No. of Teacher Trainees
Superior	14
Above average	32
Average	93
Below average	13
Poor	8

Majority of the teacher trainees are average in attitude towards ABL method. The teacher trainees category were superior 14, above average 32, average 93, below average 13 and poor 8 students.

FIGURE – 4.0

FREQUENCY CURVE



4.3 DIFFERENTIAL ANALYSIS OF DATA

The data was subjected to appropriate statistical test for testing hypothesis. The acceptance (or) rejection has been done at 0.05 level of significance.

HYPOTHESES – I

There is no significant difference in attitude of teacher trainees towards ABL method with regards to their nature of gender.

TABLE – 4.1

Comparison of attitude towards ABL method male and female teacher trainees

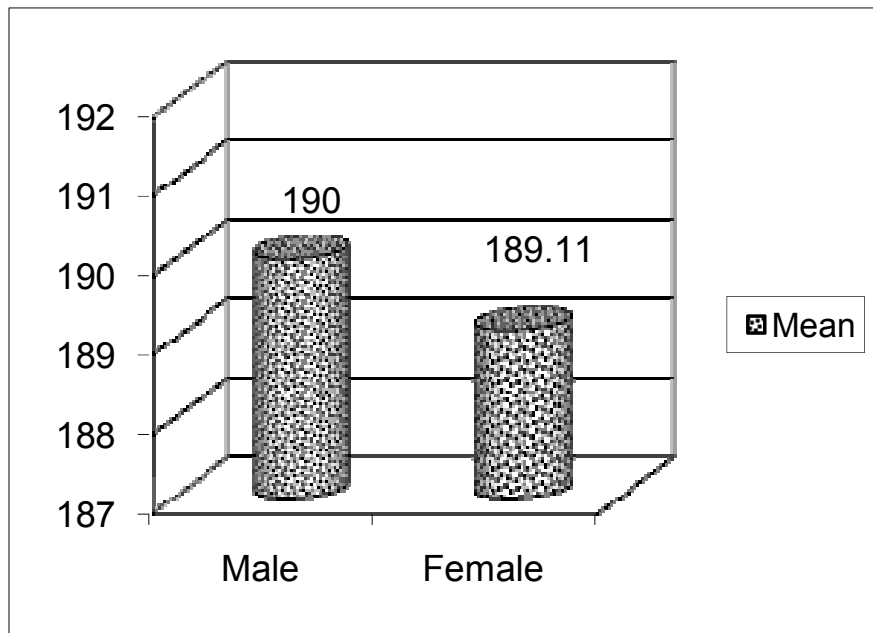
Group	N	Mean	S.D	S.E	't' Value	Significance
Male	61	190	15.62	2	0.34	Not significant at 0.05 level
Female	99	189.11	16.01	1.60		

The obtained 't' value 0.34 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 158. Hence the null hypothesis is accepted.

From this it is concluded that male and female teacher trainees does not differ in their attitude towards ABL method. They are equal in their attitude towards ABL method.

FIGURE 4.1

**Mean score of male and female teacher trainees
in their attitude towards ABL method**



HYPOTHESES – II

There is no significant difference in attitude of teacher trainees of Government and Aided institutions towards ABL method.

TABLE – 4.2

**Comparison of attitude towards ABL method Govt and
Aided teacher trainees**

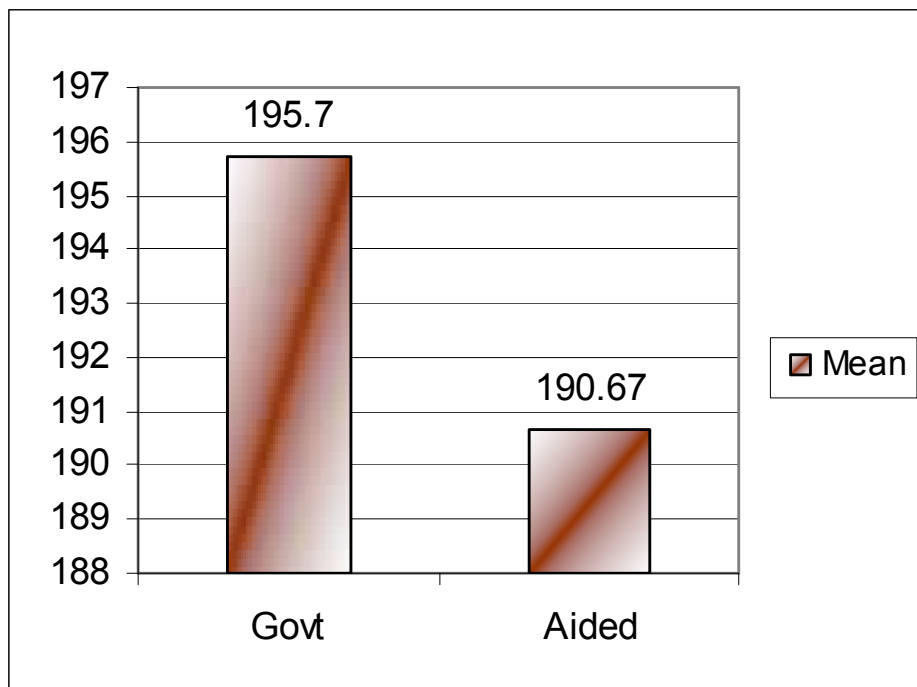
Group	N	Mean	S.D	S.E	't' Value	Significance
Govt	40	195.7	12.49	1.97	1.41	No Significant at 0.05 level
Aided	40	190.67	15.78	2.49		

The obtained 't' value 1.41 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 78. Hence the null hypothesis is accepted.

From this it is concluded that Govt and Aided teacher trainees does not differ in their attitudes towards ABL method. They are equal in their attitude towards ABL method.

FIGURE 4.2

Mean score of Government and Aided teacher trainees in their attitude towards ABL method



HYPOTHESES –III

There is no significant difference in the attitude of teacher trainees of Government and Self - finance institutions towards ABL method.

TABLE – 4.3

Comparison of attitude towards ABL method Government and Self - Finance teacher trainees

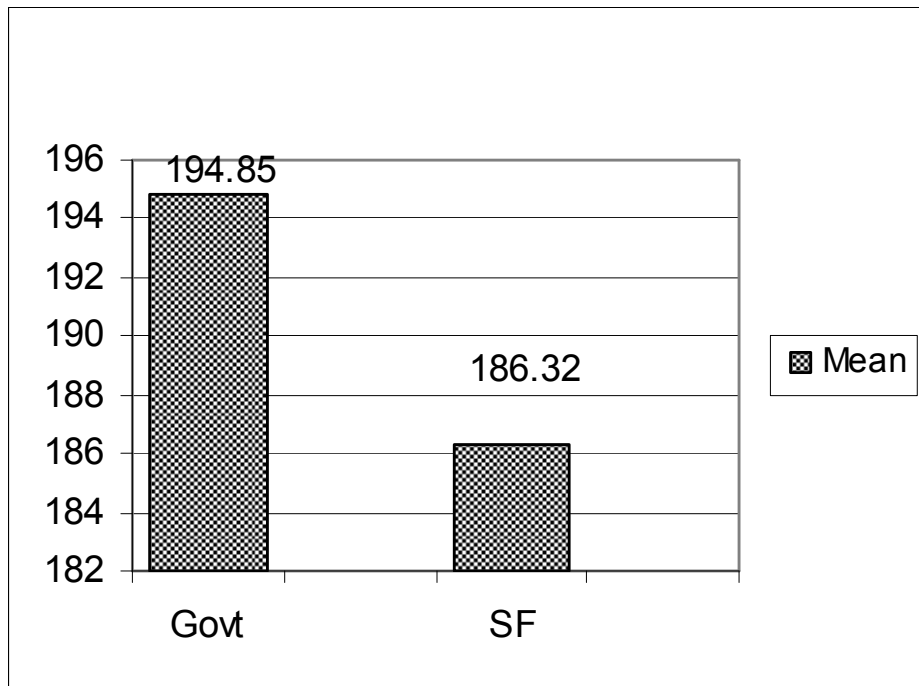
Group	N	Mean	S.D	S.E	't' Value	Significance
Govt	40	194.85	13.30	2.10	2.80	Significant at 0.05 level
SF	80	186.32	16.75	1.87		

The obtained t value 2.80 is significant at 0.05 level. Since it is higher than the Table value 1,98 for degree of freedom 150. Hence the null hypothesis is rejected.

From this it is concluded that the attitude of Government and self - finance teacher trainees towards ABL method significantly varies Government teacher trainees have better attitude towards ABL method than teacher trainees of self finance institute.

FIGURE 4.3

Mean score of Government and Self - Finance teacher trainees in their attitude towards ABL method



HYPOTHESES – IV

There is no significant difference in the attitude of teacher trainees of Aided and Self - finance institutions towards ABL method.

TABLE – 4.4

Comparison of attitude towards ABL method Aided and Self - Finance teacher trainees

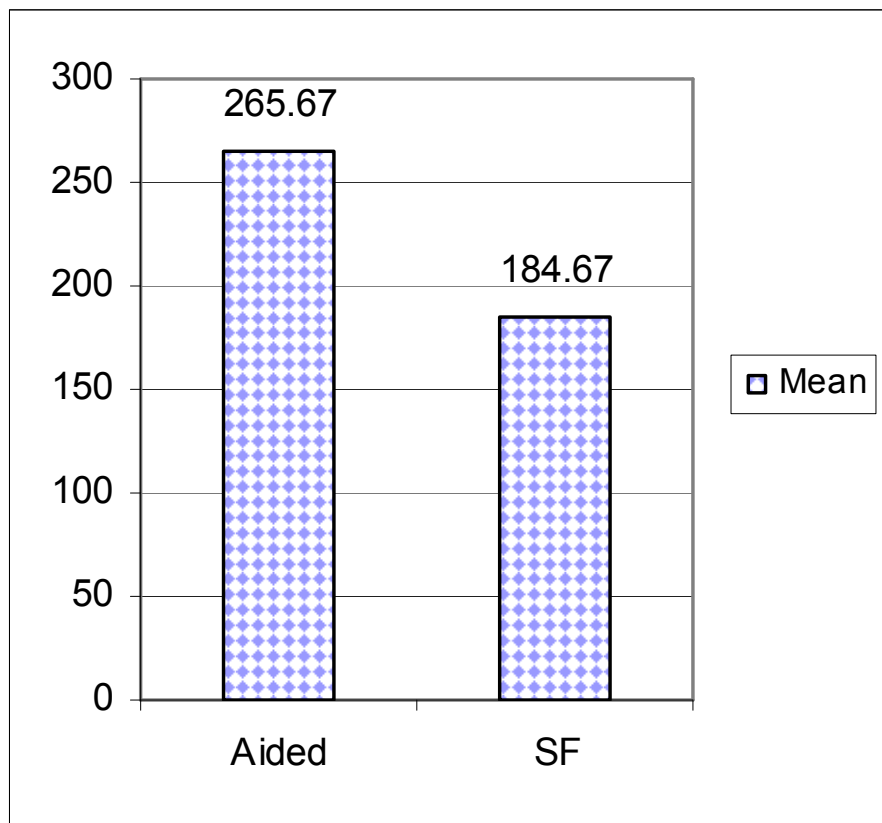
Group	N	Mean	S.D	S.E	't' Value	Significance
Aided	40	265.67	478.04	75.58	1.51	Not Significant at 0.05 level
SF	80	184.67	26.74	2.99		

The obtained 't' value 1.51 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 118. Hence the null hypothesis is accepted.

From this it is concluded that Aided and self – finance teacher trainees does not differ in their attitude towards ABL method.

FIGURE 4.4

**Mean score of Aided and Self - Finance teacher trainees
in their attitude towards ABL method**



HYPOTHESES – V

There is no significant difference in the attitude of teacher trainees hailing from urban and rural residence towards ABL method.

TABLE – 4.5

**Comparison of attitude towards ABL method urban and
Rural institute teacher trainees**

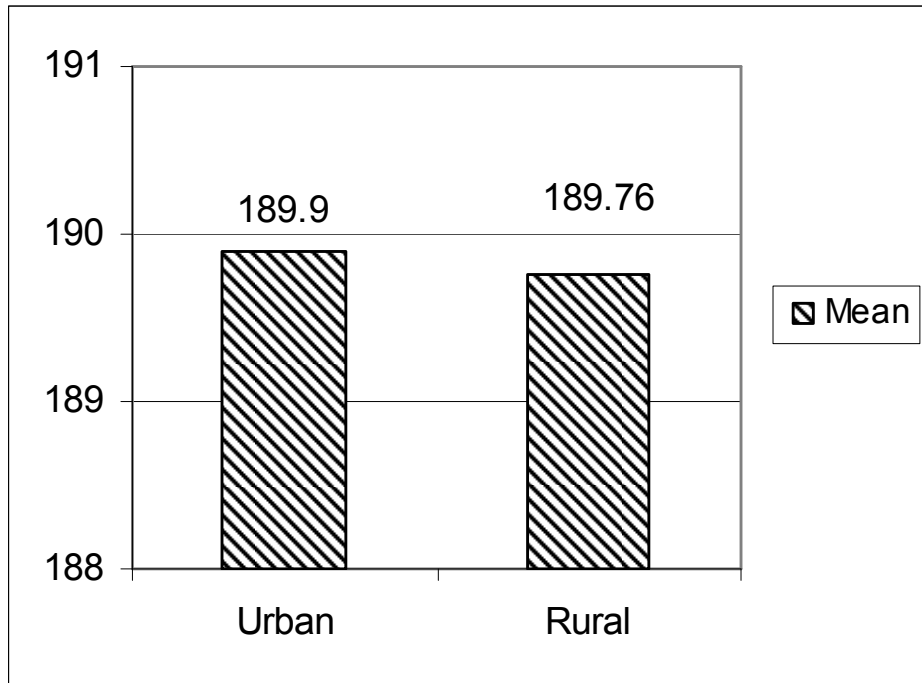
Group	N	Mean	S.D	S.E	't' Value	Significance
Urban	80	189.9	15.76	1.76	0.05	Not Significant at 0.05 level
Rural	80	189.76	16.26	1.81		

The obtained 't' value 0.05 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 158. Hence the null hypothesis is accepted.

From this it is concluded that urban and rural institute teacher trainees does not differ in their attitude towards ABL method.

FIGURE 4.5

**Mean score of urban and rural female teacher trainees
in their attitude towards ABL method**



HYPOTHESES - VI

There is no significant difference in the attitude of teacher trainees of rural self – finance and urban self – finance institutions towards ABL method.

TABLE – 4.6

Comparison of attitude towards ABL method rural self - finance and urban self – finance teacher trainees towards ABL Method

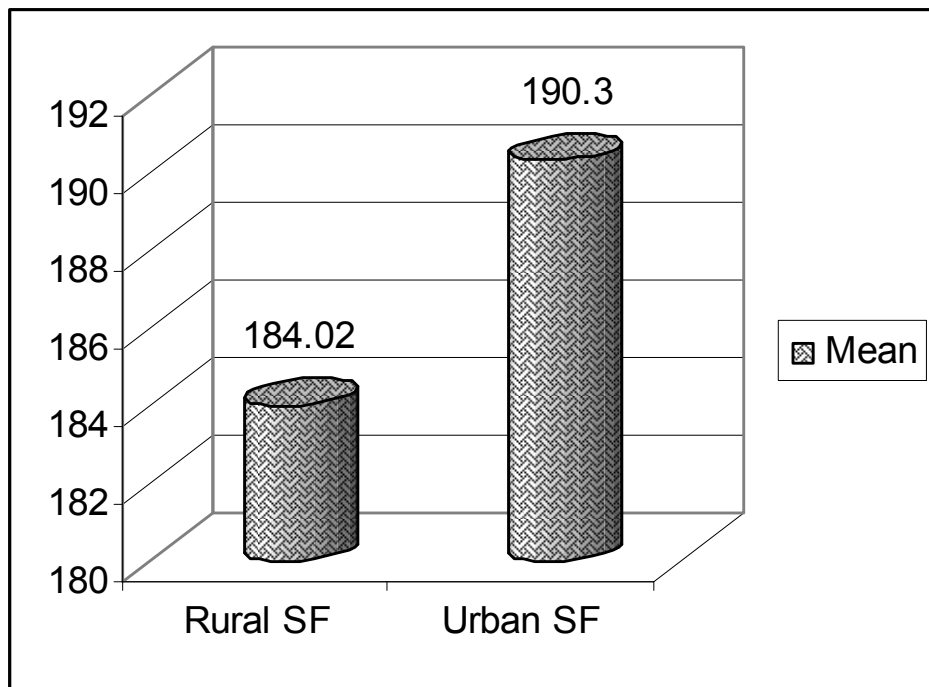
Group	N	Mean	S.D	S.E	't' Value	Significance
Rural SF	40	184.02	17.83	2.82	1.63	Not Significant at 0.05 level
Urban SF	40	190.3	16.45	2.60		

The obtained 't' value 1.63 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 78. Hence the null hypothesis is accepted.

From this it is concluded that rural self - finance and urban self – finance institute teacher trainees does not differ in their attitude towards ABL method.

FIGURE 4.6

**Mean score of rural self - finance and urban self – finance
teacher trainees in their attitude towards ABL method**



HYPOTHESES – VII

There is no significant difference in the attitude of teacher trainees hailing from joint family and nuclear family towards ABL method.

TABLE – 4.7

**Comparison of attitude towards ABL method joint family
and nuclear family teacher trainees**

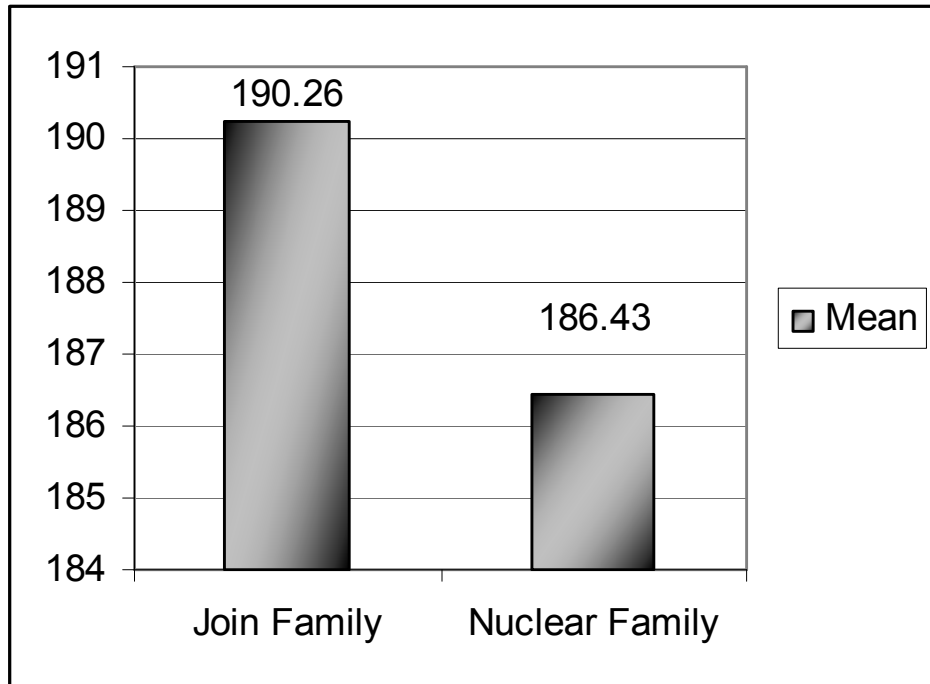
Group	N	Mean	S.D	S.E	't' Value	Significance
Join Family	71	190.26	15.78	1.87	1.35	No Significant at 0.05 level
Nuclear Family	89	186.43	16.82	1.78		

The obtained 't' value 1.35 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 158. Hence the null hypothesis is accepted.

From this it is concluded that Joint family and nuclear family teacher trainees does not differ in their attitude towards ABL method.

FIGURE 4.7

Mean score of joint family and nuclear family teacher trainees in their attitude towards ABL method



HYPOTHESES - VIII

There is no significant difference in the attitude of teacher trainees of educational status towards ABL method.

TABLE – 4.8

**Comparison of attitude towards ABL method
educational status of teacher trainees**

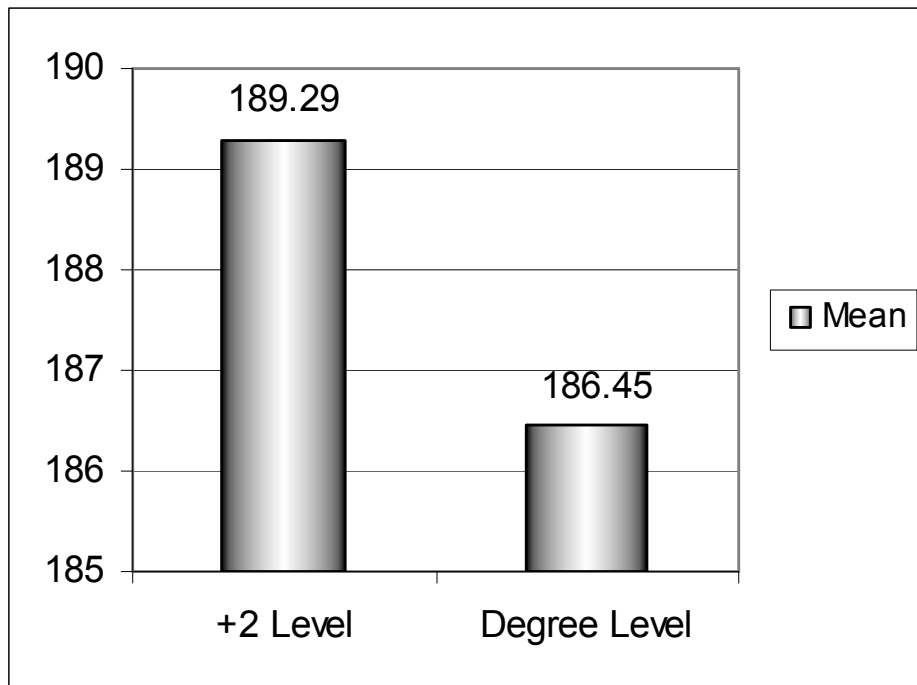
Group	N	Mean	S.D	S.E	't' Value	Significance
+2 Level	138	189.29	16.55	1.40	0.73	Not Significant at 0.05 level
Degree level	22	186.45	18029	3.89		

The obtained 't' value 0.73 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 158. Hence the null hypothesis is accepted.

From this it is concluded that +2 level and degree level teacher trainees does not differ in their attitude towards ABL method.

FIGURE 4.8

Mean score of educational status of teacher trainees in their attitude towards ABL method



HYPOTHESES - IX

There is no significant difference in the belonging to Hindu and Christian teacher trainees towards ABL method.

TABLE – 4.9

Comparison of attitude towards ABL method Hindu and Christian teacher trainees

Group	N	Mean	S.D	S.E	't' Value	Significance
Hindu	146	199.23	126.87	10.50	0.16	No Significant at 0.05 level
Christian	14	193.71	17.89	4.78		

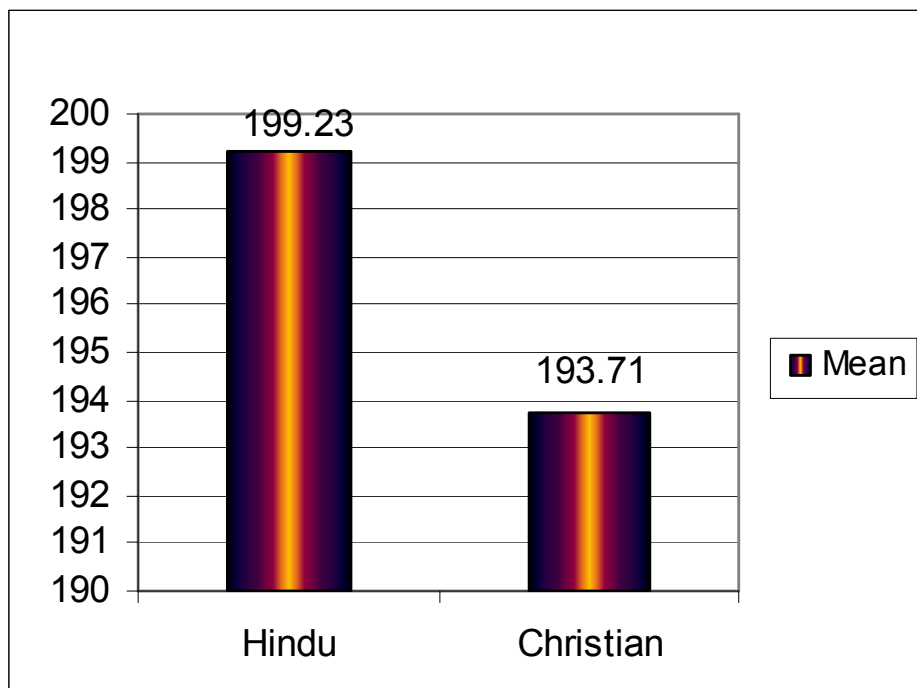
The obtained 't' value 0.16 is not significant at 0.05 level, since it is higher than the Table value 1.98 for degree of freedom 158. Hence the null hypothesis is accepted.

The individual belonging to Hindu and Christian have similar level of attitude. All the Hindu and Christian religions are having equal role in developing attitude towards ABL method in teacher trainees.

The findings and suggestions are discussed in the following Chapter V.

FIGURE 4.9

Graph showing the mean score of Hindu and Christian religion of teacher trainees in their attitude towards ABL method



CHAPTER V

FINDINGS, SUGGESTION AND DISCUSSION

5.1 OVERVIEW

This chapter deals with the summary and brief explanation of previous chapter and the findings and suggestions of the present study. This chapter has been arranged under the following Headings. Viz., overview, statement of the problem, sample design instrumentation, findings and conclusion, limitations of the study and suggestions for further research study.

5.2 SAMPLE DESIGN

The researcher decided to use random sampling procedure to ensure representatives. The students are selected on the basis of stratified random sampling method because the total number of students selected for the study divided into various subgroups like, gender, location of students, family size, educational status and studying in Government, Govt. – Aided and Self – finance institute in Tiruchirapalli district. The above institutes are located in rural and urban areas.

5.3 RESTATEMENT OF THE PROBLEM

The problem is entitled as **“A study on the attitude of teacher training students towards activity based learning approach in Tiruchirapalli district”**.

5.4 POPULATION

Student teachers of D.T.Ed institutions in Tiruchirapalli district were the population for the study.

5.5 SAMPLE

Randomly selected 160 teacher training students from five teacher training institutions in Tiruchirapalli district.

5.6 TOOLS USED

The tools used for the study were,

- 1) Personal Data Form
- 2) ABL method was adopted

5.7 STATISTICAL TECHNIQUES

The following statistical techniques were used for analyzing and interpreting of data.

- 1) Pearson’s Product moment correlation
- 2) t-test

5.8 MAJOR FINDINGS OF THE STUDY

1. Male and female teacher trainees does not differ in their attitude towards ABL method. They are equal in their attitude towards ABL method.
2. Government and Aided teacher trainees does not differ in their ABL method. They are equal in their attitude towards ABL method.
3. Government and self - finance teacher trainees towards ABL method significantly varies Government teacher trainees have better attitude towards ABL method than teacher trainees of self finance institute.
4. Aided and self - finance teacher trainees does not differ in their attitudes towards ABL method.
5. Urban and rural institute teacher trainees does not differ in their attitude towards ABL method.
6. Rural self – finance and urban self – finance institute teacher trainees does not differ in their attitude towards ABL method.
7. Joint family and nuclear family teacher trainees does not differ in their attitude towards ABL method.

8. +2 level and degree level teacher trainees does not differ in their attitude towards ABL method.
9. Hindu and Christian have similar level of attitude. All the Hindu and Christian religions are having equal role in developing ABL attitude in teacher trainees.

5.9 SUGGESTION FOR THE STUDY

The present study was conducted with 160 D.T.Ed student teachers of Tiruchirapalli district. Similar studies can be conducted in following ways.

1. The study can be conducted for primary school teachers.
2. The study can be conducted among parents of primary school children.
3. This study can be conducted all over the state.
4. This study can be also done in the ALM.

5.10 CONCLUSION

In the light of administrating ABL method in the primary schools, the teacher trainees are trained with various activity in taking the curriculum effectively to the children. There had been revisions and suggestions every five year in the curriculum of teacher training education. Hence the study had the objective of assessing the attitude of

the teacher trainees towards ABL methods. With above objective the study tool was designed and given to the teacher trainees of selected institute of Tiruchirapalli District. From the analysis it is found that there is better attitude in the teacher trainees towards ABL method. The policy makers and educationist should find ways and means to implement ABL method in all type of institutions.