

CHAPTER I

INTRODUCTION

1.1 BACK GROUND OF THE STUDY

Education plays a very important role for society. For every nation proving its population, the quality education is a foremost goal. In this era of technology and science; Process of learning changed a lot over time. From blackboard to smart boards, from notebooks to tablets, from computers to laptops etc. technology and science is everywhere. Information and Communication Technology is an inevitable part of most of the institution these days (Zhang& Aikman, 2007). Integration of Information Communication and Technology (ICT) in education refers to the use of computer-based communication that incorporates into daily classroom instructional process. In conjunction with preparing students for the current digital era, teachers are seen as the key players in using ICT in their daily classrooms. This is due to the capability of ICT in providing dynamic and proactive teaching-learning environment.

The importance of ICT in teaching and learning is to create a massive improvement in the educational sector. The use of ICT has the potential to enrich understanding of the changing nature of teaching and learning to an increasingly high technology dedicate environment (Brugnes, 2012). Information and Communication Technology has the potential to innovate, accurate, enrich, deepen skill, to motivate and engage students to help relate school experience to practical works, create economic viability, for tomorrow's workers as well as strengthening teaching and help school changes (Yusuf, 2005). The integration of ICT into teaching and learning has greatly influence teaching strategies, instructional and learning outcomes.

The use of ICT no doubt is relevant to the educational sector. The rapid changes in the world today to the access and application of ICT are of great necessity to education sector. ICT integration in school education is also very important. In Odisha, Odisha government had made many project for ICT in school education. So, the use of ICT has increased in school education. In kendriyaVidyalaya, there are almost ICT in their school and classroom but these ICT should be used properly and students should get benefitted from these ICT. For the use of ICT first of all teachers should know how to use ICT means how to integrate ICT in classroom teaching. So that the competencies of teacher can increase with the use of ICT. The teacher can use ICT in the preparation of lesson plan and note for effective teaching and

learning. In 2012, Rampersad reported that teachers were mandated to include ICT in their lesson planning to enhance their instructional strategies in the classroom.

Economics as a subject has assumed great importance in the field of social science. In our day- to-day life we use a lot of economic concepts such as goods, market, demand, supply, price, inflation, banking, tax, lending, borrowing, rate of interest etc. Similarly, we take economic decisions related to the distribution of our income to purchase various goods, making a budget to do some work, taking up a job to earn, withdrawing money from bank etc. So that Economics is very important subject at school level. In Economics, the teacher can use ICT in preparation of contents and process that will help easy understanding of the subject matter. Therefore, the introduction of ICT in teaching and learning of Economics as a subject having its unique structure produces the learner with ways of reasoning and thinking for better living after school (Nji and Idika, 2018).

There is no doubt that the use of ICT properly and effectively by the teacher in teaching of Economics can enhance learning of Economics. Economics studies how man make judicious use of both human and non-human resources for national development. Information and Communication Technology fosters national development, in which the proper teaching and learning of Economics is improved. Economics a field of study involves teaching that are direct towards deductive reasoning and inductive reasoning. Deductive reasoning involves teaching and learning form more general ideas to the more specific while inductive reasoning involves teaching and learning from specific observation to general observation (Trochim, 2006). Deductive analysis and inductive reasoning are very essential in course development of Economics. Therefore, teaching of Economics entails the use of ICT to expand on both deductive and inductive reasoning where knowledge on economic behaviour and phenomena are critically studied. This implies that ICT addresses teaching and learning phenomena in Economics.

Economics as a subject in secondary schools requires that at the end of the program/course the students becomes relevant in everyday life and could prepare to have meaningful future career. The attainment of this philosophy can only become realistic when ICTs are utilized in the teaching learning process. The use of ICT in teaching and learning will enrich with global challenges to the world and students can compete favourably with peers throughout the world. So that ICT integration is very important in school education. Specially its important to integrate ICT in teaching and learning of Economics at secondary school level.

As students taught Economics should be active, interactive and effective in the utilization of ICT which will make the students not to be passive in teaching and learning process. So that students can perform better in their exam. They can achieve more result. They can interlink what they have taught in their Economics class with the real life. Therefore, ICT integration in Economics class teaching is very crucial not only for students but also for teachers.

1.2 PRESENT STATUS OF TEACHING AND LEARNING

Present teaching learning process is different from before due to Covid-19. Since middle of march, 2020, millions of learners had been out of school, because of the COVID-19 lockdown. This had also affected more than one lakh learners, who could not complete their class 12th board examinations. Today, even after more than one year, it is difficult to predict when schools will restart. Schooling is supposed to look after the emotional, social and behavioural health of learners, which is diametrically opposite to social distancing. Due to this Covid-19 pandemic and country wide lockdown, there has been continuing online teaching learning process. But all learners are not belonging to rich family. A negative fallout could be that the country's digital divide will get more pronounced, but poor learners with less access to device, connectivity and private space will suffer greatly.

In march 2020, schools and colleges in almost all part of the world were forced to close their doors due to this pandemic. The academic calendar has been severely disrupted with actual classroom learning being replaced by online learning. Despite this rapid transition to e-learning, millions of children, especially in Africa and South Asia, have been left without adequate access to education. This situation in India turned out to be grimmer. As many schools and educational institutions moved to online platforms for continuation of learning, the 'digital divide' remained a challenge for the country.

According to data from the 2017 National Sample Survey (NSS) report, merely 6% of rural household and 25% urban households had access to a computer lack of internet facilities was also a cause of concern with only 17% of rural households and 42% of urban households having access to it. Definitely, data-enabled cell phones have increased access in the last four years, but many of the most disadvantaged people are still suffering, especially in rural areas. According to surveys conducted by the National Council Educational Research and Training (NCERT), the Azim Premji Foundation, ASER, and Oxfam, between 27% to 60% of students were unable to participate in online classes due to a variety of factors, including a lack of devices, shared devices, and the inability to purchase data packs.

Even those who will continue their education once schools reopen may struggle to catch-up to their counterparts who have access to online learning. The two-years gap in schooling will make the learning more difficult and less efficient in the coming years for such people which will eventually make them incompetent for the formal sector job. Despite continuing their education, they may not be able to meet the minimum threshold required for employment in the formal sectors (or it may take them considerably large amount of time), and will thus end up working in an informal sector only.

Presently, teachers are engaging with online teaching and learning. But most of teachers are not aware of online teaching. They don't know how to use ICT and how to teach through online which is create an obstacle in online teaching. Previously classroom teaching and learning was live interaction, two-way process teaching learning, teachers could guide learners and learners can ask each and every doubt to their teachers and made their doubts clear. But now in this Covid-19 pandemic era, Online teaching and learning could not provide two-way teaching -learning process; there is no interaction between learners and teachers; learners are passive learners; teachers give their lecture; there is no live interaction which are disadvantages of online teaching.

1.3 EDUCATIONAL TECHNOLOGY

In terms of terminology and structural composition, Educational Technology is the combination of two words namely education and technology. Technology as a subject has its own sole concern with the task identifying the most suitable, appropriate and developed technology for serving educational needs and purposes of the students and the society at a particular time and place. There has been a continuous shift in nature of use of technologies mean and measures for improving the process and product of education depending upon the type of excellence attained by members of society and communities all over the world in terms of scientific, philosophical, psychological and technological progress and advances in educational fields and also in other fields.

In teaching learning process, both teachers and students use many instructional materials like books, notes, chalkboard, pictures, chart, models, maps, diagrams and other graphic materials. But later on, with the industrial development and technical advancement, sophisticated scientific instruments, mass media and educational material were used. So, it brought the sophisticated hardware and software such as radio, television, tape recorder, films, transparency etc. in field of educational system. But after that development there is

another concept of programmed instruction and theories added to another dimension educational technology which is again broadened when the new approaches in the form of system approach, microteaching, interaction, analysis and computer assisted instruction come into existence.

“Educational Technology is the systematic application of scientific knowledge about teaching-learning and condition of learning to improve the efficiency of teaching and learning (Leith, 1967).”

-G.O.M. Leith

“Educational Technology is concerned with the application of modern skill and techniques and requirements of educational training. This includes facilitation of learning by manipulation of media and methods, and the control of environment is so far as this reflects on learning.”

-D. Unwin

Educational Technology is more comprehensive and broad-based concept. Instructional technology is a sub system of the main system of educational technology. Education is comprehensive process and imparting of instruction is one of the several means to achieve the goals of education. Instructional technology is concerned with determining and providing appropriate stimuli to the learner to produce a certain type of response for making learning more effective. Educational Technology is concern with scientific use of the available human and non-human resources for solving various problems of education for optimising the result of the whole teaching-learning process. There is also another concept that is teaching technology. It is also a sub-type of the system of educational technology. It also concerns with the systemisation of the process of teaching and provides necessary and practices for the teachers to bring improvements in teaching learning processes.

Significance of Educational Technology in Indian context: In India before the 1960's the term educational technology was almost unknown to the educational system. It was used as synonym to audio-visual teaching aids. Today, the role of educational technologist in India is not merely that of an audio-visual aid master, hardware expert, media expert or programme text writer, but of one who concerned with the information of an overall design to carry out an evaluation of the total process of education in terms of specific objectives. So educational

technology has a meaningful present and promising future in our country. Some of the significant development in this direction as follows:

- There has been a wider and more effective utilization of radio for broadcasting educational programme throughout the country. These well-planned programmes are now broadcast throughout the country for both in-school and out-school groups.
- Another most significant educational development in the use of educational technology is concerned with the development of television programmes.
- Third important area where educational technology has been useful is the problem of training and re-training a large no of school teachers in an effective way.
- In distance education, educational technology is very very important.
- Educational technology is being used in our country related to language instruction.
- Another use for which educational technology is being put in our country is concern with preparation, development and utilisation of audio-visual materials, and handling as well as maintenance of the hardware application and sophisticated gadgets.
- In the latest trend, educational technology is providing its worth by utilizing the services of computers and advanced form of ICT technology in the fields of education.

Some innovative educational technologies which are used are:

- Digital reader and tablets
- 3D printings
- Virtual reality
- Artificial Intelligence
- Mobile Technology
- Gamification
- Cloud Technology etc.

1.4 ICT INTEGRATION IN TEACHING

1.4.1 Meaning of ICT

ICT stands for Information and Communication Technology. These are the diverse set of technological tools and resources that are used to communicate, create, disseminate, store and manage information. In some context, ICT became integral part to the teaching learning interaction, through such approach replacing chalkboard with interacting digital whiteboard, using students own smart phone or other devices for learning during class time. When teachers are digitally literate and trained to use ICT, these approaches can lead to higher order thinking skills, provide creative and individualised options for students to express their understandings, and leave students better prepared to deal with ongoing technological changes in society. In the context of educational institutions, ICT has a major impact on teaching, learning, research and managements. During last twenty years many educational institutions have heavily invested across the globe on ICT application and its infrastructure development

1.4.2 Significance of ICT

Through expansion of ICT, the business environment gets permeated and the governments are provided with efficient infrastructure. ICT adds values to the learning process and organisation and administration of educational institutions. The internet is regarded as the powerful force that has rendered a significant contribution in promoting development and innovative practices. In the present existence, it has gained much prominence that individual are regarding it as an integral aspect that facilitates the implementation of their job duties. When development of technology is taking place, it vital to ensure that they prove to be advantageous to the individuals, organizations, communities and nation as a whole (Meenakshi, 2013). ICT has rendered a significant contribution in not only the field of education, but in various other fields. In various field areas, technologies are rendering an effective contribution in implementation of various tasks. ICT helps in communication, sending message, information, preparing assignments, reports, projects, articles, and for leisure and recreation purposes. The development in ICT have led to progression in the implementation of various tasks and activities. ICT increases critical thoughts, enhances creativity, enhances logical and rational decision making, upgradation of skill and abilities, expansion of effective communication skill, working as a member of a team, coping with problems and challenging, handling of dynamic situation, generating awareness etc.

1.4.3 ICT Integrated Teaching

ICT integration is defined as the use of ICT to introduced, reinforce, supplements and extend skills. ICT integrated teaching means use of ICT in the teaching learning process in order to make teaching and learning more effective, joyful, meaningful. ICT can impact students learning when teachers are digitally literate and understand how to integrate it into curriculum. Teachers should be provided proper training that use of ICT, how to use ICT, how to integrate it classroom situation etc. in their pre-service and in-services training periods. So that they can easily integrate ICT in their classroom according to their concept which they will teach. This classroom will become more interesting and joyful and meaningful. Students also will take interest in that class.

The need for ICT in education is crucial, because with the help of technology, teaching and learning is not only happening in the school environment, but also can happen even if teachers and students are physically in distance. A technology- based teaching and learning offers various interesting ways which includes educational videos, stimulation, storage of data, the usage of databases, mind-mapping, guided discovery, brainstorming, music, World Wide Web (www) that will make the learning process more fulfilling and meaningful. ICT integrated teaching can make the teaching process easy and more understandable. Students can easily achieve what the teacher taught in the class. Students can easily interlink what they have learned from class with their day-to-day life. So, ICT integration in classroom teaching learning process is very crucial. This type of teaching can enhance the student's abilities, develop the innovative powers, and their potential powers also.

1.5 MEANING OF ECONOMICS

Economics is a vast subject. So, it is not easy to give a precise definition or meaning of economics as its scope and the area it covers are very large. Ever since, it emerged as a separate branch of study in social science, various scholars and authors have tried to give its meaning and objectives. It should be noted that with development of time and civilization the definition of economics has undergone modification and change. But Economics as a word comes from the Greek word oikos which means 'family or household or estate', and nomos stands for 'custom, law' etc. Thus, "household management" or management of scarce resources is the essential meaning of economics. Economics encompasses production, distribution, trade and consumption of goods and services. Economic logic is applied to any problem that involves choice under scarcity. We can say that. Economics is the science and

art of decision making regarding the allocation of limited resources to satisfy the unlimited human wants. Let us focus the major ideas involving the meaning of economics below:

- Many scholars and authors in the late eighteenth and early nineteenth century believed that economics is the **science of wealth**. These scholars are called the classical thinkers. They viewed that economics deals with the phenomenon of wealth which includes nature and causes of wealth, creation of wealth by individuals and nations etc.
- The problem with wealth definition was that it did not talk about people who had no wealth. Having wealth and not having wealth divided the society into rich and “not rich” or poor. So many scholars in the early nineteenth century thought that economics should address the issue of “**welfare of the society**” and not just wealth. Accordingly, economics was seen as science of welfare. Welfare is both quantitative and qualitative in nature. Consumption of goods and services, increase in per capita income etc are quantitative aspects of welfare. Living in peace, enjoying leisure, acquiring knowledge etc are qualitative aspects of welfare. As science of welfare, economics was said to be concerned with the quantitative welfare only because it can be measured in terms of money.
- The welfare definition of economics explained only the material aspects of welfare. But people want both material goods and non-material services. Since resources available with every individual or society are scarce, people try to achieve their goals by alternative use of these resources which they do by making appropriate choice. So, economics was treated as science of scarcity and choice. As **science of scarcity and choice**, economics studies human behaviour as relationship between ends and means which are scarce and have alternative uses. Here “ends” imply “wants”. “Scarce Means “imply “limited resources”. According to the scarcity definition, limited resources can be used alternatively. Take the example of production of two goods – Cloth and Wheat. We cannot produce unlimited amount of cloth and wheat with limited amount of resources. The resources have to be divided to produce these goods. Let demand for one of the goods say wheat increases so it has to be produced in larger quantity for which we need more resources. But given that, resources are limited, we can produce more wheat only by withdrawing

some resources from the production of cloth and putting them in production of wheat. As a result, cloth production will fall and wheat production will increase.

- In the twentieth century the objective of achieving growth and development of the entire economy gained momentum. Role of the government in economic growth and development became increasingly important. So, economics no longer, some remained limited to individual decision making and use of resources only. Its scope has been expanded to include production and consumption of commodities overtime so that the economy achieves growth and development. So, economics is treated as the science of growth and development. In fact, it is true that now a day's people talk about well-being of individual and the whole nation. It is understood that for an individual to be able to satisfy his/her wants, it is necessary that the whole economy must grow and find proper mechanism to distribute the benefits of growth among the individual citizens. So, performance of the economy is very important in terms of use of its resources and production and distribution of goods and services. The economy must allocate its resources among various alternative activities, ensure the efficient use and find ways as to how they would grow for future development of the economy. On this basis, many economies in the world have performed well. For example, the USA, European countries, Japan, etc. are called developed economies because they have achieved higher level of income for their citizens. Our Indian economy is a developing economy because many of its citizens are still poor. A study of economics tells us the state of our economy and guides us to achieve higher level of growth and development.
- Economists of late twentieth century have also started talking about welfare of future generation and protection of natural environment. Hence economics is also treated as **science of Sustainable Development**. To achieve higher level of growth and development, economies around the world have been exploiting natural resources and polluting the environment. Consumption of goods and services have even resulted in lots of wastages. Note that some resources like minerals, mineral oil, forests are depleting fast because of their rising consumption by present

generation. So future generation may be left with little or no resources. It is our moral duty to use the available scarce resources judiciously, efficiently and ensure welfare of our future generation.

1.5.1 Nature of Economics

Economics is the science that deals with production, exchange and consumption of various commodities in economic systems. It shows how scarce resources can be used to increase wealth and human welfare. The central focus of economics is on scarcity of resources and choices among their alternative uses. The resources or inputs available to produce goods are limited or scarce. This scarcity induces people to make choices among alternatives, and the knowledge of economics is used to compare the alternatives for choosing the best among them. The numerous human wants are to be satisfied through the scarce resources available in nature. Economics deals with how the numerous human wants are to satisfied with limited resources. Thus, economics not only covers the decision-making behaviour of individuals but also the macro variables of economies like national income, public finance, international trade and so on. "Economics aims to explain how economics work and how economic agents interact. Economic analysis is applied throughout society, in business, finance and government, but also in crime, education, the family, health, law, politics, religion, social institutions, war, and science. The expanding domain of economics in the social science has been described as economic imperialism". This shows the nature of economics in modern context. It tells that economics can be used for raising the living standard of people and their welfare, however, it also wants that economic issues or economic, objectives might become a tool in the hands of people, who want to exploit it for unknown motive like separation from others.

1.5.2 Scope of Economics

Scope means province or field of study. It is very difficult to define economics because economics is very dynamic subject. Its scope keeps on changing rather expanding. There are divergent views about the scope of economics due to continuous growth in the subject matter of this subject.

Economics as a Science and an Art

a) Economics is a science: Science is a systematized body of knowledge that traces the relationship between cause and effect. Another attribute of science is that its phenomena

should be amenable to measurement. Applying these characteristics, we find that economics is a branch of knowledge where the various facts relevant to it have been systematically collected, classified and analysed. Economics investigates the possibility of deducing generalizations as regards the economic firms can be very easily measured in terms of money. Thus, Economics is a science.

Economics as a Social Science: in order to understand the social aspect of economics, we should bear in mind that labourers are working on materials drawn from all over the world and producing commodities to be sold all over the world in order to exchange goods from all parts of the world to satisfy their wants. There is, thus, a close inter-dependence of millions of people living in distant lands unknown to one another. In this way, the process of satisfying one has, thus, to study social behaviour i.e., behaviour of men in-groups.

b) Economics is also an art: An art is a system of rules for the attainment of a given end. A science teaches us to know; an art teaches us to do. Applying this definition, we find that economics offers us practical guidance in the solution of economics problems. Science and art are complementary to each other and economics is both a science and an art. Economics is both positive and normative science.

a) **Positive Science:** it only describes what it is and normative science prescribes what it ought to be. Positive science does not indicate what is good or what is bad to the society. It will simply provide results of economic analysis of a problem.

b) **Normative science:** It makes distinction between good and bad. It prescribes what should be done to promote human welfare. A positive statement is based on facts. A normative statement involves ethical values. For example, “12 per cent of the labour force in India was unemployed last year” is a positive statement, which could be verified by scientific measurement”. “Twelve per cent unemployment is too high” is normative statement comparing the fact of 12 per cent unemployment with a standard of what is unreasonable. It also suggests how it can be rectified. Therefore, employment is a positive as well as normative science.

1.5.3 Branches of Economics

There are two branches of Economics. They are as follows

- Microeconomics
- Macroeconomics

- **Microeconomics**

The word “micro” means very small. So micro economics implies study of economics at a very small level. What does this exactly mean? In a society comprising of many individuals collectively every single individual makes just a small part. So, the economic decisions taken by a single individual become the subject matter of micro economics. What are the economic decisions an individual take? We can cite some examples in this regard.

(a) In order to satisfy various wants an individual buy goods and services. To buy goods and services the individual has to pay some price from his limited amount of income. So, the individual has to make a decision with regard to quantity of the good to be purchased at given price. He/she has to also decide the combination of different goods to buy given his/her income so that he/she can get maximum satisfaction as a buyer.

(b) An individual also sells goods and services as a seller. Here he has to take decision regarding the quantity of good to be supplied at a given price so that he/she can earn some profit.

(c) All of us pay price to buy a good? How does this price get determined in the market? Micro economics provides answer to this question.

(d) In order to produce a good an individual producer has to take decision as to how to combine the various factors of production so that maximum output can be produced at minimum cost.

- **Macroeconomics:**

The word macro means very large. In comparison to an individual, the society or the country or economy as a whole is very large. So, the economic decisions taken at the level of the economy as whole are subject matter of macroeconomics. Take the example of the economic decisions taken by the government. We all know that the government represents the whole country, not just any individual. So, the decisions taken by the government are meant for solving the problems of the whole society. For example, government makes policies with respect to collection of taxes, expenditure on public goods and welfare activities etc. which affect the whole economy. “How do such policies work” is the subject matter of macroeconomics. In micro economics we study the behaviour of an individual as a buyer and seller. As buyer the individual spends money on goods and services which is called his/her consumption expenditure. If we add consumption expenditure of all individuals then we get

idea of aggregate consumption expenditure of the whole society. Similarly, aggregating incomes of individuals becomes total income of the country or national income. So, study of these aggregates such as national income, total consumption expenditure of the country etc. comes under macroeconomics. Another example of macroeconomic issue is the study of inflation or price rise. Inflation or price rise does not affect an individual only, but it affects the whole economy. So, knowing its causes and effects as well as controlling it, come under the study of macroeconomics. Similarly, problem of unemployment, economic growth and development etc. concern with the whole population of the nation and hence are covered under the study of macroeconomics.

1.5.4 Aim and Objectives of Teaching Economics at Secondary level

Placing India in the categories of economics, it comes under the developing economy. It has poverty, overpopulation and unemployment as its major problems. The most important feature of our country is that 70 per cent population is residing in the rural area and major part of economy is based on its agriculture. No doubt, India, as a developing country, has achieved a considerable growth and development in the area of agriculture, industry, and important improvements in the area of education for the constructive attitudinal change towards the social and economic development in the country. Therefore, the teacher may have the important aims of teaching economics in his mind to make his students able to understand the application of economics in their daily lives and the whole economic structure of the country as follows:

- To make the students able to know the impact and consequences of British rule on the Indian Economy.
- To make the students able to acquire knowledge of various economic terms like various definitions of economics and economy, capitalistic, socialistic and mixed economy, developed and developing economy.
- To make the students able to understand the various causes of population explosion, consequences and its various remedial measure in India.
- To make the students aware about institutional set-up and main sectors of the Indian economy like private and public sectors.
- To make the students able to understand the various causes of poverty, unemployment, price rise, inflation and their remedial measures.
- To make the students able to understand the economic explosion of consumers, rights of consumers in the society.

- To make the students able to understand the complete infrastructure of the Indian economy, like transport and communication network, power and irrigation and various monetary and financial institutions.
- To make the students able to understand the significant contribution of agriculture to national income, employment, state revenues, industries, food, equipment and trade.
- To make the students able to understand the mutual relationship of agriculture and industry and a balanced industrial structure, the importance of small and large-scale industries and its various regional disparities and future aspects of industrial developments. .

1.5.5 Value of Teaching Economics

- **A Field of Information**

The study of Economics helps the students to broaden their knowledge. Students can aware about most of the interesting and logical facts about the behaviour of human beings. The students increase their knowledge through the study of various economic theories, important principle, laws and generalisation. New facts and problems in economics also induce the reservoir of information among the students.

- **A Field of Training in Mental Horizon**

It is the reasoning power that leads human beings towards achieving certain goal of their lives. This reasoning power increase through the study of Economics. Mental horizon of the setback is sharpened. The teacher put an economics problem before the students. The students try best possible to make good analysis of economics problems. In economics, students study various theories of values, wages, interest, international trade, solution of various financial problems, demand and supply of various goods and services in different form of markets etc. these theories develop mental power of the students.

- **A Field of Cultural Value**

The cultural values are developed through the better co-relationship of material and non-material things of the society. Economics make study about material and non-material things. It studies how individual produce and make better utilisation of the goods and services and income in his life and his human behaviour in utilising these goods and services. Developing human behaviour through utilising different material goods leas to various cultural values in the society. Proper balance is required to

develop cultural and teaching of economics provide better understanding about the food use of various things in life.

- **A Field of Mutual Cooperation**

Being social instruct in human beings, he has to make social relationship with others in his social surroundings. He has to fulfil his basic requirements to sustain his life. It is not possible to complete these requirements without the help of others. He satisfies his various wants with the cooperation of others. This process leads to a sense of mutual cooperation among the persons. On the basis of cooperation all the activities of economy is possible. The students learn through the study of various concepts in economics like cooperative marketing, cooperative banking system, terms of trade, successful functioning of industries etc.

- **A Field of Citizenship**

Every country desire to make its good citizens. The study of economics provides intelligent and good citizens to the society. The students of Economics learn completely how to make better utilization of goods and services of the country. The formal training is given to all the students through teaching various economic concepts from the beginning of schooling in the form of social studies.

1.6 IMPORTANCE OF ECONOMICS AT SECONDARY EDUCATION LEVEL

Economics is a social science that studies how individuals, governments, firm, businessmen and nation make choices on allocating and distributing scare resources to satisfy their unlimited wants. Economics is concerned with human behaviour such as how people earn their living and how to allocate them and make a choice between alternatives to satisfy their unlimited wants. But in case of producer, the activities are geared to the production of goods and services, what to produce, how to produce, how much to produce, when to produce, how to allocate and distribute in order to satisfy peoples unlimited wants since economics is concerned with human behaviour. So that Economics is a social science, and like any science subject, the reasoning procedure in economics is methodological, its analysis is systematic, and the validity in its various theories.

The study of Economics plays a very crucial role throughout our lives. Now-a-days, economic issues are drawing the attention of every citizen directly and indirectly. Therefore, it is appropriate to include Economics as a distinct area of study in the system of school learning particularly because for most of the students it will be a terminal stage. At the same time, it fits within the frame of schooling wherein it is advocated that education should be relevant to the needs of students. Economics, in comparison to other social science subject has an edge in providing certain job opportunities to the learners and also open the gates for various occupations, if they pursue the study of the subject further. Another most important reason why study Economics is very necessary is that there are many changes occurring in our economy like privatisation, liberalisation and globalisation etc. So that, this makes a strong reason imparting economic education to all the students due to which they may understand these new concept and issues are related with economy. Further, the learning of Economics helps the students to enhance their decision-making power, problem solving power, creativity knowledge and also help the students to participate in different social activities, and also effectively participate in economic and social affairs and take intelligent decision in day-to-day life. In the interest of our own survival and of the nation, there is no education more important than that which help us to understand our economic problems and reflect on them. From the above discussion it's clear that Economics teaching-learning become highly significant in modern times.

1.7 IMPORTANCE OF ICT IN TEACHING LEARNING OF ECONOMICS

Economics being an area which study people and their rational behaviour have to play a significant role in the life of individuals, directly and indirectly everyday life. Learning of Economics must bring certain values in the individual learners and in the society. So that learning of Economics should be a joyful experience to the learners. But in many times the present-day economics classroom is appear to be boring and threatening to many students. Because there is no or only little scope for natural and creative learning of economics knowledge and acquisition of competence. So, learners took economics as a difficult subject. Learners also find it very difficult that they are unable to link what has been learned from the classroom with their real life and feel it is meaningless what they have learned is not functional.

The use of ICT assists the teacher in keeping students' performance record, portfolio records, computing examination results, preparation of lesson notes and making statutory records to

be kept and handled easily. Basically, the utilisation of ICT as a teaching aid for teachers, makes the art of Economics teaching more realistic, dynamic, interesting, interacting and creative, and making learning more concrete, real, immediate and retentive. So that students can able to link what has been learned from the Economics classroom with their real life. In the same time use of ICT make both teaching and learning of Economics more interesting, joyful and pleasurable without reducing from its level of efficacy and effectiveness. Learners can also achieve more result in their economics achievement test if they are taught Economics through ICT.

1.8 RATIONAL OF THE STUDY

Economics being an area which study people and their rational behaviour have to play a greater role in the life of individuals, directly and indirectly. Learning of economics must bring certain values in the individual learners and in the society. So that learning of economics should be effective, joyful and meaningful. But many times, the present-day economics classroom appear to be boring and threatening to many students as there is no or only little scope for natural and creative learning of economics knowledge and acquisition of competence. Learners also find it very difficult to link what has been learned from the classroom with their real life and feel as it is meaningless as what they learned is not functional. So that ICT integrated teaching of economics at secondary level can be made effective, useful, joyful and meaningful. Learners can achieve more in Economics if they will be taught through ICT. Learners can enhance their creative knowledge and innovative power. So, ICT integration class is very crucial in not only for Economics class but also for other classes.

The use of ICT integration class gives the learner opportunity to touch, smell or taste objects in the teaching and learning process of Economics. Consequently, knowledge passed unto the students at different level of educational instructions should be well planned and properly allied with relevant instructional materials for clarity and comprehensibility. Hence significance of this study to the learners, teachers, curriculum planners, educational system and the society at large. To the learners, the effective use of ICT integration class would enable them to effectively learn and retain what they have learnt and thereby advancing their performance in their subject Economics and also in other subjects.

The study is also significant to the educational system and society at large. This is because when teachers solidify their teaching with ICT instructional materials and learners learn

effectively, the knowledge acquired will reflect in the society positively. Learners will be able to understand each and every concept of Economics, functioning of Economy and can interpret government's economic policies and activity and perform economically better in choice of life and work.

1.9 STATEMENT OF THE PROBLEM

Economic education is vital to the future health of our nation's economy. It gives the learners the building block for a successful financial future. Teaching Economics through traditional method is not more effective and interesting. So, students faced a lot of problems in understanding Economics and also unable to link with their real life as it is also a difficult subject. So, through ICT, teaching of Economics can be made more effective, joyful, interesting, interactive and meaningful. Learners can be able to link what they have learned from classroom with their real life and can increase their achievements in Economics.

1.10 OPERATIONAL DEFINITION OF KEY WORDS

The relative key words below were operationally defined relative to their usage in this study.

- **Effect-** In this study, effect is described as significant mean differences of student's post-test over the pre-test achievement scores in Economics.
- **Instructional material-** What the teacher uses to make the lesson more interesting and understandable and joyful and more effective.
- **ICT integration-** ICT integration means use of ICT to introduce, reinforce, supplement and extend skills in teaching learning process.
- **ICT Integrated Teaching-** ICT integrated teaching means to integrate ICT in teaching learning processes like transacting curricular content and students working on technology to do authentic tasks etc. Teachers use different technology in their teaching. Schools use a diverse set of ICT tools to communicate, create, disseminate, store, and manage information.
- **Achievement in Economics-** To measure students' level of skill, accomplishment and knowledge in Economics by taking a test in Economics.
- **Economics-** Economics is the science and art of decision making regarding the allocation of limited resources to satisfy the unlimited human wants.

1.11 OBJECTIVES

The objectives of this study were as follows:

- To compare the mean scores of achievement in Economics of ICT integrated teaching and without ICT integrated teaching on pre-test.
- To compare the mean scores of achievement in Economics of ICT integrated teaching and without ICT integrated teaching on post-test.
- To compare the mean scores of achievement in Economics at pre-test and post-test stages of group taught through ICT.
- To compare the mean scores of achievement in Economics at pre-test and post-test stages of group taught without ICT.

1.12 NULL HYPOTHESIS

The following Null-hypothesis were stated for this study.

- H_0 1: There is no significant difference between mean scores of achievement in Economics of ICT integrated teaching and without ICT integrated teaching on pre-test.
- H_0 2: There is no significant difference between mean scores of achievement in Economics of ICT integrated teaching and without ICT integrated teaching on post-test.
- H_0 3: There is no significant difference between mean scores of achievement in Economics at pre-test and post-test stages of group taught through ICT.
- H_0 4: There is no significant difference between mean scores of achievement in Economics at pre-test and post-test stages of group taught without ICT.

1.13 DELIMITATION

Due to COVID-19 Pandemic the researcher faced a lot of problems in the course of carrying out this study and data collection process from Kendriya Vidyalaya Bhadrak. Due to this dangerous pandemic the Principal of this School hesitated to grant permission to the researcher in data collection from her school. And also, during that time examination were going on of tenth and eleventh class students. After the completion of their examination new session was started and Principal ma'am granted permission to the researcher for research work and data collection work. The researcher had taken three weeks for teaching and achievement test. Due to COVID-19 lockdown the researcher faced a lot of problems.