CHAPTER-2
REVIEW OF RELATED LITERATURE

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2.1 INTRODUCTION

In this chapter an attempt has been made to review the related literature pertaining to the effectiveness of ICT integrated pedagogy on academic achievement of students of class 9 level in physics. The review of related literature has given an understanding of previous work and equips the investigator with new understanding and insight.

'The literature survey forms an important chapter in thesis where its purpose is to provide the background for justification of the research undertaken'- Bruce (1994). 'It acts as good source of ideas and information in developing various parts of study such as problems and term definition research design, data gathering techniques and instruments forms and styles of report presentation. Knowing what data are available often serves to narrow the problem itself as well as technique that might be used .It also refrains the researcher from doing a duplicate research study that has been done before.

2.2 PURPOSE OF THE STUDY

The study mainly wanted to see how ict integrated pedagogy support teaching and learning process in classroom and help in academic achievement of students in learning the concepts of physics subject which is considered to abstract in nature.

The research studies reviewed are presented below:

2.3 STUDIES FROM ABOARD

Ghavifekr Simin And Rosedy Waw (2015) conducted a research on teaching and learning with technology: - effectiveness of ict integration in schools. This study aims to analyze teachers' perceptions on effectiveness of ICT integration to support teaching and learning process in classroom. A survey questionnaire was distributed randomly to the total of 101 teachers from 10 public secondary schools in Kuala Lumpur, Malaysia. The data for this quantitative research were analyzed for both descriptive and inferential statistic using SPSS (version 21) software. The results indicate that ICT integration has a great effectiveness for both teachers and the students. Findings indicate that teachers' well-equipped preparation with ICT tools and facilities is one the main factors in success of technology-based teaching and learning. .

Khaliq Saima (2015) An Experimental Study to Investigate the Effectiveness of Project-Based Learning (PBL) for Teaching Science at Elementary Level.

The objectives of the study were application of the project-based learning technique to teach science at elementary level and finding out the effect of project based learning on the academic achievement of the students. There was no significance difference between the mean academic achievement scores of pre-test and post-test after the treatment. The one-group pretest-posttest design was used for the present study. All grade 8 students of the Federal Government high schools of Rawalpindi and Islamabad were the population. A federal school 8th class was randomly selected for the study. This selected group was considered as experimental group. The group was pre and post tested. The experimental group was taught through project-based learning technique by the researcher. After the treatment a post test was conducted and difference of the mean academic

achievement score was observed. t test was used to analyze the data and it was recommended to use PBL in classroom particularly in teaching science subjects.

Quardoui Adekrim (2012) conducted a research on ict integration into chemistry – physics classes in middle school.

Sunday A Adeyemo (2012) conducted a research on impact of ict o teaching and learning of physics. This study investigated the impact of information and communication technology on teaching and learning of Physics.

Ndawula Stephen and Kahuma B James et al., (2013),
Conducted study on "Getting Schools Ready for Integration of Pedagogical ICT: the Experience of Secondary Schools in Uganda".
The purpose of the study was to establish whether secondary schools in Uganda are prepared for effective teaching of ICT education. The study was carried out in six secondary schools in Uganda. Both qualitative and quantitative research methods with a descriptive cross sectional survey design were adapted to collect data from 96 respondents. Questionnaires and interviews were employed as data collection instruments. The study findings showed that, the introduction of ICT education as a subject in the secondary school curriculum is a good government's policy that will bring in every secondary school graduate to the use of internet, world of employment creativity, knowledge and use of internet and other related technologies for national development. The findings further revealed that success of the ICT education policy will depend on governments' effort to recruit well qualified teachers in the subject, supply of enough computers, and construction of adequate computer laboratories and libraries in all secondary schools and availability of a reliable power supply in the country.

2.4 STUDIES FROM INDIA

Gokhan Aksoy (2013), conducted study on "Effect of Computer Animation Technique on Students' Comprehension Of The 'Solar System And Beyond' Unit In The Science And Technology Course". The purpose of this study is to determine the effect of computer animation technique on academic achievement of students in the 'Solar System and Beyond' unit lectured as part of the Science and Technology course of the seventh grade in primary education. The sample of the study consists of 60 students attending to the 7^{th} grade of primary school under two different classes during the 2011-2012 academic year. While the lectures in the class designated as the experiment group were given with computer animation technique, in the class designated as the control group PowerPoint presentations and videos were utilized along with the traditional teaching methods. According to the findings, it was determined that computer animation technique is more effective than traditional teaching methods in terms of enhancing students' Achievement. It was also determined in the study that, the PowerPoint presentations and related videos used together with the traditional teaching methods provided to the control group significantly help the students to increase their academic achievement.

Vidal Puga (2006) conducted study on "Integration of ICT in the school context. Case study". This research study aimed at to examine and to understand the impact of the introduction of ICT at a particular school.