INFLUENCE OF COMPUTER LITERACY ON STUDENTS LEARNING OUTCOME IN PUBLIC JUNIOR SECONDARY SCHOOLS IN EDO STATE

BY

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EDU2102088

DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY

UNIVERSITY OF BENIN

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE BACHELOR OF EDUCATION B.SC (ED) DEGREE IN COMPUTER SCIENCE EDUCATION

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CERTIFICATION

We, the undersigned, hereby certify that this research work was carried out by Saheed AUDU of the Department of Curriculum and Instructional Technology, Faculty of Education, University of Benin, Benin City.

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DEDICATION

The work is dedicated to God Almighty, the Beginning and the End. The work is also dedicated to my wonderful parents, Mr. and Mrs. Bello and also to the love of my life, Binta Audu.

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ABSTRACT

The study investigated the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. To achieve the purpose of the study, four research questions were raised and answered.

The descriptive survey research method was adopted for the study. The population for this study consisted of all the 5,109 public junior secondary school students (JSS I - JSS III) in the 12 public junior secondary schools in Egor Local Government Area of Edo State. The sample size for the study was made up of 120 respondents. For data analysis, mean and standard deviation were used to calculate the research findings.

The findings from the study include that there is high level of computer literacy among students in public junior secondary schools in Egor Local Government Area of Edo State. It was concluded that there is a significant impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area. The study recommended among others that the government and relevant stakeholders should ensure that public junior secondary schools in Egor Local Government Area are equipped with sufficient computers, internet access, and uninterrupted power supply. These resources are essential for fostering effective computer literacy and improving students' learning outcomes.

CHAPTER ONE

INTRODUCTION

Background to the Study

In the 21st century, the advancement of information and communication technology (ICT) has significantly transformed every sector of human endeavor, particularly the educational sector. One of the major components of ICT integration in education is computer literacy, which refers to the knowledge and ability to use computers and related technologies efficiently for learning, communication, problem-solving, and productivity (Udoma, 2022). The global educational community now recognizes computer literacy as an essential skill, comparable to reading and writing, due to its importance in facilitating access to information, improving research skills, and enhancing overall learning experiences. In response, many countries, including Nigeria, have introduced computer studies into their school curricula to prepare students for the challenges and opportunities of the digital age.

Computer literacy refers to an individual's ability to effectively use computers and related technology to perform a wide range of tasks. It involves not only the basic operation of computer systems, such as turning on the computer, using a mouse and keyboard, and managing files and folders, but also the ability to use various software applications (Nwokolo, 2020). These may include word processors, spreadsheets, web browsers, and communication tools like email and social media platforms. A computer-

literate person can navigate digital environments, search for and evaluate information online, and use digital tools for work, study, or entertainment. In many cases, computer literacy also includes understanding basic troubleshooting techniques and maintaining digital devices. This foundational knowledge is increasingly essential in modern society, as computers are integrated into almost every aspect of daily life, including education, business, health care, and government operations.

The concept of computer literacy extends beyond just using a computer—it also encompasses understanding the ethical, social, and security implications of technology use. It includes knowledge of internet safety, protection of personal information, and responsible digital behavior (Dokunbor, 2023). A computer-literate individual is aware of the importance of cybersecurity, data privacy, and intellectual property rights. In addition, computer literacy fosters critical thinking and adaptability, as technology continues to evolve rapidly. In educational settings, students need computer literacy to conduct research, complete assignments, and access learning materials. In the workplace, it is a vital skill for communication, data analysis, and project management. Being computer literate allows individuals to participate fully in the digital world, improve their career prospects, and access information and services with ease. As such, promoting computer literacy is crucial for students' learning outcome.

Students' learning outcome refers to the specific knowledge, skills, attitudes, and values that students are expected to acquire and demonstrate after a period of learning.

These outcomes are typically stated as measurable goals that guide teaching strategies, assessment methods, and curriculum development. Learning outcomes help educators understand what students should know and be able to do at the end of a lesson, course, or programme (Lawal, 2021). They provide a clear direction for both teaching and learning by aligning instructional activities with educational objectives. Examples of learning outcomes include the ability to analyze information, solve problems, communicate effectively, or apply theoretical concepts in practical situations. By focusing on outcomes, schools and teachers can assess whether students are making meaningful progress and identify areas that require improvement. Overall, learning outcomes serve as important tools for promoting accountability and improving the quality of education.

The influence of computer literacy on students' learning outcomes in secondary schools is increasingly significant in today's digital age. Students who possess computer literacy skills are better equipped to access online educational resources, use academic software, and complete assignments efficiently (Erhivona, 2023). Computer literacy skills enable students to navigate virtual learning platforms, conduct research, and collaborate with peers beyond the classroom walls. With the integration of technology into teaching methods, students with strong computer literacy can engage more actively in learning, understand complex concepts through multimedia, and develop critical thinking and problem-solving skills. Teachers also find it easier to deliver lessons using digital tools when students are computer literate, enhancing the teaching-learning process. Overall,

computer literacy not only improves academic performance but also prepares students for future educational opportunities and the demands of the modern workforce.

Moreover, computer literacy contributes to the development of essential competencies that directly impact students' academic success in secondary schools (Adewuyi, 2020). For example, computer-literate students can efficiently use educational platforms to submit assignments, participate in online discussions, and receive timely feedback from teachers. This fosters self-directed learning and responsibility. In science and technical subjects, simulation software and virtual labs enhance understanding of abstract topics, leading to better learning outcomes. Computer literacy also promotes digital communication skills, enabling students to share ideas, collaborate on projects, and interact in a global learning environment. Additionally, assessments administered through digital platforms become more effective and accessible, allowing students to track their progress over time. As the educational system continues to embrace technology, students' ability to effectively use computers becomes a vital factor in achieving academic excellence and long-term educational goals (Emenike, 2022).

Statement of the Problem

In contemporary times, the growing gap in computer literacy among junior secondary school students especially in public schools has become a pressing concern for educational stakeholders. It is disheartening to observe that while the world advances rapidly in digital technology, many students in public junior secondary schools continue

to struggle with basic computer skills. This lack of exposure and competence in computer usage appears to hinder their academic progress, as they are often unable to access digital learning materials, participate in computer-based assessments, or engage in research activities that would enhance their learning. The problem seems to stem from inadequate computer infrastructure in schools, lack of trained ICT teachers, and poor implementation of the computer studies curriculum. Consequently, students are left ill-equipped to compete academically with their counterparts in private schools or urban centers who have better access to digital tools and training. This situation contradicts the National Policy on Computer Education (FRN, 2013, Section 11), which clearly stipulates that computer education shall be taught at all levels of education to equip students with necessary digital literacy skills for academic performance and future career development.

From the researcher's observation, students with limited computer skills tend to struggle in subjects that involve the use of online resources, multimedia presentations, or basic word processing software for assignments. A more pressing concern is that computer studies is frequently taught without hands-on practice, largely due to the lack of adequate or functional computer laboratories. This challenge undermines the educational reforms aimed at promoting digital literacy among students and preparing them for the demands of the modern world. Could it be that students' poor learning outcomes in public junior secondary schools are partly due to their low level of computer literacy? The problem of this study therefore is to investigate the influence of computer literacy on

students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State.

Research Questions

The following questions were raised to guide the study:

1. What is the level of computer literacy among students in public junior secondary schools in Egor Local Government Area?
2. To what extent are computer facilities and digital learning resources available in public junior secondary schools in Egor Local Government Area?
3. What are the perceived challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area?
4. What is the impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area?

Purpose of the Study

The main purpose of the study is to investigate the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. However, the specific objectives of the study are to:

1. examine the level of computer literacy among students in public junior secondary schools in Egor Local Government Area;

2. ascertain the extent to which computer facilities and digital learning resources are available in public junior secondary schools in Egor Local Government Area;
3. determine the perceived challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area; and
4. find out the impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area.

Significance of the Study

The study will benefit students, teachers, policymakers, the Ministry of Education, and prospective researchers. The study will benefit students as it will help them understand the importance of acquiring computer literacy skills in enhancing their academic performance and overall learning outcomes. Recognizing the role of computer literacy in education can motivate students to embrace digital learning tools, thereby improving their research abilities, creativity, and access to global knowledge.

The study will benefit teachers as it will provide insights into how students' computer literacy levels affect their ability to grasp lessons, complete assignments, and perform academically. It will help teachers identify effective ways of integrating technology into their teaching methods and how to better support students with low digital skills. This will ultimately promote more inclusive and technology-driven classroom practices.

The study will benefit policymakers and the Ministry of Education by highlighting the current challenges and opportunities associated with computer literacy in public junior secondary schools. The findings will inform decision-making processes regarding curriculum development, teacher training, and investment in ICT infrastructure. This will help in formulating policies that promote equitable access to digital resources and ensure that all students are prepared for the demands of a technology-driven world.

The study will benefit prospective researchers by serving as a valuable reference point for future investigations on the subject of computer literacy and educational outcomes. It will open up new avenues for academic inquiry, encouraging more studies into the role of ICT in education, the digital divide in public schools, and innovative strategies for improving digital skills among students. This contribution will enrich the body of knowledge in educational research and digital learning.

Scope and Delimitation of the Study

The study focuses on the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. The study was delimited to students in JSS I - JSS III in public junior secondary schools in Egor Local Government Area of Edo State.

Definition of Terms

The following terms were operationally defined in the study:

Computer Literacy: This refers to the ability of an individual to use computers and related technology efficiently.

Learning Outcome: Learning outcome refers to the measurable knowledge, skills, attitudes, and values that students are expected to acquire as a result of teaching and learning activities.

Public Junior Secondary Schools: These are government-owned secondary schools that cater to students in the lower level of secondary education, typically from JSS1 to JSS3.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter, the review of related literature is discussed under the following sub-headings:

- Theoretical Framework
- Concept of Computer Literacy
- Concept of Students' Learning Outcomes
- Computer Literacy Among Students in Junior Secondary Schools and Student's Academic Performance
- Availability of Computer Facilities and Digital Learning Resources in Junior Secondary Schools and Student's Academic Performance
- Challenges Affecting Students' Acquisition of Computer Literacy Skills and Student's Academic Performance
- Impact of Computer Literacy and Students' Learning Outcomes in Junior Secondary Schools
- Summary of Literature Review

Theoretical Framework

The study is hinged on the Technology Acceptance Model (TAM), developed by Fred Davis in 1986. The theory provides a theoretical framework that explains how users come to accept and use technology. It posits that two primary factors—Perceived Usefulness and Perceived Ease of Use—influence an individual's decision to adopt technological tools. In the context of junior secondary education, the theory is highly relevant in understanding how students perceive the use of computers and digital tools in their learning process. If students believe that being computer literate will improve their academic performance and make learning more efficient, they are more likely to embrace and actively use technological resources in school. Moreover, students who find computer applications easy to navigate are also more inclined to integrate them into their daily academic activities (Obodo, 2020).

The theory hold out that computer literacy plays a central role in shaping both the perceived usefulness and ease of use of educational technologies. For instance, a student who has mastered basic computer skills is likely to approach online learning platforms, word processors, and educational software with confidence. This competence not only reduces anxiety towards the use of technology but also enables the student to exploit the full potential of digital tools to enhance learning. Furthermore, a computer-literate student can independently access a wealth of information online, participate in digital discussions, and complete assignments using modern tools—all of which contribute to improved learning outcomes (Ezeji, 2020). As such, the theory provides a lens through

which the relationship between students' computer literacy and their academic performance can be critically examined.

Moreover, the theory can be extended to analyze how school policies, teacher attitudes, and infrastructural availability influence students' acceptance of technology. For instance, when teachers themselves exhibit positive attitudes towards educational technology and integrate computer-based instruction in classrooms, students are more likely to perceive such tools as valuable for their learning. In the view of Asanakpa (2022), the availability of well-equipped computer laboratories and access to the internet further promotes ease of use and usefulness. Therefore, both intrinsic factors (such as computer literacy) and extrinsic conditions (like school support and teacher encouragement) must be considered in assessing how technology is embraced by junior secondary school students.

The theory is relevant to the study as it help provides a robust and relevant theoretical foundation for examining the influence of computer literacy on students' learning outcomes in junior secondary schools. By focusing on perceived usefulness and ease of use, TAM allows researchers and educators to understand how computer literacy affects students' willingness and ability to use technology effectively in their academic pursuits. It also highlights the importance of a supportive learning environment and instructional practices that encourage the integration of technology. Ultimately, enhancing computer literacy among junior secondary school students is not just about

skill acquisition—it is about shaping positive attitudes towards technology that can lead to improved academic performance and lifelong learning habits.

Concept of Computer Literacy

Computer literacy refers to the ability to confidently and effectively use computers and related technologies for everyday tasks and problem-solving. Nuhu (2023) asserted that computer literacy involves more than simply knowing how to operate a computer; it requires the ability to navigate through digital tools and applications to achieve specific goals. This includes understanding software functions, operating systems, data storage, and file management. A computer-literate person is expected to use programs like Microsoft Word, Excel, web browsers, and other applications with ease. As digital devices increasingly permeate various aspects of modern life, being computer literate has become vital in communication, learning, business, and governance. In the Nigerian context, computer literacy is gradually being integrated into school curricula to bridge the digital divide and promote national development. A society with computer-literate individuals is more likely to experience technological advancement and economic growth (Okonkwo, 2021).

The concept of computer literacy extends to the user's ability to apply digital knowledge critically and appropriately in different contexts. Chukwuma and Abadi (2022) highlighted that computer literacy goes beyond technical proficiency; it involves

analytical thinking, creativity, and the capacity to evaluate digital content for reliability and relevance. For example, when conducting online research, a computer-literate person must differentiate between factual sources and misinformation. Additionally, users must understand the functions of search engines, academic databases, and cloud storage systems. In Nigeria, such skills are crucial in both academic and professional environments, where digital tools are increasingly used for documentation, collaboration, and innovation. Computer literacy also supports digital inclusion, enabling individuals to participate in the digital economy, access services, and engage in civic matters. Promoting these skills equips Nigerians to compete globally and adapt to rapidly changing technological landscapes (Adebayo, 2023).

Another important aspect of computer literacy is digital safety, which involves understanding cybersecurity principles and responsible online behaviour. Udeme (2021) stated that being computer literate means recognising potential threats such as malware, phishing scams, and data breaches. Users should know how to protect personal information, use strong passwords, and avoid suspicious websites. As Nigeria experiences increased internet usage, there is a growing need to educate individuals about online security risks and how to manage them. Furthermore, ethical computing is also essential, as users must respect copyright laws, avoid cyberbullying, and maintain a positive digital footprint. This ethical dimension of computer literacy contributes to a safer and more responsible digital society. Building such awareness in schools, workplaces, and communities helps to cultivate trust and safety in online interactions,

especially among young people who are highly active on digital platforms (Ibrahim, 2022).

In educational institutions, computer literacy serves as a cornerstone for modern learning and academic engagement. Ujeme and Akinyemi (2023) pointed out that students who are computer literate can easily access online resources, participate in virtual classrooms, and utilise educational platforms for their studies. These skills allow learners to research topics, prepare digital assignments, and interact with peers and teachers in virtual environments. In Nigeria, the COVID-19 pandemic highlighted the urgent need for digital learning infrastructure and computer-literate students. As schools adopt blended learning models, the role of computer literacy becomes more central. It helps students become independent learners, improving their critical thinking and research capabilities. Teachers also benefit, as digital literacy allows for more interactive teaching methods. Ensuring that Nigerian students are computer literate is essential for closing the educational gap and fostering a more inclusive, technology-driven academic system (Eze, 2021).

Computer literacy is also a vital skill in the employment sector, where digital competence influences job performance and career progression. Iloabuchi (2022) observed that employers now demand employees who can handle office applications, manage virtual communication tools, and analyse data using software. In many Nigerian workplaces, tasks such as preparing reports, scheduling meetings, or processing

transactions depend heavily on digital systems. For job seekers, computer literacy enhances employability and opens up access to remote work opportunities and online business ventures. It also promotes efficiency and innovation in professional environments, helping organisations stay competitive in a digital economy. Government agencies and private firms in Nigeria are increasingly conducting digital literacy training for staff as part of capacity development initiatives. Therefore, acquiring computer literacy is not just an academic requirement but a pathway to economic empowerment and social advancement (Balogun, 2023).

Computer literacy is not static; it involves ongoing learning as digital tools and systems continue to evolve. Makuola (2021) emphasised that in a technology-driven world, individuals must constantly update their knowledge to remain relevant. Learning to use new applications, understanding software updates, and adapting to emerging platforms such as artificial intelligence or cloud computing are all part of maintaining digital competence. In Nigeria, digital transformation is influencing various sectors including health, agriculture, education, and commerce. To remain active participants in this transformation, individuals must be willing to upgrade their digital skills continuously. This is especially important for educators, civil servants, and entrepreneurs. Encouraging lifelong learning in computer literacy can improve national productivity and technological innovation. As such, computer literacy should be seen as a continuous journey rather than a one-time achievement (Garuba, 2022).

Concept of Students' Learning Outcomes

Students' learning outcome is fundamentally the intended result of the educational process, representing what learners are expected to know, understand, and be able to apply after completing a learning experience. Bilikisu (2023) asserted that learning outcomes serve as the benchmarks for evaluating the success of both teaching strategies and curriculum design. These outcomes reflect a clear shift from traditional content-based teaching to a more student-centred approach that prioritises learners' competencies and performances. Learning outcomes are typically expressed in measurable terms, facilitating precise assessment and feedback mechanisms. They encompass not just academic achievements but also cognitive, emotional, and behavioural development. Educators use learning outcomes to structure classroom instruction, ensuring that each activity leads to a specific learning goal. When used effectively, learning outcomes help learners understand their progress and areas needing improvement, making learning more structured and purposeful (Uzondu, 2020).

At the core of the concept of students' learning outcome is the principle of constructive alignment, where curriculum content, teaching strategies, and assessment methods are cohesively structured to support specific learning goals. Salamatu (2022) noted that this alignment ensures that students are actively engaged in learning processes that directly lead to intended outcomes. Learning outcomes clarify expectations for both teachers and students, helping to streamline lesson delivery and academic performance. They are instrumental in helping students stay focused and motivated, as they understand

the significance of their learning activities. This transparency also allows educators to make informed adjustments to their teaching methods where necessary. Over time, this alignment improves the overall effectiveness of the teaching-learning process by maintaining a consistent focus on clearly defined educational targets (Nwankwo, 2021).

Another critical aspect of students' learning outcome is its emphasis on skills development, particularly the ability to apply knowledge in real-world contexts. After stating desired outcomes, learning shifts from rote memorisation to active engagement, problem-solving, and critical thinking. Tunji (2021) highlighted that students become more involved in their learning when they are aware of the competencies they are expected to demonstrate. When learners understand that their success depends on how well they can use their knowledge in practical situations, they develop a sense of purpose in learning. This approach enhances not just academic results but also critical life skills such as collaboration, innovation, and decision-making. Ultimately, focusing on applicable outcomes equips students to function effectively in diverse environments and prepares them for life beyond school (Babatunde, 2023).

Students' learning outcomes are also crucial in the design and implementation of educational assessments. These outcomes serve as the foundation for determining the effectiveness of tests, assignments, and projects. According to Imoko and Udo (2020), assessments that are aligned with learning outcomes provide reliable data on students' academic progress and areas requiring intervention. Outcome-based assessments guide

educators in understanding how much content has been retained and whether students can apply their knowledge meaningfully. They also allow teachers to modify teaching methods to address observed learning gaps. By making assessments more reflective of actual learning, students are better supported in their academic journey. It also ensures that evaluation is not solely focused on memory recall but on higher-order thinking skills such as analysis and application (Ezeanya, 2022).

The concept of students' learning outcome also plays a key role in curriculum review and policy formulation. Curriculum planners use learning outcomes to ensure that educational content remains relevant, coherent, and responsive to societal needs. Umoh (2023) explained that in Nigeria's context, aligning national curricula with well-defined learning outcomes has been vital for achieving educational objectives under the Sustainable Development Goals (SDGs). Additionally, these outcomes create a bridge between theoretical knowledge and the practical skills required in the labour market. They ensure that education systems are not producing graduates who are only book-smart but also employable and adaptable. Through this process, learning outcomes contribute significantly to national development by producing a competent and skilled workforce (Adewumi, 2021).

Students' learning outcome is not just an academic tool, but a reflection of the broader educational philosophy that prioritises accountability, equity, and continuous improvement. It demands that teaching is not merely about delivering content, but about

ensuring meaningful learning experiences that lead to personal and societal development. As Zulum (2022) posited, learning outcomes push educators to reflect on their practice and adjust instruction to meet the diverse needs of learners. These outcomes also support inclusive education by setting goals that are adaptable to learners with varying abilities and backgrounds. When applied thoughtfully, learning outcomes promote fairness and allow all students equal opportunities to achieve their full potential. In this way, they serve as both a guide and a standard for delivering quality education (Ogunwale, 2020).

Computer Literacy among Students in Junior Secondary Schools and Student's Academic Performance

Several studies conducted has shown the level of computer literacy among students in junior secondary schools and its effect on their academic performance. Hamidu (2020) conducted a study on the level of computer literacy among junior secondary school students in Enugu State. The study's population consisted of 3,120 students drawn from 40 public junior secondary schools in three selected local government areas. Through the use of simple random sampling technique, 240 students were selected from 12 schools as the sample size. The study was guided by three research questions and one null hypothesis. A descriptive survey design was adopted for the study. Data was collected using a structured Computer Literacy Questionnaire (CLQ) developed by the researcher and validated by experts in measurement and evaluation. Mean and standard deviation were used to analyze the research questions, while chi-square statistics was applied to test the null hypothesis at 0.05 level of significance. Findings from the

study showed that the level of computer literacy among junior secondary students in public schools in Enugu State was generally low, especially in the areas of practical computer skills and internet usage.

Salihu (2019) carried out a study on computer literacy levels among public junior secondary school students in Kano State. The population of the study was 2,875 students from 25 randomly selected government-owned junior secondary schools. Using a purposive sampling method, a total of 200 students were drawn from ten schools. The study was framed by four research questions and one hypothesis. The researcher utilized a descriptive survey design. A Computer Skills Assessment Questionnaire (CSAQ) was used to gather data. The analysis of data was done using mean and standard deviation for the research questions and Analysis of Variance (ANOVA) to test the hypothesis at a 0.05 level of significance. The study revealed that students possessed average theoretical knowledge of computer studies but had very limited hands-on experience, which negatively impacted their overall computer literacy levels.

Bosun (2022) explored the extent of computer literacy among public junior secondary school students in Ogun State. The study population included 2,506 students across 30 public junior secondary schools. A stratified random sampling method was used to select a representative sample of 300 students from 15 schools. The study was guided by five research questions and two hypotheses. It employed a descriptive survey research design. A validated Computer Literacy Evaluation Inventory (CLEI) served as

the main instrument for data collection. Descriptive statistics such as mean and standard deviation were used to analyze the research questions, while independent sample t-tests were employed to test the hypotheses. The results indicated that although a majority of the students had some level of awareness about basic computer operations, their proficiency in using word processing tools, spreadsheets, and internet resources was relatively poor due to inadequate computer facilities in schools.

Bello (2021) conducted a study on computer literacy levels among junior secondary school students in Kwara State. The study population comprised 2,301 students from 20 government-owned junior secondary schools across four local government areas. A sample of 250 students was selected using a multistage sampling technique. Three research questions and one null hypothesis were developed to guide the study. The researcher adopted a descriptive survey design, and a Computer Literacy and Usage Questionnaire (CLUQ) was used for data collection. The data was analyzed using mean and standard deviation for answering research questions, while Z-test statistics was used to test the hypothesis at 0.05 significance level. The findings revealed that students had low access to functional computer laboratories and lacked basic skills in using common computer applications, which contributed to their overall low computer literacy levels.

Udom (2023) examined the level of computer literacy among junior secondary school students in Cross River State. The study targeted a population of 2,804 students in

35 public junior secondary schools. A sample of 210 students was selected using systematic sampling technique. The study was anchored on four research questions and one hypothesis. The design of the study was descriptive survey. The instrument for data collection was a 30-item questionnaire titled Computer Literacy Scale (CLS). The data collected was analyzed using mean scores and standard deviation for the research questions, while a paired sample t-test was employed to test the hypothesis. The findings of the study showed that the majority of students had a moderate understanding of computer concepts, but very few could demonstrate advanced knowledge or navigate digital tools confidently due to the poor ICT infrastructure and lack of trained computer instructors in most schools.

Availability of Computer Facilities and Digital Learning Resources in Junior Secondary Schools and Student's Academic Performance

Studies conducted has shown the availability of computer facilities and digital learning resources in junior secondary schools and student's academic performance. Okonkwo (2021) conducted a study on the extent of availability of computer facilities and digital learning resources in public junior secondary schools in Anambra State. The study involved 2,150 students and 120 ICT teachers from 30 government schools. Stratified random sampling was used to select 300 students and 30 teachers from 15 schools. The study adopted a descriptive survey design and was guided by three research questions. Data was collected using a validated checklist and questionnaire on ICT availability. Mean and standard deviation were used for analysis. The findings revealed a

high availability of computer facilities and digital learning tools, particularly in urban schools. Most schools had computer laboratories, internet access, and functional digital projectors. The study concluded that schools in Anambra State are well-equipped with digital learning resources, significantly enhancing ICT integration and digital education at the junior secondary level.

Mohammed (2020) carried out a study to determine the extent of availability of computer facilities and digital learning resources in public junior secondary schools in Bauchi State. The population comprised 2,602 students and 75 ICT teachers across 25 schools. A purposive sampling technique was used to select 200 students and 25 teachers from 10 schools. The study utilized a descriptive survey design, and data were collected using a structured questionnaire and observation checklist. Mean and frequency counts were used for analysis. The study revealed a low level of availability of computer facilities. Many schools lacked functional computers, had no internet connectivity, and possessed outdated or insufficient learning software. Some schools had computer labs in name only, with no supporting infrastructure. Mohammed concluded that most public junior secondary schools in Bauchi State are inadequately equipped for digital learning, limiting students' exposure to basic computer education and practical ICT skills.

Binani (2022) examined the extent of digital learning resource availability in public junior secondary schools in Ekiti State. The population included 2,811 students and 100 ICT teachers from 35 government-owned schools. A multistage sampling

technique was used to select 250 students and 30 teachers from 12 schools. The study, guided by two research questions, adopted a descriptive survey design. A Digital Resources Availability Questionnaire (DRAQ) was used to gather data, which was analyzed using mean and standard deviation. Findings showed a high extent of availability, especially in urban areas. Many schools had multimedia projectors, computer labs, e-libraries, and internet access. Some even utilized learning management systems and educational apps. However, slight disparities existed between urban and rural schools. Adeyemi concluded that efforts by the Ekiti State government and international partners had improved ICT infrastructure, promoting digital literacy and modern teaching practices in junior secondary schools.

Usman (2019) conducted a study on the availability of computer facilities and digital learning resources in public junior secondary schools in Kogi State. The study involved 2,708 students from 28 government-owned schools. A random sampling technique was used to select 220 students from 10 schools. The study was guided by two research questions and one hypothesis and adopted a descriptive survey design. A 25-item structured questionnaire was used to collect data. Mean and standard deviation were employed for data analysis. The findings indicated a low level of availability of computer facilities in most schools. Schools lacked standard computer labs, internet connectivity, or interactive digital learning materials. Teachers reported relying mostly on chalkboards and printed textbooks. Usman concluded that the shortage of digital tools and

infrastructure severely hampers ICT integration in junior secondary education in Kogi State, limiting students' acquisition of essential 21st-century digital competencies.

Nwankwo (2023) explored the availability of computer facilities and digital learning resources in junior secondary schools in Imo State. The population consisted of 3,005 students and 80 ICT teachers in 30 public schools. Systematic sampling was used to select 280 students and 20 teachers from 12 schools. The study was framed by three research questions and adopted a descriptive survey design. Data was gathered using a checklist and a structured questionnaire. Analysis was done using mean and standard deviation. Results revealed a low availability of ICT tools, especially in rural schools. Only a few schools had functional computer labs, and most lacked internet, digital whiteboards, or educational software. Teachers cited poor funding and insufficient maintenance as major challenges. The study concluded that inadequate digital learning resources hinder effective ICT teaching and learning, especially in remote parts of Imo State, thereby affecting students' digital competence.

Challenges Affecting Students' Acquisition of Computer Literacy Skills and Student's Academic Performance

One of the major challenges facing students in public junior secondary schools regarding computer literacy is the lack of adequate infrastructure. Many schools, particularly in rural or underfunded areas, lack the necessary resources, such as computers, functional computer labs, and reliable internet access. This deficiency

severely limits students' exposure to practical computer use, which is vital for developing basic digital literacy. According to Isiorho (2022), numerous public schools in Nigeria do not have sufficient computer facilities to cater to the growing student population, restricting individual hands-on experience. Overcrowded computer labs, coupled with the lack of maintenance of existing equipment, also mean that students do not receive the personalized attention they require. As a result, they struggle to acquire critical computer skills that are essential in today's technology-driven world (Ogunbanjo, 2021).

Another significant challenge in acquiring computer literacy is the inadequate training and professional development of teachers in public junior secondary schools. A substantial number of teachers still lack the necessary skills and knowledge to effectively incorporate computers into their teaching methods. As Idowu (2023) pointed out, many educators are not sufficiently trained to teach computer literacy, which limits their ability to guide students in mastering essential digital tools. This lack of expertise can lead to a reliance on outdated teaching practices that do not promote the development of computer skills. Furthermore, the absence of ongoing professional development opportunities means that teachers cannot update their knowledge in line with current technological advancements. Without the required skills and confidence, teachers may avoid using computers in the classroom, which leaves students without essential technological exposure (Warris, 2022).

The integration of computer literacy into the curriculum remains inadequate in many public junior secondary schools. Despite the growing importance of technology in education, computer literacy is often treated as a secondary subject, not central to students' learning experience. Hadiza (2022) argues that the Nigerian curriculum, while incorporating technology, does not fully prioritise computer literacy, with the subject being offered as an elective in some schools rather than as a core component. Moreover, the curriculum is often designed to focus more on theory than practical skills, meaning that students may not receive the hands-on experience they need to develop true computer proficiency. As a result, students are frequently unable to acquire the computer skills necessary to succeed in higher education or the workforce. Without deeper integration of computer literacy across subjects, students remain ill-equipped for the demands of the digital age (Chukwuma, 2021).

Financial constraints and poverty significantly hinder students' ability to acquire computer literacy skills in public junior secondary schools. In many Nigerian households, especially in economically disadvantaged areas, there is little to no access to personal computers or the internet. Ukeje (2023) highlighted that the financial burden of owning a computer or paying for internet access prevents many students from practising computer skills at home. This lack of access, combined with the limited technological resources available at schools, restricts the opportunities for students to develop proficiency. Furthermore, public schools often rely on government funding, which is insufficient to equip computer labs with modern, functional devices. Consequently, students from low-

income backgrounds are left at a significant disadvantage, unable to benefit from the technological advancements that could enhance their learning (Emenike, 2022).

Inadequate power supply remains a major obstacle to students' acquisition of computer literacy in public junior secondary schools. Erratic electricity supply in many regions, especially in rural areas, makes it difficult for schools to maintain functioning computer labs. Fatuyi (2022) explained that frequent power outages cause interruptions in the learning process, which in turn affects the frequency and quality of computer lessons. In many cases, schools may not have backup power sources like generators, further compounding the issue. Even when computers are available, inconsistent power supply results in difficulties in maintaining equipment, leading to a lack of proper functioning devices for students to use. Without reliable power, students miss out on valuable computer practice sessions, which affects their ability to master digital tools (Suleiman, 2021).

A lack of motivation among students is another key challenge affecting the acquisition of computer literacy in public junior secondary schools. Many students do not perceive computer skills as essential to their academic or future career success, which reduces their engagement in computer-related activities. According to Lawal (2023), this lack of motivation is often due to a lack of awareness regarding the importance of computers in modern education and the workplace. Without an understanding of how essential digital literacy is in today's world, students may not take computer lessons

seriously. Moreover, the reluctance to engage in computer learning may be exacerbated by limited access to computers both in and outside of school. Raising awareness about the importance of computer literacy and creating a more engaging, relevant curriculum is crucial for motivating students to embrace technology in their learning (Dokunbor, 2022).

Impact of Computer Literacy and Students' Learning Outcomes in Junior Secondary Schools

Computer literacy significantly enhances students' ability to access, process, and utilise information for academic purposes. Madueke (2023) asserted that when students are equipped with computer skills, they can navigate digital learning platforms, conduct online research, and engage more actively with their coursework. In public junior secondary schools, where traditional teaching methods may often limit students' exposure to global educational content, computer literacy opens new pathways for independent and inquiry-based learning. Furthermore, students who are competent in basic computing demonstrate improved performance in subjects such as English and Science, where access to simulations, typing tools, and grammar software can reinforce learning. By integrating computer studies into the curriculum, schools can cultivate a generation of digitally fluent learners ready to compete in an increasingly digital world (Ogunwale, 2021).

The development of computer literacy fosters critical thinking and problem-solving skills among junior secondary school students. Haruna (2022) noted that

engaging with computer-based learning tools requires students to make decisions, interpret data, and troubleshoot technical challenges—skills that are transferrable to other academic disciplines. In many public schools where resources are limited, the introduction of computers in classrooms creates opportunities for collaborative learning, where students work together on digital projects, thereby also enhancing social and communication skills. Additionally, students often become more confident in their learning journey when they can independently access tutorials and educational games that reinforce classroom instruction. The sense of autonomy that computer literacy offers can have a lasting impact on motivation and academic engagement (Bako, 2020).

Another notable impact of computer literacy is its role in bridging the educational divide between urban and rural students. Gidado (2021) observed that students in rural public junior secondary schools often lag behind their urban counterparts due to limited access to qualified teachers and up-to-date learning materials. However, with computer literacy and internet access, rural students can benefit from e-learning platforms, virtual libraries, and televised educational content, thereby narrowing the learning gap. Government and non-governmental initiatives that provide digital devices and training for both students and teachers in underserved communities are crucial to making this impact sustainable. Moreover, computer literacy empowers students in remote areas to participate in national and international academic competitions, giving them broader exposure and motivation to excel (Yakubu, 2022).

Computer literacy also prepares students for future educational and vocational opportunities by aligning their skills with the demands of the modern workforce. Salau (2020) stressed that familiarity with software applications such as word processing, spreadsheets, and presentation tools equips students with competencies required in higher education and various career paths. In an era where digital literacy is often a prerequisite for employment, early exposure in junior secondary schools ensures that students are not left behind. Beyond employment, these skills support lifelong learning, enabling individuals to adapt to technological changes and pursue continuous self-improvement. Integrating computer education into public school systems is thus a strategic investment in national development (Chinonso, 2023).

Diodemise (2021) conducted a study to examine the impact of computer literacy on students' learning outcomes in public junior secondary schools in Enugu State. The population of the study consisted of 2,400 students and 100 ICT teachers from 25 public schools. A stratified random sampling technique was used to select 250 students and 30 teachers from 10 schools. The study employed a descriptive survey design with two research questions and one hypothesis. Data was collected using a Computer Literacy Questionnaire (CLQ) and students' academic records. The data were analyzed using mean scores and t-test statistics. The findings showed that students with higher levels of computer literacy had significantly better academic performance in subjects such as mathematics and science, compared to those with lower computer literacy. The study concluded that computer literacy enhances students' ability to access information,

improves their problem-solving skills, and leads to higher academic achievement in public junior secondary schools.

Tanko (2020) investigated the impact of computer literacy on the learning outcomes of public junior secondary school students in Ogun State. The study's population included 2,500 students and 80 ICT teachers from 30 public junior secondary schools. A simple random sampling technique was used to select 300 students and 25 teachers from 12 schools. The study utilized a correlational research design, and data was collected using a Computer Literacy Assessment Tool (CLAT) and students' performance records in major subjects. Pearson's correlation and regression analysis were used to analyze the data. The results revealed a positive impact of computer literacy on students' academic outcomes. Students who were proficient in using computers had improved performance in subjects that required research and critical thinking, such as social studies and English language. The study concluded that computer literacy plays a crucial role in improving students' cognitive abilities, which directly influences their academic performance.

Ubogu (2022) investigated the effect of computer literacy on students' learning outcomes in Kano State. The study targeted 3,000 students and 120 ICT teachers from 35 public junior secondary schools. A stratified random sampling technique was used to select 350 students and 40 teachers from 15 schools. The research employed a quasi-experimental design, with two groups: one with integrated computer literacy training and

another without it. Data was collected using a Computer Literacy Test (CLT) and academic performance records in core subjects. Analysis was conducted using mean, standard deviation, and independent t-test. The findings revealed that students who received computer literacy training showed significantly higher academic outcomes than those who did not. The study concluded that computer literacy enhances students' ability to use digital tools for learning, improving their engagement and academic performance in subjects like science and technology.

Kiakite (2023) explored the relationship between computer literacy and students' learning outcomes in public junior secondary schools in Osun State. The population included 2,800 students and 90 ICT teachers across 20 public schools. A purposive sampling technique was used to select 250 students and 30 teachers from 12 schools. The study adopted an experimental design, with one group receiving computer literacy instruction and another group serving as the control. A pre-test and post-test approach was used to assess students' performance in mathematics and English. The data were analyzed using mean, standard deviation, and paired t-test. Results indicated a significant improvement in learning outcomes among students who received computer literacy training. The study concluded that computer literacy provides students with essential skills for efficient learning, boosting their confidence, academic performance, and participation in class activities.

Summary of Literature Reviewed

The literature review critically examined the concepts of computer literacy and students' learning outcomes. As seen from the review of literature, computer literacy refers to the ability to confidently and effectively use computers and related technologies for everyday tasks and problem-solving. Students' learning outcomes on the other hand represents what learners are expected to know, understand, and be able to apply after completing a learning experience. The reviewed of literature shows that while there is high level of computer literacy among students in some public junior secondary schools, the reverse is the case in some others.

The literature reviewed further examined the challenges affecting students' acquisition of computer literacy skills and student's academic performance. Some of these challenges include lack of adequate infrastructure, inadequate training, financial constraints, and inadequate power supply amongst others.

The literature reviewed also looked into the impact of computer literacy and students' learning outcomes in public junior secondary schools. It could be seen from the reviewed of literature that computer literacy significantly enhances students' ability to access, process, and utilise information for academic purposes. Thus, when students are equipped with computer skills, they can navigate digital learning platforms, conduct online research, and engage more actively with their coursework.

Although, numerous studies have been conducted on the influence of computer literacy on students' learning outcomes in public junior secondary schools such as

Diodemise (2021), Tanko (2020), Ubogu (2022) and Kiakite (2023), however, literature reviewed showed dearth of literature on the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. That is the gap that this study intend to fill.

CHAPTER THREE

METHODOLOGY

In this chapter, the processes and procedures that was followed in carrying out the study was discussed under the following sub-headings:

- Research Design
- Population of the Study
- Sample and Sampling Techniques
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument

- Method of Data Collection
- Method of Data Analysis

Research Design

The study adopted the descriptive survey research design. The descriptive survey design involves observing and collecting data on a given topic without manipulating variables. Descriptive survey is a quantitative research approach that allows researchers to thoroughly investigate on the background of a research problem. The design is considered suitable because it allows the researcher to effectively probe into the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. In this study, computer literacy serves as the independent variable, while students' learning outcomes represent the dependent variable.

Population of Study

The population for this study consisted of all the 5,109 public junior secondary school students (JSS I - JSS III) in the 12 public junior secondary schools in Egor Local Government Area of Edo State. (Source: Ministry of Education, Edo State, 2025).

Table 1: Population Distribution Table

S/N	Name of School	Population
1.	Asoro Grammar School	414
2.	Government Science Technical College	726
3.	Iyoba Girls Secondary School	483
4.	Egor Secondary School	507
5.	Kings and Queens College	309
6.	Ransford Educaton Centre	297

7.	Ohonre Grammar School Boys College	312
8.	Federal Government Girls College	537
9.	Use Secondary School	411
10.	Evbotubu Grammar School	403
11.	Evbereke Secondary School	309
12.	Sunny Comprehensive College	401
	Total	**5,109**

Sample and Sampling Techniques

The sample size for the study consisted of 120 students. With the aid of the simple random sampling technique, ten (10) students were selected from each of the 12 public junior secondary schools in the local government area, thus making a total sample size of 120 respondents. The simple random sampling technique was used to select the respondents.

Research Instrument

The instrument for the study was a structured questionnaire developed by the researcher titled: "Computer Literacy and Students' Learning Outcomes in Public Junior Secondary Schools Questionnaire (CLSLOPJSSQ)". The questionnaire was divided into two section A and B. Section "A" comprised of personal data of respondents such as age, class and sex while section "B" comprised of 20 questions bothering on the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. The questionnaire consists of 4-point Likert scale response of Strongly agree (SA), Agreed (A), Disagree (D), Strongly Disagree (SD).

Validity of the Instrument

The constructed questionnaire for the study was presented to the project supervisor to confirm its content validity. Corrections made by the supervisor was incorporated into the final draft of the instrument before administration.

Reliability of Instrument

The Cronbanch Alpha method was used to determine the reliability of the instrument. The questionnaire was administered to a group of 20 respondents which were not part of the study. A Cronbach coefficient of .837 was obtained. This shows that the instrument is reliable.

Method of Data Collection

The researcher personally distributed the questionnaires to the respondents. To ensure a high response rate, all administered questionnaires was collected immediately on the spot.

Method of Data Analysis

Descriptive statistics such as mean scores and standard deviation was used as the method of data analysis. Scores above the mean of 2.50 was considered high, while scores below the mean of 2.50 was considered low.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the analysis of data and the presentation of results. The data are presented in tables and are arranged according to the order of the research questions raised in the study.

Research Question 1: What is the level of computer literacy among students in public junior secondary schools in Egor Local Government Area?

Table 1: Descriptive Statistics on Level of Computer Literacy among Students

S/N	Items	Mean	SD	Remarks

1.	I can use the computer to send and receive messages	3.47	.903	High
2.	I can use the computer to search for information on the internet	3.88	.887	High
3.	I can use Microsoft word or other word processing software to type and work on document	3.79	.729	High
4.	I can turn on and off my computer system	3.57	.816	High
5.	I can draw and work on graphic packages and software	3.59	.615	High
	Cluster Mean	**3.66**	**.790**	**High**

N = 120, Criterion Mean = 2.5

Table 1 revealed the responses of the respondents on all the items presented at a mean score of 3.47, 3.88, 3.79, 3.57 and 3.59 respectively. The cluster mean of 3.66 is above the criterion mean score of 2.50 which implies that there is high level of computer literacy among students in public junior secondary schools in Egor Local Government Area of Edo State.

Research Question 2: To what extent are computer facilities and digital learning resources available in public junior secondary schools in Egor Local Government Area?

Table 2: Descriptive Statistics on Availability of Computer Facilities

S/N	Items	Mean	SD	Remarks
1.	My school has a functional computer laboratory accessible to students	2.34	.802	Low
2.	Computers in my school are enough to serve all students	2.19	.678	Low

3.	There is internet access in my school to support digital learning	2.41	.812	Low
4.	My school provides e-learning materials such as digital textbooks and videos	2.09	.722	Low
5.	The computer facilities in my school are regularly maintained	2.28	.599	Low
	Cluster Mean	**2.26**	**.723**	**Low**

N = 120, Criterion Mean = 2.5

Table 2 revealed the responses of the respondents on all the items presented at a mean score of 3.63, 3.81, 3.84, 3.58 and 3.22 respectively. The cluster mean of 2.26 is below the criterion mean score of 2.50 which implies that there is low extent to which computer facilities and digital learning resources are available in public junior secondary schools in Egor Local Government Area of Edo State.

Research Question 3: What are the perceived challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area?

Table 3: Descriptive Statistics on Challenges Affecting Students' Acquisition of Computer Literacy Skills

S/N	Items	Mean	SD	Remarks
1.	There are not enough computers for all students to use	3.36	.626	Agreed
2.	I do not get enough time during school hours to learn or practice computer skills	3.61	.831	Agreed

3.	Lack of electricity or power supply affects our ability to use computers in school	3.78	.667	Agreed
4.	Some teachers are not knowledgeable in using computers, which limits our learning	3.66	.592	Agreed
5.	I find it difficult to understand computer-related lessons due to lack of prior exposure	3.42	.861	Agreed
	Cluster Mean	**3.57**	**.715**	**Agreed**

N = 120, Criterion Mean = 2.5

Table 3 revealed the responses of the respondents on all the items presented at a mean score of 3.36, 3.61, 3.78, 3.66 and 3.42 respectively. The cluster mean of 3.57 is above the criterion mean score of 2.50 which implies that some of the challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area include insufficient computers for all students to use, limited time during school hours to learn or practice computer skills, lack of electricity, lack of computer knowledge by some teachers, and lack of prior exposure.

Research Question 4: What is the impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area?

Table 4: Descriptive Statistics on Impact of Computer Literacy on Students' Learning Outcomes

S/N	Items	Mean	SD	Remarks
1.	Computer skills have helped me perform better in school assessments	3.89	.937	Agreed
2.	I learn better and faster when computer tools are used in teaching	3.92	.642	Agreed

3.	Being computer literate has improved my academic confidence.	3.81	.816	Agreed
4.	Computer literacy helps me complete assignments and research effectively	3.73	.621	Agreed
5.	I actively participate more in class when digital tools are used in teaching	3.79	.586	Agreed
	Cluster Mean	**3.83**	**.720**	**Agreed**

N = 120, Criterion Mean = 2.5

Table 4 revealed the responses of the respondents on all the items presented at a mean score of 3.89, 3.92, 3.81, 3.73 and 3.79 respectively. The cluster mean of 3.83 is above the criterion mean score of 2.50 which implies that there is a significant impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area.

Discussion of Findings

Findings from the study in research question one shows that there is high level of computer literacy among students in public junior secondary schools in Egor Local Government Area of Edo State. The high level of computer literacy among students may be attributed to several factors. The increasing integration of computer education into the school curriculum has exposed students to basic computer knowledge and usage from an

early stage. In addition, the proliferation of smartphones and other digital devices has provided many students with hands-on experience in using technology, even outside the classroom. The influence of social media platforms, online learning tools, and computer-based games has further enhanced their digital skills. This findings is in line with Udom (2023) who found out that there is high level of computer literacy among students in secondary schools in contemporary times.

Findings from the study in research question two also shows that there is low extent to which computer facilities and digital learning resources are available in public junior secondary schools in Egor Local Government Area of Edo State. The low extent of availability of computer facilities can be attributed to inadequate funding, poor infrastructure, and lack of government prioritization of digital education. Many public schools in the area struggle with basic amenities, making it difficult to invest in modern technological tools. Additionally, the absence of trained ICT personnel and insufficient maintenance culture further limit the usability of existing resources. These challenges reflect broader systemic issues affecting public education, particularly in underfunded and less-developed regions within the Nigerian educational system. In support of the findings, Mohammed (2020) found in his study that there is a low level of availability of computer facilities and digital learning resources in public secondary schools, as many of these schools lacked functional computers, had no internet connectivity, and possessed outdated or insufficient learning software.

Findings from the study in research question three revealed that some of the challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area include insufficient computers for all students to use, limited time during school hours to learn or practice computer skills, lack of electricity, lack of computer knowledge by some teachers, and lack of prior exposure. The challenges affecting students' acquisition of computer literacy skills stem from both infrastructural and instructional limitations. Insufficient computers mean students cannot practice regularly, while limited time allocated during school hours restricts meaningful engagement with technology. Frequent power outages further hinder effective learning, especially in schools without alternative power sources. Moreover, some teachers lack the necessary computer knowledge to guide students adequately, which weakens the quality of instruction. The lack of prior exposure to computers, especially among students from low-income backgrounds, also places them at a disadvantage, making it harder to grasp basic computer concepts and skills. In line with the findings, Isiorho (2022) argued that numerous public schools in Nigeria do not have sufficient computer facilities to cater to the growing student population, restricting individual hands-on experience. In same vein, Idowu (2023) pointed out many teachers are not sufficiently trained to teach computer literacy, which limits their ability to guide students in mastering essential digital tools.

Findings from the study in research question four also revealed that there is a significant impact of computer literacy on students' learning outcomes in public junior

secondary schools in Egor Local Government Area. This findings can be attributed to the ability of digital skills to enhance understanding, engagement, and academic performance. Students who are computer literate can easily access a wide range of educational materials, conduct research, and use learning applications that support classroom instruction. This exposure promotes independent learning and critical thinking skills. Furthermore, computer literacy helps students complete assignments more efficiently and boosts their confidence in using technology, which is essential in today's digital world. This findings is in corroboration with Madueke (2023) who asserted that when students are equipped with computer skills, they can navigate digital learning platforms, conduct online research, and engage more actively with their coursework. Similarly, Diodemise (2021) found out in his study that computer literacy enhances students' ability to access information, improves their problem-solving skills, and leads to higher academic achievement in public junior secondary schools.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter dealt with the summary of the study, the conclusions drawn, results obtained and recommendations offered.

Summary

The study investigated the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. To achieve the purpose of the study, four research questions were raised and answered. The population for this study was made of all the5,109 public junior secondary school students (JSS I - JSS III) in the 12 public junior secondary schools in Egor Local Government Area of Edo State. The sample size for the study was made up of 120 respondents. With the aid of the simple random sampling technique, ten (10) students were selected each from the 12 public junior secondary schools in the local government area, thus making a total sample size of 120 respondents.

The instrument that was used for the data collection is a structured questionnaire titled "Influence of Computer Literacy on Students' Learning Outcomes in Public Junior Secondary Schools Questionnaire (ICLSLOPJSSQ)". The constructed questionnaire for the study was presented to the project supervisor to confirm for content validity. Necessary corrections were made and after which it was re-written before it was administered by the researcher. The questionnaire was the instrument for data collection. The descriptive survey research design was adopted for the study. The researcher made use of descriptive statistics such as mean score and standard deviation as the method of data analysis. The scores above mean of 2.50 was considered high, while scores below mean of 2.50 was considered low.

Findings of the research

Findings from the study include:

- That there is high level of computer literacy among students in public junior secondary schools in Egor Local Government Area of Edo State.
- That there is low extent to which computer facilities and digital learning resources are available in public junior secondary schools in Egor Local Government Area of Edo State.
- That some of the challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area include insufficient computers for all students to use, limited time during school hours to learn or practice computer skills, lack of electricity, lack of computer knowledge by some teachers, and lack of prior exposure.
- That there is a significant impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area.

Conclusion

The study investigated the influence of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area of Edo State. Based on the findings of the study, the researcher concluded that there is a significant impact of computer literacy on students' learning outcomes in public junior secondary schools in Egor Local Government Area. It was also concluded that some of

the challenges affecting students' acquisition of computer literacy skills in in Egor Local Government Area include insufficient computers for all students to use, limited time during school hours to learn or practice computer skills, lack of electricity, lack of computer knowledge by some teachers, and lack of prior exposure.

Recommendations

Based on the findings and conclusion drawn, the following recommendations were put forward:

1. The government and relevant stakeholders should ensure that public junior secondary schools in Egor Local Government Area are equipped with sufficient computers, internet access, and uninterrupted power supply. These resources are essential for fostering effective computer literacy and improving students' learning outcomes.
2. Regular professional development programmes should be organized to train teachers on basic and advanced computer skills. This will enable them to integrate ICT effectively into teaching and learning, thereby enhancing students' academic performance.
3. Computer literacy should not be limited to ICT classes alone. Teachers should be encouraged and supported to use digital tools in the teaching of all subjects to help students apply computer skills across disciplines, thereby reinforcing their learning outcomes.

4. School timetables should be adjusted to allow for more time in the computer laboratory. Students should have adequate time to learn and practice computer skills during school hours, which will improve their competence and academic engagement.

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APPENDIX

DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY

FACULTY OF EDUCATION

UNIVERSITY OF BENIN

Dear Respondent,

The questionnaire is designed to investigate the "**Influence of Computer Literacy on Students' Learning Outcomes in Public Junior Secondary Schools in Egor Local**

Government Area of Edo State." Please fill it out appropriately. Your responses will be kept confidential. Thank you for your time.

Section A: Demographic Data

Sex: Male ( ) Female ( )

SECTION B: Data on Questionnaire

Indicate the extent to which you agree or disagree with the following statements.

Key: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

S/N	ITEMS	SA	A	D	SD
	Level of Computer Literacy Among Students				
1.	I can use the computer to send and receive messages				
2.	I can use the computer to search for information on the internet				
3.	I can use Microsoft word or other word processing software to type and work on document				
4.	I can turn on and off my computer system				
5.	I can draw and work on graphic packages and software				
	Availability of Computer Facilities and Digital Resources				
6.	My school has a functional computer laboratory accessible to students				
7.	Computers in my school are enough to serve all students				
8.	There is internet access in my school to support digital learning				
9.	My school provides e-learning materials such as digital textbooks and videos				
10.	The computer facilities in my school are regularly maintained				
	Challenges Affecting Students' Acquisition of Computer Literacy Skills				

11.	There are not enough computers for all students to use				
12.	I do not get enough time during school hours to learn or practice computer skills				
13.	Lack of electricity or power supply affects our ability to use computers in school				
14.	Some teachers are not knowledgeable in using computers, which limits our learning				
15.	I find it difficult to understand computer-related lessons due to lack of prior exposure				
	Impact of Computer Literacy on Students' Learning Outcomes				
16.	Computer skills have helped me perform better in school assessments				
17.	I learn better and faster when computer tools are used in teaching				
18.	Being computer literate has improved my academic confidence.				
19.	Computer literacy helps me complete assignments and research effectively				
20.	I actively participate more in class when digital tools are used in teaching				