



**A STUDY OF THE IMPACT OF ACTIVE LEARNING METHODOLOGY
ON THE LEARNING OF THE STUDENTS OF ASHRAM SCHOOL**

Dr. Ratnaprabha N. Rajmane,
Principal, Gandhi Shikshan Bhavans,
Smt. Surajba college of Education,
Juhu (North) Juhu Mumbai -400049

Background of the Research:

Education is fundamental to socio-economic development. Development of the Country lies with the development of the backward people who are socio-economically underprivileged and educationally recessive in relation to total population. Education is the cornerstone of development. Education will enable the tribal to perform their role to be useful citizen in democracy. The success of Education is evident from the literacy rate. Thus for increasing the literacy rate a number of strategies have been planned and adopted by the government.

Rationale of the Research:

Education for tribal children: An engine for human development. The Indian Constitution assigns special status to the Scheduled Tribes (STs). Traditionally referred to as **Adivasis, Vanbasis**, tribes, or tribal; STs constitute about 8% of the Indian population. Around 12 percent or 10.2 million live in the Northeast. **Thus from the above statistics it can be inferred that, if the education of this 8.2% of the population is neglected, 100% literacy can never be attained and this population will never progress and be worthwhile for the country. Need for the Research:**

The present Research made an attempt to analyse the problems in the field of Tribal children education and suggest measures for the development of education among the Tribal in Asharam schools.

The study reveals that People of the remote area are superstitious and addicted to blind beliefs not reach to the advance technology. Hence, they do not understand the value of education. The researcher has been visiting the Shri Annasaheb Sahasrabudhe Advasi Anudanit Madhyamik Shala last 25 years. Researcher is working with them for enhancing their 10th std. result and observed something is lacking in their education. Being a teacher educator researcher thought some of the new Active learning methodologies on the trial bases to them the result was good.

From this experience researcher got insight to do some research study for this children. Researcher has gone through review of literature on this particular topic and deeply studied for Active Learning Methodology which will be useful for tribal children learning. Researcher got an opportunity to do Minor Research Project immediately she has taken this project in hand and tried to bring out positive result for the same.

About Institution where Research Study Conducted:-

This Progressive Ashram School. Start in 1975, Shri Annasaheb Sahasrabudhe, realized that along with Leprosy, the society was plagued with several other problems and he therefore expanded the activities of the center to create one big Ashram – ‘Shantivan’. The NGO’s and many social organizations like Rotary and Lion Clubs and many social workers volunteered to help in the activities of Shantivan. The efforts of all the people lead to the establishment of an agriculture center, a cow shelter with Indian and Jersey cows, a Bio-gas plant, a Naturopathy center, a weaving center, a Panchayat Training program and **Adivasi Ashram School.** The performance of the students is satisfactory. They are having difficulty in learning science mathematics so researcher has taken permission from school and conducted experimental study for them.

The Research Question:

1. Is it possible to develop the Active Learning Methodology (ALM) of the students using different learning strategies in day-to-day teaching?
2. Are your classroom surroundings conducive to active learning e.g? How much space is in your classroom?

Statement of the Problem:

The present study is entitled as **“A Study of the Impact of Active Learning Methodology on the Learning of the Students of Ashram School.”**

Operational Definitions of the Terms:-

Active learning:-

In particular, students must engage in such higher-order thinking tasks as analysis, synthesis, and evaluation. Active learning engages students in two aspects – doing things and thinking about the things they are doing (Bonwell and Eison, 1991).

Co-operative and collaborative Learning Strategies

Active Learning Strategies is defined as any classroom learning situation in which students of all levels of performance, work in structured groups towards a shared or common goal.

For the present study, the following strategies were selected.



1. Three-Step Interview
2. Simple Jigsaw:
3. Numbered heads together:
4. Stump your partner
5. Think-pair-share/ Write-pair-share

Impact

Effect is defined as the "Influence or impact on a particular thing.

For the present study, effect implies the impact of the Active learning strategies on learning of the pupils, which is measured in terms of the difference in the scores.

Tribal

The term Scheduled Tribes first appeared in the Constitution of India. Article 366 (25) defined scheduled tribes as "such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this constitution". Article 342, which is reproduced below, prescribes procedure to be followed in the matter of specification of scheduled tribes. The present study is about tribal students learning

Variables of the study:

Following were considered as the variables for the present study:

A. Independent Variable:

Active learning strategies

Conventional methods of teaching

B. Dependent Variable:

Learning of the students

C. Extraneous Variable:

The attitude of the pupils towards learning in groups, Media and extra learning.

Assumptions of the Study

The present study is based on the following assumptions:

It is assumed that the schools are not giving much importance to the Active learning methodologies due to which there lack of knowledge, skills, and self-motivation. The active learning methodology which is one important aspect of the learning to be developed in the children.

Aim of the Study

The main aim of this research was "to study the Impact of the Active learning methodology with respect to the learning of the pupils." The research was aimed to see the impact of Active

learning strategies on pupils learning. The researcher has trained local teacher those who are working in school as a Science teacher and they were well versed with the subject. Science is a subject where there is a scope for using lots of active learning strategies.

Objectives of the Study

The objectives for the present study were as follows:

- To study the impact of the Active learning strategies on the learning of the pupils.
- To study the effect of the planned Active learning strategies on the following five areas of students performance of the study.

Hypotheses of the Study

The Following Null Hypotheses were formulated for the present study:

Ho-1: There is no significant difference in the achievement of the pupils taught by using the Active learning strategies as compared to the achievement of the pupils taught by using traditional methods as reflected in their scores on the achievement test after the treatment. (Posttest)

Ho-2: There is a significant difference in the correlation between Active learning and Achievement of the pupils taught by using the Active learning strategies as reflected in their scores. (Posttest)

Scope of the Study

The study covers the effect of the planned Active learning strategies on the following five areas of student's performance of the study:

De-Limitations of the Study

The de- limitations of the present study are as follows:

Limitations:

Location

There are many secondary Adivasi Ashram school in the state of Maharashtra for the convenience of administration of this study research data collected in one of the Adivasi school Anna Saheb Sahastrabudde audanit Scondary Advasi Ashram School situated at post – Nere Vakdi ,Taluka –Panvel , Dist. Raigad .From this school only VIII standard is chosen. Hence logically the findings are related to only this targeted group.

The group size:

The group size for testing is done in present set of available set up VIII Std. students of secondary school.

Present study was limited to only S.S.C. Board Maharashtra state.



Tools used for research: All the tools used for research were self-made tools validated by experts in three angles:- a) Content Validity, b) Language Validity, c) Structure Validity.

Per test post test are the main tools for the research. Present study was limited to only S.S.C. Board Maharashtra state.

Methodology of the study:

For the present study Post-test Experimental Group and Control Group design was employed. The present study is developmental cum experimental and it was conducted in three phases.

Sample of Research:

Sample: One school, which granted the permission (incidental sampling) from Panvel Annasaheb Sahastrabudhe Secondary School, was selected. 25 students were selected as experimental group which were taught based on ALM .25 students were selected as control group and were taught by normal lecture method

Statistics: Consolidated table- Mean, Standard Deviation and ‘t’-value of Achievement Scores

Units	Group	Mean	S.D.	D.F.	‘t’ test value	Level of	Significance
						0.01	0.05
1	Experimental Group	13.4	1.6	24	5.19		
	Control Group	9.20	3.55			Significant	Significant
2	Experimental Group	13.40	1.95	24	5.19		
	Control Group	9.20	3.55			Significant	Significant
3	Experimental Group	12.30	3.05	24	5.19		
	Control Group	9.20	2.55			Significant	Significant
4	Experimental Group	11.60	2.65	24	5.19		
	Control Group	10.00	2.00			Significant	Significant

5	Experimental Group	12.00	3.45	24	5.19		
	Control Group	9.06	2.40			Significant	Significant

Interpretations: The calculated 't' value was higher than the tabulated value at 0.01 and 0.05 at df 24. Since, the calculated-value 't' exceeds the table value at 0.05 and 0.01 level of significance. The assumption, hypothesis was true.

Testing of Hypothesis

“Teaching based on Active Learning method in science is more effective than Conventional (lecture/chalk-talk method).e.g. There will be significant difference in the mean achievement score of students in the unit tests conducted for the evaluation of the units taught based on Active Learning method and conventional method (lecture/chalk- talk method).”

After calculating the data of post-test, it was proved that the obtained t-value was significant. Alternate research hypothesis, "Mean achievement score of the experimental group will be significantly higher than that of the mean achievement of control group" was accepted.

Achievement of Hypothesis:

“Teaching based on Active Learning method in science is more effective than Conventional (lecture/chalk-talk method).”

The above hypothesis was accepted as the mean achievement score of students in the unit tests for the summative evaluation of all the five units are concerned, as the calculated 't' value was higher than the table value at 0.05 and 0.01 level of significance for df = 24. There was a significant difference in the mean achievement score of students in the unit tests conducted for the summative evaluation of all the five units with respect to the treatment through teaching based on Active Learning method in science and Conventional method. Even the researcher collected the final scores of final examination of science subject of same students. The researcher found that there was increase in marks in science subject paper of those students who were given treatment, taught five units through Active Learning based teaching. (Five units taught were from final exam Portion).

Interpretation:

It is evident from the above tables that the Active Learning Method has an advantage over the normal classroom teaching as evident by the difference in the mean values of the achievement test in the control and treatment groups. Moreover, the standard deviation in the control group was wider than that of the treatment group. This is indicative of the higher variation of the



obtained marks in the control group over the treatment group.

Thus, research hypothesis, "There will be significant difference between the mean scores of the students receiving instructions through teaching based on Active Learning Method and the students receiving Conventional classroom teaching was accepted, and the alternate research hypothesis, "Mean achievement score of the experimental group will be significantly higher than that of the mean achievement of control group" was accepted

Major Findings:

In chapter IV, as it is already discussed that Computed t-values for all the five units are higher than the tabulated t-value for 0.05 and 0.01 level of significance .So, hypothesis was accepted. So, there is a significance in the mean score of the students in all the five test and teaching based on Active Learning was effective compared to Conventional (traditional/normal/chalk-talk method).

To determine the effectiveness of teaching based on ALM over normal teaching method, gain scores of both groups experimental and control group were found out then so that it will help in finding the Mean, Standard deviation and t-value .In turn they helped in Computation of t-values with the tabulated t-value at 0.01, Development of programme, Analysis and the interpretation of the data collected were discussed.

Conclusion as per the objectives

- (1) The teaching based on ALM in Science is effective.
- (2) The teaching based on ALM is effective over teaching through lecture (chalk- talk) normal method in Science. In the present study t-test results proved that the mean scores of the ALM Package group were significantly higher than that of the control group i.e. normal classroom-teaching group as far as achievement in English is concerned.

Recommendations: Importance utility, suggestion, recommendation and application of the problem:

1. Teachers should familiarize themselves with new techniques and methods of teaching particular subject. They should experiment different types of methods to teach the subjects.
2. Teachers should teach some units of the subjects based on ALM.
3. Teachers should motivate students for self-learning and should use methods like ALM that supports self-learning and learning by own speed and own space.
4. Teachers should regularly attend seminars; workshops work experiences and training programmes in order to know about innovative methods and techniques and to utilize them in their classroom teaching.

Recommendations for the Further studies in this regard can be carried out as follows:

1. Development and implementation of ALM package (for teaching other topics in science for English, Marathi, Hindi, all other medium students of Standard VIII.
2. Development and implementation of ALM package for teaching other topics in science for English, Marathi ,Hindi, all other medium students of other standard including primary, secondary, higher secondary, Degree colleges.
3. Active learning lessons can be prepared based on the whole textbook and its effectiveness can be tested.

Conclusion-:

In this era of knowledge exploration, technological development and population growth and individual differences of the students, new and innovative methods need to be tried out by the teacher in the classroom to improve the grasping of the students and to improve the results.

Active learning is one of the self-learning techniques. Through ALM, students without getting help of teacher or any other person learn on his or her own. They can proceed at their own pace. This technique motivates self-learning and individual learning .Therefore, the researcher has to developed techniques and strategies to teach science based on ALM.

References:-

Books

- Archer, W. G. (1974). *The Hill of Flutes: Life, Love, and Poetry in Tribal India: APortrait of the Santals*. Pittsburgh: University of Pittsburgh Press.
- Best, John. W. (1963). *Research in Education*. New Delhi: Prentice Hall.
- Burman, B. K. Roy (1994). *Indigenous and Tribal Peoples*. New Delhi: Mittal

Publications.

- Coolican, Hugh (1990) *Research methods and statistics in psychology*. London: Hodderand Stoughton.
- Desrochers, John (1987). *Education for Social Change*. Bangalore: Centre for SocialAction.
- Patel, M. L. (1994). *Tribal Research in India*. New Delhi: Inter-India Publications.
- Prakash, Satya (1976). *Tribal Welfare*. Ranchi: Research Institute Government ofIndia.
- Prasad, MakhanJhaHari (1991). *Glimpses of Tribal Life*. New Delhi: Inter-IndiaPublications.
- Sahay, K. N. (1985). *Change of Tribal Identity in Chotanagpur* . Varanasi: KishoreVidyaNiketan.