

**EFFECT OF INFORMATION AND COMMUNICATION TECHNOLOGY  
ON THE TEACHING OF ECONOMICS IN SENIOR SECONDARY  
SCHOOLS IN OREDO LOCAL GOVERNMENT AREA OF EDO STATE**

**BY**

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UNIVERSITY OF BENIN,  
BENIN CITY**

**JANUARY, 2023**

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**A PROJECT RESEARCH SUBMITTED TO THE DEPARTMENT OF  
EDUCATIONAL MANAGEMENT, FACULTY OF EDUCATION,  
UNIVERSITY OF BENIN, BENIN CITY, IN PARTIAL FULFILMENT FOR  
THE REQUIREMENTS OF THE AWARD OF B. SC(ED) DEGREE IN  
ECONOMICS AND STATISTICS**

**JANUARY, 2023**

## CERTIFICATION

We certify that this research was conducted by Owusu Comfort Josephine in the Department of Educational Management, Faculty of Education, University of Benin, Benin City, Edo State, Nigeria.

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**Dr. (Mrs.) N. C. Marchie**  
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**Prof. O. K. Omorogiuwa**  
(Dean, faculty of Education)

Date

\_\_\_\_\_

## **DEDICATION**

This project is dedicated to my parents who have always supported and encouraged me in all of my endeavors.

## **ACKNOWLEDGEMENT**

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## **Abstract**

*The study investigated the effect of information and communication technology on the teaching of economics in senior secondary schools in Oredo Local Government of Edo State. Four questions were raised. Research questions 1 and 2 were answered, while research questions 3 and 4 were hypothesized and tested at 0.05 level of significance.*

*The descriptive survey research which adopted the correlational research design was employed in this study. Thirty (30) economics teachers from fourteen (14) public senior secondary schools in Oredo Local Government Area of Edo State made up the study's population. The sample size comprised of the total population of the study because the population of the study is small. The instrument for data collection was a structured questionnaire which was distributed to the participants. The instrument was retrieved and analyzed using mean and standard deviation for research questions 1 and 2, while the hypotheses were tested using t-test statistics at 0.05 level of significance.*

*The findings of this study revealed that majority of the public senior secondary schools in Oredo Local Government Area have a variety of ICT facilities. The study also showed a strong link between ICT and pupils' academic achievement. Based on the findings it was recommended that all Economics teachers in senior secondary schools in Oredo Local Government Area of the state of Edo should have access to ICT equipment and facilities.*



# **CHAPTER ONE**

## **INTRODUCTION**

### **Background of the Study**

Information and communication technology (ICT) has been incorporated into schools by numerous nations worldwide through a variety of methods. The discipline of training workers in diverse topic areas involves a variety of techniques. A change of strategy, operations, and ICT integration in schools is required to achieve a number of goals and improve the standard of instruction across all subject areas as along with in economics. ICT is viewed as a diverse collection of technology resources and resources for managing, creating, disseminating, and communicating information. Okafor (2010) asserts that "ICT resources offer chances for learning and building an environment that can improve learning.

Consideration should be given to issues relating to Economics and the teaching of Economics as the educational sector undergoes several changes and reforms nowadays. Many teaching methods have been created in order to accommodate the various learning styles and needs of pupils. ICT has a growing influence in many aspects of our everyday life, including work, business, education, learning, leisure, and health (Olaajo, 2010). Thus, the strategic study of the concepts crucial to all

elements of operations, resources, and administration is at the heart of the discipline of economics. Every citizen of this nation wants education to make people's lives better; as a result, this improvement should have an impact on their abilities, understanding, attitudes, and behaviors (Dimkpa, 2011). The world appears to be changing significantly as a result of the usage of ICT in educational settings. ICT appears to be having a positive impact on education. However, this frequently depends on how ICT is utilized by educators, students, and even outside of the classroom in educational institutions. ICT does not seem to be able to fully transform how Economics is taught and learned. A thorough approach that considers the economic backdrop, the learning environment, and the learner is necessary to fully understand the impact of ICT on the teaching and learning of Economics.

Information and communication technology (ICT) applications can be categorized into four main groups:

- Utilizing process skills,
- building knowledge, solving problems,
- helping to explain concepts, and
- expressing ideas (power point, desktop publishing)

The use of digital technology in all facets of teaching and learning is known as ICT in education. Nearly all advanced-country schools teach it. However, there has been justifiable concern over the past three (3) decades that emerging countries have

been reluctant to encourage learning among the majority of their inhabitants (Hubert, 2006). In the developing world, ICT usage in the classroom seems to be growing, making regular verbalization or excess verbalization of words alone in the classroom less efficient for conveying concepts, skills, and attitudes to teach students. As a result, the Nigerian government program pushed for teachers to fast convert to more internet and web-based work in schools. Today, it appears that technology has had a considerable impact on the classroom and has integrated itself into the process of instruction and learning. Conversely, economics is renowned for its abstract nature as a social science field. This has an impact on students' decision to study Economics in senior high school. Sometimes teachers lack adequate skills in the transmission of knowledge in Economics, and as a result, they rely on theories that might be in opposition to what the economic theory states or implies. Nevertheless Economics is a unique discipline that promotes the development of specialized science knowledge and abilities while simultaneously understanding the natural processes of societal life.

Despite the fact that economics is an abstract subject, the aim of its instruction is to foster in learners a scientific way of thinking, one that requires them to test their hypotheses through empirical research. Nevertheless, the use of ICT, such as CDROM, PowerPoint, and others, in the teaching and learning of economics seems to make it fascinating. The traditional instructional approach (non-ICT materials)

appears incapable of realizing the objectives of Economics teaching in this age of information explosion and globalization. ICT must be incorporated as a necessary instructional tool in order to properly teach and study economics in our secondary schools.

### **Statement of the Problem**

Parents and education stakeholders are concerned that very few students in our schools choose economics as an elective subject. They further asserted that students who study economics score poorly on both internal and external examinations, which leads to bad outcomes. In light of this, the study looks to examine if the usage of information and communication technology (ICT) in senior secondary schools in the Oredo Local Government Area of Edo State might modify and influence students' decisions and performance in economics.

### **Research Questions**

The study was framed around four research questions. Research questions 1 and 2 will receive direct responses, whilst questions 3 and 4 will receive hypotheses that will be examined at a 0.05% level of statistical significance.

1. What is the level of availability of ICT for Economics teachers in senior secondary schools in Oredo Local Government Area of Edo state?
2. What is the level of utilization of ICT in teaching Economics in senior secondary schools in Oredo Local Government Area of Edo state?
3. Is there any significant difference between the use of ICT and the traditional method in teaching Economics in senior secondary schools in Oredo Local Government Area of Edo state?
4. Is there any significant effect of using ICT in the teaching of Economics on senior secondary school students in Oredo Local Government Area of Edo state?

### **Research Hypothesis**

1. Is there any significant difference between the use of ICT and the traditional method in teaching Economics in senior secondary schools in Oredo Local Government Area of Edo state?

Ho: There is no significant difference between the use of ICT and the traditional method of teaching economics.

H1: There is a significant difference of economics between the use of ICT and the traditional method of teaching economics.

2. Is there any significant effect of using ICT in the teaching of Economics on senior secondary school students in Oredo Local Government Area of Edo state?

Ho: There is no significant effect of using ICT in the teaching of economics.

H1: There is a significant effect of using ICT in the teaching of economics.

### **Purpose of the Study**

The primary goal of this study is to investigate the effects of ICT on the teaching of Economics in secondary schools in Edo state's Oredo Local Government Area. Among the specific goals are:

1. To find out the level of availability of ICT for Economics teachers in senior secondary schools in Oredo Local Government Area of Edo state.
2. To determine the level of utilization of ICT in teaching Economics in senior secondary schools in Oredo Local Government Area of Edo state.
3. To identify any significant difference between the use of ICT and the traditional method in teaching Economics in senior secondary schools in Oredo

Local Government Area of Edo state.

4. To investigate if there is any significant effect of using ICT in the teaching of Economics on senior secondary school students in Oredo Local Government Area of Edo state.

### **Significance of the Study**

The significance of this study extends across multiple levels of Nigeria's educational system, from policymakers and stakeholders to the primary beneficiaries, students. In order to facilitate effective teaching-learning, this research aims to provide information to federal, state, and educational authorities about the availability of ICT facilities in secondary schools for teaching Economics as well as the extent to which teachers and students are making use of these resources. Additionally, it is hoped that the study will highlight the ICT weaknesses in secondary schools so that authorities can more rapidly assist those institutions in removing obstacles to student progress.

This research can also help head teachers, principals, and school administrators. This is because it seeks to determine how the use of ICT will improve

students' academic performance. Students who are proficient with ICT, especially those who study economics in senior secondary schools, will learn how to independently evaluate economics information, which will improve their skills and performance on tests. When teachers use ICT, students feel that learning is simpler, more grounded, and more tangible.

It is hoped that this work will be helpful to scholars and future researchers working in the field of ICT in the teaching and learning of Economics or in related fields, and that the findings will increase the contribution to the body of knowledge by taking up research work on some suggested areas for future studies towards the nation's development generally.

### **Scope and the Delimitation of the Study**

The goal of this study is to determine how ICT affects economics instruction and learning in senior secondary schools in the state of Edo. The study is restricted to senior secondary schools in Oredo Local Government Area of Edo state due to time and funding restrictions.

### **Definition of Terms**

- **Effect:** The process by which an event, an action, or a person alters someone or something. It is the transformation (outcome) that one person or thing creates in another person or thing.

- **ICT (Information and Communication Technology):** Any device that stores, retrieves, manipulates, transmits, and analyzes information electronically in digital form is referred to as an ICT. This includes the internet, mobile devices, and broadcasting technologies.
- **Economics:** Economics is a social science that examines how people behave in respect to limited resources and multiple uses of those resources.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **Introduction**

This chapter focuses on the review of related literature in the study. This study is discussed under the following sub headings:

- a. Concept of ICT as a teaching method.
- b. Level of availability of ICT for economics teachers.
- c. Level of utilization of ICT in the teaching of economics.
- d. Difference in the use of ICT and the traditional method of teaching economics
- e. The effect of ICT on Economics students' performance.

## **Concept of ICT as a teaching method**

According to Murray (2011), ICT, also known as information and communication technology, highlights the value of integrated communications as well as the integration of telecoms (telephone lines and wireless signals), computers, and other relevant software. Information and communication technology (ICT) is defined by Merriam Webster Dictionary (2011) as the field of technology concerned with the creation, upkeep, and application of computer systems, software, and networks for the processing and delivery of data. To gather, process, and present information, ICT refers to a group of instruments, procedures, and methodologies (such as coding and programming, data communications, data conversion, storage and retrieval, systems analysis and design, and systems control) as well as related hardware.

ICT also encompasses telecommunications, multimedia, and office automation. ICT is also described by Ofodu (2007) as electronic or computerized tools that can be used for both personal and professional purposes, aided by human and interactive resources. Singh (2013) defined ICT as a group of technological resources and tools that are used to transfer, organize, and retain information; nonetheless, there are two main categories in which ICT is employed in the educational process:

1. ICT for education

2. ICT in education.

ICT in education, as opposed to ICT for education, refers to the usage of generic ICT components within the instructional process. ICT for education refers to the creation of ICT expressly for teaching and learning objectives (Okoro and Ekpo, 2016). ICT in education exemplifies how modern man's existence and activities have changed as a result of the development of ICT, especially in the setting of globalization. Recently, there has been a lot of national and worldwide lobbying for the use of ICT in the teaching and learning processes (Okoro and Ekpo, 2016). ICT has an impact on education, especially in terms of research and teaching strategies. According to Davis and Tearle (2014), who were cited by Yusuf (2015), ICT has the potential to quicken, improve, and broaden aptitude changes. This is due to the fact that ICT may improve instruction by igniting and involving students, as well as by assisting schools in comprehending financial and practical practices. Ashley (2016) emphasizes how important it is for children to learn about ICT in order to become responsible citizens as our societies become increasingly dependent on technology. According to Ashley, technology helps teachers prepare their kids for life in the real world. The usage of ICT in the classroom is a pertinent and beneficial method of delivering teaching that will enhance students' education and provide them the skills

they need for the workplace. Because ICT in schools gives teachers greater educational content and more effective teaching and learning strategies, they can change the way they approach their lessons. ICT enhances the educational process by putting together interactive learning resources that raise learner motivation. For students of all ages, the utilization of diverse multimedia resources such as television, records, movies, and computer programs promotes a more demanding and engaging learning environment (Haddad and Jurich, 2014).

ICT seems to have expanded the adaptability of educational communication by allowing students to access resources at any time and place. ICT in the classroom can

be advantageous for students who don't have access at home. It can be used as a learning device to provide instructions to students in order to improve their learning and retention (Aslan and Dogdu, 2013). This technology helps to accelerate study time while simultaneously energizing and motivating the classroom. ICT can raise learner motivation and teacher training, which are the building blocks of higher order thinking skills, and hence enhance the quality of instruction (Aslan and Dogdu, 2013).

ICT has essentially changed how people learn by integrating it into the classroom's teaching and learning process (Agrahari and Singh 2013). It is recognized as the most powerful mass communication tool and has profoundly

changed the way that education is delivered. Poulter and Basford (2013) assert that ICT is a teaching instrument with tremendous potential for enhancing the standards and tenets of students' learning.

### **Availability and Utilization of Information and Communication Technology (ICT)**

ICT facilities are a requirement for successful ICT integration into the educational system. It is crucially important that teachers have positive attitudes and technical proficiency when it comes to using modern technologies in the classroom. To include technology into Economics, ICT must be incorporated into teaching strategies. Every teacher and student can use ICT equipment since ICT facilities are readily available as a teaching aid (Ajayi & Ekundayo, 2009). When it comes to teaching economics, information and communication technology is used to improve and promote teachers' creativity. ICT can improve teaching, according to Akuegwu (2011), by enhancing, deepening, and accelerating instructors' skill sets as well as inspiring them. Additionally, it can facilitate student success and lead to significant adjustments in educational settings. Therefore, it is necessary to employ ICT to improve economics teaching. As a result, only when ICT resources are readily available and accessible will they be useful in education. Additionally, according to Agbo (2015), the majority of instructors are prevented from using ICT in the

classroom since they do not always have access to it when they need it. This suggests that in order for instructors to use ICT successfully and appropriately to teach Economics in senior secondary schools, they must have access to ICT facilities.

When appropriate information and communication technology resources are provided in the classroom and are used properly, the quality of education is significantly improved. Access to modern ICT resources, such as computers and other accessories, is now vital for educators. The computer is the most crucial tool for the growth of education, according to Okeke (2013). This suggests that computers continue to be the main technology for instruction in the present day. The success of using ICT for teaching greatly depends on the accessibility of facilities. As technology advances, educators must adapt to the new infrastructure and increase their openness to, proficiency with, and knowledge of using ICT to properly teach economics in the classroom (Ike, 2014). Utilizing the available ICT resources won't be sufficiently interesting unless the students have the knowledge, skills, and guts to apply it to their daily work (Okogu, 2011). According to William (2010), the usage of facilities in the classroom is a major problem for instructors all around the world. In other words, it is essential to teach economics using computers.

Utilizing facilities suggests that a business, particularly one in the education

sector, makes acceptable use of the resources at its disposal to carry out the curriculum effectively. Hornby (2015) defined utilization as the use of something, particularly for a practical purpose. Utilization is the process of employing things to enhance instructional practice, according to Amalu (2015). Therefore, "use of contemporary ICT facilities in teaching" refers to a strategy for leveraging ICT to improve the quality and style of instruction in secondary schools. A variety of techniques, such as computer-based networks, audio and video conferencing, the internet, and computer-assisted training, must be implemented in order to maximize the utilization of ICT resources (Ajayi, 2008). ICT is used to organize and deliver educational content through electronic teaching in order to increase learning and communication (Yusuf, 2005). This suggests that when existing ICT resources are used successfully, modern tools for stimulating teaching, learning, and research are integrated. Ngurukwem (2005) defined utilization as the time allotted to carrying out a plan for utilizing educational resources at all levels. In order to effectively teach social economics in senior secondary schools in the Oredo Local Government Area of Edo State, it has become essential to make use of all available educational resources, particularly ICT resources like computers and other ICT peripherals. Chigano (2010) argues that employing computers and web technology in the classroom is essential evidence of a teacher's ability to do their job. In his study, Ajayi (2008) argues in favor of the proposition that effective ICT integration into education

depends on both the availability of appropriate ICT facilities and teachers who are proficient at using them. The term "availability" in this study refers to services and resources that may be easily accessed in order to conduct educational activities. Abifarin (2015) argues that availability refers to the readiness of resources for use, their usability, or the ease with which new applications can be created.

The availability of ICT resources and enough staff will motivate pupils and improve teachers' effectiveness. The degree of consumption is a significant problem in regard to availability. Utilization was defined by Ngurukwem (2005) as the time spent using educational resources throughout all stages of a program. According to Chigano (2010), the use of computers and web innovation in the classroom is crucial proof of a teacher's competence to carry out their duties. It is important to determine how much of the ICT infrastructure is being used to educate economics students in the Oredo Local Government Area of Edo State. The availability and use of ICT facilities in senior secondary schools in Edo State's Oredo Local Government Area must then be investigated. The Nigerian youngster needs a learning environment that is driven by ICT. In Nigerian classrooms in the past, the chalkboard and textbooks were the main focal points. Although radio, television, and cinema have all been employed in the educational process in numerous nations throughout the world, they don't seem to be prevalent in Nigerian classrooms. A computer can also trigger the user's sense of touch and hearing. It is possible to offer higher levels of interactivity and foster users'

individual intellectual and creative capacities. In line with the National Policy on Education, the government is responsible for providing senior secondary schools with the ICT infrastructure and training they require. However, research data suggest that senior secondary schools in Edo State's Oredo Local Government Area may lack some of the ICT resources available for instruction and learning. As a result, it's important to identify the ICT resources that senior secondary schools can use to teach economics. Therefore, the issue that this study asks in the form of a question is: to what extent are ICT resources available and used to teach economics in senior secondary schools in the Oredo Local Government Area of Edo State?

### **Difference in the Use of ICT and the Traditional Method of Teaching Economics**

Marriott et al. (2004) investigated senior students' use of information and communication technology (ICT) and their opinions on using the internet. The degree to which technologies are used varies from school to school; in comparison to female students, male students had greater computer literacy, better analytical skills, and better spreadsheet skills. While a sizable portion of students indicated that they preferred conventional face-to-face training, they were also favorable toward the usage of the Internet as a teaching tool when it served only as a supplementary function.

Due to the rising interest in using the Internet to enhance student-centered teaching and the demand for distance education, many higher education institutions implemented the virtual environment into their curricula to enable them to teach accounting to open and remote learning students. In this regard, it may be stated that innovative and creative learning methods stimulate students to learn with new technologies (Kozma, 1991), which may have an impact on how much students "embrace" the internet as a teaching tool to some level (De Lange et al. 2003).

### **The Effect of ICT on Economics students' performance**

Does ICT impact the results of learning? This issue has been brought up as one of the most interesting and important since the inception of ICT use, but the proof of the influence of ICT is still patchy (Condie, Munro, Seagraves, & Kenesson, 2007). Studies conducted to find an answer to the question have unavoidably reflected current culture and educational practices. ICT in general and computers in particular, have frequently been researched in education as unconnected, stand-alone problems unrelated to the overall learning environment, as well as unrelated to the pedagogical framework. Tondeur, van Braak, and Valcke (2006) give the studies into the technical applications used in ICT—and frequently even applications used in a

variety of subjects—as examples. It was common practice between 1980 and 1995 to compare instruction with and without the use of computers, followed by an examination of the results. It was formerly believed that computers could replace teachers as instructors. Similar to this, it was believed that a computer would serve as an endless tutor for drill-and-practice exercises, offering unique difficulties on the subjects to be studied. There are studies where teachers assess whether learning outcomes are improved by ICT; these studies tend to reveal more about general expectations or attitudes than they do about the genuine impact of ICT on academic results. Some "snapshot" surveys could also demonstrate learning impacts, though they were conducted when using ICT in the classroom was still somewhat novel, thus the benefits reflect the uniqueness of the intervention (Condie et al., 2007). There are also several meta analyses, but there are no conclusive results from the studies on the factors that affect student performance (Bayraktar, 2000–2001). The results of meta-analyses conducted between the years of 1980 and 1994, as summarized by Lowe (2000–2001), as summarized by Lowe (2000–2001), demonstrated that computer-based education improved student achievement when compared to traditional classroom instruction. However, the results were frequently more complicated: The number of studies included in the meta-analysis resulted in a smaller effect size; the applications included simulation and tutoring; the instructor's (teacher's) role was frequently vital but varied much; and the teacher's function was frequently crucial but

varied greatly. The findings of this research on the "Effects of ICT on the Teaching of Economics in Senior Secondary Schools" will be used to assess where they stand right now.

The first side effects of ICT are typically difficult to pinpoint. Furthermore, given the diversity of studies, evidence, and research, it could be challenging to draw firm conclusions about the consequences of ICT. Effective comparison is constrained by a variety of variables, including differences in sample sizes, techniques, and effects, in addition to the various variations among international educational systems. Despite these reservations, a number of information technology-related effects on learning outcomes are established. They consist of:

#### **•ICT and Student Achievement**

The question of whether and how much ICT can improve student achievement is frequently at the forefront of discussions about ICT's effects on education. According to studies conducted by the British Educational Communication and Technology Agency, there is proof of a statistically positive relationship between information technology and increased achievement (BECTA 2000).Lowe (2001) found that, as compared to conventional classroom instruction, computer-based

education has a positive impact on students' achievement.

- **Personal Learner Interaction**

Recent trends toward the integration of teachers and learners have suggested the use of ICT to enhance the learning experience. Teachers' pedagogical methods must shift from learner-based to teacher-based in order to effectively integrate ICT in education (Underwood, 2008). ICT is also ideally suited for creative learning approaches that encourage experimentation and critical thinking because of its interactive character.

- **Fostering Learner Autonomy**

ICT enables increased differentiation (particularly in secondary schools) with programs catered to the needs of specific students. In other words, ICT gives teachers the chance to give different learning assignments to students in the same classroom for their benefit. When students utilize ICT more efficiently and independently, they take on more responsibility for their own learning.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **Introduction**

This chapter explains the steps and procedures followed as well as the instrument used in the collection of data and the method used in analyzing the collected data in this study under the following headings:

1. Research Design
2. Population of the Study
3. Sample and Sampling Techniques

4. Research Instrument
5. Validity of Instrument
6. Reliability of Instrument
7. Method of Data Collection
8. Method of Data Analysis

### **Research Design**

The research approach for this study was a descriptive survey research method with a correlational research design

### **Population of the Study**

The study's population comprises of thirty (30) economics teachers from fourteen (14) public senior secondary schools in Edo state's Oredo Local Government Area.

### **Sample and Sampling Technique**

The sample size for this study consisted of all the thirty (30) economics teachers which were gotten from all the fourteen (14) senior secondary schools in Oredo local government area. The sample is made up of at least two (2) teachers each from the fourteen (14) senior secondary schools in Oredo Local Government Area.

## **Research Instrument**

The instrument of data collection for the study was a standardized questionnaire titled “The Effect of Information and Communication Technology on the Teaching of Economics in Senior Secondary Schools (EICTTESSS)” designed by the researcher. The questionnaire has twenty (20) items intended to gather data on the effect of ICT on economics students and teachers.

## **Validity of Instrument**

The instrument for the study was devised by the researcher. The instrument was validated by two departmental experts. All corrections were incorporated in the study.

## **Reliability of the Instrument**

Cronbach's Alpha was used to assess the instrument's reliability. With a reliability coefficient of 0.87, the research instrument displayed good reliability.

## **Method of Data Collection**

The researcher prepared thirty (30) questionnaires. The questionnaire was distributed to thirty (30) Economics teachers in the fourteen (14) senior secondary Schools in

Oredo local government area. The questionnaire was administered by the researcher in person to the population. Permission was sought from the school administration before distributing the questionnaire. The completed questionnaires from the teachers were collected and examined.

### **Method of Data Analysis**

The data from the study was examined using mean statistics and standard deviation for research questions 1 and 2, and T-test statistics for the hypothesis.

## **CHAPTER FOUR**

### **PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS**

This chapter is focused on data presentation, analysis, and interpretation. The chapter also examines the primary findings of the Effect of Information and Communication Technology on the Teaching of Economics in Senior Secondary Schools in Oredo Local Government Area, Edo State. Every piece of data presented, examined, and interpreted is dependent on the results of the questionnaire.

#### **Presentation of Results**

**Research Question 1:** What is the level of availability of ICT for Economics teachers in senior secondary schools in Oredo Local Government Area of Edo State?

**Table 1: Description of the level Availability of ICT for Economics Teachers in Senior Secondary Schools in Oredo Local Government Area**

Variable	N	Sum	Mean	SD	Theoretical mean	Decision
Availability of ICT	30	406	13.53	2.30	7.50	High

Table 1 reveals that a mean value of 13.53, a standard deviation of 2.30, and a theoretical mean of 7.5 were obtained from the 30 respondents. As a result, the mean value is bigger than the theoretical mean, indicating that ICT is widely available for Economics teachers in senior secondary schools in Oredo Local Government Area.

**Research question 2:** What is the level of utilization of ICT in teaching Economics in senior secondary schools in Oredo Local Government Area of Edo state?

**Table 2: Descriptive Statistics of the utilization of ICT in teaching Economics in senior secondary schools in Oredo Local Government Area**

Variable	N	Sum	Mean	SD	Theoretical mean	Decision
Utilization of ICT in Teaching Economics	30	455	15.17	3.18	7.50	High

Table 2 shows that respondents had a mean value of 15.17, a standard deviation of 3.18, and a theoretical mean of 7.5. Because the mean value surpasses the theoretical mean, there is extensive use of ICT in senior secondary schools in the Oredo Local Government Area.

**Hypothesis One:** There is no significant difference between the use of ICT and the traditional method of teaching Economics.

**Table 3: One Sample t-test of difference between the use of ICT and the traditional method in teaching Economics in senior secondary schools in Oredo Local Government Area**

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<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>t-test</b>	<b>df</b>	<b>sig.(2 tailed)</b>
Use of ICT and Traditional Method	30	15.93	2.52	18.34	29	.000

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**Test value = 7.5**

Table 3 indicates a single sample t-test result of 18.34 and a p-value of .000 when tested at an alpha level of 0.05; the p-value is less than the alpha level ( $p < 0.05$ ). As a result, the null hypothesis, which claims that there is no substantial difference

between using ICT and the traditional way of teaching Economics, is dismissed. As a result, there is a substantial difference between the use of ICT and the traditional technique in teaching Economics in senior secondary schools in Oredo Local Government Area.

**Hypothesis Two:** There is no significant effect of using ICT in the teaching of Economics on senior secondary school students in Oredo Local Government Area.

**Table 4: One Sample t-test of the effect of using ICT in the teaching of Economics on senior secondary school students in Oredo Local Government Area**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>t-test</b>	<b>df</b>	<b>sig.(2 tailed)</b>
Use of ICT in Teaching Economics	30	16.86	3.10	16.52	29	.000

**Test value = 7.5**

Table 4 shows a one-sample t-test result of 16.52 and p-value.000 when testing at an alpha level of 0.05. Because the p-value is less than the alpha level (p 0.05), the null

hypothesis that there is no significant effect of using ICT in Economics instruction is dismissed. As a result, using ICT in Economics instruction has a significant effect on senior secondary students in Oredo Local Government Area.

### **Discussion of Findings**

The findings of research question one indicate that Economics teachers can use ICT to aid in their learning and classroom instruction. The results strongly demonstrate that the provision of ICT facilities is crucial for the successful integration of ICT into the educational system. The way that teachers feel and are capable of using these contemporary tools in the classroom is equally significant. ICT must be incorporated into instructional practices. This finding is similar with Ajayi and Ekundayo (2009), who observed that the availability of ICT facilities as a teaching tool allows every instructor and student to work with ICT gadgets.

The result of research question two suggests that ICT is used to teach economics in the Oredo Local Government Area of Edo State. This study unambiguously shows that the use of information and communication technology aids in the enhancement and encouragement of teachers' creativity,

and that this is equally true for economics instruction. In accordance with these ideas, Akuegwu (2011) asserts that ICT has the potential to increase teaching by accelerating, enhancing, and deepening teachers' skill sets, as well as motivating them; assisting in relating school proficiency; and contributing to radical changes in schools.

The results of Hypothesis 1 on the significant difference between using ICT and the traditional method of teaching economics show that the p-value and alpha level of the relationship between using ICT and the traditional method are .000 and 0.05, respectively. Because the p-value is less than the alpha criterion ( $p < 0.05$ ), there is a positive relationship between ICT use and conventional techniques. As a result, the premise that there is no significant difference between employing ICT and traditional methods is unsupported. As a result, there is a substantial difference between using ICT and traditional methods of teaching Economics. This finding is in line with Lowe (2001) who claimed that as compared to conventional classroom instruction, computer based education has a positive impact on students' achievement.

The results of hypothesis two reveal that the p-value and alpha level of the effect of using ICT in the teaching of Economics on senior secondary students

in Oredo Local Government Area are.000 testing at an alpha level of 0.05, respectively. Because the p-value is less than the alpha level ( $p < 0.05$ ), it implies that employing ICT in Economics instruction has a significant effect. As a consequence, the hypothesis that employing ICT in Economics instruction has no significant effect is dismissed. This finding is in line with the research conducted by the British Educational Communication and Technology Agency (BECTA 2000) that there is an evidence of a statistically positive association between Information Technology and higher achievement.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **Introduction**

This chapter highlights the inquiry into the Effect of Information and Communication Technology on Economics Teaching in Senior Secondary Schools in Oredo Local Government Area, Edo State. The chapter includes a summary, conclusion, and recommendations.

## **Summary**

The purpose of the study was to examine the effect of ICT on the teaching of Economics in senior secondary schools in the Oredo local government area. The descriptive survey design was used in the study to bring these to light. The sample size for this study was thirty (30) teachers drawn from all fourteen (14) senior secondary schools in the Oredo local government. The sample size for the study was thirty (30) respondents.

## **Conclusion**

- i. Information and Communication Technology has an effect on the teaching of Economics; the respondents agreed that availability of ICT in the teaching of Economics in Oredo local government area has improved the quality of Education in Nigeria.
- ii. The use of ICT as a teaching tool has made Economics research easier and faster; hence, respondents agreed that the level of utilization of ICT in the teaching of Economics in Oredo local government area is high.
- iii. The use of ICT in the classroom In contrast to the conventional style of teaching economics provides access to more resources via the internet; thus,

respondents stated that there is a major difference between the use of ICT and the traditional method of teaching in the Oredo local government area.

- iv. Communication and Information Technology has an impact on students' academic performance in Economics at the senior secondary level in the Oredo local government area. The majority of the respondents agreed that ICT makes it easier for students to acquire the critical cognitive abilities needed for efficient economics analysis and evaluation.

To improve the effectiveness of economics training in the classroom, it is apparent that Nigeria and Edo State both need to utilize information and communication technology. Our society can only develop through advancing knowledge, introducing more technology, and increasing human manipulation and control over the elements of the physical world. In conclusion, senior secondary school pupils should receive the best instruction possible along with cutting-edge facilities to bring out the best in each student and assure their usefulness for Nigeria's and the rest of the world's development.

## **Recommendations**

The following recommendations are given based on the findings of this

research:

i. All Economics teachers in Oredo local government area of Edo state should have access to ICT equipment and facilities.

ii. Seminars, workshops, conferences, and other relevant programs should be arranged by ICT professionals to educate Economics teachers about modern technology and its applications.

iii. ICT technique is relatively new and should be incorporated into the senior secondary school curriculum of Economics. Consequently, schools supplied with computer systems by Government and other non-governmental agencies require the need for ICT packages in different subjects to be installed on them for use. This will assist Economics teachers in enhancing their abilities and competencies in

instructional delivery.

iv. The country's inconsistent power supply needs to be improved because ICT depends heavily on it. Furthermore, individual school administration should develop a backup power supply strategy, such as a generator set, in the event of a power outage.

v. The government and other stakeholders should offer additional computers, laptops, ICT software and computer laboratory equipment to schools to enhance Economics teachers' lesson in senior secondary schools.

Secondary schools throughout the country must be provided with adequate funds, infrastructure in the form of modern classrooms equipped with electronic computer systems that are connected to the internet, well-equipped laboratories, workshops, libraries, instructional materials, and highly qualified personnel who can effectively use these resources if they are to maintain the highest educational standards. With the introduction of ICT, economics teaching and learning have become more effective and efficient not only in Edo State, but throughout the country.

### **Suggestions for further Study**

Based on the finding of this study and the educational implication of the finding the following recommendations are made;

1. Factors militating against teachers in the use of ICT in teaching and learning.
2. Funding problem in the use of ICT in teaching and learning.
3. Strategies for improving teacher and student participation in the use of ICT learning of Economics.
4. Application of ICT in teaching and learning of Economics.

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## **APPENDIX**

## QUESTIONNAIRE FOR ECONOMICS TEACHERS

**Please tick ( ✓ ) in the option that most appropriately describes your opinion**

### KEY

SA – Strongly Agree,    A – Agree,    D- Disagree,    SD- Strongly Disagree

S/N	Statement	SA	A	D	SD
	<b>What is the level of availability of ICT for Economics teachers?</b>				
1.	There are enough computers in my school for the teaching and learning of Economics.				
2.	There are inadequate ICT facilities to support the teaching of economics in secondary schools.				
3.	The school management does not consider the use of ICT facilities in the				

	teaching of economics due to irregular power supply.				
4.	Lack of proper emphasis on the use of ICT for practical teachings in schools.				
5.	Inadequate funding to purchase ICT facilities for the teaching of economics due to high cost of purchasing them.				
	<b>What is the level of utilization of ICT in teaching Economics?</b>				

6.	Lack of skilled teachers to use ICT facilities in teaching of economics.				
7.	Reluctance to adapt to the use of ICT facilities in the teaching of economics.				
8.	Lack of computer literate teachers impedes the utilization of ICT facilities in secondary schools.				
9.	The use of ICT makes the teaching of economics less vague and more comprehensible.				
10.	The use of ICT as a teaching tool in Economics has made research easier and faster.				
	<b>Is there any significant difference between the use of ICT and the traditional method of teaching economics?</b>				
11.	ICT has helped in the teaching of Economics by making the subject more practicable.				
12.	Unlike the traditional method of teaching, ICT has made it easy for				

	students to commit to memory the teachings on Economics.				
13.	Traditional method of teaching Economics is less complex compared to the use of ICT facilities in teaching Economics.				

14.	The use of ICT in teaching economics unlike the traditional method, gives access to more resources via the internet which is a further aid to teaching economics.				
15.	With the versatile nature of ICT, students have become vast in learning Economics.				
	<b>Is there any significant effect of using ICT in the teaching of economics on senior secondary school students?</b>				
16.	The use of ICT helps to improve the engagement and knowledge retention among students.				
17.	The use of ICT in teaching economics helps the students to better understand the subject.				
18.	ICT facilitates the acquisition of important cognitive skills required for effective economic analysis and evaluation.				
19.	ICT has improved the technique of teaching economics through the use of projectors and computers.				
20.	The use of ICT in teaching economics enhances team work among students and also fosters the acquisition of technological knowledge.				

## Descriptives

### Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
AvalabilityICT	30	10.00	18.00	406.00	13.5333	2.30042
Valid N (listwise)	30					

DESCRIPTIVES VARIABLES=UtilzationICT

/STATISTICS=MEAN SUM STDDEV MIN MAX.

## Descriptives

### Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
UtilzationICT	30	8.00	20.00	455.00	15.1667	3.18491
Valid N (listwise)	30					

T-TEST

/TESTVAL=7.5

/MISSING=ANALYSIS

/VARIABLES=ICTTraditional  
 /CRITERIA=CI(.95).

**T-Test**

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
ICT Traditional	30	15.9333	2.51798	.45972

**One-Sample Test**

	Test Value = 7.5					
	95% Confidence Interval of the Difference					
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
ICT Traditional	18.345	29	.000	8.43333	7.4931	9.3736

T-TEST

/TESTVAL=7.5

/MISSING=ANALYSIS

/VARIABLES=ICTUsing /CRITERIA=CI(.95).

## T-Test

### One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
ICT Using	30	16.8667	3.10432	.56677

### One-Sample Test

	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
					95% Confidence Interval of the Difference	
					Test Value = 7.5	

ICT Using	16.526	29	.000	9.36667	8.2075	10.5258
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