Chapter 2

Review of Literature

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2.1. Introduction

For any study to be relevant in any field of knowledge the researcher needs an adequate familiarity with the work which has already been done in the area of his research. In this chapter, a review of related earlier studies was done which would enable the researcher to develop better understanding of the problem and various factors connected with the study. Research can never be done in isolation, the works that has already been done on the problems or which are directly or indirectly related to the problem of study, serve as guideline to the researcher.

2.2. Importance of Review of Literature

The importance of review is well stated by Best and Kahn (2008), in the following words, "A summary of the writing of recognized authorities and of research provides evidence that the researcher is familiar with what is already known and what is still unknown and interested. Since the effective research is based on part knowledge this step helps to eliminate duplication of what has been done provides, useful hypothesis and helpful suggestion for significant investigation. Man's experience gets enriched when relates himself to others and when is already to learn from surroundings".

According to Good (2006), the key to the vast store house of published literature may open door to sources of significant problems and explanatory hypotheses and provides helpful orientation for definition of the problem background for selection of procedure creative and comparative data for interpretation of results in order to be truly creative and original, one most read extensively and critically as stimulus to thinking.

2.3. Review of Related Literature

Muddu (1978) conducted an experimental study which investigated the effectiveness of the use of motion pictures as aids in the teaching of biological sciences as compared to the usual methods. The sample of the study consisted of 60 students of class VIII of the age group 12-14 years. The sample students (30 students to each group) were assigned to the experimental and control group randomly. The two groups were taught the same topics in Biology. The controlled group was taught by the usual method making use of charts and models and the experimental group was taught with the help of motion pictures as teaching aids. Findings of study revealed that the sound pictures helped the above average students to comprehend the subject matter in biology to a greater extent.

Jeyamani (1991) developed a Computer Assisted Instruction (CAI) package in Physics for class XI students. The experimental group received, CAI and after the experiment it was found that the experimental group performed better on the post test. The differences were insignificant in terms of sex and medium of instruction.

Singh (1991) took up the study to see the effectiveness of Computer Assisted Instruction (CAI) in teaching mathematics. He found that students who used the computer, scored significantly higher than those taught through the conventional method.

Jaiswal (1992) took up a study on the effectiveness of TV programs in science education. The study was conducted on B.Ed. Diploma in Computer Education students. Lecture with demonstration and illustration talk formats were found quite effective. About 70% of the programs focused on the lower cognitive skills of knowledge and understanding. About 75% of students were satisfied with the quality of the programs in terms of language used, technical quality, additional information and synchronization and compatibility of sound with visuals.

Thatte (1998) found that Audio Visual method was found to be significantly more effective than the Traditional method in terms of achievement of students studying in standard V, VI and VII. Sample comprised of 1,381 students from 8 schools of Greater Mumbai (India). Male students and female students both were equally benefited through Audio Visual (AV) method as well as Programmed learning method.

Zyoud (1999) developed a computer assisted English language teaching program me and investigated its effectiveness for standard VIII Gujarati (Indian language) medium students. He found that when the computer was used to its full potential, it helped the students to learn English language in better way because it provided them with a lot of freedom and responsibility to learn at their own pace. The students were found to have positive attitude towards computer assisted English language instruction.

Yadav (2000) found that software on alphabets and animals enhanced the achievement of class I students. Most of the students were found to have positive reactions towards the software. Teachers welcomed the media integrated approach towards learning.

Muchal (2001) studied the effectiveness of instructional strategies in general science in standard X of the National Open School (India) and found that video lesson was more effective than printed lesson. Post- video instructional discussion was found to be more effective than video lesson. Video lesson and post-video discussion was found to be more effective than only Video lesson. Video lesson was also found to be more effective than printed lesson.

Desai (2004) developed a multimedia package for teaching the subject of nutrition (Protein) to the undergraduate level student. The sample of the study constituted 98 students studying home science as a subject in graduation first year of Smt. J.P. Shroff Arts College, Valsad (India). The multimedia package constituted of transparencies, pie graph, charts, diagrams, pictures, video tape, audio tape and slide set developed by the

investigator. The mean of achievement score of the experimental group was found significantly higher than that of the control group.

Yadav (2004) developed an IT-enabled instructional package for teaching English grammar and determined its effectiveness in terms of achievement of the students. The sample consisted of 20 students from standard VIII of school situated in Baroda city (India). She found a significant gain in terms of students' achievement through IT—enabled instructional package.

Joel & Thangarajathi (2011) undertook a study on Influence of Multimedia in Enhancing Attitudes towards Computer Science at Higher Secondary Level. And attempted an experiment to develop and validate a multimedia package in teaching computer science for higher secondary students. Objectives of the study were (i) To develop a multimedia package in teaching Computer Science at Higher Secondary Level. (ii) To find out the effectiveness of multimedia on attitude towards Computer Science at Higher Secondary Level. Findings of the study were (i) The attitudes mean scores of controls and experimental groups did not differ significantly at the pre—test. Further, these two groups have similar in terms of their attitude. (ii) The attitudes mean scores of controls and experimental groups differ significantly at the post test. It is concluded that on the basis of higher mean scores the experimental group students had better attitude than control group.

Kumar & Patil (2011) conducted a study Teaching Grammar through Multimedia to Rural Secondary School Students. The purpose of the study is to develop Multimedia Presentations for teaching grammar for the students studying in IXth Standard. The present study being an experimental study with variables like Multimedia presentation and Learning grammar. The study involves pre-test and post—test design with treatment in between. Research evidenced indicates that the Multimedia presentation can improve student's performance. Therefore, multimedia presentation being an innovative approach to teaching—learning process endless drill

and practice without repetition, and provides immediate feedback to the learner on his/her progress.

Rosa & Preethi (2012) conducted a study to find out the effectiveness of multimedia instructional package over the present method of teaching on the achievement of marketing management among higher secondary school students. Students of two divisions of standard XII were selected one as experimental group and other as control group. Control group consists of 45 students and experimental group consists of 45 students. Analysis of the data revealed that students taught through multimedia instructional package performed better than those who were taught through present method of teaching.

Kulandai & Benjamin (2013) conducted a study on effectiveness of multimedia in teaching Mathematics at under graduate level. The study was conducted on a sample of 30 under-graduate students who have opted Mathematics. Tools used were multimedia courseware and achievement test. The data was analyzed by descriptive and differential analyses. The findings revealed that there is increase in mean scores of both the experimental and control groups. It was also found that multimedia proved its effectiveness in teaching mathematics at under graduate level over traditional method.

Goforth (2013) investigated that visualization is a powerful tool in research; visual, dynamic and interactive representations help the learner using simulations and microworlds to gain qualitative understanding of concepts. Recorded video can bring reality to computer assisted learning.

Perzylo (2013) found that, multimedia represents a radical change in how information can be presented or communicated and how learners can access and retrieve information. Multimedia CD-ROM technology enables the learners to engage actively more of their senses in the learning process as well as to develop their information searching skill and strategies. As a user-

friendly means of acquiring information, multimedia CD-ROMs have exciting potential.

Wishart & Blease (2014) found that, the installation of a computer network in a secondary school resulted in improved teaching and learning and increased enjoyment of learning in the school, with both pupils and teachers viewing the use of IT in the form of computer as beneficial to learning. Positive effects of using computer were noted, they could be justified theoretically using behaviorist, cognitive and social constructivist theories of motivation and learning. The wide range of ways in which use of computer could be both extrinsically and intrinsically motivating explains the increased motivation observed in the pupils.

Chanlin (2015) investigated the factors that influence Taiwan teachers' use of technology in creative teaching. The study identified four factors – environmental, personal, social and curricular. Environmental factors were concerned with issues related to computer facilities. Personal factors were related to a teacher's personality and beliefs. Social factors were those factors that influence an individual's effort in the use of technology and creative teaching in classrooms. These factors also played an important role in the process and production of creative teaching outcomes. The curricular factors involved issues related to the goals and instructional setting within particular courses. These research-based findings reflect that not only creative teaching environment and personal factors influenced the integration of computer technology but also social and curricular factors surrounding teaching and learning issues.

Liu & Pange (2015) looked at the barriers to ICT integration in teaching practices from the perspective of Chinese early childhood teachers in Mainland China. A total of 46 Chinese early childhood teachers in Mainland China participated in this study. They were from three early childhood settings located in three different cities in terms of the administrative division. A self-designed questionnaire was adopted as the research

instrument. It was found that a range of first-order barriers, which included lack of hardware (laptops, notebooks, and computers), lack of teaching content and material, as well as lack of pedagogical models were perceived as main barriers by the teachers. However, several second-order barriers, such as lack of teachers' interest, and lack of teachers' support were perceived as the least main barriers. Furthermore, and lack of teachers' support were perceived as the least main barriers. Furthermore, the variable "ICT use in daily life" was found play an important role in determining the teachers' perceptions of barriers both on the overall level and on the specific level.

2.4. Conclusion

Based on the above review, it can be concluded that educational institutions now often encourage the use of multimedia aids. On the other hand, faculty members still need to be motivated to integrate technology in teaching learning. The related literature also reveal that the studies made so far did not focus on use of multimedia packages in the field of political science as compared to science discipline for making the teaching—learning process effective. It was therefore, desirable to carry out a study on Multimedia packages used by CBSE schools for Political Science at upper primary level.