



CHAPTER – 2

**REVIEW OF RELATED  
LITERATURE**

## CHAPTER 2

### **Review of Related Literature**

#### **2.1 Introduction**

Research takes advantage of the knowledge accumulated in the past as a result of the constant human Endeavour. It can never be undertaken in isolation from the work that has already been done on the problems, which are directly or indirectly related to the study proposed by a researcher . a careful review of the research journal , books, dissertation thesis and other sources of information on the problem to be investigated is one of the important step in the planning of any research study.

#### **2.2 Purpose of the Review**

Review of the related literature besides allowing the researcher to acquaint herself with current knowledge in the field or area in which he/she is going to conduct research ,serves the following purposes—  
The reviewing of related literature enables the researcher to define the limits of her fields.

By reviewing the related literature the researcher can avoid unintentional duplication of well established findings.

By reviewing the related literature the researcher can avoid unfruitful and useless problem areas. The review gives researcher an understanding of the research methodology which refers to the way the study is to be conducted .

The final and important specific reason for reviewing the related literature is to know about the recommendations of previous researches, listed in their studies for further research.

### 2.3 Reviews

In this chapter, the researcher intends to scan the previous studies that have been conducted in the selected are some studies are-

**Basu, M.K. (1981)** conducted Effectiveness of Multimedia programmed materials in the teaching of Physics, Ph.D. Edu. Kal. U. The main purpose of the study was to make an appraisal of the relative effectiveness of multimedia programmed instruction and programmed class teaching on the criteria of intermediate achievement and retention of a group of subjects of three level of ability. Objectives of the study are. 1. To develop the programmed learning materials on the light, in school on four different style- semi programmer, Programme and hybrid programme. 2 To develop instructional material for the strategy of programmed class teaching and to study effectiveness. 3. To develop a programme package using each style of programmes in multimedia conjunction with audio-visual media. 4. To compare the relative effectiveness of a different strategies of instruction employing multimedia programmed material and programmed class teaching on the criteria of immediate achievement, retention and delayed retention. 5. To study the interaction effects of instructional strategies abilities and occasion immediate learning retention and delayed retention. Major findings of this study were : 1. There was a significant difference among the different strategy means the criterion on overall achievement. It was found that on the Criterion of overall achievement the multimedia semi programmed instruction was better than the strategy of programmed learning. The multimedia time as programmed instruction was better than the multimedia semi programmed instruction. The multimedia branching programmed instruction was better than the multimedia linear programme instruction and the multimedia hybrid programme instructions was better than the

multimedia branching programme instruction. 2. The strategies of Multimedia programmed instruction enabled learner to reach the level of mastery learning (mean score varied between 80.00 and 86.00 out of 100). 3 It was found that a significant difference existed in the achievement through the different strategies due to difference in ability. The implication of the study was that multimedia packages in modular form could be used for training programmes in vocational education.

**Kapadia (1981)** The Impact of Television on students learning on exploration. The study focuses on the impact of television on students learning. Objectives of this study were: 1.To find out the comparative effectiveness of the tele-films and the tape chart programmes and to get the opinion of students and teachers regarding the television programme. Major findings of this study were: 1.Significant improvement had been achievement after the treatment with the tele-film. It was found effective for self learning in both the groups. It showed or significant gain in the spot test as well as the retention test scores. 2.The Tele film was found more effective in both the groups than the tape chart programmes in terms of achievement scores as well as retained knowledge. 3. It was found that television had an impact which affected study habits. it was also found that television was not considered as obstacle in the study 4. Seventy percent of the student opinioned that television motivated self learning 5. Television had no adverse impact on the attendance of the students in the school. 6. The social relations of majority of the students had been disturbed by television. 7. Majority of the student felt that their educational interest was satisfied by television.

**Krishnan, S.S. (1981)** Development of Multimedia packages for teaching of course on Audiovisual Education. The objectives of the study were 1.Develop a multimedia package for teaching a course on audio-

visual education for the instructor training programme. 2.To find the effectiveness of the multimedia package in terms of achievement of trainees and change in attitude of the instructor trainees towards the multimedia package and 3.To study the feasibility of the multimedia package in terms of time and cost for the instructor training programme. Major findings of this study were: 1. 98% of trainees obtained more than 80% of the marks on the final post test 2. The mean percentage of the post test scores varied from 81.41% to 90.46% 3. The mean gain in the total scores for all the modules was found to be significant at 0.01 level. 4. The mean gain scores of knowledge comprehension and higher mental abilities were found to be significant at 0.01 level .5 The feasibility of the multimedia package was established in terms of cost involved in reproduction of the various resource materials and time scheduling in an actual institutional set up.

**Man, B.S. (1981)**, An experimental study of the Relative Effect of three methods of Instruction- Exposition method, Programmed learning method and Multimedia method in science education. Ph.D. Edu., Kur, Univ. The objective of study was to see the relative retention in learning through these three methods and to develop multi-media text on the programmed content. The major findings were that the multimedia method was more effective and Retention was also higher in it.

**Rabindra Nath M.J (1982)**, Development of Multimedia Instructional Strategy for Teaching Science at Secondary school level, Ph.D. Edu.Msu. The main objective of the study was to develop multimedia instructional strategy for teaching and study their relative effectiveness. The main finding of the experiment suggested that the multimedia approach was better as the experimental group achieved significantly better results on the achievement test.

**Kaur. R.(1982)** .An Enquiry into the Effectiveness of Self-instructional Audio cassettes in developing Teaching Skills among Student-teachers in a three phased study. Objectives of the study was to develop instruction at material for the skills of probing, questioning, explaining and illustrating with examples. The major findings of the study are the experimental groups exposed the treatments showed better performance than the control group exposed to the traditional technique only. In this study self-instruction at Audio cassatas are used in developing Teaching Skills found to be effective.

**Jaimini ,Nirupama.(1991).**Effect of Teaching strategies on Conceptual learning Efficiency and Retention in relation to Divergent thinking. Ph.D .Edu.Univ. of Delhi. Problem: This study investigates the effect of two major teaching strategies and their interaction with creativity on learning outcomes in terms of learning Efficiency and Retention Objectives: To study the relative effectiveness of teaching through Advance organizer (AOM). Concept attainment model(CAM ) and Conventional method on retention of concepts and concept attainment or Achievement. The researcher used Pre –test and post-test design

With two experimental groups for two strategies and one control group.

**Major findings:** 1. CAM, AOM both were found more effective than the conventional method. 2. The concept Retainment was significantly influenced by the Teaching strategy.

**Kumari, Indira and B.S. Dagaar (1992)-** Piagetian Concepts of Conservation, Seriation and Classification in relation to Intelligence. India Educational review. This is an attempt to study the relationship between Intelligence and Piagetian concepts. Developing and testing the effectiveness of programmed learning material in the syllabus of

Principles of Education in the B.T. Course of Gauhati University Ph.D., Phil Gauhati University. It attempts to develop and test the effectiveness of programmed learning material in the syllabus of principles of education in B.T. Course of Gauhati University which was found to be effective.

**Viney (1992)** Effectiveness of different models of Teaching on Achievement In Mathematical concepts and Attitude in relation to Intelligence and Cognitive style. Ph. D. Edu. Punjab Univ. Objectives : 1.To compare the effectiveness of CAM and computer model in terms of concepts. 2, To study whether the two models of teaching effect the Attitude of students towards Mathematics. Findings : 1.The computer model of teaching was found to be superior to the CAM for teaching concepts and for inculcating positive Attitude.

**Kumar, Ashwini, Vyas, R.V, Sharma, R.C. (2002)** Perception of Electronic media by Distance Education Function , Journal of Education Technology, July, 2003 . Objective of the study was to study the views of the coordinators on the usefulness of electronic media in distance education. The result suggested the usefulness of electronic media and its effectiveness .

**William N. Chernish, A.GNES L. DEFRANCO, JAMES R. Linder and Kim E.Dooley (2002)** Journal of Educational Technology ,volume 14 . April –July, 2003. The increasing diversity of learners and thus their needs and preferences, coupled with increasing usage of the computer and internet, prompted the need for testing and verifying the many ways that knowledge can be delivered and of the study learned effectively. The three different delivery methods used were Traditional classroom, Instructional Television, and Internet. Learner centered and self directed

approach, learner centered instruction considers a myriad of characteristics processes, interactions and delivery methods that result in effective teaching and learning. This strategy allows learners to complete work in their own time and location rather than being in the classroom at a specified time. Limitation -This study would be greatly enhanced if a longitudinal study could be performed and /or more data can be collected from different types of classes and with an large no. of learners. Methodology - A pre-test, pro test quasi experimental design and a survey instrument were used to compare the results of how traditional Methods effects the academic achievement. Classes were carried out for one full semester with the same information and assessment measurements conducted on three different group based on different delivery methods. A total of 83 students were in this study, effects on achievement. The analysis of covariance on the pre and post test showed results of the three group. Signifying that though there might be differences amongst the three groups, such differences was not statistically significant .Thus the delivery method did not contribute to any difference in the learners achievement level.

**Dey B., Saxena, K.M. and Gihar, S.(2005)** Communication Technology and Teacher Educators. An empirical study, Gyan. The Journal of Education, Vol.(2), P.60-63. Objectives : 1 .To study the use of ICT in teacher training institutions by the teacher educators during their teaching and 2. To give suggestions for this better use of ICT in teacher training institutions. Methodology: The study was based on the sample of 200 teacher educators working in the different teacher training institutions of U.P. self-developed tool called use of ICT in teaching inquiry questionnaire was used for data collection. The data were analyzed using percentage. Findings: 1. More than 80% Teacher educators were found



not using educational technologies like magic lantern, video camera, film projector, LCD projector radio and DVD in their teaching. 2. 70% to 90% Teacher educators did not use internet, Tape recorder, T.V. overhead projector, computer and slide projector during teaching their classes. 3. 60% Teacher educators did not use working models during their teaching whereas only. 0.7% Teacher educators did not use calculators. The study cites 16 references.

**Panda, B.N. and Pradhan, Niladri (2007)**, Impact of Educational Television on Enhancing Scholastic and Co-Scholastic achievement. Vol.37 No (2) July, 2007 *Psycholingua*, half yearly Research Journal. The present study has been conducted with the objective to study the Impact of ETV Programmes on different Subject areas. The findings revealed that the urban and rural areas students have significant difference in relation to subjects, who are exposed to those ETV programmes. The researcher should have taken into account other factors like home environment, literate/illiterates parents because they must have interfered with the results.

**Desai, Rucha (2007)** *Indian Educational Abstracts* Vol. 6 Jan. 2006. 'Researching wholistic Education'. Centre of Advanced study in Education faculty of Education and Psychology. the Maharajor sayajrao University of Baroda, Vadodara - 390002. 2008-2009 (P.91-100) Statement of the Problem – Designing , Developing and implementing a computer enabled educational programme on child rights for student teachers. Objectives of the study : 1 .To design and develop a computer enabled Educational Programe on Child Rights. 2. To study the Effectiveness of computer enabled educational programme in terms of the mean Achievement Scores of the Control group and experimental group. Hypothesis : (1) There will be no significant difference between mean a

Achievement scores of control group and experimental group. Sample- For experimental group a sample of 30 B.Ed. Students was drawn through the random sampling. M.S.U. of Baroda, whereas the remaining students constituted the control group. Findings- The efforts of researcher to educate the student teachers with the help of Multi media presentations were found effective, and significant difference in mean Achievement score of control group and experimental group was found.

## **2.4 Summary**

The extensive study done on the related researches show that lot of work has been done on the use of multimedia. The conclusions of the their findings were that the efforts of researcher to educate the student teachers with the help of Multi media presentations were found effective, and significant difference in mean Achievement score of control group and experimental group was found. The feasibility of the multimedia package was established in terms of cost involved in reproduction of the various resource materials and time scheduling in an actual institution. The multimedia method was more effective and Retention was also higher in it.

Overall multimedia approach was better as the experimental group achieved significantly better results on the achievement test. As the studies were at other levels, the researcher wants to see that the similar results are achieved in the case of Pre-service Teacher Trainees. The multimedia approach has been used in many subjects and at many levels but for educational Psychology and with pre service Teacher Trainees, it has never been used, especially in the study of Piaget's Theory. So, there is a felt need for such a study.