## CHAPTER II

## REVIEW OF RELATED LITERATURE

Before analysing and discussing in detail about the dissertation topic "A Study of Effect of ICT Integrated Teaching on Achievement in Economics of Class IX Students of KendriyaVidyalayaBhadrak", it is noteworthy to make review of the existing literatures on the topic related to ICT integrated teaching and learning, teaching and learning of Economics at secondary level education, ICT related topics, importance of Economics at secondary level education and so on. Any literature available on the ICT integrated teaching and learning of Economics may varies from individual researcher to committee report, empirical studies to descriptive studies and general nature of studies. Through review of related research, the researcher can find out the gap existing in that research and can identify the problems related to that variable. After identification of problems, the researcher can finally select the problem for research. Followings are some literatures, articles, journals which the researcher reviewed for her dissertation work.

G. M. Ojo and VusyNkoyane (2016) attempted to analysed in their research paper "Factors Affecting Effective Teaching and Learning of Economics in Some Ogbomosho High Schools, Oyo State, Nigeria" that how various factors affect teaching and learning of economics in Some Ogbomosho High Schools for which they analysed the variables such as students, teachers' ratio available in school, textbooks were also analysed. This was an expost facto research and descriptive design was used. The target population of this study was 9 Higher Secondary School in Ogbomosho North Local Government Area of Oyo State. The sample is 3 Economics teachers and 5 students from each school. Through questionnaire data were collected. The study found that high number of economics students (5864) were against 26 teachers in 9 public school under this study which gave a very high teacher-student ratio of 1:225. The conclusion of this study showed that there was lack of teaching aids, library facilities and also lack of availability of textbook of Economics. This study recommended that the federal and state government should employ more-teachers, especially in Economics to checkmate raising teacher-student ratio. They should also build more senior secondary school with the increasing student population.

A research was accomplished by Dr Vasiliki, KalogriPanagiota, and S.K. Maria (2016) about a new teaching method for teaching economics in secondary education. The aim of the study was to find out the attitudes and perceptions of students, when implementing this teaching process and to explore the extent to which this method can contribute to the improvement of teaching and learning. The authors evaluated an interdisciplinary approach to teaching economics through an innovative teaching method, in the context of the Greek Senior High School. The authors used convenient sampling and questionnaire was used for data collection. The sample consist of 26 students of the first year of Senior High School. The important findings of the study were, the use of art especially the use of a movie, helped students understand the basic concept of the stock market. Furthermore, the use of audiovisual materials facilitated the active participation of students and made the course more interesting. As a result, the class climate was friendlier enhancing the freedom of expression. The role-playing was a significant factor of formatting this climate and it created a positive experience of students. The new teaching methodology contributed to the enforcement of knowledge results which helped students to shape their own views on the economics issues related to the stock market. And to developed an overall view of economic science in relation to the real life.

In2020, Kesh Rana and Karna Rana in their article paper "ICT Integrated in Teaching and Learning Activities in Higher Education: A Case Study of Nepal's Teacher Education" attempted to analysed how ICT training is very important for teacher education as for teaching at school level ICT integration teaching class is necessary. As on today's era ICT integration teaching is very important for fulfilment of teaching objectives. Their study reported the lack of clear strategies to implement the ICT education policy and fund for ICT infrastructure and professional development of university staff to integrate ICT in teacher education. So, the authors suggested policy in practice, more sustainable mechanism need to be developed to provide ICT facilities for teacher education for which they can make the class more interesting and realistic by using ICT. The study found a gap between ICT policies and the reality of the ICT use in higher education. The findings was the currently available ICT facilities are insufficient to realise the effective practice of ICT in teacher education at the university level. However, the students had an enthusiasm to use a higher level of ICT facilities if made available in their c;lassroom.

A journal was published by Lukumon Akande, Abigail and Abrahamo (2018) where they analysed the effects of teaching method of economics on students' performance. The main

objective was to critically examine the relationship between methods of teaching Economics of Economics teacher and students' performance. Another objective was to examine the methods and delivery technique suitable for different topics with varying objectives and to determine the availability of teaching materials. For this study the researchers took 120 sample and questionnaire for data collection. The data were analysed by use of SPSS and chi-square was used for hypothesis testing. The researchers found from their study that oriented method i.e. ICT integration class and use of concrete objects to represent ideas that have direct bearing on lecture.

Debarun Chakraborty, SoumyaKantiDhara&AdrinilSantra (2018) in their research article "Effectiveness of ICT in Strengthening the Process of Higher Education System in India" (2018) illustrated that how ICT based education effect the education system of India. The objective of this study was to discover the elements impacting the adequacy of ICT in reinforcing the procedure of advanced education framework in India. For this research, the researchers took 386 examples and used 5point likert scale for data collection and analysis and utilized convenience sampling technique and found out the result Exploratory Factor Analysis and Multiple Regression Analysis have been used. The findings of this study claimed that cost of ICT is one of the most influencing factors on effectiveness of ICT.

Despite lots of budgeting and accommodation of funds; there are several barriers regarding appropriate use of Information and Communication Technologies. Payal and Vinod Kumar Kanvaria (2017) attempted to analyse teachers' perceptions and barriers faced in using ICT tools in classrooms for learning. For this he used qualitative research design to collect data randomly from Government school teachers of 10 schools of Delhi. He used questionnaire for data collection from sample. He concluded from his study that integrating ICT tool into classroom learning will give effective product as students concentrate more on their study.

Chakra Bahadur Khadka in his research article "Effectiveness of Teaching Economics in Higher Secondary School Level, Nepal" (2016) analysed teaching Economics to secondary level students in a clear and unbiased manner supports them, they can easily link economics in their day-to-today life, master the essential principles of understanding the economizing problems, specific economic issues, apply economics in a precise and empirical manner on economic issues and create the interest of students in issues of economics. The main objective of this study was to analysed the effectiveness of teaching Economics in higher secondary school level. For this study the researcher had selected 204 teachers and 204

students for questionnaire survey. Psychometric scale was designed for data collection and SEM, OLS coefficient, mean and variance were used for data analysis. The findings were based on the assumption that was; default was correct, the probability of getting discrepancy as significant as 73.59 is 0.00 of students understanding of economics in their classroom.

In 2016, Md. Rashedul and Md. Abu Raihan attempted to identify the effectiveness of using ICTs to promote teaching and learning in technical education. Survey research design was adopted by the researchers for the study where the teachers of government polytechnic institutes of Bangladesh were considered as population. In Bangladesh, ICTs implication in technical education is very few. Thus, for the convenience of the study, a purposive random sampling was used and the sample size was 120. A structured questionnaire is used for collection of data. The data were tabulated in the form of frequency distribution and quantitative analysis exposed in a tabular and graphical form. The result was found that more than 60% technical education teachers strongly agreed that ICTs are essential for enhancing the process of teaching learning in the poly-technique institutions.

A survey was conducted by **Blazar** (2015) into education production function that moved away from narrative teacher inputs, such as education, certification, and salary, directing as a replacement of on observational measures of teaching practices. Build on this conversation by exploitation within school, between grade, and cross-cohort variation in scores from two observation instrument; further the condition with uniquely rich set of teacher characteristics, practices, and skills. The findings of the study indicated that inquiry-oriented instruction positively predicts student achievements. Content error and impression were negatively related, though the estimated and were sensitive to the set of covariates included in the model. Two other dimension of instruction, classroom emotional support and classroom organisation, were not related to this outcome. Findings recommended that requirements and development effort aimed at improve the quality of the teacher's workforce.

In 2015, a journal article named "ICT Integration in Education: Incorporation for Teaching & Learning Improvement" was published by SiminiGhavifekr, Ahmad Zabidi, MuhammadFaizal, Ng Yan and Yao & Zhang. The objective of this article was to identify the level of ICT integration in teaching and learning process in class room by primary teachers; to identify the relationship between teachers' level of computer skill and knowledge and ICT integration in teaching and learning process in classroom. The researchers took 61 teachers from 10 public primary school in Klang Valley, Malaysia. This was a quantitative

survey research and for which researchers took questionnaires for data collection. The result of this study showed that teachers should always be ready and well-equipped in term of ICT competencies and positive attitude to provide ICT-based learning for students to improve and enhance their learning quality.

In 2015, SiminGhavifekr and Wan Arrthirah Wan Rosdy, in their paperattempted to make a study to analyse teachers' perceptions on effectiveness of ICT integration to support teaching and learning process in classroom. This research was quantitative research. A survey questionnaire was distributed randomly to the total of 101 teachers from 10 public secondary schools in Kuala Lumpur, Malaysia. The data were analysed for both descriptive and inferential statistics by using SPSS. The researchers found that teachers' well-equipped preparation with ICT tools and facilities is the main factor in success of technology-based teaching and learning and students will get benefitted more in comparison to traditional method.

A research paper was published by Adu, Galloway and Olaoye (2014)regarding the characteristics of teachers and students' attitude towards Economics in higher secondary schools. The study sample involved in 640 students selected through cluster sampling and simple random sampling techniques. To set the hypothesis of the study pearson product moment correlation and t statistics were used. The findings of the study showed that, students perceived their teachers' in term of knowledge of content of Economics, communication ability, teaching method and classroom management skill has a significant relationship with the students' attitude towards Economics. When the students' perception of their teachers' characteristics is low, hence the student's attitude to economics tends to be negative.

Santhosh Areekkuzhiyil (2014) in his paper attempted to analyze the economics curriculum, instructional strategies and evaluation system at secondary level and whether the school education facilitate joyful learning of economics and the development of essential economic competence among students, so that students will be interested by learning economics and will apply them in their real life. The objectives of his study were 1. To analyze the economics curriculum, instructional strategies and evaluation system at secondary level 2.to verify whether school education facilitate joyful learning of economics 3. To identify the strategies for joyful learning of economics at secondary level. This study was qualitative in nature and the researcher had taken interview and also group discussion for data collection. The text book also had taken for content analysis. The study found that many

students complain that learning of Economics is not at all interesting and attractive to them. Various studies showed that the main reasons for this complaint lies in the faulty methodology and pedagogy adopted in the economics classes and the failure to create meaningful and realistic situation.

A study report Submitted to national teachers' institute Ebonyi State University study center by Chibueze in (2014) set the objective of identifying the factors influencing the effectiveness of teaching of Economics in higher secondary schools in the Izzi Local government zone. The investigative design of the research was descriptive and questionnaire survey. Total population of the study was 1900 students. Likewise, 75 teachers in the senior secondary schools have been used. 150 teachers and students were samples in 5 selected schools. The descriptive statistics were used to analyze the data. The findings showed that teaching and learning economics in higher secondary school are affected by unqualified economics teachers, poor method of teaching, inadequate instructional material, and attitude and interest of the teachers and students. Based on the findings some recommendations were made thus employment of economics teachers by the government through the ministry of education should be strictly based on merit so as to make it possible for only those who studied the course to be appointed.

Ali, Haolader and Muhammad (2013) found that instructors and executive regularly confront issues on the viable coordination of ICT into classroom rehearses. An exact examination was directed in higher establishments of learning in Uganda to discover the elements impacting the utilization of ICT to make educating and learning successful and distinguish the advancement in the instructing learning process realized by ICT. The discoveries of this examinations uncovered those instructors and chairman had firmly supported the joining of ICT into educating learning forms. ICT might be counted in bringing the advancement, for example, e-learning, online understudy enlistment, online investigation material, online conference with scholarly specialists, in the educating learning process. The shot of successful combination of ICT in instructing learning procedure can be expanded through every one of these components. More preparing ought to be bestowed to the Educators and chairmen in understanding the noteworthiness and use of ICT.

A research article "The role of ICT in General Economics Teaching: an example from Turkey" (2012) was published by CemIsik and Sumeyra Buran. This research is an experimental research for which the researcher took 60 samples and divided the participants

into two groups i.e. experimental group and control group. The participants studied for the six weeks for the experiments. For this data collection the researcher took pre-test before teaching and post-test after teaching. Finally, a questionnaire was given to experimental group participants after post-test. The objective was to investigate of computer assisted economics classes learning by using e-learning support. The researchers found that there was a significant difference between the pre-test and post-test score of experimental groups and a significant difference again was seen in term of post-test scores between experimental group and control group. The final conclusion found that computer-assisted economics classes learning has more effect on learners' economics learning abilities.

Albert Sangra and Mercedes Gonzalez-Sanmamed (2010) attempted to analyze what is happening at schools regarding the integration and use of ICT and to examine teachers' perceptions about what teaching and learning processes can be improved through the use of ICT. They applied a multiple-case study research methodology. From previous exploratory research, four different types of schools were determined. A multiple-case-study research methodology was applied. From a previous exploratory research, four different type of schools were determined. Data analysis showed that there was a widespread view that ICT in teaching favours several teaching and learning process. And also, in some particular there was a view that the contribution of ICT to the improvement of teaching and learning process is higher in schools that that have integrated ICT as an innovative factor.

An article paper was published by **Dr D. Amutha**about the role of ICT in improving the quality of education. In this paper, he discussed the role and effect of ICTs, and how they can promote future growth and development. He used qualitative data for his paper analysis. The findings of the study showed taht proper integration of ICT with teaching/ learning environment increases the chance of gaining education along with increased productivity.