

CHAPTER – V
SUMMARY &
CONCLUSION

CHAPTER – V

SUMMARY & CONCLUSION

5.1 Introduction :

Children in today's technologically advanced society are growing up in an educational environment that is struggling to overcome the teachers centered classroom in which student's achievement is based on a system of memorization and recitation of material contained in a single content area text book. In order for students to succeed in today's competitive society they must be given the opportunity & the guidance to develop not only knowledge level skills, but they should graduate from high school with the ability to use that knowledge in "real world" situations.

Teachers are slowly realizing that traditional methods of teaching are no longer capable of providing students with an education foundation that is strong enough to withstand the pressures of such a technologically dependent society.

The present study has investigated into in teaching science. The achievement in science of class VIII students studying through multimedia approach and compare its achievement with traditional approach, which is currently used in the classroom as the study intended to see the relative effectiveness of the traditional approach and multimedia approach on the achievement of science. Self efficacy, intelligence & attitude of class VIII, researcher adopted two group experimental design.

5.2 Statement of the problem :

A comparative study of the effectiveness of traditional and multimedia approach to teaching science on secondary school student's achievement attitude, self efficacy and intelligence.

5.3 Objectives of the study :

1. To compare the effectiveness of multimedia based teaching approach and traditional approach on science achievement.
2. To compare the effectiveness of multimedia based teaching approach and traditional approach on self-efficacy.
3. To compare the effectiveness of multimedia based teaching approach and traditional approach on attitude towards science.
4. To study the fact of intelligence on learning science using traditional and multimedia approach.
5. To study the significance between attitude & achievement among the students.

5.4 Hypothesis :

- There is no significant difference in mean achievement of score between the students studying through traditional approach and multimedia based teaching approach.
- There is no significant difference in mean self efficacy between the students studying through traditional and multimedia based teaching approach.
- There is no significant difference in mean science attitude score between the students studying through traditional and multimedia based teaching approach.
- There is no significant partial correlation between academic achievement and intelligence among students of multimedia group significant.
- There is no significant correlation between attitude & achievement among the students.

5.5 Variables :

- I. **Independent Variables :-** Teaching approaches (1) Traditional Approach
(2) Multimedia Approach

- II. **Dependent Variables** :- (1) Science Achievement (2) Self –Efficacy (3) Intelligence (4) Science Attitude.

5.6 Delimitations of the study :

Depending upon the focus of the study the present study has following delimitations:

1. The study was limited to one school only.
2. The study was limited to VIII standard only.
3. The study was limited to a public school only.
4. The study was limited to English medium only.
5. Sample size was small that is of 41 only.
6. Purposive sampling was used in the present study.

5.7. Sample :

In the present study the sample was taken from People's Public School Bhanpura Bhopal. Purposive sampling method was used in the study.

In this research work 41 students were taken from VIII standard which were then divided into 2 groups of 21 & 20 into experimental and control group respectively.

5.8 Tools Used :

1. Intelligence Tool :-
2. Self Efficacy Tool :- General Perceived Self-Efficacy.
3. Science Attitude Tool :- Science Attitude Scale.
4. Science Achievement Tool :- Science Achievement Test

5.9 Statistical Techniques Used :

This tabulated data was processed for obtaining mean, standard deviation and 't' value of the components wise score to analyse the difference as aimed in the objectives of the study. First of all mean of all the scores are taken and then its standard deviation value is calculated which is then subjected to t-test and correlation among the 2 groups was obtained.

5.10 Major Findings of the study :

1. There is a significant difference in mean achievement of score between the students studying through traditional approach and multimedia based teaching approach.
2. There is no significant difference in mean self-efficacy between the students studying through traditional and multimedia based teaching approach.
3. There is no significant difference in mean science attitude score between students studying through traditional and multimedia based teaching approach.
4. There is significant correlation between achievement and intelligence among students of both the groups.
5. There is no significant correlation between attitude and achievement among students both the groups.

5.11 Conclusion :

By analyzing the hypothesis it was found that Multimedia approach is better than that of Traditional approach so far as achievement in science is concerned. So multimedia programmes are beneficial and it should be adopted by the teachers so as to increase the science achievement among the students.

In case of self-efficacy both Traditional and Multimedia approaches are beneficial to increase students self-efficacy. The analysis of hypothesis also reveals that good intelligence leads to better results in science achievement. Hence measures should be taken to improve intelligence level among the students.

5.12 Educational Implications :

Multimedia is now regarded as a super teaching machine its use in education has been tried as an innovation & it has proved its teaching efficiency in many developed countries Multimedia has been helping the teacher in the following areas :

1. Allocation of learning materials according to individual needs and interests.
2. Multimedia provides direct interaction between pupil and subject matter.
3. Multimedia engages students in tutorial work.
4. Multimedia provides immediate feed back to students for better interaction & motivation.

5.13 Suggestions for furthers Research :

The present study was an effort to critically assess the use of multimedia programmes in science. At elementary level on VIII class students only. The survey of the related literature revealed the fact that only a few studies have been conducted in the area of multimedia in Indian context. Here the result of the present study bring out certain points for furthers study which are as follows.

- To replicate the present study researcher can conduct a similar study with large sample of students and teachers in other districts of M.P. or other state.
- Replication of study may be done with different samples & at a different grade level.
- The effect of multimedia on achievement of science at other elementary level can also be studied.
- Evaluation of different multimedia programmes can be done.
- Effect of multimedia programme teaching on the mental health of normal & specially needed children can be studied.