

Table 5: Mean, standard deviation and t-value post test scores of experimental and control group

Group	N	Mean	S.D	t-value	Level of Significance
Experimental	140	15.721	2.067	16.35	P<0.0001
Control	140	12.092	1.635		

Df = 278

The table 5. shows that observed t-value is 16.35 which is much greater than table-t value at 0.0001 level of significance. The obtained t-value is therefore, statistically significant. Therefore, the null hypothesis No.- 2, That There is no significant difference between the mean post-test achievement Scores of the experimental groups taught through advance organizer Model and control group taught through conventional method is rejected which implies that there is real difference between the post test means of comparison groups. From this we can say that mean score of students taught by AOM is greater than the mean Score of student which are taught by traditional teaching method.

7. Major Findings of the Study

The main findings of the study were:

- 1) There was no significant difference between mean pretest scores of the experimental group and control group as tested through critical ratio (CR) at 0.05 level of confidence. Therefore, null hypothesis No.1 was retained (Table 4.)
- 2) There was Significant statistical difference between mean post test scores of the experimental group taught through Advance organizer Model and control group taught through traditional method as tested through mean, Standard deviation and coefficient of variation. Therefore. The Null hypothesis No.2 was rejected (table 5.)

8. Discussion of Results

The present study was conducted to find out the effect of Advance Organizer Modal on academic achievement of 9th class students in four west Bengal Govt. Aided Schools. There were one experimental group and one control group. During experiment, experimental group was taught through Advance Organizer Model Where as control group was taught through conventional teaching . In this study, Advance organizer Model was found to be more effective than the conventional teaching method. The student of IXth class taught through Advance Organizer Model Showed Superior achievement in the Subject of geography.

During the instruction of Advance organizer model, the researcher used different types of material like models, pictures, charts and also the text book. The students performed different activities during the experiment, especially when they were taught through Advance organizer model. This might have influenced their understanding due to learning by doing, thus improving their academic achievement. The subject of geography is considered a less structured subject which is generally taught through dictation of text book reading and straight lecturing. This traditional approach is highly objectionable

for teaching an important subject like social studies in order to prepare productive and motivated citizenry. Keeping in view its importance, it is necessary to teach the subject with greater zeal and devotion by using modern models of teaching like Advance organizer model. In the present study, though advance organizer model was found superior to conventional method. Advance organizer model improved student's performance better than conventional method. In fact, Advance organizer model is more logical and systematic in its approach than conventional teaching.

9. Recommendations

On the basis of findings, conclusions and the discussion, the following recommendations are made for action and further research:

- 1) Since the Advance organizer model was found be superior to traditional model the teachers of geography Studies be trained to use Advance organizer model because it was found to be more effective than conventional teaching in this study. Student curiosity be stimulated and interest through stimulating questions be fostered to promote deep thinking. The modes of inductive and deductive teaching may also be emphasized during teaching practice in Geography in teacher training programs.
- 2) For the subject f geography most of the time, lecture method is used. It is recommended especially at primary level that activity based teaching be adopted as it will help the learners to understand knowledge rather than just memorizing facts and concepts.
- 3) Advance organizer model is new mode of effective teaching that require thorough understanding and sufficient practice before using them during instruction. In future studies sufficient rigorous training in this model be provided to the teachers of the experimental group before conduction of the experiment.

References

- [1] Ary, D. Jacobs L.C. and Razavich A (1972): Introduction to research in Education, New York: Holt, Rineheart and Winston Inc.
- [2] Asthona, B. (2008) Measurement and Evaluation in Psychology and Education, Agrawal Publications, Agra.
- [3] Asubel D.P. (1968). Educational psychology: A Cognitive view New York; Holt, Rineheart & Winston.
- [4] Best J.W: (1981) Research in Education, New Delhi: prentice hall of India Pvt. Ltd.
- [5] Bhatnagar, A.B., Bhatnagar, M. Bhatnagar, A., (2003) Educational Psychology. R. Lal Book Dept. Meerut.
- [6] Bransford T.D. & Stein B.S. (1993) The ideas problem Solver (2nd Ed) New York, Freeman.
- [7] Carter N. Good (1945) Ed, Dictionary of Education, Mc Graw Hill Book Company.
- [8] Chitriv U.G. (1988) Ausubel Vs Brunder Model of Teaching mathematics, New Delhi, Himalaya Publishing House.

- [9] Cook D (1993) – Behaviourism Evolves, Educational Technology. Page: (62-77)
- [10] Driscoll M. (1994) – Psychology of learning for Instruction, Needham heights, MA Allyn & Bacon.
- [11] Garret, H.E (2008) Statistics in Psychology and Education. Subject Publications, New delhi.
- [12] Glatthover, A.A. (19908): Writing the Winning Dissertations, A step by step Guide. California, Carwin Press Inc.
- [13] Joyce, B and Weil M. (1997) Models of Teaching (Fifth Edition), New Delhi: prentice Hall of India Pvt. Ltd.
- [14] Joyce, B., Weil, M., & Calhour, E. (2004). Models of Teaching, 7th ed. Boston: Allyn & Bacon.
- [15] 15. Kothari, C.P. (2009) Research Methodology Methods and Techniques, New Age International Publishers, new Delhi.
- [16] NCTE: A Handbook on Educational Research, New Delhi: NCTE.
- [17] Orlich, Donald C et al Ed (2004) – Teaching Strategies: A Guide to Effective Instruction, New York: Houghton Mifflin Company.
- [18] Passi B.K. (1981) study for the development of training Models for different families of models. National Seminar on Innovation in teacher Education. Jabalpur, N.C.E.R.T. India.
- [19] Passi B.K. Singh L.C. (1991) Models of Teaching, Report of the three phase study of C.A.M and I.T.M New Delhi.
- [20] www.ciser.ttu.edu.
- [21] www.csun.edu/education/cte/
- [22] www.easycalculations.com
- [23] www.edutechwiki.unige.ch/en/Advance_organizer
- [24] www.graphpad.com

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