IMPACT OF TECHNOLOGY IN TEACHING OF ACCOUNTANCY IN NIGERIAN UNIVERSITIES.

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A PROJECT SUBMITTED TO THE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A B.Sc (Ed.) DEGREE IN BUSINESS EDUCATION.

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APPROVAL PAGE

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CERTIFICATION

We the undersigned, certify that this project was carried out by **BABATUNDE AHMED FOLARANMI** with Matriculation Number **EDU1804400** in the Department of Vocational and Technical Education Departmen, Faculty of Education, University of Benin, Benin City, Nigeria in partial fulfillment of the requirements for the award of B.Sc (Ed) degree in Business Education.

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DEDICATION

This research work is dedicated to God Almighty, the most gracious, most merciful

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ABSTRACT

This study examined the Impact of Technology in the Teachng and Learning of Accountancy in Nigeria Universities. The purpose of the study is to examine how the use of technology has impacted the teaching of accountancy.

Survery research design was adopted, the study population comprised one hundred (100) four hundred level (400L) studying Accountancy/Accounting in the university of Benin and thirty (30) students in Igbinedion University. A structured questionnaire was used to gather data which was subsequently analyzed using mean($\overline{X}$) scores and Standard Deviation (σ) to answer five (5) research questions. The findings revealed that the level of the use and proficiency of Technology in Universities in Nigeria

Based on these findings, it was concluded that the use of Technology in teaching of accountancy has contributed in development readly made accounting graduates who are ready to take on the accounting profession. it was recommended that Universities need to provide cheap data plans for students studing accountancy in various Nigeria universities and also provide enough computers and stong data connections should be available in Nigeria Universities; lecturers should be given special training by experts every year on how to use the latest accounting softwares; lecturers should be provided personal computers and free strong data networks to enable them hold online classes with students.

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CHAPTER ONE

INTRODUCTION

Background to the Study

Technology was less advanced as far as 2005. Majority of tasks done by accountants across every organization were done manually. Accountants then made use of paper and pen to prepare accounting statements and when it is needed that they type, they made use of the typewriter

Accountancy as far as 2005 was majorly done manually because at the period of time technology was not advanced. As population increased accountants were no longer efficient in their activities. In the pursuit to find solution to this problem scientist developed accounting softwares, that was the beginning of technology in accounting. As time went on the technologies got advanced.

Learning processes must keep up with the technological innovations which professional accountants are adopting. Babalola and Tiamiyu (2014) concurred that for learners of Accountancy to acquire the weights and potentials connected with heightened worldwide competition, a variety of basic skills is needed – amongst others. Diagnostic and problematic-solving skills; personal and interactive skills; management-related skills, negotiation and organizational skills; together with the capacity to apply these competencies in an array of single situations, often with the aid of technology sprang up. Obeng (2014) asserted that technology use in accounting classrooms is now deemed to be

as crucial a usefulness as water and electricity in communities, and later has also come to play a major role in education delivery.

Importantly, technology permits continuous testing to determine whether learners have mastered the contents of the materials presented to them (Hammond, 2013). Beetham and Sharpe (2013) asserted that great majority of schools in the United Kingdom are virtual learning environments (VLEs). Thanks to the use of Web 2.0 or 'software', Sakai and DrupalEd, Moodle, Blackboard, Turnitin and many more. Furthermore, these platforms grant teachers the opportunity to search topics on the internet, track their learners' activities display syllabus information. However, in the Eastern Cape of South Africa, Daily *Dispatch* (2020) reveals that a contract worth hundreds of millions of rand, to lease 55 000 tablet devices, was signed to provide a technology use in classrooms. Thus far, 44 000 tablets have been delivered to learners, in an attempt to promote online, distance learning and laptops distributed to teachers. Despite these impressive statistics, a study conducted by Skhephe, Caga et al. (2020) reveal that there is no evidence that the recipients were prepared, in any way, before being allocated these devices. Therefore, it is against this background that the authors wanted to investigate, about the use of technology in accounting classrooms during

Statement of the Problem

Despite ambitious efforts made, as highlighted in the background to produce accounting graduates with adequate competency necessary for the effective use of Accounting Technologies, poor curricular and unreliable training resources in most of the

Nigeria universities were identified by Aina (1991) and Goro (2000) as drawback militating against effective teaching. This problem according to them has prevented effective delivery of essential skills, knowledge and attitude necessary for job performance of graduates. The consequential effect of using unreliable teaching resources for training purposes was shown in separate studies conducted by Abdulwahab (2004), Apagu (1997) and Aina (1991). These studies showed that training with unreliable training resources or a time through mere theoretical method has prevented Accounting graduates from acquiring enough competencies needed for use of accounting software and equipment in organizations they find themselves. Specifically, these studies have shown that the competency acquired by graduates have not measured up to the minimum standard set in the technical knowledge and manipulative skills as well as in the use of English Language. The findings have indicated a serious gap between the competency acquired by graduates and the minimum standard set by the Accounting bodies. To produce competent accountants, the minimum standards have recommended proficiency training in skill, knowledge and attitude that are integral parts of the accounting professions.

Maybe, the difference which exist in the competency acquired by accounting lecturers and the standard set by the accountant bodies and also the impact of the universities in providing enough technological equipments for the use of accountancy lecturers and students might make it impossible for learning institutions to fully implement the use of technology in teaching accountancy. The present situation therefore

calls for proper investigation to determine the extent to which differences really exist. Knowledge of these differences will help in determining accounting lecturers' area of weaknesses or specific area in which lecturers'comptency need improvement.

Purpose of the Study

The major purpose of this study is to examine the impact of Technologies in Teaching of Accountancy in Nigerian University with emphasis on Igbinedion University, Okada and University of Benin, Benin City, Edo state of Nigeria.

Specifically, the study seeks to determine:

1. The impact of the use of Accounting softwares in teaching accountancy in the University of Benin, Benin city and Igbinedion University, Okada Edo state of Nigeria.
2. As the use of accounting technologies in teaching really prepared accountancy graduates that will impact positively the accounting sector straight away?
3. How efficiently the lecturers teaching accountancy at Igbinedion university, Okada and Unversity of Benin, Benin City, Edo State of Nigeria can use accounting softwares to solve accounting problems.
4. The challenges confronting the use of Technologies in teaching accountancy in the University of Benin, Benin City Nigeria.
5. The solutions to the challenges confronting the use of Technologies in teaching accountancy in the University of Benin, Benin City Nigeria.

Research Questions

The following research questions were raised in this study;

1. Are Technologies used in teaching accountancy to undergraduates' in the University?
2. How proficient are the accountancy lecturers in the use of Technologies in teaching Accountancy to undergraduates?
3. What are the effects of using Technologies in teaching Accountancy to undergraduates?
4. What are the challenges encountered in the use of Technology in teaching accountancy to undergraduates?
5. What are the solutions to the challenges encountered in the use of Technology in teaching accountancy to undergraduates?

Significance of the Study

This study will be of great benefit to accounting students and lecturers' on the importance of technologies in teaching of the graduates of accountancy in various universities in Nigeria.

Scope of the Study

The study is conducted to determine the impact of Technology in Teaching of Accountancy in Nigerian universities. The study will cover issues and problems of Technologies in Teaching Accountancy in University of Benin and Igbinedion University, Edo state of Nigeria.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter, the focus is on the theoretical framework and review of related literature of the study.

The review is presented under the following sub-headings:

- Theoretical Framework
- Concept of Technology
- Concept of Accounting Technology
  a) Benefits of Accounting Technology
  b) Eight Essential Technologies for Accounting Business
- Concept of Teaching
  a) Characteristics of Teaching
  b) Methods of Teaching
- Concept of Accountancy
- Concept of University
  a) Lists of Nigerian Universities
  b) Nigerian University Commission (NUC)
- Summary of Reviewed literature

Theoretical Framework

The theoretical framework of the study was anchored on Constructivism. Theory of Constructivism can be traced back to educational psychology in the work of Jean

Piaget (1896–1980) identified with Piaget's theory of cognitive development. Piaget focused on how humans make meaning in relation to the interaction between their experiences and their ideas. Constructivism is founded on the notion that individuals actively establish their understanding through experiences, rather than just passively accepting information. Constructivism is an important learning theory that educators use to help their students learn.

As individuals experience the world and reflect upon their experiences, they build on their learning and add new details into their previous knowledge.

Learners develop *outline* to organize acquired knowledge. This model was entrenched in learning theories by Dewey, Piaget, Vygotsky, Gagne and Bruner. The theory of constructivist learning is vital to understanding how students learn. The idea that students actively construct knowledge is central to constructivism. Students add (or build) their new experiences on top of their current foundation of understanding. As stated by Woolfolk (1993) “learning is active mental work, not passive reception of teaching”.

These principles outline the theory as a whole and how they affect the learning of the students. The main points are listed below:

- Knowledge is constructed: Every student begins the learning journey with some pre-existing knowledge and then continues to build their understanding on top of that. Students take pieces and put them together in their own unique way, building something different than what another student will build

- Learning is a social activity: Learning is directly associated to our connection with other people. Group work, discussions, conversations, our acquaintances, our teachers, our family, or peers, how we interact are all important to creating understanding. When we reflect on our past experiences, we can see how our relationship with others is directly connected to the information learned and how they impact our learning. Educators are more likely to be successful as they understand that peer involvement is key in learning. Isolating learning is not the best way to help students learn and grow together.
- Learning is an active process: Students cannot just sit and expect to be told things and learn, you need to engage in discussions, reading, activities, etc. to construct knowledge. To build meaningful ideas, the learner needs to do something to learn, it is not a passive activity. Learners need to engage in the world so they are actively involved in their own learning and development.
- Learning is contextual: Isolation is not the best way to retain information. We learn in ways connected to things we already know. Learning also occurs in the situation within the context of our lives, or alongside the rest of our understanding. We reflect on our lives and classify the new information as it fits into our current perspective. The things we learn and the points we tend to remember are connected to the things going on around us.
- People learn to learn, as they learn: As each student moves through the learning journey, they get better at selecting and organizing information. They are able to

better classify ideas and create more meaningful systems of thought. They also begin to recognize that they are learning multiple ideas simultaneously, for example, if they are writing an essay on historical events, they are also learning elements of written grammar. If they are learning about important dates, they are also learning how to chronologically organize important information.Each thing we learn gives us a better understanding of other things in the future.

- Learning exists in the mind: Hands-on activities and physical actions are not enough to retain knowledge. Active engagement and reflection are critical to the learning journey. Learning needs to involve activities for the minds, not just our hands to develop a thorough understanding.
- Knowledge is personal: The theory of constructivism based on your own experiences and beliefs hence, every person's perspective is unique, so will be the knowledge gained. Every individual comes into the learning activity with their own experiences and will take away different things as well.
- Motivation is vital to learning: Similar to active participation, motivation is vital to making connections and creating understanding. Students cannot learn if they are unwilling to reflect on pre-existing knowledge and activate their thought process. Educators need to have ways to engage and motivate learners to activate their minds and help them be excited about education. Without motivation, it's difficult for learners to reach into their past experience and make connections for new learning.

Concept of Technology

The word "technology" brings to mind various devices, such as laptops, phones, airpod and tablets. Technology may also make you think of the internet, data, or advancements in the world of engineering, education, accounting etc. This may be a narrow scope though, as technology includes physical objects like utensils or machines and intangible tools such as software and so many creative solutions to many everyday problems humans have faced all throughout history. (Babatunde Ahmed Folaranm 2022)

Fig 1. The evolution of computer

FIG 2. An Aeroplane

Technology is a broad concept that deals with usage and knowledge of tools and crafts, and how it affects the ability to control and adapt to its environment. Technologies from around the world have been adopted to enhance human capabilities, from the most basic inventions, to complex systems that function entirely independently from the human experience. Technology has revolutionized society in countless ways; technology allowed early humans to grow their own food, navigate the open oceans, tell time, and connect society on a global scale. The transition from manual to technological methods of solving problems took place simply because relying on technology makes work easier.

FIG 3. Well Water

FIG 4. Tap Water

Accounting Technology

Accounting technology is the transformation of previously paper-driven processes and systems into streamlined accounting workflow solutions that are accessible twenty four hours a week via cloud-based software. In the not-so-distant past, accountants spent a good portion of their day entering trial balance data into engagement software or formatting Financial Statements.

Accounting technology has always played a part in making the accountant's job just a little easier. As our knowledge of technology increased so has the accountant's ability to analyze statistical values. Technology advancements have enhanced the accountant's ability to interpret data efficiently and effectively. Today, technology has impacted accounting firms in positive ways. Firms are using accounting technology and cloud-based platforms for automation, sophisticated diagnostics, and predictive analysis to better serve clients and utilize their knowledge more effectively.

What are the Benefits of Accounting Technology?

For accounting firms, accounting technology provides a foundation for success in today's ever-changing tax landscape. While some may have wondered, "Will accounting be automated?" forward-thinking firms have been proactively putting automation to work for themselves. With the right accounting technology in place, accountants can automate manual activities, saving them precious time and money while also improving accuracy,

enabling collaboration and work/life balance and boosting staff and client engagement levels.

Benefits of Accounting Technology:

- **Elimination of Manual Data Entry**

Manual data entry is the traditional method of data entry. It is used to enter specific information such as customer details or product specifics.

With accounting technology automation and sophisticated diagnostics, accountants no longer have to manually enter information, detect blank fields, or search for numbers that don't add up. Accounting technology enables accountants to link returns using a tax identity number, so the same changes do not have to be made across multiple documents. By comparing a tax return with last year's documents, accounting technology can catch errors before it's too late to fix them. This decreases both the margin of error and the time needed to review returns for accuracy. We make use of accounting softwares like Spreadsheet.

Spreadsheet software is a software application capable of organizing, storing and analyzing data in tabular form. The application can provide digital simulation of paper accounting worksheets. They can also have multiple interacting sheets with data represented in text, numeric or in graphic form. With these capabilities, spreadsheet software has replaced many paper-based systems, especially in the business world. Originally developed as an aid for accounting and bookkeeping tasks, spreadsheets are

now widely used in other contexts where tabular lists can be used, modified and collaborated.

Spreadsheet software is also known as a spreadsheet program or spreadsheet application.

Examples of spreadsheet applications includes:

- Microsoft Excel.
- Google Workspace.
- Quip.
- Apple Numbers.
- Zoho Sheet.
- Minitab Statistical Software.
- LibreOffice.
- WPS Spreadsheets.

	A	B	C	D	E	F	G
1		12/31/10					12/31/10
2		Unadjusted	Debit		Credit		Adjusted
3	Cash	70,000					70,000
4	Fixed Assets	20,000					20,000
5	Accumulated Depreciation	(2,000)			(1,000)	a	(3,000)
6	Organization Costs	1,000					1,000
7	Accumulated Amortization	(100)			(100)	b	(200)
8	Loan Payable	(50,000)	800	c			(49,200)
9	Due from Owner	(4,000)			(900)	d	(4,900)
10	Retained Earnings	(20,000)					(20,000)
11							-
12	Income	(140,000)					(140,000)
13	Advertising	3,000					3,000
14	Amortization	-	100	b			100
15	Depreciation	-	1,000	a			1,000
16	Dues & Subscriptions	800	500	d			1,300
17	Employee Benefits	7,000					7,000
18	Interest	4,500			(800)	c	3,700
19	Legal & Professional	12,000					12,000
20	Rent	22,000					22,000
21	Repairs/Maintenance	7,500					7,500
22	Supplies	5,000	600	d			5,600
23	Telephone	3,000					3,000
24	Travel	300					300
25	Wages	60,000					60,000
26	TOTAL	-	3,000		(2,800)		200
27	Net Income	(14,900)					(13,500)

FIG 5
Accounting entries using the Microsoft excel spreadsheet program

- **Tax Workflow Automation**

From data collection to preparation to review and final delivery, a customized, cloud-based, end-to-end accounting technology solution allows for advanced data sharing and paperless processing. With a seamless tax workflow process from start to finish, accountants benefit from automating key processes, reducing the hours spent on non-

billable work, and creating efficiencies that free up staff for more meaningful work. (Nmor Martins 2022)

- **Real-Time Collaboration**

Accounting technology offers accountants the ability to share data and documents with clients and staff in real time. By enabling remote work and online collaboration with clients, accountants can save time, enhance the client experience, and boost staff engagement.

- **A shift to Value-Added Work**

With today's accounting technology in place, accountants can shift their focus from tedious tasks to more value-added work. This creates an opportunity capitalize on knowledge and expertise to build more meaningful relationships with clients and create a more sustainable, year-round business model that goes beyond tax season.

- **Surfacing Valuable Insights**

Accounting technology helps accountants analyze data, surface valuable insights, stay current on the latest tax laws, and proactively provide guidance and support to clients. In today's complex tax landscape, accounting technology is a catalyst to making informed decisions and sustainable growth.

Accounting technology has always played a part in making the accountant's job just a little easier. As our knowledge of technology increased so has the accountant's ability to analyze statistical values. Technology advancements have enhanced the accountant's ability to interpret data efficiently and effectively. He/she now has the ability to interpret

the language of business with such ease that the accountant has become a corporation's most trusted business advisor.

Eight essential technologies for accounting businesses

Cloud computing

Cloud computing is the storage and accessibility of data online rather than on a hard drive. Accessing programs via the cloud gives a free flow of information, no matter where you are or which device you are using. The cloud also gives clients and colleagues the ability to access certain data, making it easier to collaborate and exchange information.

Cloud-based accountant technology programs require creation of account with the cloud service provider, a subscription agreement to store and access data, as well as to utilize the provided tools and software, such as those for purchase orders, expense claims, payroll, asset management, and even multi-currency accounting.

Given the wide variety of cloud-based accounting options, it is easy to find the right subscription to meet your changing needs as an accounting professional. Below are the top 10 cloud service providers globally in 2022, Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP), Alibaba Cloud, Oracle Cloud, IBM Cloud (Kyndryl), Tencent Cloud, OVHcloud, DigitalOcean, and Linode. (Nmor Martins)

Blockchain Technology

Block chain technology is created to change the accounting game — a few major reasons are its reliability and rigid security.

Block chain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. In simple terms, block chain is the distribution and decentralization of database technology. It can protect encrypted data and maintain an expanding list of transactions among all parties involved. Especially in the financial sector, block chain technology has the potential to transform entire industries.

Accounting is currently based on a double-entry bookkeeping system in which the accountant and independent auditor input and verify a company's financial information. With blockchain technology, there is no longer a need for this kind of redundancy, since the data are verified without another party. It is a complete, automated digital audit of each individual transaction..

Block chain uses modern encryption methods to allow companies to use a common data retention infrastructure. That means it allows both sides of a transaction to be recorded at the same time in a shared ledger, even as each accountant, auditor, and the company maintains a privately managed database.

Automated Accounting Technology

Automated accounting involves the use of software to automate important finance operations. Accounting operations like accounts reconciliation, updating financial data, and preparing financial statements can be completed without human interaction using accounting software.

The business landscape is quickly approaching the no-coding era of accounting, which means there will be virtually zero data entry required in the industry. Automated

technology has always presented the double-edged sword of convenience against the replacement of humans with technology.

Those in the accounting field argue that automated technology will make accountants' lives more efficient, cutting down the time spent on manual entry and reducing human error. This efficiency can provide accountants additional time to optimize their involvement in a company's economic strategies. This could translate to higher profitability.

Five Automated Accounting Software

1. **SolveXia**

SolveXia is more than an accounting automation software. It can be thought of as a human analytical financial automation solution. SolveXia's no code solution allows you to connect all your data, transform processes into automated workflows, provides advanced analytics for informed decision-making, and also offers audit trails and data governance.

The solution will completely radicalise your accounting and financial department's abilities, accelerating business value and allowing for your organisation to be more adaptable and resilient to changing business environments.

2. **BlackLine**

BlackLine is an automated tool that is focused on credit card management and reconciliation processes. It helps businesses to spot fraud early on using its "continuous

accounting" approach. BlackLine is a cloud-based solution that provides its services through its Modern Accounting Playbook designed to aid in the financial close process.

3. **Xero**

Xero accounting software is intended for small businesses, bookkeepers and accountants. The solution enables automatic data capture and an accounting app for access from anywhere and at any time.

Its features include the ability to track and pay bills online and review cash flow, claim expenses with expense manager tools, accept payments, track projects through its job tracker software, and connect to bank feeds, to name a few.

4.**Quickbooks**

Intuit's Quickbooks offers an automated accounting software solution that provides a dashboard to track spending and revenue over time, get payroll done, get paid online, prepare for tax time, and more.

Quickbooks also integrates with your current apps. The software also offers advanced accounting features like the ability to gain deep insights from batch transactions, manage employee expenses, and benefit from automatic data back-ups.

5. **Netsuite**

Netsuite is a business management solution that provides a cloud ERP. Its accounting software can be used to optimise accounts receivable, automate accounts payable, oversee tax management, and transform your general ledger into a digital one.

Optical Character Recognition

In 2016, optical character recognition (OCR) hit the ground running in tax software, making accountants' lives easier.

OCR applications scan printed and handwritten documents and convert them into machine-readable text. When they can scan a handwritten note (or photograph of a note) and create an electronic document, professionals can quickly share information with colleagues and clients.

The integration of OCR with accounting software allows accountants to perform a simple digital search to find the information they need. They can also digitally copy or edit information as required. The best part is that OCR allows accountants to cut hours of work from such tasks as itemizing receipts, organizing invoices, tracking expenses, and eliminating paper clutter.

Becoming well-versed in OCR, among other growing trends, can make you a highly valuable employee for even the largest accounting firms.

Fortunately, OCR is finding a home in automated, cloud-based applications, including Yooz and Neat. When combined, these trends in accountant technology have transformed the accounting profession of just a few years ago.

AI and Machine Learning in Accounting

While the terms artificial intelligence (AI) and machine learning may bring to mind the well-worn science fiction trope of machines supplanting humans, the truth is,

these tech-driven innovations can be helpful to accountants, making their jobs more effective and efficient.

Artificial intelligence in accounting

AI can be a game-changer for companies, with *Forbes* reporting that its use may improve productivity by 40%.

In the field of accounting, AI can conduct repetitive, rudimentary tasks that could otherwise dominate an accountant's schedule, including auditing, payroll, uploading files, and sorting through large swaths of data.

With these tasks covered, accountants are freed to focus on the job's more human-directed tasks, such as analyzing and interpreting data once it's been gathered, and building more effective, efficient recommendations for corporate growth and stability.

Machine Learning in Accounting

As any accountant can attest, the smallest mistake can cause the biggest problems. Using machine learning tools within an accounting technology strategy can substantially reduce the likelihood of these frustrating, time-consuming issues.

Machine learning tools can develop algorithms that recognize patterns in various math-based accounting tasks, such as invoices or transactions. Once these algorithms are developed and fortified, any miscalculation that causes deviation from the established pattern can be caught before an accountant's calculations move beyond the problem.

This ability to catch issues sooner than later can have an impressive ripple effect on accounting. Not only does it lead to more accurate reporting, it also spares accountants

from pouring time and energy into identifying minor issues during audits. Again, this could save time, which could enable accountants to increase their focus on less mundane tasks.

Teaching

To teach is to engage students in learning; thus teaching consists of getting students involved in the active construction of knowledge. A teacher requires not only knowledge of subject matter, but knowledge of how students learn and how to transform them into active learners. Good teaching, then, requires a commitment to systematic understanding of learning (Babajide 2007). The aim of teaching is not only to tranfer information, but also to transform students from passive recipients of other people's knowledge into active constructors of their own and others' knowledge. The teacher cannot transform without the student's active participation. Teaching is fundamentally about creating the pedagogical, social, and ethical conditions under which students agree to take charge of their own learning, individually and collectively.

Different educationists hold different ideas regarding the concept of teaching.

"Teaching is intimate contact between a more mature personality and a less mature one which designed to further the education of the latter". Morrison (1934), Dewey (1934) expressed this concept of teaching by an equation. "Teaching is learning as selling is to buying". In the words of John Brubacher (1939), "Teaching is arrangement and manipulation of a situation in which there are gaps or obstructions which an individual will seek to overcome and from which he will learn in the course of

doing so". B.O. Smith defined teaching as follows: "Teaching is a system of actions intended to induce learning. Smith in 1963 further extended the definition of teaching Teaching is a system of actions involving an agent, an end in view and a situation including two sets of factors those over which the agent has no control (class size, characteristics of pupils, physical facilities, etc.) and those which he can modify (such as techniques and strategies of teaching. Teaching is a scientific process, and its major components are content, communication and feedback. The teaching strategy has a positive effect on student learning.

The International Encyclopedia of Teaching and Teacher Education have classified the concept of teaching into three categories:

1. Teaching as success signifies that learning is implicated in teaching. Teaching entails learning and can be defined as an activity which necessarily affects learning.

2. Teaching as an intentional activity means that teaching may not logically imply learning, but it can be anticipated that will result in learning.

3. Teaching as normative behaviour denotes action undertaken with the intention of bringing about learning activities. It designates a family of activities: training and instructing are primary members and indoctrination (Green, 1968).

Training consists of activities that shape skills and other behaviours while instruction and indoctrination go with activities which induce knowledge and beliefs. Teaching can be conceptualized as a form of problem-solving and decision - making which has many properties in common with the work of physicians. This

conceptualization has led to a body of research which has investigated the decision - making of teaching focusing in particular on the information about pupils that teachers use to make decisions and the way they tailor instruction to individual pupil needs (Calderhead, 1995).

Characteristics of Teaching

The characteristics of teaching are as follows:

1. Teaching is an effective interaction between teacher and students.

2. Teaching is both arts as well as science. Teaching is an art as it calls for the exercise of talent and creativity. Teaching as science involves a repertoire of techniques, procedures and skills, that can be systematically studied, described and improved. A good teacher is one who adds creativity and inspiration to the basic repertoire.

3. Teaching has various forms, like formal and informal raining, conditioning or indoctrination, etc.

4. Teaching is dominated by the skill of communication.

5. Teaching is a tripolar process; the three poles are, educational objectives, learning experiences and change in behaviour.

6. Teaching should be well planned, and the teacher should decide the objectives, methods of teaching and evaluation techniques.

7. Teaching is suggesting and not dictating.

8. Teaching is kind and sympathetic, and a good teacher develops emotional stability among children.

9. Teaching is remedial, and the teacher must solve the learning problems of students.

10. Teaching helps children to make adjustments in life.

Method of Teaching

Method of teaching are approaches through which knowledge are transferred from the teacher to the learner.

There are various methods of teaching and few are listed and explained below:

a) Teacher-Centered Instruction

b) Small Group Instruction

c) Student-Centered / Constructivist Approach

d) Project-Based Learning

e) Montessori

1. **Teacher-Centered Instruction**

The teacher-centered methodology is based on the idea that the teacher has the main responsibility in the learning environment. Teachers are in charge of the classroom and direct all affairs. Typically, in this approach, students are seated at individual desks that face the teacher. While group work may take place, most classroom time is spent with the teacher explaining concepts and assigning individual work. In other words, students passively absorb the information while the teacher actively delivers it (Serin, 2018).

2. **Small Group Instruction**

Small group instruction (SGI) usually follows whole group instruction and provides students with a reduced student-teacher ratio, typically in groups of four to six students. SGI allows teachers to work more closely with each student on a specific learning objective, reinforce skills learned in whole group instruction, and check for student understanding. This teaching method is based on constant activities around workstations: groups working with the teacher and groups working independently on varied activities, such as using computer/online resources.

3. **Student-Centered / Constructivist Approach**

With the development of the educational sphere and society in general, the idea of a student-centered approach has become more popular. Student-centered classrooms include students in planning, implementation, and assessments. Involving the learners in these decisions places more responsibility and ownership on them rather than on the teacher. Also, teachers must become comfortable with changing their leadership style from directive to consultative. Meanwhile, students may work in small groups, access centers, and move about the classroom freely.

4**. Project-Based Learning**

Project-based learning falls within the student-centered approach. As the name suggests, in project-based learning students complete projects. However, these are big,

meaty projects in which students acquire knowledge, research, think critically, evaluate, analyze, make decisions, collaborate, and more.

5. **Montessori**

Today, the Montessori method is most popular in preschools, kindergartens, and lower elementary grades. In this method, the teacher prepares an ideal classroom environment full of activities that children may pick from to work on. Moreover, the teacher guides the children to ensure that they choose an adequate number of lessons from all of the subject areas.

The Montessori method also encourages the use of "materials" or carefully curated objects designed for learning. For example, there are trays containing different types of triangles or cards with definitions explaining the parts of a bird. Furthermore, the Montessori method includes areas of the curriculum that teach social skills and practical life skills, such as cooking and cleaning (Chloë Marshall).

Concept of Accountancy

Accountancy is the practice of recording, classifying, and reporting on business transactions for a business. It provides feedback to management regarding the financial results and status of an organization. The key accountancy tasks are noted below.

Recordation

The recording of business transactions usually involves several key transactions that are handled on a repetitive basis, which are issuing customer invoices, paying

supplier invoices, recording cash receipts from customers, and paying employees. These tasks are handled by the billing clerk, payables clerk, cashier, and payroll clerk, respectively.

There are also a number of business transactions that are non-repetitive in nature, and so require the use of journal entries to record them in the accounting records. The fixed asset accountant, general ledger clerk, and tax accountant are most likely to be involved in the use of journal entries.

Classification

The results of the efforts of the preceding accountants are accumulated into a set of accounting records, of which the summary document is the general ledger. The general ledger consists of a number of accounts, each of which stores information about a particular type of transaction, such as product sales, depreciation expense, accounts receivable, debt, and so on. Certain high-volume transactions, such as customer billings, may be stored in a subledger, with only its totals rolling into the general ledger. The ending balances in the general ledger may be altered with adjusting entries each month, mostly to record expenses incurred but not yet recorded.

The information in the general ledger is used to derive financial statements, and may also be the source of some information used for internal management reports.

Reporting

The reporting aspects of accountancy are considerable, and so have been divided into smaller areas of specialization, which are noted below.

Financial Accounting

Financial accounting is the province of the general ledger accountant, controller, and chief financial officer, and is concerned with the accumulation of business transactions into financial statements. These documents are presented based on sets of rules known as accounting frameworks, of which the best known are Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).

Management Accounting

Management accounting is the province of the cost accountant and financial analyst, who investigate ways to improve the profitability of a business and present their results to management. Their reports may be derived from the main system of accounts, but may also include separate data accumulation systems, as may be found with activity-based costing systems. Management accounting is not governed by any accounting framework - the structure of the reports issued to management are tailored to the needs of the business.

The History of Accountancy

Accounting's history can be traced back thousands of years to the cradle of civilisation in Mesopotamia and is said to have developed alongside writing, counting

and money. The early Egyptians and Babylonians created auditing systems, while the Romans collated detailed financial information.

Some of the first accountants were employed around 300 BC in Iran, where tokens and bookkeeping scripts were discovered. Around the first millennium the Phoenicians invented an alphabetic system for bookkeeping, while the ancient Egyptians may have even assigned someone the role of comptroller.

Italian Roots

But the father of modern accounting is Italian Luca Pacioli, who in 1494 first described the system of double-entry bookkeeping used by Venetian merchants in his *Summa de Arithmetica, Geometria, Proportioni et Proportionalita*. While he was not the inventor of accounting, Pacioli was the first to describe the system of debits and credits in journals and ledgers that is still the basis of today's accounting systems. With the onset of the industrial revolution in 1760, there was a proliferation of companies and the need for more advanced accounting systems. The development of corporations also created larger groups of investors, and more complex structures of ownership, all requiring accounting systems to adapt.

Scotland Modernizes Accounting

The modern profession also has its roots in Scotland in the mid-1800s when the Institute of Accountants in Glasgow petitioned Queen Victoria for a Royal Charter, so accountants could distinguish themselves from solicitors, as for a long time accountants

had belonged to associations of solicitors, which would offer accounting in addition to a firm's legal services. In 1854 the institute adopted 'chartered accountant' for its members, a term and demarcation that still carries legal weight globally today. The petition was signed by 49 Glaswegian accountants, and it argued that the accounting profession had long existed in Scotland as a distinct profession of great respectability and that the small number of practitioners had been rapidly increasing. The petition further highlighted the varied skills required to be a professional accountant – in addition to mathematical skills, an accountant needed to be acquainted with general legal principles, as they were often employed by the courts to give evidence on financial matters – as they still are today.

Industrial Revolution

By the mid-1800s, the industrial revolution in Britain was well underway and London was the financial centre of the world. With the growth of the limited liability company and large-scale manufacturing and logistics, demand surged for more technically proficient accountants capable of handling the growingly complex world of global transactions.

The increasing importance of accountants helped to transform accounting into a profession, first in the UK and then in the US. In 1904 eight people formed the London Association of Accountants to open the profession to a wider audience of people than was available through the UK's older associations. After several name changes the London Association of Accountants adopted the name the Association of Chartered Certified Accountants (ACCA) in 1996.

Importance of Ethics

It is not all been plain-sailing for the accountancy profession. The 21st century has seen some dubious actions by accountants causing large-scale scandals. The Enron scandals in 2001 shook the accounting industry, for example. Arthur Andersen, one of the world's largest accounting firms at the time, went out of business. Subsequently, under the newly introduced Sarbanes-Oxley Act, accountants now face harsher restrictions on their consulting engagements. Yet ironically, since Enron and the financial crisis in 2008, accountants have been greatly in demand, as corporate regulations have increased and more expertise is required to fulfil reporting requirements.

Concept of University

A university is an institution of higher education, usually comprising a college of liberal arts and sciences and graduate and professional schools and having the authority to confer degrees in various fields of study. University are organized by various bodies depending on the country, in Nigeria the body organizing University is National University Commission. The National Universities Commission was established in 1962 as an advisory agency in the Cabinet Office. However in 1974, it became a statutory body and the first Executive Secretary, in the person of Prof. JibrilAminu was then appointed.

The National Universities Commission (NUC) is a parastatal under the Federal Ministry of Education (FME). The Commission has a Governing Council, its Executive Secretary is Prof. AbubakarAdamu Rasheed mni, MFR, who assumed office on August 3,

2016.Over the years, the Commission has transformed from a small office in the cabinet office to an important arm of government in the area of development and management of university education in Nigeria.

The main functions of the Commission are outlined as follows:

i. Granting approval for all academic programmes run in Nigerian universities;

ii. Granting approval for the establishment of all higher educational institutions offering degree programmes in Nigerian universities;

iii. Ensure quality assurance of all academic programmes offered in Nigerian universities; and

iv. Channel for all external support to the Nigerian universities.

The Commission has twelve Directorates; Directorate of Academic Planning, Directorate of Inspection and Monitoring, Directorate of Management Support Services, Directorate of the Establishment of Private Universities, Directorate of Students Support Services, Directorate of Research, Innovations & Information Technology, Directorate of Finance and Accounts, Directorate of Accreditation, Directorate of Open and Distance Education, Directorate of Liaison Services and International Cooperation, Directorate of Corporate Communications, and the Directorate of the Executive Secretary's Office. Each of the Directorates is headed by a Director.

The Commission has recorded a number of successes since its inception. These successes can be attributed to quality of leadership, dedication and commitment of the

staff, the quality of its Board members, cooperation received from Universities and support from the Federal Government.

As a coordinating body, the Commission ensures it discharges its responsibilities by recruiting adequate and relevant man power and appeals to the Universities for their sustained support and understanding. The Commission also relies on support from the Federal Government, State Governments and other stakeholders in its bid to improve on the quality of tertiary education and graduates of the nation's university system.

The Goals of the National Universities Commission are:

- Attainment of stable and crisis-free University System.
- To work with Nigerian Universities to achieve full accreditation status for at least 80% of the academic programmes.
- To initiate and promote proficiency in the use of ICT for service delivery within the Commission and the Nigerian University System.
- Upgrade and maintain physical facilities in the Nigerian University System for delivery of quality university education.
- To match university graduate output with national manpower needs.
- To foster partnership between the Nigerian University System and the private sector.

The Functions of the Commission are:

- To advise the President and State Governors, through the Minister, on the creation of new universities and other degree-awarding institutions in Nigeria;
- To prepare, after consultation with the State Governments, the universities, the national manpower Board and such other bodies as it considers appropriate, periodic master plans for the balanced and co-coordinated development of all universities in Nigeria; To lay down Minimum Academic Standards in the Federal Republic of Nigeria and to accredit their degrees and other academic awards;
- To ensure that quality is maintained within the academic programmes of the Nigerian University System;
- To make such other investigations relating to higher education as the Commission may consider necessary in the national interest;
- To inquire into and advise the Federal Government on the financial needs, both recurrent and capital, of university education in Nigeria and, in particular, to investigate and study the financial needs of university research and to ensure that adequate provision is made for this in the universities;
- To take into account, in advising the Federal and State Governments on university finances, such grants as may be made to the Universities by the Federal and State Governments, private proprietors and by persons and institutions in and outside Nigeria;

- To undertake periodic reviews of the terms and conditions of service of personnel engaged in the universities and to make recommendations thereon to the Federal Government where appropriate;
- To recommend to the Visitor of a university that a visitation be made to such university as and when it considers it necessary;
- To act as the agency for channeling all external aid to the universities in Nigeria;
- To receive block grants from the Federal Government and allocate them to Federal Universities in accordance with such formula as may be laid down by the National Council of Ministers.

Universities in Nigeria

- Abia State University, Uturu, Abia State
- Abubakar Tafawa Balewa University, Bauchi, , Bauchi State
- Achievers University, Owo ,Ondo State
- Adamawa State University, Mubi, Adamawa State
- Adekunle Ajasin University,Akungba-Akoko, Ondo State
- Adeleke University,Ede, Osun State
- Afe - Babalola University, Ado-Ekiti, Ekiti State.
- Ahmadu Bello University, Zaria, Kaduna State
- Ajayi Crowther University, Oyo, Oyo State
- Akwa-Ibom State University, Uyo, Akwa-Ibom State
- Al-Hikmah University,Ilorin, Kwara State

- Ambrose Alli University, Ekpoma, Edo State
- American University of Nigeria, Yola Adamawa State
- Atlantic African Oriental Multicultural University International ,Jos Plateau State
- Babcock University, Ilishan-Remo, Ogun State
- Bakassi Technical University, Uyo, Akwa-Ibom,
- Bayero University, Kano, Kano State
- Baze University, Federal Capital Territory, Abuja
- Bells University of Technology, Ota, Ogun State
- Benson Idahosa University, Benin City, Edo State
- Benue State University, Makurdi, Benue State
- Bowen University, Iwo, Osun State
- Bukar Abba Ibrahim University, Damaturu, Yobe State,
- Caleb University, Ikorodu, Lagos State
- Caritas University, Enugu, Enugu State
- CETEP City University, Lagos State
- Chukwuemeka Odumegwu Ojukwu University ,Uli, Anambra State
- City University of Technology, Kaduna, Kaduna State
- Covenant University, Ota, Ogun State
- Crawford University, Igbesa, Ogun
- Crawford University, Oye-Ekiti, Ekiti State
- Crescent University, Abeokuta, Ogun State

- Cross River University of Technology, Ekpo-Abasi, Cross River
- Delta State University, Abraka, Delta
- Delta State University of Science and Technology, Ozoro, Delta
- Dennis Osadebe University, Asaba, Delta State
- Ebonyi State University, Abakaliki, Ebonyi State
- ECWA Bingham University, Karu, Nassarawa
- Edo State University, Uzairue, Edo State
- Elizade University, Ilara-Mokin, Ondo State
- Enugu State University of Science and Technology, Enugu, Enugu State,
- Evangel University, Akaeze, Ebonyi State
- Federal University of Agriculture, Abeokuta, Ogun State
- Federal University Oye-Ekiti, Ekiti State
- Federal University, Dutsin-Ma, Katsina State
- Federal University, Gusau, Zamfara State
- Federal University of Technology, Akure, Ondo State
- Federal University Ndufe Alike, Ikwo, Ebonyi State
- Federal University of Technology Owerri, Imo State
- Fountain University, Osogbo, Osun State
- Godfrey Okoye University, Enugu, Enugu State
- Gregory University, Uturu, Abia State
- Igbinedion University, Okada, Edo,

- International Open Institute, Ikorodu, Lagos State
- Joseph Ayo Babalola University, Ikeji-Arakeji, Osun State
- Kings University, Odeomu, Osun State
- Koladaisi University, Ibadan, Oyo State
- Lagos State University, Ojo, Lagos State
- Landmark University, Omu-Aran, Kwara State
- Mewar International University, Masaka, Nasarawa State
- Michael and Cecilia Ibru University, Agbara-Otor, Ughelli North, Delta State
- Maryam Abacha American University of Nigeria, Kano, Kano State
- Nasarawa State University, ,Keffi, Nassarawa State
- National Open University of Nigeria, Victoria Island, Lagos State
- Nile University of Nigeria, Abuja
- Nnamdi Azikiwe University, Awka, Anambra State
- Obafemi Awolowo University, Ile Ife, Osun
- Oduduwa University, Ipetumodu, Ile-Ife, Osun State
- Plateau State University ,Bokkos, Plateau State
- Redeemer's University Nigeria, Ede, Osun State
- Skyline University Nigeria, Kano , Kano State
- Taraba State University, Jalingo, Taraba State
- Umaru Musa Yar'adua University, Katsina, Katsina State
- University of Benin, Benin City, Edo State

- University of Calabar, Calabar, Cross River State
- University of Delta, Agbor, Delta
- University of Ibadan, Ibadan, Oyo State
- University of Jos, Jos Plateau State
- University of Lagos, Lagos State
- University of Nigeria, Nsukka, Enugu State
- University of Port Harcourt, Rivers State
- Veritas University, Abuja
- Abubakar Tatari Ali Polytechnic, Bauchi State
- Ahman Pategi University, Patigi, Kwara State

- Anchor University, Ayobo, Lagos State
- Bauchi State University, Gadau, Bauchi State
- Bayelsa Medical University (BMU), Yenagoa, Bayelsa State
- Borno State University, Maiduguri, Borno State
- Edusoko University, Bida, Niger State
- Ekiti State University, Ado Ekiti, Ekiti State
- Federal University, Birnin, Kebbi, Kebbi State
- Federal University Gashua, Yobe State
- Federal University Dutse
- Federal University of Petroleum Resource Effurun

- Federal University of Technology Minna
- Gombe State University, Gombe
- Gombe State University of Science and Technology, Kumo[10]
- Ibrahim BadamasiBabangida University, Lapai
- Ignatius Ajuru University of Education (formerly Rivers State College of Education), Port Harcourt
- Imo State University, Owerri
- Institute of Management and Technology, Enugu
- Kaduna State University, Kaduna, Kaduna State
- Kano State University of Technology, Wudil
- Kebbi State University of Science and Technology, Aliero, Kebbi State
- Kogi State University, Ayigba, Kogi State
- Kwara State University, Malete, Kwara State
- LadokeAkintola University of Technology, Ogbomoso
- Lagos Business School, Lagos
- Lead City University, Ibadan
- Madonna University, Elele
- Michael Okpara University of Agriculture, Umudike
- Modibbo Adama Federal University of Technology, Yola
- Mountain Top University, Ogun State[11]
- Niger Delta University, Wilberforce Island, Bayelsa State

- Nigerian Army University Biu (NAUB)[12]
- Nigerian Defence Academy, Kaduna
- Novena University, Ogume, Delta State
- Obong University, ObongNtak, AkwaIbom
- OlabisiOnabanjo University, Ago-Iwoye, Ogun State
- Ondo State University of Science and Technology, Okitipupa
- Osun State University, Osogbo
- Pan-Atlantic University, Lagos
- Paul University, Awka Anambra
- Precious Cornerstone University
- Renaissance University, Agbani
- Rhema University, Aba Abia State
- Ritman University, IkotEkpene, AkwaIbom State
- Rivers State University, Port Harcourt
- Salem University, Lokoja
- Samuel Adegboyega University, Ogwa Edo State
- Sokoto State University, Sokoto
- SuleLamido University, Kaffin Hausa, Jigawa State
- Summit University, Offa
- Tai Solarin University of Education, Ijebu-Ode, Ogun State
- University of Abuja, Gwagwalada

- University of Africa (Toru-Orua), Bayelsa State
- University of Agriculture, Makurdi, Makurdi, Benue State
- University of Ilorin, Ilorin
- University of Maiduguri, Maiduguri
- University of Mkar, Mkar-Gboko, Benue State
- University of Uyo, Uyo, AkwaIbom State
- UsmanuDanfodiyo University, Sokoto, Sokoto State
- Wesley University of Science and Technology, Ondo
- Western Delta University, Oghara, Delta State
- Yusuf MaitamaSule University, Kano
- Zamfara State University, TalataMafara, Zamfara State

How Technology has impacted the Teaching of Accountancy in Nigeria Universities

Our focus is majorly on two Universities in Edo state, Nigeria, we shall be focusing on Igbinedion University, Okada a Private University and the University of Benin, Benin City a public University. The two universities offer a course in Accountancy or Accounting, below are their requirements

O'Level Requirements for Accountancy/Accounting

Five (5) SSC credit passes which includes: English Language, Mathematics, Economics plus any other two (2) Social Sciences subjects.

JAMB UTME Subjects Combination for Accountancy/Accounting

Note: English Language is a compulsory subject for all candidates in JAMB irrespective of course of study or institution of choice. Therefore, all candidates seeking admission to study Accountancy/Accounting degree programme in Nigerian Universities will write the following JAMB subjects;

Use of English, Mathematics, Economics plus any other (2) Social Science subjects.

Example 1: Use of English (compulsory), (2) Mathematics (3) Economics (4) Geography

Example

2: Use of English (compulsory), (2) Mathematics (3) Economics (4) Government

Example 3: Use of English (compulsory), (2) Economics, (3) Mathematics (4) Commerce

Direct Entry Requirements to Study Accountancy/Accounting

University of Benin accepts:

1) A minimum of 5 credits in the Senior Secondary Certificate Examinations (SSCE/GCE) Ordinary Level Credits in a maximum of 2 sittings.
2) Degree (First Class/Second Class Upper) in related fields.
3) A minimum of Merit Pass in the National Certificate of Education (NCE), National Diploma (ND) and other Advanced Level Certificates.

4) Other qualifications acceptable to the Senate of the University, and being equivalent to (1) and (4) above. In addition to the above minimum admission requirements, candidates must also satisfy such Faculty/Departmental entry requirements.

Igbinedion University accepts ND at credit level in related programmes.

Technology in the accounting classroom

Accounting classroom has changed to fulfil business necessities, better prepare learners for the labour marketplace and to allow them to succeed in a changing environment (Yap et al., 2014). The most recent cohorts of accounting learners are more familiar with diverse technologies – after all, they learnt to deal with mobile phones, tablets, and individual technology from an initial stage.

Accounting teachers must use of this opportunity to develop certain strengths which are inherent in learners, such as teamwork skills and enthusiasm, as these competencies will enable them to make a difference in their organizations one day, to communicate efficiently with supervisors and to be at ease with technology. The current organizational atmosphere entails professionals to progress innovative skills which, if schools have the foresight, they will already have trained their learners to master.

As Mastrolia and Willits (2013) observe, related skills must comprise the capability to search a widespread variation of bases (e.g., the world wide web) and to effort with an extensive variety of data services (Albrecht & Sack, 2016). Worryingly, Yu

et al. (2013) note that accounting learners are not adequately prepared to use databases or technology domains, nor do they become proficient at problem solving. Yu et al. (2013) emphasizes that, as the world prepares to meet the demands of the forth Industrial revolution (4IR), it will become very problematic to teach Accountancy exclusive of the usage of detailed software.

Reimbursements of consuming technology in the accounting classroom

Babalola and Tiamiyu (2014) opine that the appropriate use of technology in accounting classrooms can catalyze a model modification in terms of both content and pedagogy, which will, in turn, usher in reforms. Babalola and Tiamiyu (2014) further argue that, if considered and applied appropriately, technology-reinforced teaching can foster the gaining of appropriate knowledge and skills to form a basis from which to empower accounting learners for lifelong learning. Babalola and Tiamiyu further observe that, there are several benefits that can be derived from the use of technology in teaching accounting , as discussed below.

Evaluative learning

Technology permits pupils to examine and determine, rather than merely (passively) attend and recall. Technology-improved knowledge is learner-focused and investigative, unlike static, text- or print-based educational aids. It recognizes that there are many diverse knowledge pathways and diverse arrays of articulations of knowledge.

Dynamic learning

Technology-improved knowledge mobilizes tools through which to examine, calculate and analyze material, thus affording a platform for learner inquiry and analysis, and facilitating the construction of new information. Pupils consequently acquire while doing, and, where suitable, effort on real-life difficulties in complexity, assembly learning less intellectual and more applicable to their lifetime condition.

Co-operative learning

Where technology supports learning, it inspires collaboration and teamwork among pupils, educators, and specialists, notwithstanding of where in the world they are. Away from each other from modelling actual-world connections, technology reinforced education offers pupils and chance to work with individuals from various nations, in that way helping to develop their team up and forthcoming skills, as well as their worldwide responsiveness. It models education done through the learners' generation, by enlarging the learning space to incorporate not only their peers, but also mentors and specialists from diverse disciplines.

Creative learning

Learning which is maintained by technology endorses the guidance of present data and the formation of real-world products, rather than the regurgitation of established data.

Integrative learning

Here, the goal is to promote a thematic, consolidative method to education and knowledge. Such a method removes the artificial divide amongst diverse disciplines, and amongst theory and practice that characterizes the old-style classroom approach.

Summary of Reviewed Literature

This study is based on the Theory of Constructivism, this theory basically deals with the way people or individuals reflect on their previous experiences to accept new ideals and that learning requires active participation in other for it to be considered complete. We talked various psychologist and their contributions to the theory of Constructivism. We moved to the concept of technology and made known what advancement technology has brought to us, we said technology has revolutionized society in countless ways; technology allowed early humans to grow their food, navigate the open sea, tell times, and connect society on a global scalen and also the transition from manual to technological methods of solving problem.

We talked about accounting technologies, the benefit of accounting technology and listed few accounting softwares. Eight essential technologies for accounting business were also mentioned and explained. The concept of education was extensively discussed we further discussed how technology has influenced the teaching of accountancy.

CHAPTER THREE

METHODOLOGY

This chapter deals with the methodology and procedures that was adopted for this research work. Therefore, related sub-topics treated under this chapter includes:

- Design of the study
- Population of the study
- Sample and Sampling Technique
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Design of the Study

The study adopted survey research design which according to Nworgu (1991) is suitable for a study that involves collection of data from a sample considered to be representative of the population. This study therefore adopted a survey research design since it collected data from a sample considered to be part of the entire population of the student of accounting in the University of Benin, Benin City and Igbinedion University, Okada, Edo State of Nigeria.

Population of the Study

The population of the study consisted of the all the one hundred (100) four hundred level Students studying Accounting/Accountancy in the University of Benin and 30 students in Igbinedion University. However, the accessible population consisted fifteen (25) students Studying Accountancy in Igbinedion University and thirty five (25) four hundred level accounting students of the University of Benin, Edo State.

Sample and Sampling Technique

Random sampling is a part of the sampling technique in which each sample has an equal probability of being chosen. A sample chosen randomly is meant to be an unbiased representation of the total population. Random Sampling technique was used in choosing a sample of fifty students. This consists of students of the Accounting Department in the University of Benin and Igbinedion University Okada, Edo State Nigeria. Sampling refers to the decision made regarding whom and from where the researcher collected data needed to answer the research questions (Maxwell, 2013).

Research Instrument

The study employed Questionnaire which was a scorecard with two sections to be used as instrument for data collection. The questionnaire was divided into session A and B.

Section A: Demographic Information: This section elicits demographic information about the respondents such as, gender, status, age, Institution and department.

Section 2: This Section was judged with a closed ended questionnaire in the form of a four Likert- Scale where,

Strongly Agree (SA) = 4

Agree (A) = 3

Disagree (D) = 2

Strongly Disagree (SD) = 1, for continuous variables. The use of Likert-scale is to make it easier for understanding, reduce confusion in reading and answering the questionnaire by respondents.

Validity of the Instrument

To ensure the validity of the instruments, a draft copy of the instrument was submitted to three experts who are the research supervisor, a data analyst and an expert from the Department of Vocational and Technical Education and Educational Management in the University of Benin, Benin City, Edo State, Nigeria.

Each of the experts were required to comment on the suitability of the items in the questionnaire and possibly suggesting alternative items where the ones written were not suitable before the final draft was made.

Reliability of the Instrument

The result of the research will be stated with Cronbach Alpha reliability output. It is a general formula that has been found suitable for multiple – score items (Ogbazi and Okpala, 1994).

Method of Data Collection

The administration and retrieval of the questionnaire were through the use of Google form which is an online platform for sending and getting information from respondents. Research assistance were not needed as it involves the internet hence physical contact with the respondent was not required.

A total of 50 participants' access was granted to fill the questionnaire out of which twenty five were from Iginedion University, Okada and twenty five from Accounting department of the University of Benin, Benin City, Nigeria. This method yielded hundred percent retrieval of questionnaire.

Method of Data Analysis

The data of this study will be analyzed using a computer application called Statistical Package for Social Science (SPSS) every data from the retrieved questionnaire was imputed in the application and was allowed to run, mean(X) and standard deviation will be employed to analyze the data received from the respondents , while the mean is used to determine the degree of response , the Standard Deviation(SD) was used to determine the extent at which the respondents responses cluster or deviate around the mean. The mean rating 2.50 is used for decision point such that only less than 2.50 is regarded as disagree while Mean (X) rating equals or above 2.50 is regarded as agree.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

In this chapter, data collected is analyzed and presented in tabular form and discussed, the analysis and discussion is presented in the order of the research questions in chapter one.

Presentation of Result

Research questions:

1. Are technologies used in teaching Accountancy to undergraduates in the University?

Table 1: Descriptive in Mean and Standard Deviation of use of technologies in teaching Accountancy to undergraduates

Variable	N	Sum	Mean	Std.Dev	Scale Mean	Remarks
Use of Technologies	50	566.00	**11.32**	2.39	**10.00**	**They are Used**

Table 1 shows the descriptive data with respect to use of technologies in teaching Accountancy to undergraduates. Total respondents N = 50 the sum of their responses is 566.00 and they have a mean of 11.32 ± 2.39 Standard Deviation. The mean value is greater than the scale-mean of 10.00 (Mean of 4 items of four points scale) this implies

that the respondents agreed that technologies are used in teaching Accountancy to undergraduates in the University.

2. How proficient are the accountancy lecturers in the use of technologies in teaching Accountancy to undergraduates in the university?

Table 2: Descriptive in Mean and Standard Deviation of Lecturers Proficiency in the Use of Technologies in Teaching Accountancy to Undergraduates

Variable	N	Sum	Mean	Std.Dev	Scale Mean	Remarks
Proficiency	50	433.00	**8.66**	1.50	**7.50**	**Moderately Proficient**

Table 2 shows the descriptive data with respect how proficient are the accountancy lecturers in the use of technologies in teaching Accountancy to undergraduates in the university. Total respondents N = 50 the sum of their responses is 433.00 and they have a mean of 8.66 ± 1.50 Standard Deviation. The mean value is greater than the scale-mean of 7.50 (Mean of 3 items of four points scale) this implies that the respondents agreed that accountancy lecturers are proficient in the use of technologies in teaching Accountancy to undergraduates in the university.

3. What are the effects of using technologies in teaching Accountancy to undergraduates in the University?

Table 3: Descriptive in Mean and Standard Deviation of the Effects of Use of Technologies in Teaching Accountancy

S/N	Effects	Mean	Std.Dev	Remarks
1	The use of Technology software has influenced the performance of accounting students in their assessment.	3.04	.88	**Positive**
2	The use of technology software in teaching makes work easier for the accounting lecturers and students.	3.30	.81	**Positive**
3	The use of accounting technology has influenced the rate at which students conduct research using the internet	3.22	.84	**Positive**
4	The use of technology has improved students understanding of accountancy taught in Universities.	3.16	.77	**Positive**
5	The use of technology has prepared accountancy graduates to work in the modern accounting setting.	3.08	.70	**Positive**
6	The use of Technology has increased literacy among students and lecturers in Accounting profession.	3.32	.868	**Positive**

Table 3 showed the descriptive data with respect to effects of using technologies in teaching Accountancy to undergraduates in the University. Total respondent's N = 50. From the table all items have mean values greater than 2.50 for a four points Likert scale,

this implies that the respondents agreed that all the stated (influenced performance,makes work easier,conduct of research,improved students understanding,work in the modern accounting setting and increased literacy among students and lecturers in Accounting profession) are effects of the use of technologies in teaching Accountancy to undergraduates in the university

4. What are the challenges encountered in the use of technologies in teaching Accountancy to undergraduates in the University?

Table 4: Descriptive in Mean and Standard Deviation Challenges Encountered inUse of Technologies in Teaching Accountancy to Undergraduates

S/N	Challenges	Mean	Std.Dev	Remarks
1	Inadequate facilities have hindered the use of Technology in teaching accountancy in universities.	3.48	.71	**Yes**
2	Lack of access to accounting software has limited the effectiveness in teaching students on how to use soft wares to compute accounting entries.	3.28	.81	**Yes**
3	Lack of finance to provide facilities that afford the students easy access to internet facilities in the universities has caused major setback in the use of technology software in teaching accounting students.	3.32	.77	**Yes**

Table 4 showed the descriptive data with respect to challenges encountered in the use of technologies in teaching Accountancy to undergraduates in the University. Total respondents N = 50. From the table all items have mean values greater than 2.50 for a four points Likert scale, this implies that the respondents agreed that all the stated (Inadequate facilities, Lack of access to accounting software and Lack of finance to

provide facilities) are challenges in the use of technologies in teaching Accountancy to undergraduates in the university.

5. What are the solutions to the challenges encounter in the use of technologies in teaching Accountancy to undergraduates in the University?

Table 1: Descriptive in Mean and Standard Deviation of Solutions to the Challenges Encountered in the Use of Technologies in Teaching Accountancy to Undergraduates

S/N	Solutions	Mean	Std.Dev	Remarks
1	Provision of adequate facilities that support full adoption of the use of Technology software in teaching accountancy is one of the solution to problem that hinder effective teaching of accounting in universities.	3.40	.76	**Solution**
2	Provision of strong and affordable internet facilities to support easy access of the network will enhance the use of technology software in teaching accountancy in the universities.	3.38	.70	**Solution**
3	Adequate finance of tertiary institutions to create centers that afford students easy access to internet facilities will improve the interest of accountancy undergraduates in the Universities.	3.46	.73	**Solution**
4	Provision of adequate electricity in universities will boost the use of technology in teaching accountancy.	3.42	.67	**Solution**

Table 5 showed the descriptive data with respect to the solutions to the challenges encounter in the use of technologies in teaching Accountancy to undergraduates in the University. Total respondents N = 50. From the table all items have mean values greater than 2.50 for a four points Likert scale, this implies that the respondents agreed that all

the stated (Provision of adequate facilities, Provision of strong and affordable internet facilities, finance of tertiary institutions to create centers and Provision of adequate electricity) all possible solutions to the challenges encountered in the use of technologies in teaching Accountancy to undergraduates in the university.

Discussion of Findings

The results from the data collected were discussed under the following areas.

The Use of Technologies in Teaching Accountancy

Analysis and finding relating to the use of technology in the teaching of accountancy in Nigeria Universities which provides answers to research questions 1 to 4 have shown that accounting softwares are used for teaching accountancy in Nigeria Universities, other variable points that technology softwares are used for performing tasks such as submission of assignments. Further, the research shows that the use of technology softwares has influenced the academic performance of accounting students and technology in teaching has made teaching and learning easier and convenient for students and lecturers.

From the research it became clear that accounting teachers understand that when technology is optimally used in class, it provides different forms of assistance: it not only changes the way in which learners learn, but also the way in which the teacher delivers his/her lesson. This finding corroborates the view of Babalola and Tiamiyu (2014) that

the appropriate use of technology in the accounting classroom can bring about a paradigm shift in both the content and pedagogy which the teacher uses, and that is the essence of true classroom reform. As S Wang note, it is crucial to use relevant computer software and technology, to create a learning environment that fosters teaching and learning to the extent that other subjects may be inspired to try to do the same – that will boost learners' proficiency across all disciplines.

Proficiency of Accounting Lecturers in the Use of Technology in Teaching Accountancy

The findings under this component which relates to research questions 5 to 8 indicates that accounting lecturers have no adequate knowledge, skill in the handling of technology in the use of accounting teaching purposes, in relation to various accounting softwares, the researcher discovered that Quick Book accounting software was of a low extent utilized by lecturers in teaching accounting. The finding is in accordance with the result of Hodge (2014) which states that Quick Book packages have robust tools for expense tracking, tax calculation, invoice management and sales monitoring.

Effect of the Use of Technologies in Teaching Accountancy

Analysis of items under this component which relates to research questions 9 to 12 shows that the use of accounting software's has influenced the rate at which students' conducts research using the internet also the use of technologies has improved students

understanding of accountancy. The research also revealed that the use of technology in teaching accountancy has prepared accountancy graduates to work in the modern accounting setting, the use of technology has increased literacy among students and lecturers these claims were backed by Babalola and Tiamiyu (2014) who argued that, if considered and applied appropriately, technology-reinforced teaching can foster the gaining of appropriate knowledge and skills to form a basis from which to empower accounting learners for lifelong learning and implementation.

Challenges Encountered in the Use of Technology in Teaching Accountancy and Solutions to the Challenges Encountered

The findings under this component which relates to research questions 13 to 20 shows that inadequate facilities has hindered the use of technology in teaching accountancy in universities. This confirms the position of Maholwana-Sotashe (2007) that unavailability of infrastructure, lack of hardware and software, lack of internet access and other of technology resources as factors for low technology patronage among lecturers , Raman & Mohamed (2013) observe that there are several obstacles that hinder the frequent use of technology among subject teachers. These obstacles include unavailability of infrastructure; lack of hardware and software; lack of access to the internet; lack of technology competent teachers; insufficient training; resistance to change and insufficient knowledge possessed by teachers; lack of technical support; insufficient funding; and lack of appropriate technology policies (Maholwana-Sotashe, 2007).

According to Anderson (2008), most of these challenges arise as a result of the required changes that accompany the introduction of new technology into the classroom. In the view of Anderson, many educators feel that the onset of technology-based instruction is intimidating, intrusive, and aimed at replacing traditional modes of instruction. As such, identifying the possible challenges to technology integration in schools is an important step in improving the quality of teaching and learning and making teachers proactive adopters of technology in the future (Bingimlas, 2009). All these findings from the professionals highlight above supports our findings.

Solutions to these problems were provided in research questions 17 to 20, provision of adequate facilities that support full adoption of the use of technology in teaching accountancy is one of the solutions to the problem that hinder effective teaching of accounting in universities, provision of strong and affordable internet facilities to support easy access of the network will enhance the use of technology softwares in teaching accountancy in the universities, adequate finance of tertiary institution to create centers that afford students easy access to internet facilities will improve the interest of accountancy undergraduates in the Universities, provision of adequate electricity in universities will boost the use of technology in teaching accountancy these solutions were supported by Brantley-Dias and Ertmer (2013)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, conclusion and recommendations of this study based on the data analyzed

Summary

The main purpose of this study was to examine the impact of technology in teaching of accountancy in Nigerian Universities, in order to provide direction to the study, five (5) research questions were raised. The study adopted survey research design because according to Nworgu (1991) is suitable for a study that involves collection of data from a sample considered to be representative of a population. This study therefore adopted a survey research design since it collected data from a sample considered to be part of the entire population of the student of accounting in the University of Benin, Benin City and Igbinedion University, Okada, Edo State of Nigeria.

The population of the study consisted of the all the one hundred (100) four hundred level Students studying Accounting/Accountancy in the University of Benin and 30 students in Igbinedion University. However, the accessible population consisted fifteen (25) students Studying Accountancy in Igbinedion University and thirty five (25) four hundred level accounting students of the University of Benin, Edo State.

Random Sampling technique was used in choosing a sample of fifty students. This consists of students of the Accounting Department in the University of Benin and Igbinedion University Okada, Edo State Nigeria. The study employed Questionnaire

which was a scorecard with two sections to be used as instrument for data collection. To ensure the validity of the instruments, a draft copy of the instrument was submitted to three experts. The result of the research was stated with Cronbach Alpha reliability output a general formula found suitable for multiple – score items (Ogbazi and Okpala, 1994). The research questions were analyzed using frequencies, percentages, mean, and standard deviation.

Summary of Findings

The major findings of the study were as follows:

6. Technologies were used in teaching of accountancy in Nigeria Universities.
7. Accountancy lecturers are proficient in the use of technologies in teaching Accountancy to undergraduates in the university
8. The effect of using technology in teaching accountancy influenced performance of students, makes work easier for students and lecturers, exposes students to the use of the internet to conduct, improves students understanding, enables graduates work in the modern accounting setting and increased literacy among students and lecturers in Accounting profession.
9. It was agreed that agreed that all the stated (Inadequate facilities, Lack of access to accounting software and Lack of finance to provide facilities) are challenges in the use of technologies in teaching Accountancy to undergraduates in the university.

Conclusion

The findings of this review specifically revealed the strength and weakness of accountancy lectures in the basic components of the use of technology and application in teaching accountancy in Nigeria Universities. This study no doubt shows the incompetencies of Nigeria universities in providing conducive environment and enough equipments for the swift running of technology based accounting lectures.

Authority concerned must as a matter of urgency take advantage of the information provided by this study to fill in the holes in Nigerian University regarding to teaching accountancy. Also strategy actions must be taken to upgrade the handling of technological equipments by lecturers and to upgrade teaching resources and environments in Nigeria universities. By so doing accounting graduates will be well prepared and leveled to the current trends in accountancy profession.

Recommendations

In the light of the above findings, the following recommendations are made for the improvement of technology based accountancy lectures:

1. We have found out that one of the major problems of technology based teaching of accountancy is the lack of provision of enough computers, stable electricity, cheap data plans and strong network for browsing; Universities need to provide cheap data plans for students studying accountancy in various Nigeria universities and also provide enough computers and strong data connections should be available in Nigeria Universities.

2. Lectures should be given special training by experts every year on how to use the latest accounting softwares,
3. Lecturers should be provided personal computers and free strong data networks to enable them hold online classes with students.

Suggestions for Further Findings

Based on the scope and findings of this study, it is further suggested that other studies should be carried out on:

1. The present study should be replicated in other university in Nigeria for the purpose of generalization.
2. Impact of Technology Softwares in the Teaching and Learning of Accountancy in Nigerian Polytechnics.
3. Influence of Technology Softwares in Teaching of Accounting in Colleges of Education in Nigeria

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UNIVERSITY OF BENIN, BENIN CITY

FACULTY OF EDUCATION

DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATIUON

(BUSINESS EDUCATION)

RESEARCH QUESTIONNAIRE

Dear Respondent,

My name is Babatunde Ahmed Folaranmi, a final year student of the above named department of the Faculty of Education, University of Benin, Benin City. I am currently conducting a research on "the influence of Technologies in Teaching of Accountancy in Nigeria Universities".

I shall be delighted if you could give your honest response to the items contained, as all information shall be treated with utmost confidentiality and use for the purpose of this research only.

Thanks for your anticipated co-operation.

INSTRUCTION; Please, complete this questionnaire by ticking (√) in appropriate column which corresponds with the level of your agreement.

SECTION A (Personal Data)

Sex: Male ( ), Female ( )

Institution: Igbinedion University, Okada, Edo State, Nigeria ( )

University of Benin, Benin City, Nigeria ( )

SECTION B

Keys :- SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

S/N	ITEMS	SA	A	D	SD
1.	Accounting software is used for teaching accountancy in my School.				
2.	Assignments are being submitted with the use of Technology software.				
3.	The use of Technology software has influenced the performance of accounting students in their assessment.				
4.	The use of technology software in teaching makes work easier for the accounting lecturers and students.				
5	Accountancy lecturers are highly proficient with the use of technology in teaching.				
6	Accountancy lecturers makes use of spread sheet in the computing of accounting entries.				
7	Accountancy lecturers use updated softwares in teaching accountancy.				
8	Accountancy lecturers can make use of major accounting softwares in computing accounting entries.				
9	The use of accounting technology has influenced the rate at which students conduct research using the internet				
10	The use of technology has improved students understanding of accountancy taught in Universities.				
11	The use of technology has prepared accountancy graduates to work in the modern accounting setting.				
12	The use of Technology has increased literacy among students and lecturers in Accounting profession.				
13	Inadequate facilities has hindered the use of Technology in teaching accountancy in universities.				

14	Lack of access to accounting softwares has limited the effectiveness in teaching students on how to use softwares to compute accounting entries.				
15	Lack of finance to provide facilities that afford the students easy access to internet facilities in the universities has caused major setback in the use of technology software in teaching accounting students.				
16	Lack of competency among lecturers has hindered the use of Technology in teaching Accounting in Universities.				
17	Provision of adequate facilities that support full adoption of the use of Technology software in teaching accountancy is one of the solution to problem that hinder effective teaching of accounting in universities.				
18	Provision of strong and affordable internet facilities to support easy access of the network will enhance the use of technology software in teaching accountancy in the universities.				
19	Adequate finance of tertiary institutions to create centers that afford students easy access to internet facilities will improve the interest of accountancy undergraduates in the Universities.				
20	Provision of adequate electricity in universities will boost the use of technology in teaching accountancy.				