Comparative Study on the Effectiveness of Teaching by Lecture and Team teaching

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Introduction:

Today's modern age is an age of change. The Bhagavad Gita also says, "Change is the law of the world." The whole world is on the path of progress today. With the passage of time, many changes have taken place in every sphere of society today such as social, religious, economic, cultural and educational, etc. People are beginning to understand the importance of education. The progress and development of the country depends on the education system of the country. It is inevitable that education will change in order to keep pace with the changing times. Adopting multiple and modern teaching methods are the need of contemporary education system. This is needed to make teaching more effective and diverse. Student centered methods are considered to be more effective as compared to teacher centered method. Team teaching, collaborative teaching, problem solving, project based techniques are some of the student centered techniques. These methods can be used in teaching to make teaching more effective and interesting.

The reason behind the researcher taking up this type of problem for his research work was that there is an observation that lecture method is still being largely used as one of the major teaching method in the classrooms from primary education to higher studies. In addition, modern teaching methods are being used more and more in subjects like mathematics and science. While in subjects like Gujarati, Hindi, Social Sciences, indifference is seen in various methods and uses. The researcher believes that there are various methods in social science subject as well, such as project method, seminar method, group discussion method, dramatization method, demonstration method, group study method, self-study method etc. If these methods are used in teaching, the interest of the students can be increased as well as the world of social sciences can expand.

Objectives

- 1.To examine the effectiveness of group teaching method in terms of academic achievement.
- 2. To examine the effectiveness of the lecture teaching method in terms of academic achievement.
- 3. To compare the achievement of group teaching method and lecture teaching method. 4. To compare the achievement of group teaching method and lecture teaching method w.r.t gender.

Variables: The variables covered in this research are as follows:

V₀₁ **Independent variable**: Group teaching method, lecture method

V₀₂ **Dependent variable:** Academic achievement

V₀₃ Moderator variable: Boys / Girls

V₀₄ Controlled variable: Std. 9/ Social Science/ Rural Area

V₀₅ Intermediate variable: Interaction between the interest and enthusiasm group towards the subject

Importance of research: The significance of the research presented is as follows:

- 1. Present study using group teaching and lecture method will be helpful to see which of the above method is more effective in improving the achievement.
- 2. With the help of present study recommendations can be made to the teachers about the effectiveness of a particular method.
- 3. The study will help to identify the effectiveness of the method w.r.t. the gender.

Background of reference literature review and study

Introduction:

If any researcher wants to do research on a subject, it is imperative to study and review the literature related to the subject. Related literature is useful in all kinds of research. Unless the relevant literature is resorted to, the researcher cannot formulate a specific plan for his research work or determine a specific direction for the research.

R₀₂ **Importance of Study of Reference Literature**:

It is important for every researcher to study the reference literature. Research Demonstrating the importance of reference literature for Dr. H.G. Desai in his book "Research Methods and techniques'. The study of reference literature is an important aspect of research. The study of the research done before preparing the research plan is a beacon.

As George Molly states, "The review at the reference literature is essential for the development of the problem and the deviation of effective approach to its solution".

$R_{02.1}$ Theoretical understanding of the concepts:

Team teaching: "No one to suit the needs of their students and school facilities, Teaching is a system in which the teacher's vision, interest and expertise are personally rooted in the formulation of the work plan. "- Varvi

Davis (1995) defines team teaching as, "All arrangements that include two or more faculties in some level of collaboration in the planning and delivery of a course'.

Benefits of Team teaching:

Teachers who participate in team teaching exert their full strength in the planning process and in the practice. The teachers of the team are motivated and exited to work and collaborate together. This brings good results. Impact of harmonized expert work of teachers and experts performing team teaching work provides motivation to students.

Limitations of Team Teaching:

Team strength is important in team teaching. If the strength of the union has not been considered during team formation, then the union will not get appropriate results. The main thing of team teaching is the loyalty of the members of the union.

Lecture Teaching Method:

Lecture method is the method of presenting content in lecture form. The teacher memorizes the content and introduces it to the class. Special emphasis is laid on specification in the lecture. The teacher specifies the subject matter in the classroom, It is said that teaching works by the method of lectures when using appropriate words with examples, expressions in a meaningful, accurate and logical manner. The lecture method is the oldest method.

According to James MB, "The lecture method is a pedagogical method. In this method a carefully organized speech-lecture is formally presented"

According to Thomas M. Risk, "Lecture is the articulation-explanation of quantity, principles, or other relationships. The teacher wants to explain to his students." Ruth (2008), did Comparative study of problem based learning instructional method versus traditional lecture method in the attainment of problem solving competencies in chiropractic college diagnosis course. He did not observe any significant difference by using different teaching methods. Aliakbari and Bazyar (2012) documented, co-teaching seems to be a new phenomenon in the current education system for teaching English. Lack of enough experimental studies on co-teaching in India provide a promising chance to conduct more studies.

Research Design

 $R_{03.2}$ Type of research:

The present study is a quantitative research. Since the results of the study can be applied it is a behavioral study.

R_{03.3} Research method presented:

The presented research is undertaken by experimental method. Which has two groups (1) controlled group and (2) the experimental method.

R_{03.4} Two equivalent group design:

Two equivalent groups have been formed in this study. The two groups are grouped in such a way that the effect of different factors remains almost the same. These two groups are divided on the basis of the marks of the social science subject of the first examination. One of the two groups has been selected as the experimental group and the other as the control group. The effect of factors on the experimental group i.e. The group teaching method has been tried, while the controlled group has been given the same content from the lecture teaching method. Since the effect of group teaching method is to be tested only two equivalent groups Table 1 shows the design of the study.

Table 1: Research Design

Sr. No.	Group	Method	Intervention	Group
1.	Experimental group	Group teaching	X	TE
2.	Control Group	Lecture teaching	-	T _C

R_{03.5} Population

"The universe is a class of people defined in the general sense, create that all members of the item"

 $R_{03.6}$ Sample selection:

For the present study 68 secondary school students were selected from Visnagar district of Gujarat State.

The sample was selected through convenient random sampling technique.

Table 2: Sample Details

Sample	Group	Number	Method
Secondary School Students	Experimental	34	Group teaching
	Controlled	34	Lecture
Total		68	

R03.7 **Data collection and analysis:**

Data Collection: In the present research, the researcher used equivalent group design in which experimental group was taught by team teaching method and the controlled group was taught by the lecture teaching method. In the end both groups were given the Post Test. Data so collected was analyzed using average, standard deviation, mean and standard deviation.

R₀₄ Analysis and interpretation of information

Ho₁ There is no significant difference between the post test scores of controlled group and experimental group.

Table 3: t score for the experimental and control group

Group	N	Mean	S.D.	S.E.D.	t Value	Significance
Experimental	34	19.18	6.49	1.61	0.71	N.S.
Control	34	18.03	6.80			

The 't' value of the experimental group and the control group is 0.71, which is less than the table value of 1.96 at 0.05 level. Thus there is no difference in the level of Experimental & Controlled group.

Null hypothesis is accepted and we can say that students of the experimental group and control group have shown almost similar level of achievement in both the group.

Result

The present study is not able to establish which method is better to use. Still there are varying results when we compare student centered and teacher centered techniques. So there is a need to do more research in this area.