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TVET International Journal of Research and Design (TVET IJORAD) is an annual international, peer reviewed and open access Journal aimed at promoting original scholarly research, designs, innovations, creativity and information on various aspects of Technical, Vocational Education and Training.

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EDITORIAL COMMENT

Bridging the gap that exists between educational theory and practice is a major challenge for researchers in education, the world over. There is also no doubt that globalization and knowledge explosion make it imperative that change is continuous. Change in curricular content, teaching and learning methodologies and, the evaluation of learning outcomes has thus become a major focus of education researches in the bid to address modern challenges facing teaching and application of technical and vocational education in societal development. In spite of the globalised nature of these challenges, researchers still have to also pay specific attention to peculiar articles as regards technical and vocational education which is of much relevant to the issue in discuss.

International Journal of research and design in technical, vocational education and training(TVET IJORAD) as peer-reviewed journal published by the Department of Vocational and Technical Education of the Faculty of Education, Ekiti State University, Ado Ekiti, welcomes research papers in Technical Education in all of its areas, Business Education in all of its areas ,Educational Technology, Library and Information Science, and all other areas that are practical oriented and can engender community and national development particularly in teaching and learning.

All articles in this special edition of TVET IJORAD is hinged on the modern issues in the field of Technical, Business and Educational Technology proffering solutions on the way forward. Some of the articles examined the perception of lecturers and students on Internet and artificial intelligence as a medium for effective teaching and learning, and Web-based tool for teaching all technical and vocational studies.

Therefore, I recommend this copy of TVET IJORAD for researchers, policy-makers, teachers and student at all levels. And with this, I extend profound appreciation to all the contributors and researchers whose work were cited here in.

In the over all, TVET IJORAD is a professional journal devoted to publishing scholarly information of major educational innovations and original research on various aspects of vocational and technical education in all ramifications.

Professor G. B. Olowoyeye.

Editor In Chief.

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ASSESSMENT OF SKILLS REQUIRED BY BUSINESS EDUCATION STUDENTS FOR EMPLOYMENT OPPORTUNITIES IN ONDO STATE NIGERIA

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Abstract

The study examined skills required by business education students for employment opportunities in Ondo State. The study adopted descriptive research design. The population of the study consisted 280 business education students. The sample for the study was 180 which was purposively selected. A self-designed Questionnaire titled Assessment of Skills Required by Business Education Students for Employment Opportunities (QASRBESEO) in Ondo State, was used for data collection. The instrument was validated by three experts. The reliability of the instrument was ensured through a pilot study and Cronbach's Alpha method was used to test the reliability of the instrument. A reliability coefficient of 0.79 was obtain which indicated that the instrument is reliable. The data collected were analyzed using descriptive and inferential statistics. The research questions were answered using mean and standard deviation, while a Pearson Product Moment Correlation was used to test all the hypotheses formulated for the study at 0.05 level of significance. Findings revealed that there is a significant relationship between technological skills and employment opportunities for business education students in Ondo State. It also revealed that there is a significant relationship between problem-solving skills and employment opportunities for business education students in Ondo State. An implication of these findings is that enhancing technological and problem-solving skills among business education students in Ondo State is crucial for improving their employment prospects. The study concluded that pivotal role that technological and problem-solving skills play in shaping employment opportunities for business education students cannot be underestimated. This is because the significant relationship between these skills and employment opportunities highlights the need to possess the required skills to be opportune in today's competitive job market. The study recommended among others that the curriculum planners should be fostering a curriculum that emphasizes the development of these skills is crucial in preparing students for the dynamic and technology-driven landscape of the contemporary workforce.

Introduction

Business Education is a branch of vocational and technical education which is also an integral part of general education. This type of programme offers its recipients knowledge and skills that will enable them to function effectively and efficiently in the world of work. Business education is recognized as a vocational discipline that prepares its recipients with skills that will enable them to

contribute significantly to the sustainable economic development of Nigeria. Okoye (2021) stated that business education is a programme of study that is geared towards gainful employment. It is a laudable programme prepared to meet the present needs of the people and future generations when adequately and effectively handled and implemented. Obi in Anioke (2019) views business

education as a programme with the primary aim to prepare students for business career, improve those already in the career and also help students achieve all the aims of education. The mandate of business education seems to prepare students for and about business. Therefore, the need for business education to produce self-reliant individuals and this is more imperative today, considering the high level of unemployment particularly among young men and women across the state.

Azuka and Nwosu (2018) defined Business education as the inculcation and ingraining of competencies, employable and saleable skills in its recipients for self-reliance and in turn national development. Business education students are youths/individuals admitted into higher institutions of learning (i.e Universities or Colleges of Education) to undertake a course of learning in a business education programme, expected to be certificated upon graduation and to gainfully use the skills learnt to earn a living. Thus, Business education programme is expected to have the potentials for equipping the recipients with skills and knowledge in bookkeeping/accounting, business management, marketing, keyboarding, business communication, records management and other vocational and creative skills.

The objectives of Business Education as contained in the National Policy on Education (2013) include production of business graduates who will be able to inculcate the vocational aspects of Business Education into the society, production of business teachers who will start with so much desired revolution of vocational development right from the Nigeria primary and

secondary schools, production of graduates with the right skills to engage in a life of work in the office as well as for self-employment, among others.

In view of the stated objectives, the relevance of business education programme in job creation cannot be underestimated as it has the capacity to respond to current societal issues such as education for improving basic computational skills, for meeting the needs of the bilingual and bicultural population, for eliminating occupational stereotyping for assisting people with special needs and for helping the ordinary consumers to function effectively in the private enterprise system. This is expected to help in taking decisions on socio-economic issues and providing career information which can help to develop interest and abilities in different occupational opportunities.

Employment opportunities refer to conditions or situations that make it possible for individuals with the necessary skills to obtain and engage in paid work within organizations, highlighting the importance of skill acquisition for job accessibility in competitive labor markets (Pshembayeva, et. al., 2022). It does not mean the creation of a position or the creation of specialized training that is not otherwise provided to other employees. Employment opportunities could be described as any productive and profitable engagement of individuals to contribute meaningfully either as employee, or self-employment entrepreneur to generate wealth. These employment opportunities include teaching, preschool director, marketing, self-employment among others. These opportunities seem to be possible when business education graduates possess relevant skills such as business

management, entrepreneurial, and technical skills, which equip them for gainful employment and employment generation in competitive job markets (Dambo & Nwauzor, 2023).

A business education graduate is expected to possess different skills that will help them to create wealth. Nwaukwa, Iloeje, Nzeh and Nwagu (2018) noted that business education employability skills are in such areas as accounting, marketing, entrepreneurship, office technology and management. Business education graduates are expected to be marketable. This is because they are supposed to be equipped with employability skills that are needed to solve leadership, innovative, and economic problems. Business education has been recognized as a course of study that equips its students with different skills that are necessary for job placement in business related careers and for self-employment.

Employability skill is the ability to identify, acquire, adapt, and continually enhance the skills, understandings, and personal attributes that make graduates more likely to find and create meaningful paid or unpaid work that benefits themselves, the workforce, the local community, and the economy (Yorke, 2014; Dacre Pool & Sewell, 2007). In the context of business education, employability skills encompass a broad range of competencies including communication, problem-solving, ICT, teamwork, and self-management, which are critical for graduates to effectively secure and sustain employment in a competitive labor market (Ezemma, 2020; Ajisafe et al., 2022). Hence, employability skills could be seen as those skills, which an individual is expected to acquire before seeking or entering into a job such as technological skill, problem solving skill, among others.

Technological skill involves the use of computers and other electronic devices to process information. Despite the European Union's observation in Adewole and Abimbola (2021) that technologies have profoundly influenced working patterns, knowledge acquisition, socializing, communication, collaboration, and success across professions and individual lives, business education graduates often lack the necessary digital skills. Studies have shown that employers frequently find graduates underprepared in ICT and problem-solving competencies, necessitating costly retraining programs for effective job performance (Udie & Nwosu, 2023). This skill gap underscores the urgent need for curriculum reforms integrating practical ICT and communication skill training to better prepare business education students for the demands of the modern, technology-driven workplace and enhance their employability in competitive job markets. Hence, possession of technological skills is essential for coping with the rapid technological changes in the work place. In order to apply the new opportunities that technologies are opening in modern offices, business education students are expected to have developed the right set of technological skills to make a meaningful use of these technologies when employed in modern offices, after graduation.

In addition to the above, problem solving is another important skills that business education graduates need because the ability to solve problems and make decisions is a huge asset to employers; ability to effectively plan and organise creative thinking, innovative and inventive and are more likely to devise new ways of doing things that add value to the work environment; thinking critically and logically to evaluate

situations, solve problems and make decisions. Problem solving does not just require analytical, creative and critical skills, but a particular mind-set; those who can approach a problem with a cool and level head will often reach a solution more efficiently than those who cannot. In life situation, problems need not always be solved alone but ability to know who can help reach a solution, and how they can do it, can be of great advantage. Problem solving is the act of describing the problem, stating the cause of the problem, identifying and providing solutions to the problems identified in a manageable manner (Zoe, 2020). In this 21st century, Business Education graduates are expected to be able to identify and solve problem at any given time for success to be achieved.

Statement of the Problem

Business Education is a programme implemented in Colleges of Education, Ondo State that is supposed to equip learners with practical skills for self-reliance. It aims at producing graduates with skills to enable them be self-reliant, create jobs, wealth and enhance economic development. This is because the cardinal objectives of business education centre on acquisition of skills and competency, training in general knowledge of business and occupational intelligence. However, it has been observed that business education graduates from Colleges of Education in Ondo State are found among the unemployed graduates searching for white collar job in government establishments and other private organisations.

The jobs seem not to be available as evidenced in the high level of unemployment. This might be as a result of perceived lack of requisite skills for self-employment or other paid employment

among the graduates. The implication is that if business education students possess the right skills, it may likely decrease the level of unemployment in Ondo State. Business Education graduates who have gone through the programme in Colleges of Education are expected to have acquired employment opportunities skills such as technological skills, problem solving skills among others. It is against this background that the study seeks to assess skills required by Business Education students that can enhance their employment opportunities after graduation from Colleges of Education in Ondo State, Nigeria.

Purpose of the Study

The main purpose of this study was to assess skills required by business education students for employment opportunities in Ondo State. Specifically, the study assessed:

- i. the technological skills required by business education students for employment opportunities in Ondo State, Nigeria.
- ii. the problem solving skills required by business education students for employment opportunities in Ondo State, Nigeria

Research Questions

The following research questions guided the study:

- i. To what extent do Business Education students required the technological skill for employment opportunities in Ondo State, Nigeria?
- ii. To what extent do Business Education students required the problem solving skill for employment opportunities in Ondo State, Nigeria?

Research Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

- i. There is no significant relationship between technological skills and employment opportunities of Business Education students in Ondo State, Nigeria.
- ii. There is no significant relationship between problem solving skills and employment opportunities of Business Education students in Ondo State, Nigeria.

Significance of the Study

The findings of this study would be significant to government, curriculum planners, business educators, business education students, future researchers and community at large.

The outcome of this study provides significant information to the government on how to tackle unemployment among Business Education students by funding business education programme adequately. This study was significant to business educators to upgrade themselves to equip Business Education students with required skills for employment opportunities in Ondo state. It will provide information on important skills that are very germane in employment opportunities for business education students. Students of Business Education found the outcome of this study useful as they prepare for the world of work. The results of this study could be of advantage to them in that it could give them an insight on what skills that can help them to be a job creator and not job seekers. The community at large will benefit from the study because there will be more job to create by graduates of business education and it will prevent student from

engaging social unrest, kidnapping business, stealing and so on.

Literature Review

Business Education and Employability Skills

The term “Business Education” has been defined by different authors and scholars. Business education is a component of vocational and technical education programme that prepares an individual for career in business and also to be an intelligent consumer of economic goods and services. Business education provides students with needed competencies, skills, knowledge, understanding and attitude to perform as workers in industries, civil service and also proprietors of business. In view of Oche, Ukabi and Odey (2021) described business education as an academic programme in the scheme of global education which is aimed at equipping its recipients with the requisite attributes such as knowledge, skills, competencies, and attitudes to become gainfully employed in the world of work. Similarly, Mshelia (2019) asserted that it is a type of education that helps someone to learn the facts, acquire skills, develop abilities, solve problems and be able to have business-like attitudes useful for success in business situation. Business Education therefore equip youths with appropriate skills, knowledge, abilities and competences that can enable the individuals to be self employed and self reliant leading to sustainable economic development. Amidst the above assertions, it could be deduced that business education is a programme of study that is designed to equip student with skills that are useful in the office and business organization. Therefore, a graduate of business education if are well taught, are expected to possess skills that will make them to be self-reliant.

Employability Skill could be seemed as the ability to perform expertly, facility in performance, dexterity and tact. Skills are very important for poverty reduction, economic recovery and sustainable development (Okon, 2019). This in line with the views of Mshelia (2019) who stated that skill as basic ability is the means by which man adjust to life. Skill development is essential for increasing the productivity and sustainability of business organizations and improving working conditions and the employability of workers. In this challenging environment, the role of tertiary institution is not only to produce graduates with specific areas of specialization but more importantly, to develop graduate employability skills that match the demands required by industry in electronic world. Thus, employability can be regarded as having a set of skills, knowledge, training, understanding and personal attributes capable of getting and keeping a fulfilling work (Wiki, 2020).

Employable graduates passed through a system in which they are exposed to problem-based learning approaches and hands-on trainings to acquire the following skills: Communication, problem solving, adaptability, collaboration, time management, organizational, use of technology, information sharing, interpersonal and leadership skills. Graduates who had developed these skills would be employable (Duszynsk, 2021). Meanwhile, individual abilities to use these skills can help employees contributes to the growth and development of an organization (McQuaid, 2020). Employability skill could also mean the development of skills and adaptable workforces in which all those capable of work are encouraged to develop skills, knowledge, technology and adaptability by creating utility,

customers social, economic reality and true values to enable them to enter and remain in employment throughout their working years.

Employment Opportunities in Business Education Programme

Employment could be regard as a state of being engaged in an activity or service for wages or salary. Employment can be permanent or fixed-term, casual, apprenticeship or trainees. It could also be contract employment or agency staff. According to Ugwuogo, Ugwuogo and Nzeribe (2019), employment opportunity is a natural process of social development. This appears that since, Human beings bring with them into the world an array of needs that present employment opportunities for others to meet. In the opinion of Ugwuogo, *et al* (2019) stated that the these vocational oriented jobs can be undertaken by Business Education graduates: Government Office Work or Paid Employment: Business education graduates works in many government offices such as: Teaching, Cashier, Secretary, Bank Officer, Receptionist, Marketer, Computer Operator, Bank Clerk, Mail Carrier, Account Clerk, Postal Clerk, Purchasing Agent, Telephone Operator, Manager, Public Relation Officer, Insurance Agent Typist, Bank Cashier, Accountant, Bank Manager, Sales Manager, Administrative Manager, Administrator and Salesman.

Skills and Employment Opportunities

Employment opportunities appears to be a condition in which those that have the skills are able to secure job. In view of Onyeneke, Edward and Nwosu (2019) employment opportunity is the chance for individuals to find work or

occupation that provides them with a regular income. It is an activity that allows individuals to earn money by utilizing their skills and abilities. It is obvious that certain jobs require specific skills which include technological skills, problem solving skills, among others.

In this dispensation, Technology can be referred to as computer-based tools used by people for information and communication processing needs of an organisation. Similarly, Ukaegbu and Wegwu (2019) citing Quadri (2012) described technological skills as the abilities for the collection, effective processing, storing, transmitting and the dissemination of information which enables the use of computers and related technologies to meet personal academic and labour market objectives. Sometimes these skills may be referred to as technical skills. That usually fall under the category of hard skills. That means they seem usually learnt in a classroom setting or through alternative training. These specific skills include knowledge, skills, and competencies that will enable them successfully hold positions as secretaries, managers and secretarial administrators in both public and private sectors of the economy and more importantly unlock their potentials in the 21st century work place. It also exposes students to industrial experience thereby, affording them the opportunity to practicalize their skills, and to develop in the students and changing situation in the world of work. To achieve these lofty objectives, the business education curriculum in College of Education must emphasize and inculcate in the students' employability skills that are relevant and required to function effectively in this modern day technological world.

Types of technological skills that will unlock Business Education students'

potentials in the 21st century for employment opportunities. The following are the technological skills appeared to be unlock Business Education students employment opportunities according to Mshelia (2019) include: Computer Literacy skills - Word processing systems like MS Office - Email - Presentation software - Social media - Search engines - Basic Computer Hardware, Database Management Skills, Website Development Skills, Digital Marketing Skills - Video Production - SEO - Writing Skills - Data Analysis - Communication Skills - Graphic Design - Content Management, Project Management Skills - Financial modelling - Performance Tracking - Project Scheduling - The use of agile software as an approach to find efficient solutions - The ability to collaborate with others regardless of where they are - Team management - Effective Time Management, Cyber Security - Computer Science and Forensic skills - Software development skills - Hacking capabilities - Computer Programming - Communication Skills.

The study conducted by Oyinloye, Asonibare and Oluwalola (2021), examined office skills required by office technology and management graduates for effective performance in modern office. The study found among others that office skills both of which include hard and soft skills are required by OTM graduates for effective performance in modern office which include; technology skill, internet skill, computer skill, problem solving skill, presentation skill, communication skill among others. A well skilled and equipped business education graduate should in addition with problem solving skill so as to be employable in this technological era.

Problem solving skills are highly sought after by employers as many

companies rely on their employees to identify and solve problems. It is among the most important skill students must have when they start life after graduation. In this 21st century, one of the objectives of education is raising individuals, who can apply the information they learn to solve problems, develop strategies, and transfer their knowledge. Problem solving is ability to define a problem, generate alternatives, evaluate and select the alternatives and implement solutions to them. According to Imeokparia and Edigbonya (2019), it is a set of activities designed to analyze a situation systematically and generate, implement, and evaluate solutions. As a management professional, one's ability to identify current and potential problems and to make sound, timely decisions before and during an emergency can literally affect the lives and well-being of the organization. Good problem solving and decision making ability can avert tragedy and help the organization recover from the event more quickly.

Problem solving abilities are important skills for educational area because a healthy society or a healthy nation can only maintain its existence through adopting themselves into new conditions by problem solving abilities (Incebacat and Ersoy, 2016). Problem solving is the ability to solve problems and make decisions in a huge asset to employers; ability to effectively plan and organise creative thinking, innovative and inventive and are more likely to devise new ways of doing things that add value to the work environment; thinking critically and logically to evaluate situations, solve problems and make decisions.

Methodology

The study adopted descriptive research design. The population for this study were 280 Business Education Students of Adeyemi College of Education, Ondo and College of Education, Ero-Akure. Purposive sample techniques was used for this study to select one hundred and eighty (180) out of which 166 (92%) filled and returned the questionnaire among Business Education students in the selected institutions. A self-designed questionnaire titled assessment of skills required by Business Education students for employment opportunities in Ondo State, was used for data collection. The instrument was subjected to face and content validation by three experts, the researcher's supervisor and other two experts, one in Test, Measurement and Evaluation, and one in Business Education in the Vocational and Technical Education Department at Ekiti State University Ado-Ekiti to determine the validity and based on their instruction and corrections, the instrument was reworded. Cronbach's Alpha method was used to determine the reliability and the coefficient of 0.79 was obtained. The data collected were analyzed using descriptive statistics of mean, and standard deviations and inferential statistics using Pearson product moment correlation to test the hypotheses formulated for the study. All the hypotheses were formulated and tested at 0.05 level of significance.

Results

Research Question 1: To what extent do Business Education students required the technological skill for employment opportunities?

Table 1: Mean and standard deviation showing Business Education students required possessed technological skill for employment opportunities.

S/N	Technological skills	N	Mean	St.D	Remarks
1	I have the ability to demonstrate knowledge and proficiency in predictive analytics	166	2.82	0.80	Moderate Extent
2	I can make use of accounting software like database, spreadsheet	166	2.37	0.98	Low Extent
3	I am digital and media literate	166	3.04	0.76	Moderate Extent
4	I can make use of graphic and design programme	166	2.91	0.84	Moderate Extent
5	I am capable to apply IT skills in the business setting	166	3.12	0.72	Moderate Extent
6	I can make use of keyboarding very well	166	3.38	0.76	High Extent
7	I have the ability to adopt web application effectively	166	2.84	0.92	Moderate Extent
Grand Mean		166	2.92	0.82	Moderate Extent

The results in Table 1 revealed the extent to which business education students possessed the technological skills needed for employment opportunities in Ondo State. The respondent rated items one to seven with a mean ranging from 2.82 to 3.38, while the standard deviation ranged from 0.72 to 0.98. The grand mean indicated a value of 2.92. With these results, the above mean scores show that business education students moderately possessed the ability to demonstrate knowledge and proficiency in predictive analytics, digital and media literacy, graphic and design programmes, IT skills in the business setting, and effectively adopting web plications. The

results indicate that students can use accounting software like databases and spreadsheets to a low extent. The respondents revealed that they can make use of keyboarding to a very high extent. From the analysis, it shows that business education students possessed the technological skills required for employment opportunities in Ondo State to a moderate extent.

Research Question 2: To what extent do Business Education students required the problem solving skill for employment opportunities?

Table 2: Mean and standard deviation showing Business Education students problem solving skill required for employment opportunities.

S/N	Problem Solving Skills	N	Mean	St.D	Remarks
8	I am knowledgeable to identify a problem	166	3.27	0.52	High Extent
9	I have ability to understand the problem.	166	3.28	0.64	High Extent
10	I can determine the technicalities in solving problem	166	2.69	0.90	Moderate Extent
11	I have analytical thinking towards situations	166	2.70	0.90	Moderate Extent
12	I can gather resources to solve problem	166	2.96	0.78	Moderate Extent
13	I have the ability to make quick decisions to solve a problem	166	3.01	0.68	Moderate Extent
14	I have acquired the necessary researching skills.	166	2.97	0.97	Moderate Extent
15	I have the ability to analyse a situation	166	3.05	0.59	Moderate Extent
16	People can rely on my contribution in solving problem	166	2.95	0.82	Moderate Extent
17	I have the ability to recognize the emotions of yourself and others	166	3.09	0.64	Moderate Extent
Grand Mean		166	2.99	0.74	Moderate Extent

The analysis in Table 2 reveal the extent that Business Education students' possessed problem solving skill required for employment opportunities. The respondent rated item eight to seventeen with a mean ranging 2.65 to 3.28, while the standard deviation ranged from 0.52 to 0.97. The overall grand mean was 2.99 and standard deviation of 0.74 indicate that business education student moderately possessed problem solving skills required for employment opportunity. The respondents were of the opinion that identify a problem, and understand the problem in a high extent, technicalities in solving problem, analytical thinking, ability to gather resources to solve problem, ability to

make quick decisions, researching skills, ability to analyse a situation, contribution in solving problem, and ability to recognize the emotions of yourself and others are the problem solving skills required for employment opportunities. The results of the analysis imply that the respondents moderately possessed the problem solving skill according to their aspirational level.

Test of Hypotheses

H0₁: There is no significant relationship between technological skills and employment opportunities of Business Education students in Ondo State.

Table 3: Pearson Product Moment correlation showing relationship between technological skills and employment opportunities of Business Education students.

Variables	N	Mean	r-cal	P.Value	Decision
Technological Skills	166	9.2289	.871**	.000	Significant
Employment Opportunities	166	21.3012			

The result in Table 3 revealed that Pearson Product Moment correlation coefficient was ($r=0.871$, $P = 0.000 < 0.05$), indicating that there is high positive relationship between technological skills and employment opportunities of Business Education students. Since the p value of 0.000 is lesser than 0.05 level of significant, hence the null hypothesis 1 is rejected. There is significant relationship between technological skills and employment

opportunities of Business Education students in Ondo State. This connote that the technological skills of business education students have to do with their employment opportunities in Ondo State.

H0₂: There is no significant relationship between problem solving skills and employment opportunities of Business Education students in Ondo State.

Table 4: Pearson Product Moment correlation showing relationship between problem solving skills and employment opportunities of Business Education students.

Variables	N	Mean	r-cal	P.Value	Decision
Problem Solving Skills	166	9.9096	.910**	.000	Significant
Employment Opportunities	166	18.9036			

The analysis in Table 4 revealed that Pearson Product Moment correlation coefficient was ($r=0.910$, $P = 0.000 <$

0.05). This implies that the relationship between problem solving skills and employment opportunities of Business

Education students is positive and significant. Therefore, the null hypothesis 2 is rejected. There is significant relationship between problem solving skills and employment opportunities of Business Education students in Ondo State. This means that the problem solving skills of business education student determine their employment opportunities in the labour market.

Discussion of Findings

Findings revealed that there is a significant relationship between technological skills and employment opportunities for business education students in Ondo State. The result pointed out that for business education students to be gainfully employed or qualified for any employment opportunities, they are required to have technological skills. The finding supports the study of Ukata and Nmehielle (2021), who revealed that ICT skills and leadership skills as generic skills technologies are highly exposing the employment potential of OTM students in Rivers State and needed critical thinking, creativity, and innovation, as well as technology skills, to be self-reliant in a recessed economy. The finding agreed with the study of Oyinloye, Asonibare, and Oluwalola (2021) and Ubulom and Enyekit (2022), who found that office skills, both hard and soft, are required by OTM graduates for effective performance in modern offices.

Findings revealed that there is a significant relationship between problem-solving skills and employment opportunities for business education students in Ondo State. This implies that problem-solving skills are one of the important skills that business education students must possess to guarantee employment opportunities in the labour market. The findings agreed with the

outcome of the study of Kim, Choi, Sung, and Park (2018) and Riaz, Safdar, Shah, and Malik (2023), who asked stakeholders and policymakers of educational institutions to follow the potential model in the hiring process of faculty members by ensuring qualities like proactive personality, problem-solving skills, and innovative behavior and that problem-solving ability positively influenced innovation behaviour and opportunity perception.

Conclusion

The study concluded that pivotal role that technological skills play in shaping employment opportunities for business education students cannot be underestimated because the significant relationship between technological skills and employment highlights the increasing importance of staying abreast of technological advancements in today's competitive job market. The study also concluded that many businesses are facing with diverse problems, hence, the ability to analyze, innovate, and implement effective solutions becomes a critical asset. Business education students equipped with strong problem-solving skills are not only better positioned to navigate the intricacies of the modern workplace but are also more likely to contribute positively to organizational growth.

Recommendations

The following recommendations are made:

1. The curriculum planners should be fostering a curriculum that emphasizes the development of these skills is crucial in preparing students for the dynamic and technology-driven landscape of the contemporary workforce.

2. Management of colleges of education should promote partnerships between educational institutions and local businesses to create internship and apprenticeship opportunities, allowing students to apply their technical skills in real-world settings.

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ADEQUACY AND UTILIZATION OF E-LEARNING INSTRUCTIONAL FACILITIES IN TERTIARY INSTITUTIONS IN NIGER STATE, NIGERIA.

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Abstract

The study was carried out to determine the Adequacy and Utilization of e-Learning Instructional Facilities in Tertiary Institutions in Niger State, Nigeria. Three research questions guided the study while two null hypotheses were formulated and tested at 0.05 level of significance. The study adopted mixed research design. The population of the study consisted of all the state and federal government own tertiary institutions in Niger State. Multistage Cluster Sampling technique was employed and a total of 418 respondents were used for the study. The instrument for data collection was a structured questionnaire and interview. Mean statistics and standard deviation were employed to analyze data for answering the research questions while z-test was used to test the null hypotheses. The findings of the study revealed among others that; e-learning instructional facilities are not adequate. The level of utilization of the e-learning facilities is low. It was recommended among others that, the bodies regulating the tertiary institutions in Nigeria should make available the updated e-learning facilities. Workshops and seminars should be organized for lecturers on the uses of e-learning facilities.

Key Points: e-learning instructional facilities, adequacy, utilization and tertiary institution.

Introduction

Due to the rapid advancement of technology and the introduction of digitalization, the world is changing at a rate that is unfathomable to the human race. The COVID-19 pandemic has also prompted a change in how teaching and learning are conducted within the educational system. In particular, the education sector has seen a significant transformation. The rapid advancement of technology and the globalization of all educational sectors have led to the emergence of a new educational system, which has necessitated the adoption of innovative teaching and learning

techniques at tertiary institutions around the globe. This is evident in the definition of education by Moses et. al (2018) who define education as a dynamic and tends to follow the pattern of development in the world and industrial revolution taking place in the global arena. Owing to the adoption of new technology, the global educational framework has been expanded to include all levels of education and stakeholders to be actively involve so that the kind of education given at all level will be of benefits to both the student, parents, the society and the world at large. Teachers and students are required to master communication

utilizing the appropriate and necessary facilities at the right time and for the right purpose in order to remain relevant in a world that is rapidly changing and in which technology is transforming every sector.

Teaching and learning in this 21st century should not be confined to the conventional physical classroom but should instead take place in a virtual environment where both teachers and students can actively participate, regardless of their location. The United Nations Conference on Trade and Development [UNCTAD] (2021) noted that new and emerging technologies like artificial intelligence (AI), robotics, the internet of things, autonomous vehicles, 3D printing, nanotechnology, biotechnology, materials science, energy storage, quantum computing, and others are redefining education, industries, and all human sectors of the economy. As a result, it is essential to change how teaching and learning are conducted at our tertiary institutions. A dramatic and coordinated strategy is required for larger reforms in the education system.

More precise visualization is required in the teaching of engineering and technologically oriented disciplines so that it can be more relevant and real to the students. The latest technology, such as augmentation/virtual reality, is required to disseminate information via video, images, motion, and graphic designs. The use of augmented reality (AR) in the classroom has been recognized as a cutting-edge technology that allows students to interact with both the actual world and the virtual one (Hsiao & Chen, 2011).

The kind of education required in Nigeria is one that can enable people to transition from learning to employment and become useful members of society, which in turn boosts the nation's

economic standing. This is only achievable if all parties involved in education participate voluntarily and cooperatively in the procedures and results. The major way that could assist in connecting the students and allowed them to meet up with the world is the teaching methods applied in the classroom. The teacher-centered method and the student-centered method were found to be the only two methods of teaching and learning. The teacher-centered method is a conventional approach to teaching and learning in which the teacher is the only active participant in the classroom and the students are passive participants. Teacher centred methods is an approach where activities in the classroom are centred on the teacher and involves rote memorization and coverage of the context on the part of the students (Khalid & Azeem, 2012). Students centred method of teaching involve both the teacher and students to be active members in the classroom. It is a technique of instruction that enables students to conduct independent research using all of the resources at their disposal. It entails the use of numerous pieces of technology, including computers, mobile phones, projectors, iPhones, iPads, and the internet (Yisa & Lewu, 2021). One style of teaching and learning that makes use of the aforementioned tools or technology is referred to as e-learning.

One of the most significant educational breakthroughs is e-learning, which is supported by an expanding range of technology-enabled platforms and provides prospective students with a different and creative learning environment from traditional learning (Trelease, 2016 and Bates & Poole, 2003). Since the arrival of technology in education, the introduction or inclusion

of e-learning has changed. Technology can be used in a variety of ways to give training, including face-to-face interaction, online learning, and hybrid instruction (which combines in-person and online learning). E-learning facilities utilization involves using resources like PowerPoint slides, a website or learning management system, computer programmes that require students to use electronic devices either in class and distant learning situation to construct knowledge (Bates & Poole, 2003, and Trelease, 2016). These methods are currently combined in the majority of e-Learning scenarios, including blogs, collaborative software, portfolios, and virtual classrooms.

E-learning benefits both the teacher and the students more when it is executed well and when the materials are accessible, adequate, and used. Interactivity, personalization, feedback, and tracking are just a few of these benefits. The constructivism theory, which allows students to generate their own learning and develop their experience through searching, self-paced learning, and other methods, is supported by e-learning. It made it possible for teachers and students to communicate clearly. The relationship between the teacher, students, and subject matter will go smoothly. The students' motivation to learn more will rise as a result of adequate and effective utilization of e-learning. Regardless of the methodologies or teaching methods used, the teachers' main concern seems to be the success of the students at all levels. E-learning, according to Clark and Mayer (2008), should include the following features: relevant materials to the learning purpose, utilizes teaching techniques like practice and examples to aid in learning, uses media components, such as words and images, to convey the

message and techniques, either instructor-led (synchronous e-learning) or made for independent, self-paced study (asynchronous e-learning), creates new information and abilities connected to better organizational performance or personal learning objectives. E-learning is referred to the fusion of learning and the internet (Ajadi, et al, 2008).

E-learning facilities in education refer to the contemporary telecommunications tools and internet communication technology resources such as the computer, scanner, printer, internet, intranet, e-mail, video phone system, teleconferencing devices, Wireless Application Protocols (WAP), radio and microwaves, television and satellites, multimedia computer, and multimedia projector in teaching and learning as well as in the implementation of curricula. The usefulness of e-learning resources in tertiary institutions depends on how adequate and well they can be used for both teaching and learning (Okoli, & Osuafor 2019). E-learning allows for teaching-learning through animation or video, which is often not possible through any other method. Knowledge and skills can be acquired by students in ways that are far more suited to their specific learning preferences. Thanks to recent technological advancement which has given teachers the opportunity to stream audio over the internet and then, students can download podcasts from the internet.

Based on the types of technology utilized or the timing of interaction, there are various classes of e-learning. According to Algahtani (2011), E-learning can be broken down into two categories: computer-based e-learning and internet-based e-learning. Computer-based e-learning is a form of learning that uses computers. It is not necessary to access the information

through the internet. Computer Managed Learning and Computer Aided Teaching are two examples of computer-based e-learning (Algahtani, 2011). With no requirement for a teacher to be physically present, it allowed students to learn at their own pace. According to Almosa (2002), internet-based e-learning is a step up from computer-based learning and makes content available online with links to relevant knowledge sources, such as e-mail services and references, that can be used by students whenever they want and wherever they are, regardless of the presence or absence of teachers or instructors.

E-learning is not a brand-new approach to teaching and learning, particularly in developed nations where a quality education is valued. This is evident during the global COVID-19 epidemic in 2020 when there was a complete lockdown, developed nations utilized technology in their educational systems. Currently, several higher institutions in Nigeria are adopting e-learning resources, however it is unclear how adequate these resources are and whether teachers are actually using them to teach the students. Tertiary education, as defined by the National Education Policy of the Federal Republic of Nigeria [FRN] (2014), is education that is provided after post basic education in establishments like universities and inter-university centers like Nigeria French Language Village, etc., establishments like Innovation Enterprise Institutions (IEIs), and colleges of education, monotronics, polytechnics, and special establishments like colleges of agriculture, schools of health, and tech (NTI). It was further emphasized that the purpose of tertiary education is to support and encourage scholarship, entrepreneurship, and community service; reduce skill shortages by

producing skilled labour relevant to the needs of the labour markets; and contribute to national development through high level manpower training. According to the FRN (2014), quality teaching and learning, research and development, higher standards for facilities, services, and resources, as well as the provision of a more practically based curriculum pertinent to labour market needs, are all necessary for tertiary institutions to achieve the above goal. A tertiary institution can only effectively aid in a country's growth if the teaching and learning are based on the most recent trends and needs. Digitalization and paperless education are also demanding in the field of education. Which indicates that electronic devices should be used in both teaching and learning. So, adopting e-learning instructional tools for teaching and learning is required in tertiary institutions for both the teacher and the students. The purpose of tertiary education is to impart and help students develop the skills, attitudes, knowledge, and values that will benefit them, their families, the community, and the country as a whole.

Teachers need to actively use the technologies that are relevant to 21st century capabilities since they are a key change agent in the 21st century educational system. Every aspect of the e-learning infrastructure must be mastered by them. Teachers must incorporate e-learning into the educational system to guarantee that tertiary institutions give students the skills, information, and competencies they need to be relevant to themselves and to the society. It is crucial that higher education faculty members use the available e-learning resources. A teacher must employ a variety of strategies to

meet the students' interest and focus in order to impart knowledge effectively.

Problem Statement

There is a common belief that a country can only advance to the level of its education. As a result, the degree of education in a country has a significant impact on its growth and development as well as that of its society. Education is the process that enable people to acquire the necessary competencies, knowledge, skills and attitudes that makes them to be useful to themselves, the society, country and the world at large. Every country's population will benefit from receiving quality education, which will contribute to the change that is desired.

Many teaching and learning techniques have evolved as a result of the speed at which technology is developing as well as the introduction of computerization and digitalization, and these techniques have the potential to affect how students learn in our educational system. These techniques include: electronic learning (e-learning), video conferencing, teleconferencing, blended learning, cooperative learning, and many others. A computer, tablet, smart phone, television, DVD player, radio, projector, and the internet are among the technology used in e-learning.

The education sector will only experience rapid growth if all stakeholders are able to work together and keep pace with technological advancement and ensuring that they are adequate and used by both teachers and students. The e-learning instructional facilities may be available but not adequate in terms of quantity, quality, or modernness. In some higher institutions of learning, these e-learning facilities may be available; but the question is: how much are they being utilized? In light to the foregoing, the study sought to

ascertain the levels of adequacy and utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria.

Research Questions

The following research questions guided the study.

1. How adequate are the e-learning instructional facilities in tertiary institutions in Niger State, Nigeria?
2. What is the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria?
3. What are the strategies to improve the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria?

Hypotheses

The following null hypotheses were formulated and was tested at 0.05 levels of significance:

1. There is no significant difference between the mean response of the lecturers and students on the adequacy of the e-learning instructional facilities in tertiary institutions in Niger State, Nigeria.
2. There is no significant difference between the mean response of the lecturers and students on the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria

Methodology

Mixed research design was considered suitable for this study to collect data from the targeted population. Questionnaires and interview were used to collect data from lecturers and students in tertiary institutions in Niger State, Nigeria. The study was carried out in the tertiary institutions in Niger State. The population of the study consisted of the

lecturers and students of the selected state and federal government owned tertiary institutions in Niger State.

The sample size of the study was 418 consisting of 118 lecturers and 300 students. They were selected from the seven (7) tertiary institutions in Niger State through a Multistage Cluster Sampling technique. Here, three tertiary institutions were selected by balloting out of seven (7) tertiary institutions in Niger State. The tertiary institutions were: Federal University of Technology, Minna; Federal Polytechnic, Bida, Niger State; and Niger State College of Education, Minna, Niger State. The first stage stratified sampling technique was used to group the tertiary institutions into three: University, Polytechnic and College of Education. Simple random sampling technique was used in second stage to select the three tertiary institutions. Purposive sample techniques were the used to select departments that offers technical and vocational related courses in those institutions.

Three types of questionnaires were used. The first questionnaire consisted of 14 items which focused on the adequacy of e-learning instructional facilities in tertiary institutions. The second question consisting of 14 items which focused on the level of utilization of e-learning instructional facilities in tertiary institutions, while the third questionnaire consisted of 10 items seeking the answers to the strategies to improve the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria. The questionnaires were closed-ended and was developed by the researchers' using data obtained through the review of related literature. Structured interviews schedule was conducted among selected lecturers and students in the sampled tertiary institutions in Niger State, Nigeria

on the adequacy and utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria. In these interviews, the researchers attempted to achieve a holistic understanding of the interviewees' point of view or situation.

All the questionnaires administered were returned representing 100% return rate. The data collected for the study was organized and analyzed on the basis of the research questions. Quantitative data collected for this study was analyzed using mean, standard deviation using statistical package for the social sciences (SPSS version 27) computer programme. Data obtained through interview were analyzed using thematic analysis. Decisions on the research questions were based on the resulting mean score interpreted relative to the concept of lower and upper limits of real numbers: Highly Adequate, Highly Utilized and Highly Agree is 3.50 – 4.00; Adequate, Utilized and Agree is 2.50 – 3.49; Slightly Adequate, Slightly Utilized and Slightly Agree is 1.50 – 2.49; Not Adequate, Not Utilized and Not Agree is 1.00 – 1.49

as shown in Table 1. The standard deviation was used to decide on the closeness or otherwise of the respondents to the mean in their responses. Any item with standard deviation of less than 1.96 indicated that the respondents were not too far from the mean or from one another in their responses and any item having standard deviation equal or above stated value signified that respondent were too far from the mean.

Results

Research Question 1: How adequate are the e-learning instructional facilities in tertiary institutions in Niger State, Nigeria?

Table 2: Responses of Respondents on the Adequacy of E-learning Instructional Facilities in Tertiary Institutions in Niger State, Nigeria.

S/N	ITEM	Mean	SD	Decision
1	Projector	1.36	.78	NA
2	Electromagnetic Board	3.47	.92	A
3	e-studio	1.32	1.04	NA
4	E-Library	3.12	.93	A
5	Augmented/Virtual Reality applications	0.70	.89	NA
6	Flash drives/External Hard drives	3.56	.87	HA
7	Personal Computer (PC) System	3.64	.60	HA
8	DVD player	2.36	1.25	A
9	CD players	1.84	1.29	SA
10	Radio	2.27	1.20	SA
11	Television	1.76	1.17	SA
12	Camera	2.61	1.25	A
13	Tablet	1.61	1.15	SA
14	Internet connectivity in the School	1.26	1.08	NA

Key: SD= Standard Deviation, HA=Highly Adequate, A=Adequate, SA=Slightly Adequate and NA= Not Adequate.

Table 2 shows the analysis of responses of respondents on the adequacy of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria. The results revealed that items 6 and 7 have their mean values within the ranges of highly adequate (3.56 – 3.64) while four items; 2, 4, 8 and 12 have their mean values within the ranges of adequate (2.61 - 3.47). Items 9, 10, 11 and 13 with the mean ranging from (1.61-2.27) indicated that the items are slightly adequate. Also, items 1, 3, 5 and 14 have their mean values within the ranges of not adequate

(0.70 – 1.37). The table also shows the standard deviations (SD) of all items are within the ranges of 0.60 to 1.29 and are positive and less than the normal deviate of 1.96, thereby indicating that respondents were not too far from the mean and from one another in their responses.

Research Question 2: What are the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria?

Table 3: Responses of the Respondents on the Level of Utilization of E-learning Instructional Facilities in Tertiary Institutions in Niger State, Nigeria.

S/N	Item	Mean	SD	Decision
1	Uses of Projector for lectures	1.18	.98	NU
2	Uses of Augmentation/Virtual Reality for lectures	1.43	.80	NU
3	Uses of Podcard	1.25	1.15	NU
4	Uses of Google meet for lectures	1.37	.93	NU
5	Uses of PowerPoint for lectures	1.70	.89	SU
6	Uses of Zoom for lectures	0.79	.82	NU
7	Uses of AUTOCAD for technical/building/ engineering drawings	1.44	1.21	NU
8	Uses of conference meeting for lectures	2.36	1.25	SU
9	Online collaboration teleconferencing is employed by lecturers	2.35	1.11	SU
10	Uses of e-books when sourcing for academic information	3.44	1.18	U
11	Uses recorded video or audio for instruction	1.76	1.17	SU
12	Lecturers personally have webpages, Wikis or Blogs that they used for lecture purposes	1.23	.96	NU
13	Lecturers have individual email Accounts	2.53	1.26	U
14	Lecturers use e-learning facilities to enhance teaching and learning	1.18	1.09	NU

Key: SD= Standard Deviation, HU=Highly Utilized, U=Utilized, SU=Slightly Utilized and NU= Not Utilized

Table 3 shows the analysis of responses of the respondents on the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria. The results revealed that items 10 and 13 have their mean values within the ranges of utilized (2.53 – 3.44) while four items; 5, 8, 9 and 11 have their mean values within the ranges of slightly utilized (1.70 – 2.36). Items 1, 2, 3, 4, 6, 7, 12 and 14 with the mean ranging from (1.18-1.44) indicated that the items are not utilized. The table also shows the standard deviations (SD) of all items are

within the ranges of 0.80 to 1.26 and are positive and less than the normal deviate of 1.96, thereby indicating that respondents were not too far from the mean and from one another in their responses.

Research Question 3: What are the strategies to improve the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria?

Table 4: Responses of the Teachers on the Strategies to Improve the Level of Utilization E-learning Instructional Facilities in Tertiary Institutions in Niger State, Nigeria.

S/N	ITEM	Mean	SD	Decision
1	Re-skilling of the lecturers on the e-learning instructional facilities	3.47	.87	A
2	Up-skilling of the lecturers on the e-learning instructional facilities	2.74	.67	A
3	Government should subsidize the sales of computer to lecturers	2.83	.81	A
4	Projectors should be installed in all lecture rooms	2.95	1.02	A
5	School management should make funds sufficient for the development of e-learning infrastructures	3.10	.86	A
6	School management should train people on how to repair e-learning facilities	3.17	.93	A
7	Electricity supply should be made available	3.28	1.04	A
8	Availability and adequate internet connectivity	2.98	1.00	A
9	Availability and adequate e-studio	2.35	1.26	SA
10	Lecturers should encourage the students on the uses of e-learning	2.70	1.07	A
Total		2.96		A

Key: SD= Standard Deviation, SA=Strongly Agreed, A=Agreed, SD=Strongly Disagreed and NA= Disagreed

Table 4 shows the analysis of responses of the respondents on the strategies to improve the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria. The results revealed that items 1, 2, 3, 4, 5, 6, 7, 8 and 10 have their mean values within the ranges of Agreed (2.70 – 3.47) while item 9 has

mean value of slightly agree (2.35). The table also shows the standard deviations (SD) of all items are within the ranges of 0.67 to 1.26 and are positive and less than the normal deviate of 1.96, thereby indicating that respondents were not too far from the mean and from one another in their responses.

Hypothesis 1

Table 5: Z - test for the Mean Responses of Respondents on the Adequacy of E-learning Instructional Facilities in Tertiary Institutions in Niger State, Nigeria.

Respondents	Mean	S.D	N	Df	Z-cal	z-crit	Remark
Lecturers	2.21	1.03	118	416	1.10	1.96	No sig.
Students	2.32	0.82	300				

Table 5 revealed that calculated Z does not exceed the Z-critical value; this signified that there is no significant difference between the means responses

of lecturers and Students on adequacy of e-learning instructional facilities in tertiary institution in Niger State, Nigeria.

Hypothesis 2

Table 6: Z - test for the Mean Responses of Respondents on the Level of Utilizations of E-learning Instructional Facilities in Tertiary Institutions in Niger State, Nigeria.

Respondents	Mean	S. D	N	Df	Z-cal	z-crit	Remark
Lecturers	1.72	1.06	118	416	0.82	1.96	No sig.
Students	1.81	1.03	300				

Table 6 revealed that calculated Z does not exceed the Z-critical value; this signified that there is no significant difference between the means responses of Lecturers and Students on the level of utilization e-learning instructional facilities in tertiary institutions in Niger State, Nigeria.

instructional facilities are adequate. The e-library in tertiary institutions are made adequate in so that both the lecturers and students can have access to online materials and used it for teaching, learning and research.

It was revealed also that some e-learning instructional facilities are not adequate these include projector, e-studio, augmented/virtual reality applications and internet connectivity in the school. The e-learning instructional facilities may be available but not adequate in number, quality and updated. This agrees with the study of Diseph (2021) who opined that e-learning infrastructures are inadequately provided in tertiary institutions for effective teaching and learning. The study is in harmony with the study of Diseph (2021) who revealed that e-learning equipment such as interactive white boards, computers, projectors, TV sets, and printers are not adequately provided by the university.

Discussion of Findings

One criterion for the efficient use of the e-learning facilities at tertiary institutions in Niger State is the adequacy of the e-learning instructional facilities in those institutions. The Electromagnetic Board, E-Library, Flash drives/External Hard Drives, Personal Computer (PC) System, DVD player, CD player, Radio, Television, and Tablet were found to be adequate. This is consistent with the findings of the study by Eze et al. (2018), which showed that the e-learning facilities at M-Universities are appropriate and that they should be continuously updated and maintained. These e-learning

Atsumbe, et al., (2012) also agreed with the findings of this study by revealing that e-learning infrastructures are not adequate in the university for teaching and learning and management's efforts towards the development of Information and Communication Technology (ICT) is mainly for administrative purposes. The finding agrees with the finding of Atsumbe et al (2012) who posit that the internet service is provided by the management of FUT Minna, however the services are not fast, reliable or adequate. Furthermore, they revealed that the university's website was not designed to promote teaching and learning but to divulge information about the university and enable students to register online. This e-learning instructional facilities are so important and are needed for delivery lecture in our tertiary institutions.

The result of interview conducted, also revealed that, lecturers and students agreed that some of these e-learning instructional facilities are available but not adequate. Some of their responses is that projector is available in seminar rooms, conference rooms and board rooms but are not find in lecture rooms. They agreed that e-studio, augmented/Virtual reality application and internet connectivity are not adequate in tertiary institutions in Niger State. Some e-learning instructional facilities are adequate such as electromagnetic board, e-library, and personal computer (PC) system.

It was revealed that some of the e-learning instructional facilities are not utilized which include uses of projector for lectures, uses of augmentation/virtual reality for lectures, uses of podcard, uses of google meet for lectures, uses of Zoom for lectures, uses of AUTOCAD for technical/building/engineering drawings, and others. The study agreed with the

study of Eze et al (2018) who discovered that majority of lecturers in M-University indicated that e-learning facilities are not fully utilized. The research agrees with the study of Diseph (2021) who find out that lecturers are aware of the internet and can surf the web. But they cannot use it in facilitating the teaching and learning. In addition, it further revealed that lecturers versatile in the use of computer applications. However, this knowledge is not used for educational purposes. These e-learning facilities when adequately and effectively utilized will enhance teaching and learning.

The response from the interviewed lecturers revealed that the available projectors are not usually used for lecturing but are used mostly for seminar presentations or for some special occasions. It was also revealed through interview that augmentation/virtual reality not utilized. Based on the e-studio for teaching and learning technical/building/engineering drawing, it was revealed that lecturers somehow utilized AUTOCAD for lecture purposes.

It was also revealed that some of the e-learning facilities are utilized in tertiary institutions in Niger State they include uses of PowerPoint for lectures, uses of conference meeting for lectures, Online collaboration teleconferencing are employed by lecturers, uses of e-books when sourcing for academic information, uses recorded video or audio lectures to Students and Lecturers have individual email Accounts. The research agrees with the study of Diseph (2021) who find out that lecturers are aware of the internet and can surf the web. But they cannot use it in facilitating the teaching and learning. In addition, it further revealed that lecturers versatile in the use of computer applications. However, this knowledge is not used for educational purposes.

It was revealed that there are strategies that when put into practice will increase the level of utilization of e-learning instructional facilities in tertiary institutions. E-learning could be used to either inform that is for lecture or training purpose or could be used for performance. It is so important to utilize it both by the lecturer's and students at the school and class level which could in turn help the students to be familiarized with anything electronics which they will come in contact with at the real world of work.

The study of United Nations Conference on Trade and Development [UNCTAD] (2021) avow with the study by explaining that emerging and usages of these new technologies such as artificial intelligence (AI), robotics, the internet of things, autonomous vehicles, 3D printing, nanotechnology, biotechnology, materials science, energy storage, quantum computing and others are redefining education, industries and all the human sectors and economy sector of the world. It was revealed that, there should be re-skilling and up-skilling of lecturers on the uses of e-learning instructional facilities. This will help the lecturers to develop relevant skills and learn new skills on how to effectively select and use e-learning instructional facilities so that it will be relevant to the learning aims, goal and objectives, build new knowledge and skills which is relevant to the students and needed by the society.

Clark and Mayer (2008) attest to it that in using e-learning the following features should be put into consideration: content should be relevant to the learning objective, instructional methods such as examples and practice should be used to help learning, media elements such as words and pictures should be used to deliver the content and methods also, it should be what will build new knowledge

and skills linked to individual learning goals or to improved organizational performance. This is in line with the study of Yisa et al, (2022) who find out that collaborative learning in technical colleges, the availability of augmented reality (AR) and virtual reality (VR), the up-skilling and re-skilling of teachers, and increased ICT infrastructure in technical colleges are strategies to improve the facilities in technical colleges. Eze et al (2018) also affirmed that for M-University to achieve full utilization of e-learning facilities they need to ensure that the facilities are working; and the lecturers are trained on how to utilize e-learning facilities. This might be as a result of lack of technical know-how and attitudes of the staff.

The finding of the two hypotheses revealed that there is no significance difference between the response of the lecturers and that of the students on the adequacy and the level of utilization of e-learning instructional facilities in tertiary institutions in Niger State, Nigeria. This is an indication that there is a lot to do in terms of e-learning instructional facilities in tertiary institution. If we most move and meet up with the develop countries in terms of digitalization and paper free education policy. E-learning instructional facilities should be adequate and effectively utilized by both the lectures and the students for lecture purposes.

Conclusion

It is revealed that there is need for education sector to move and blend with the development of technology in order to meet up with the current trends. This is achievable only when teaching and learning in our tertiary institutions fully infused technology in to the education system. It is revealed that e-learning is the application of technology such as computer, projector, internet and other

electronics in conjunction with face-face learning to enhance teaching and learning. This study revealed that some of the e-learning instructional facilities are not adequate while some are adequate. It is also revealed that the e-learning instructional facilities are not utilized for teaching and learning in tertiary institutions in Niger State. Strategies for improving the level of utilization of e-learning instructional facilities were revealed.

Recommendations

Based on the above findings of this study, the following recommendations were made in order to reposition the e-learning instructional facilities in the tertiary institutions in Niger State:

1. The school management should provide the e-learning instructional facilities that is sufficient in number and updated.
2. The lecturers and students should utilize available e-learning instructional facilities.
3. Government should reduce tax on ICT related equipment so that it will be easily assess by schools.
4. School management should ensure that lecturers have Up-Skilling and Re-Skilling on the uses of e-learning instructional facilities. This is possible through sponsorship by government and school managements.

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ASSESSMENT OF DIGITAL MARKETING COMPETENCIES ACQUIRED BY BUSINESS EDUCATION STUDENTS IN PUBLIC TERTIARY INSTITUTIONS IN KOGI STATE, NIGERIA

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Abstract

This study assessed digital marketing competencies acquired among Business Education students in public tertiary institutions in Kogi State, Nigeria. The study identified the digital marketing competencies and the level of digital marketing skills acquired by business education students in public tertiary institutions in Kogi State, Nigeria. The descriptive research design of the survey type was adopted in this study. The population for this study consisted of 519 final year Business Education students in Kogi State tertiary institutions and a total of two hundred and twenty-six (226) final year students was selected for the study using proportionate sampling technique. An instrument titled "Marketing Competencies Acquired by Business Education Students Questionnaire (MCABESQ)" was used to collect data for the study. The reliability of the instrument was determined through test-retest method to obtain a reliability coefficient of 0.80. Data collected were analysed using descriptive and inferential statistics. Descriptive statistics such as mean and standard deviation were used to answer the research questions, while inferential statistics of t-test was used to test the hypotheses at 0.05 level of significance. Findings revealed that Business Education students in tertiary institutions in Kogi State possess predominantly low digital marketing competencies. The findings further revealed significant gender disparities in social media campaign and Search Engine Optimization competencies favoring male students, while email marketing skills show no gender-based differences. Based on the findings, it was recommended that Business education programmes in Kogi State public tertiary institutions should integrate comprehensive digital marketing modules that emphasize hands-on training in advanced skills.

Keywords: Business Education, Digital marketing, social media campaign, Search Engine Optimization (SEO), email marketing

Introduction

Business education is a significant component of technical and vocational education that exposes students to the development of marketing strategy, especially digital marketing that may be turned into financial gain. Any country's economic growth is entirely dependent on how students relate to one another in terms of entrepreneurship, vocational and technical education, and training (Sofolahan, 2023). The reason is because; it creates business and

employment opportunities for our youths.

Business education programmes play a crucial role in equipping students with this essential marketing skills (digital marketing). Business Education is a programme designed to provide students with the basic theories of management and production, and as well in business administration, human resource management, finance, and in developing general business knowledge. According Nwaodume and Udeh (2023), business

education is an aspect of total educational programme that provides knowledge, skills, understanding and attitude to individual who are expected to perform well in the business world. Business Education is more than just learning from textbooks in a classroom, it combines important business theories with actual real-life business practices. It can be simply described as a bridge that connects what students learn in classrooms to what actually happens in the business world.

Business Education represents a comprehensive vocational educational programme offered in tertiary institutions that uniquely combines theoretical knowledge with practical skills development for business and office occupations. As an integral component of vocational education, it serves the dual purpose of preparing individuals for teaching and private/industrial establishment through systematic instruction in various business disciplines, including secretarial studies, accounting, marketing, data processing, and computer analysis (Nwaodume & Udeh, 2023). The distinctive strength of Business Education lies in its ability to equip students with functional and sustainable skills while simultaneously developing the understanding of economic systems and business operations. Business education is therefore aimed at equipping an individual with specific employable skills that would enable them identify business opportunities when others see chaos. It therefore helps to create self-employment with acquisition several entrepreneurial skills, specifically marketing competencies.

Marketing competencies represent a fundamental cornerstone of Business Education in Nigeria, encompassing a comprehensive range of skills,

knowledge, and abilities that students must acquire to succeed in the contemporary business landscape. These competencies are multifaceted constructs that extend far beyond traditional understanding of marketing as merely selling or advertising, instead incorporating strategic thinking, analytical capabilities, technological proficiency, and entrepreneurial acumen that are essential for business success in the 21st century (Adefulu & Adebowale, 2020). Business Education students in Nigerian institutions are therefore, expected to develop a robust foundation in market research and analysis, which involves the ability to identify market trends, consumer behavior patterns, and competitive landscapes. Understanding these essential skills requires examining what marketing competencies actually involve and why they are so crucial for business success.

Marketing competencies encompass a broad range of skills that enable individuals/ professionals to analyze market conditions, identify opportunities, and develop comprehensive plans to achieve business objectives through effective marketing initiatives. Kotler and Keller (2023) define marketing strategy as "the marketing logic by which the business unit hopes to achieve its marketing objectives". The skills required to formulate and execute such strategies are diverse and continually evolving. At the foundation of effective marketing strategy lies the ability to conduct thorough market analysis and research. This skill involves gathering, interpreting, and applying market data to inform decision making (Malhotra, Nunan, & Birks, 2022). According to Oyerinde and Falana (2016), marketing competencies are essential abilities that entail considering how to reach the intended audience for goods and services

created by an entrepreneur. Any business owner who learns these talents would be able to make money selling these kinds of goods. A key competency that determines whether a business succeeds or fails is marketing. Marketing involves research, product development, design, and testing, and concentrates primarily on consumers or buyers, brand management, customer relationship management (CRM), especially, digital marketing skills.

Digital Marketing Skills is the ability to leverage online platforms, tools, and strategies to promote products, services, or brands through digital channels such as social media, search engines, email, and websites to reach and engage target audiences effectively. According to Chaffey and Ellis-Chadwick (2019), digital marketing skills now encompass a wide range of technical and strategic capabilities, including search engine optimization (SEO), content marketing, social media strategy, data analytics, and proficiency with digital advertising platforms. Modern digital marketers must understand complex algorithmic ecosystems, create compelling multimedia content, and interpret sophisticated digital performance metrics.

Digital marketing is often referred to as online marketing, internet marketing or 'web marketing' (Bhosale, Raverkar and Tamondkar, 2020). Following this point of view, Gustavsen (2022) noted that, digital marketing encompasses a wide variety of marketing tactics and technologies used to reach consumers online. According to Khan (2019), digital marketing are marketing activities conducted through electronic devices and online platforms. Organizations utilize various digital channels—including search engines, social media platforms, email communications, and corporate

websites—to engage with both existing and potential customers. In addition, Rihaan (2015) noted that digital marketing serves as a broad concept encompassing the promotion of goods or services through digital technologies, primarily via online platforms, while also incorporating mobile devices, visual advertisements, and other digital mediums. Digital marketing involves the use of online channels and methods that enable businesses and organisations to monitor the success of their marketing campaigns, often in real time, to better understand what does and does not work.

Digital marketing is popular for its low cost of operation, easy access and a wider audience. Rihaan (2015) noted that digital marketing in the digital era not only allows for brands to market their products and services but also allows for online customer support through 24 hours in a week (24/7) services to make customer feel supported and valued. In the opinion of Pratt (2017), as the world moves more fully into the digital economy, forward-thinking retailers now leverage technologies to reach and serve customers through a variety of channels. They do so by using online sales and mobile apps to identify buyers shopping via the internet or in person. Some businesses have even developed websites to enable online sales. Efficient participation and beneficial outcomes in digital marketing require possessing certain digital skills.

Staton (2016) reported that digital marketing skills required for entry-level employment and by entrepreneurs include abilities related to web analysis, email marketing, inbound marketing and social media marketing. Egajivwie and Uge (2024) also noted that digital marketing skills that provides students with the opportunity to be instantly employed after graduation are social-

media marketing skills, search engine marketing skills, digital analytic skills, content marketing skills, e-mail marketing skills, mobile marketing skills, strategic planning skills, social selling skills, pay-per-click marketing skills, and video creation skills. Within the context of this study, digital marketing skills are limited to digital content creation skills, search engine optimization skills, and social media marketing skills which are deemed sufficient for micro and small-scale business owners to connect with global customers and drive sales. The acquisition and development of these digital marketing skills may be influenced by various demographic factors, particularly gender.

Gender represents one of the significant factors that may influence the acquisition and development of marketing competencies among Business Education students. Research on gender differences in educational outcomes has yielded mixed results, with some studies indicating disparities in skill acquisition between male and female students, while others suggest minimal differences (García-Aracil, 2019). Understanding these differences is essential for developing targeted educational interventions that address any gender-based gaps in marketing competence development. Gender dynamics have been recognized as influential factors in educational environments, potentially affecting students' learning experiences, skill development, and career trajectories. In the context of marketing competency acquisition, gender may influence various dimensions, including learning preferences, self-efficacy, practical engagement, and perceived career prospects.

Understanding the role of gender in marketing competency acquisition among Business Education students in

public tertiary institutions provides valuable insights for curriculum development, teaching approaches, and student support services. By recognizing potential gender-based differences in learning experiences and skill development, educators can implement strategies that ensure all students have equitable opportunities to develop the marketing competencies required for professional success in today's competitive business landscape.

Statement of the Problem

The rapid digitalization of global commerce has made digital marketing competencies essential for business success, yet there appears to be a significant lack of understanding regarding the extent to which Business Education students in Nigerian public tertiary institutions are acquiring these critical skills. Contemporary business environments seems to increasingly demand proficiency in digital content creation, social media marketing, data analytics, and online customer engagement strategies, however, preliminary observations suggest that Business Education programmes in Kogi State may not be adequately preparing students with the comprehensive digital marketing competencies required for the modern marketplace. Without clear understanding of students' actual competency levels and the alignment between curriculum delivery and industry demands, educational institutions may continue graduating students who are inadequately prepared for contemporary business challenges, potentially limiting their employability and contribution to Nigeria's economic development in the digital age, necessitating this study to assess digital marketing competencies acquired by Business Education students

in public tertiary institutions in Kogi State, Nigeria.

Purpose of the Study

The main purpose of this study was to assess digital marketing competencies acquired among Business Education students in public tertiary institutions in Kogi State, Nigeria. Specifically, the study intended to:

1. identify the digital marketing competencies acquired by Business Education students in public tertiary institutions in Kogi State;
2. determine the level of digital marketing skills acquired by business education students in public tertiary institutions in Kogi State, Nigeria;

Research Questions

The following research questions guided the study:

- i. What is the level of digital marketing skills acquired among business education students in public tertiary institutions in Kogi State, Nigeria?

Research Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance:

- i. There is no significant difference in the mean ratings of male and female Business Education students on the level of social media marketing campaigns acquired in public tertiary institutions in Kogi State, Nigeria.
- ii. There is no significant difference in the mean ratings of male and female Business Education students on the level of Search Engine Optimization (SEO) acquired in public tertiary institutions in Kogi State, Nigeria.

- iii. There is no significant difference in the mean ratings of male and female Business Education students on the level of email marketing campaigns acquired in public tertiary institutions in Kogi State, Nigeria.

Methodology

The descriptive research design of the survey type was adopted in this study. The population for this study consisted of all 519 final year Business Education students in Kogi State tertiary institutions (2024/2025 academic session), made up of Business Education students from Prince Abubakar Audu University, Ayingba (PAAU), College of Education Technical, Kabba (COETK), Federal University, Lokoja (FULOK), Federal College of Education, Okene (FCE) and Kogi State College of Education, Ankpa (KSCOE). A total of two hundred and twenty-six (226) final year students, determined by the Taro Yamane Formular, was selected for the study. The sample was selected using proportionate sampling technique.

An instrument titled "Marketing Competencies Acquired by Business Education Students Questionnaire (MCABESQ)" was used for the collection of data for the study. The instrument was used to assess the level of digital marketing skills acquired by Business Education students with options and rating as follows: High (3), Moderate (2) and Low (1). The instrument underwent validity screening by two (2) experts from the Department of Test, Measurement and Evaluation, two (2) experts from the Vocational and Technical Education Department, and the researcher's supervisor from the Business Education unit at Ekiti State University, Ado-Ekiti. The reliability of the instrument was determined through test-retest method to

obtain a reliability coefficient of 0.80 which was adjudged reliable for the study. Data collected were analysed using descriptive and inferential statistics. Descriptive statistics such as mean and standard deviation were used to answer the research questions, while inferential

statistics of t-test was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1: What is the level of digital marketing skills acquired among business education students in public tertiary institutions in Kogi State, Nigeria?

Table 1: Descriptive Analysis Showing the Level of Digital Marketing Skills Acquired among Business Education Students in Public Tertiary Institutions

S/N	Items	High		Moderate		Low		$\bar{x}$	SD	Remarks
		Freq.	%	Freq.	%	Freq.	%			
1	I can effectively manage social media marketing campaigns	129	57.1	35	15.5	62	27.4	2.55	0.92	High
2	I can analyze digital marketing metrics	57	25.2	48	21.2	121	53.6	1.94	0.94	Low
3	I can develop content marketing strategies	70	31.0	55	24.3	101	44.7	2.31	1.09	Low
4	I can apply Search Engine Optimization (SEO) principles	66	29.2	62	27.4	98	43.4	2.13	0.82	Low
5	I can execute email marketing campaigns	44	19.5	58	25.7	124	54.8	1.99	0.85	Low
6	I can use digital marketing platforms (e.g., Google Analytics, Facebook Ads Manager)	159	70.4	42	18.6	25	11.0	3.05	0.80	High
7	I can create landing pages for lead generation	40	17.7	52	23.0	134	59.3	1.81	0.72	Low
8	I understand mobile marketing strategies implementation	93	41.2	68	30.1	65	28.7	2.49	0.63	Moderate
9	I can manage pay-per-click (PPC) advertising campaigns	4	1.8	38	16.8	184	81.4	1.57	0.53	Low
10	I can analyze digital marketing reports	49	21.7	61	27.0	116	51.3	2.12	0.55	Low
Grand Mean								2.20		Low

Table 1 shows the level of digital marketing skills among business education students in Kogi State's public tertiary institutions. The table revealed that Business Education students in public tertiary institutions in Kogi State, Nigeria demonstrate low digital marketing skills acquisition overall, as evidenced by the grand mean of 2.20 which falls below the cut-off point of 2.50. Students demonstrated high skill

acquisition in only two areas: competency in using digital marketing platforms like Google Analytics and Facebook Ads Manager ($\bar{x} = 3.05$) and managing social media marketing campaigns ($\bar{x} = 2.55$), and moderate understanding of mobile marketing strategies implementation ($\bar{x} = 2.49$), they exhibit significant deficiencies in most other areas. The lowest skills are in managing pay-per-click advertising

campaigns ($\bar{x} = 1.57$), creating landing pages for lead generation ($\bar{x} = 1.81$), analyzing digital marketing metrics ($\bar{x} = 1.94$), executing email marketing campaigns ($\bar{x} = 1.99$), and analyzing digital marketing reports ($\bar{x} = 2.12$), with additional weaknesses in applying SEO principles ($\bar{x} = 2.13$) and developing content marketing strategies ($\bar{x} = 2.31$). This pattern suggests that while students have basic familiarity with digital marketing tools and social media management, they lack advanced

analytical, strategic planning, and specialized campaign management skills essential for comprehensive digital marketing practice.

Test of Hypotheses

Hypothesis One: There is no significant difference in the mean ratings of male and female Business Education students regarding social media campaign skills acquired in public tertiary institutions in Kogi State, Nigeria.

Table 2: t-test Showing Gender difference in the Level of Social Media Campaigns Competencies Acquired by Business Education Students in Public Tertiary Institutions

Variables	N	Mean	SD	df	t	p
Male	102	2.72	0.81	224	2.553*	0.011
Female	124	2.41	0.98			

$p < 0.05$ (Significant)

Table 2 shows significant difference in the mean ratings of male and female Business Education students regarding the level of social media campaign skills acquired in public tertiary institutions, with $df = 224$, $t = 2.553$ and the p value = 0.011 at 0.05 alpha level of significance. Since the p -value (0.011) is lower than 0.05 alpha level, ($p < 0.05$), there is significant difference in the variables. Therefore, the hypothesis which states that there is no significant difference in the mean ratings of male

and female Business Education students regarding the level of social media campaign skills acquired in public tertiary institutions in Kogi State is rejected.

Hypothesis Two: There is no significant difference in the mean ratings of male and female Business Education students regarding the level of Search Engine Optimization (SEO) acquired in public tertiary institutions in Kogi State, Nigeria.

Table 3: t-test Showing Gender difference in the Level of Search Engine Optimization (SEO) Skills Acquired by Business Education Students in Public Tertiary Institutions

Variables	N	Mean	SD	Df	t	P
Male	102	2.27	0.66	224	2.465	0.014
Female	124	2.02	0.91			

$p < 0.05$ (Significant)

Table 3 shows significant difference in the mean ratings of male and female Business Education students regarding the level of Search Engine

Optimization competencies acquired in public tertiary institutions, with $df = 224$, $t = 2.465$ and the p value = 0.014 at 0.05 alpha level of significance. Since the

p-value (0.014) is lower than 0.05 alpha level, ($p < 0.05$), there is significant difference in the variables. Therefore, the hypothesis which states that there is no significant difference in the mean ratings of male and female Business Education students regarding the level of Search Engine Optimization competencies

acquired in public tertiary institutions in Kogi State is rejected.

Hypothesis Three: There is no significant difference in the mean ratings of male and female Business Education students regarding the level of Email Marketing acquired in public tertiary institutions in Kogi State, Nigeria.

Table 4: t-test Showing Gender difference in the Level of Email Marketing Acquired by Business Education Students in Public Tertiary Institutions

Variables	N	Mean	SD	Df	t	p
Male	102	2.02	.84	224	1.387	0.669
Female	124	1.98	.85			
p > 0.05 (Not Significant)						

Table 4 shows no significant difference in the mean ratings of male and female Business Education students regarding the level of email marketing acquired in public tertiary institutions, with $df = 224$, $t = 1.387$ and the p value = 0.669 at 0.05 alpha level of significance. Since the p-value (0.669) is higher than 0.05 alpha level, ($p > 0.05$), there is no significant difference in the variables. Therefore, the hypothesis which states that there is no significant difference in the mean ratings of male and female Business Education students regarding the level of email marketing acquired in public tertiary institutions in Kogi State is accepted.

Discussion

The findings reveal that Business Education students in Kogi State public tertiary institutions demonstrate predominantly low digital marketing skills, which aligns with Amakaino's (2024) report of very low digital marketing skills acquisition among Business Education students at Federal University Oye-Ekiti. This pattern is further supported by Abdulkarim and Danagogo (2023), who found that business education students in Rivers

State tertiary institutions acquire digital content creation and SEO skills to a low extent, showing high competency only in social media marketing skills. The students' high competencies in digital marketing platforms and social media campaign management mirrors Abdulkarim and Danagogo's (2023) findings, indicating a consistent trend across Nigerian states where students favor accessible, user-friendly digital marketing tools. These poor performance levels stem from inadequate digital infrastructure, limited access to industry-standard software, insufficient qualified tutors with practical experience, outdated curricula, poor internet connectivity, and lack of hands-on training opportunities in Nigerian tertiary institutions.

Findings revealed a significant gender difference in social media campaign competencies, with males demonstrating higher competency than females, contradicts some recent findings in digital literacy research. A study by Campos and Scherer (2024) suggest that girls outperform boys in digital knowledge and skills, indicating that the observed male advantage in social media marketing campaigns may be context-specific to business education or reflect

differential exposure to marketing-focused social media training rather than general digital competency. This finding highlights the need for targeted interventions to ensure equitable skill development in specialized digital marketing areas.

Findings also revealed significant gender difference in SEO competencies, with males scoring higher than females, aligns with broader industry patterns where 70% of the SEO industry is still dominated by men, with 64% of SEO articles written by men (Udemy, 2024). This disparity aligns with research indicating that limited digital empowerment for young enterprising women has been a major obstacle in digital marketing development (UN Women Africa, 2023). This disparity may reflect systemic barriers in technical digital marketing education and suggests that female students require additional support and encouragement to develop confidence in technical SEO skills, which are increasingly critical for digital marketing careers.

Findings revealed no significant gender differences in email marketing skills (males $M = 2.02$, females $M = 1.98$) suggests that this particular digital marketing competency does not exhibit gender-based disparities among business education students. Email marketing remains a crucial skill where 77% of marketers use personalized content based on demographics like gender and age, indicating that both male and female students are equally positioned to develop these competencies, though the overall low means for both groups suggest that email marketing instruction needs strengthening across all students regardless of gender.

Conclusion

Sequel to the findings of the study, it was concluded that Business Education students in tertiary institutions in Kogi State possess predominantly low digital marketing competencies, while students exhibit high competency in basic digital marketing platforms usage and social media campaign management, they lack critical advanced skills in areas such as pay-per-click advertising, landing page creation, digital analytics, and Search Engine Optimization implementation. The research further reveals significant gender disparities in social media campaign and Search Engine Optimization competencies favoring male students, while email marketing skills show no gender-based differences.

Recommendations

Based on the findings obtained, the following recommendations are put forward:

1. Business education programmes in Kogi State public tertiary institutions should integrate comprehensive digital marketing modules that emphasize hands-on training in advanced skills such as pay-per-click advertising, digital analytics, landing page creation, and Search Engine Optimization implementation to bridge the identified competency gaps in content marketing strategy development, email marketing campaign execution, and digital marketing report analysis. Institutions should revise curricula to include dedicated digital marketing courses with minimum contact hours for practical laboratory sessions, establish partnerships with digital marketing agencies for internship placements, procure industry-standard software and tools.

2. Institutions should develop targeted intervention programs and mentorship initiatives specifically designed to enhance female students' confidence and competency in social media campaign management through specialized workshops and peer-to-peer learning opportunities by establishing women in digital marketing clubs, organize monthly skill-building workshops facilitated by successful female digital marketers, create peer mentorship programs pairing advanced students with beginners
3. Educational institutions should implement gender-sensitive teaching approaches and create supportive learning environments with additional resources, tutorials, and practical sessions to help female students develop technical Search Engine Optimization skills and overcome systemic barriers in digital marketing education by training faculty members on gender-responsive pedagogy, establish dedicated digital marketing resource centers with extended hours for practice, and develop supplementary online learning modules accessible outside classroom hours
4. Since both male and female students demonstrate equally low email marketing competencies, institutions should universally enhance email marketing instruction through updated course content, industry-standard software access, and practical campaign development exercises by integrating email marketing platforms into coursework, develop practical assignments requiring students to design, execute, and analyze

complete email marketing campaigns and invite email marketing specialists to conduct masterclasses.

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ATTITUDE OF AGRICULTURAL SCIENCE STUDENTS AND THEIR PARENTS TOWARD AGRICULTURAL FORESTRY CAREER IN AKURE SOUTH LOCAL GOVERNMENT AREA OF ONDO STATE

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Abstract.

This study assessed secondary school students and their parents' attitude towards agriculture and forestry career. Multistage sampling was used to select one hundred and eighty (180) students for the study. A validated questionnaire known as students/parents' attitude towards agricultural/forestry career with reliability coefficient of students' attitude $r = 0.83$ and parents' attitude $r = 0.74$ was used to collect data for this study. Descriptive statistics was used in data analysis. The results showed that students and their parents' attitude towards agriculture and forestry career were negative. In addition, there was a negatively significant relationship between students' and parents' attitudes towards agricultural and forestry careers (pearson $r = 209$) due to their level of awareness, poor teaching methods, possibly no job opportunities, poor societal value placed on farming which makes parents dislike the profession among others. The paper therefore concludes that, there should be sensitization in schools for the students and parents teachers association meetings to educate both the students and parents on the importance and benefits of agricultural/forestry career. Based on the findings from this study, it was recommended that secondary school curriculum should be reviewed as to accommodate the topic from the junior class to the senior class and be taught more than a term and competent or qualified forestry experts in agriculture should be employed to teaching the topic more effectively and efficiently among others. The study further recommended targeted advocacy, career counseling, and financial incentives to improve perceptions and interest

Keywords: attitude, agriculture, forestry, students, Parents

Introduction

Agriculture and forestry are important sectors for Nigerian economic development with high potentials for employment, food security, poverty reduction and environmental protection. Agriculture is the engine of growth for most developing countries and its development is one of the most effective

ways to alleviate hunger and poverty (Ogunjobi *et al*, 2020; Faleyimu, 2021). Forestry plays an essential role in maintaining ecological balance, combating climate change, and supporting livelihoods through sustainable resource management. As a sub-sector of agriculture, forestry offers diverse career opportunities ranging from

forest conservation to research and eco-tourism.

In the same vein, forests provide important environmental services that contribute to the wellbeing and security of human; they are needed to maintain the atmosphere and its destruction is a major contributing factor resulting in rising level of carbon dioxide emission and global warming. To ensure sustenance of forest resources and its role for economic development and environmental protection, there is need to train more professionals in the field of forestry as those already employed are bowing out of the service. It is imperative therefore to develop skilled human resources in order to sustain, diversify and realise the potentials of agriculture and forestry sectors. Hence, agriculture and forestry human resources development in Akure South Local Government Area of Ondo State is a continuous process undertaken by educational sectors both in secondary schools and especially tertiary institutions through their attitudes. Despite its importance, forestry careers are often perceived with disdain by students and their families. This attitude undermines efforts to build a sustainable forestry workforce and limits the development of forest resources.

Attitude is a way in which an individual feel, thinks and is predisposed to act towards a particular situation which can be favorable or unfavorable, positive or negative typically directed towards some specific object. Attitude can also be viewed as a mental state that disposes a learner to choose to behave in a certain way. An attitude involves the cognitive, affective and psychomotor domains of the students. Adewale, et al, (2017) defined attitude as an evaluative judgement either favourable or unfavourable, that an individual possess and direct towards some object, which it

abstract or concrete may be. The researcher therefore sees attitudes as how one thinks and feels about an act towards an objective or idea. According to Olujobi and Sale, (2015) and Ogunsola *et al* (2020) that a person's beliefs, feelings, or intentions (attitude) towards an object can predict behaviour. The perceptions or beliefs and feelings towards agriculture and forestry can influence attitude in agriculture and forestry in particular. The attitude of the students either male or female have not really been positive and this could also be one of the reasons for the decline in the enrolment of the student in the training.

Training to become agriculture and forestry professionals generally requires a diploma certificate from technical and vocational institutions or a degree from the university. Agriculture and forestry education are offered in universities, technical and vocational training institutions in Nigeria. Despite all the issues addressed by agriculture and forestry education, students' enrolment into forestry and agriculture in Nigerian tertiary institutions are at the lowest ebb (Alao, 2010; Adebo and Semade, 2013; Areo, 2019; Adebayo, *et al*, 2022). Most students prefer other courses compare to agriculture and forestry courses but enrol in agricultural and forestry only when they are unable to undertake alternative courses or programs of study. This is supported by Appah and Tokede, (2020) and Olaniyi, *et al*, (2022) that some students found in forestry department are there because they could not meet up to the cut off mark of their chosen courses and they accept forestry courses as they have no option because the students doesn't want to return home in other to sit for another examination. The poor enrolment in agriculture and forestry in schools is a major concern for agriculture and forestry sectors and this might make

it unfavourable towards government efforts at improving agricultural and forestry sectors. However, considering strategic contributions of agriculture and forestry education in sustaining national development, there is urgent need to encourage the younger generation (graduating class of secondary schools) to take up agriculture and forestry as a career especially in Akure South LGA of Ondo State.

In Nigeria, according to the National Policy on Education, (FGN, 2014), Agricultural science is a compulsory subject in junior secondary education but optional at senior level, in that case, secondary school students have the choice of deciding whether to offer the course or not. Majority of these students still regard agriculture as nonprofessional and less profitable livelihood option for less privileged young adults and sees any one returning to farming after university to be a failure (Okiror & Otabong, 2015; Faleyimu, 2021). Forestry is found in the senior secondary school curriculum, and it is taught for just a term in SSS III which seems not to be adequate for the students to have a good attitude towards the subject as it is only at tertiary education level that forestry is known as a career. And once the students are not properly groomed from secondary school particularly about a subject, there will no consciousness for the student to see such a subject as a career course in the higher institution. Based on the fact, there is need to increase forestry education advocacy and literacy of the people and the need to inculcate awareness of forestry education and its importance; it will also improve students' positive attitude towards forestry education.

There can be many reasons for attitudinal disposition towards agriculture especially forestry education among

senior secondary school students. Adejoh, Edokah and Shuiab, 2016; Olaniyi, et al, (2022) found that parents were the dominant influence on a student's decision due to Parental influence, societal views, and poor career orientation. Based on the fact that forestry is in the secondary school curricula but appears not taught at all, possibly there is no qualified or competent teacher to handle such aspect of Agriculture, therefore, there is need to increase the advocacy on forestry education literacy of the citizen and the need to inculcate in students and their parents a positive attitude to forestry education through proper teaching of the subject. It is against this backdrop that the study examined the attitude of secondary students' and their parents towards agriculture and forestry education in Akure South LGA of Ondo State.

Purpose of the study

The purpose of the study is to examine the attitude of secondary students' and their parents towards agriculture and forestry education in Akure South LGA of Ondo State.

Research questions

The following research questions were addressed:

- What is the attitude of agricultural science students towards agriculture/forestry as a career?
- What is the attitude of parents' of agricultural science students' towards agriculture/forestry as a career?

Hypothesis

There is no significant correlation between agricultural science students' attitude and their parents' attitude towards agriculture/forestry career.

Methodology

A descriptive and correlational survey was adopted for this study hence no variable was manipulated or controlled. The study was conducted in the Akure South local Area, Ondo State, Nigeria. The target population for this study comprised all public senior secondary school three (SSS 3) students in Akure South Local Government Area of Ondo State. Multistage sampling procedure was employed. A simple random sampling technique was used to select six (6) public secondary schools and thirty (30) students were randomly selected from each of the schools, making a total of one hundred and eighty (180) comprising 81(45%) female students and 99(55%) male students. A structured questionnaire known as 'Students and their Parents' Attitude Towards Agricultural/Forestry Education' (SPATAFE) was used in collecting data. The questionnaire consisted of sections A and B. Section A consisted of respondents' demographic variables. Section B consisted of ten (10) items used to elicit information on respondents' attitude, measured on a four-point scale (Strongly Agree, Agree, Disagree and Strongly Disagree). The instrument was

subjected to face and content validity. The internal consistency and reliability of the instrument in sections A and B were established using cronbach alpha to get the values of 0.83 and 0.74 respectively. The instrument was administered on the respondents. to the sampled senior secondary schools, each students chosen were given students' copy of the questionnaire to respond to. Face to face method was adopted to make sure that the students filled the questionnaire effectively through the assistant of their class teachers. Questionnaires were also distributed to the parents to fill, making a total of one hundred and eighty (180). All the parents' questionnaire were retrieved and found valid. The parents' that responded to the questionnaire were 113(62.8%) female and 67(37.2%) male. Data collected were analysed using descriptive statistics (frequency and percentage) to answer research questions 1 and 2 while correlation method was used to test the hypothesis at 0.05 alpha levels.

Results

Research Question 1: What is the attitude of students towards agriculture/forestry career?

Table 1: Response on the attitude of students towards agriculture/forestry career

S/N	Items	Strongly agree	Agree	Disagree	Strongly disagree	Mean	SD	Decision
1	Students feel they choose agricultural science to enable them study agricultural/forestry courses after their secondary education	3 (1.7%)	30 (16.7%)	99 (55.0%)	48 (26.7%)	4.75	0.64	Disagree
2	Students believe that there are no job opportunities in forestry/ agriculture profession	55 (30.6%)	40 (22%)	57 (31.7%)	28 (15.6%)	3.48	0.93	Agree
3	Student believe joining forestry/ agriculture profession will make them useful in the society	10 (5.6%)	54 (30.0%)	74 (41.1%)	42 (23.3%)	3.49	0.92	Agree
4	Students believe forestry/ agriculture will give them prestigious status	33 (18.3%)	30 (16.7%)	74 (41.1%)	42 (23.3%)	3.78	0.72	Disagree
5	Students believe forestry/ agriculture will equip them to be self-reliant	32 (17.8%)	68 (37.8%)	61 (33.9%)	19 (10.5%)	3.53	0.90	Disagree
6	Students feel forestry/ agriculture education will not provide them suitable jobs	68 (37.8%)	33 (18.3%)	55 (30.6%)	24 (13.3%)	2.69	1.09	Agree
7	Poor societal value placed on farming make students dislike the profession	84 (46.7%)	33 (18.3%)	24 (13.3%)	39 (21.7%)	4.00	1.09	Agree
8	Students believe forestry/ agriculture is meant for those in urban areas	15 (8.3%)	30 (16.7%)	89 (49.4%)	46 (25.6%)	3.59	0.92	Disagree
9	Student believe that forestry /agriculture practices are tedious	16 (8.9%)	61 (33.9%)	83 (46.1%)	20 (11.1%)	2.90	4.05	agree
10	Students prefer forestry/ agriculture profession to other profession.	12 (6.7%)	30 (16.7%)	99 (55.0%)	48 (26.7%)	4.33	4.05	agree

As shown in table 1, the findings of this study reflect students' negative attitude towards forestry/agricultural education. For instance, only 18.3% of the students admitted they choose agricultural science to enable them offer forestry/agriculture education in higher institutions (item 1). Over 60% of the students disagreed that forestry/agricultural education will make them useful in the society (item 3), will give them prestigious status (4), such

education is meant for those in rural area (item 8). Also 65% of the students agreed that poor societal value placed on farming make students dislike the profession (item 6) while only 23.4% of the students prefer forestry/agricultural profession to other profession (item 10).

Research Question 2: What is the attitude of parents' towards agriculture/forestry career?

Table 2: Response on the attitude of parents towards agriculture/forestry career

Items	Strongly agree	Agree	Disagree	Strongly disagree	Mean	SD	Decision
Parents believe their wards offering agricultural science is to enable them study agricultural/forestry courses in university.	12 (6.7%)	26 (14.4%)	55 (30.6%)	87 (48.3%)	4.07	0.71	Disagree
Parents believe that there are no job opportunities in forestry/agriculture profession	87 (48.3%)	43 (23.9%)	22 (12.2%)	28 (15.6%)	4.00	0.68	Agree
Parents believe their wards joining forestry/agriculture profession will make them useful in the society	18 (10.0%)	38 (21.1%)	48 (26.7%)	76 (42.2%)	3.30	0.98	Disagree
Parents believe forestry/agriculture will give their wards prestigious status	34 (18.9%)	40 (22.2%)	43 (23.9%)	63 (35.0%)	3.30	0.98	Disagree
Parents believe forestry/agriculture will equip their wards to be self reliant	51 (28.3%)	54 (30.0%)	40 (22.2%)	35 (19.4%)	3.35	0.98	Agree
Parents feel forestry/agriculture education will provide suitable jobs for their wards	19 (10.6%)	39 (21.7%)	58 (32.2%)	64 (35.6%)	3.93	0.95	Disagree
Poor societal value placed on farming makes parents dislike the profession	45 (25.0%)	30 (16.7%)	34 (18.9%)	71 (39.4%)	3.74	1.67	Disagree
Parents believe forestry/agriculture education is meant for those in urban areas	54 (30.0%)	34 (18.9%)	43 (23.9%)	49 (27.2%)	3.78	0.90	Agree
Parents feel that agricultural/forestry practices will be tedious for their wards.	22 (12.2%)	60 (33.3%)	38 (21.1%)	60 (33.3%)	3.31	1.03	Disagree
Parents prefer other education to forestry/agriculture profession.	100 (55.6%)	29 (16.1%)	25 (13.9%)	26 (14.4%)	3.97	0.98	Agree

As shown in table 2, the findings of this study also reflect parents' negative attitude towards forestry/agricultural education. For instance, 78.9% of the parents disagreed that their wards will go for forestry/agriculture education after their secondary education. The respondents also agreed that there are no job opportunities in forestry/agriculture profession (item 2), it will not make their wards useful in the society (item 3), it will not give them prestigious status (item 4). Although 58 % of the parents believe

forestry/agriculture will equip their wards to be self-reliant and over 55% disagreed that agricultural/forestry practices will be tedious for their wards (item 9) yet over 70% of them prefer other education to forestry/agriculture education (item10).

Hypothesis: There is no significant correlation between students' attitude and parents' attitude towards agriculture/forestry as a career.

Table 3: Response on the correlation between students' attitude and parents' attitude towards agriculture/forestry as a career.

Variables	N	Mean	SD	Pearson r	sig	Decision
Students' attitude	180	25.96	5.05	.209	0.05	S
Parents' attitude	180	25.64	5.08			

Correlation is significant at 0.05

Table 3 showed that a significant positive relation existed between students' attitude towards agriculture/forestry career and parents' attitude towards agriculture/forestry career (pearson $r = .209$; $n = 180$, $p < 0.05$). The null hypothesis that there is no significant correlation between students' attitude and parents' attitude towards agriculture/forestry as a career is therefore rejected. This result implies that students' attitude is dependent on parents' attitude.

Discussion on the findings

The findings from the study revealed that students and parents' responses were similar in majority of the items. They both showed negative attitude towards agriculture/forestry as a career, the negative attitude could be attributed to their limited knowledge of what the career entails. This finding is supported by Alao, (2010); Baliyan and Nenty (2015); Okiror and Otabong (2015) and Areo, (2019) that motivational strategies should be used to improve students' attitude towards agriculture. Their negative attitudes could be because of their misconceptions about the career which they showed in responding to some of the items. This is in line with Olujobi and Sale, (2015); Adejoh, Edoaka and Shaibu (2016) and Ogunsola et al, (2020) that students attitudes towards agricultural science can be attributed to their misconceptions about the career opportunities in agriculture. The finding agrees with Appah and Tokede (2019) and Olaniyi et al, (2022) that many people are not aware of what forestry education entails. The results also showed that students and their parents prefer other courses to agriculture/forestry which makes them disagree to the fact that they chose agricultural science to enable them offer

forestry/agriculture education in higher institution. This could be attributed to the fact that the students and their parents do not understand what agriculture/forestry education is all about and its prospects. This corroborates with Adebo and Semade, (2013); Areo, (2019); Adebayo et al, (2022) that stressed the need for massive public enlightenment on forestry education and its prospects to improve students' attitude towards the career.

In this study also the preposition that there is no significant correlation between students' attitude and parents' attitude towards agriculture/forestry as a career was found to be false. In essence, students' attitude towards agriculture/forestry career is dependent on their parents' attitude towards agriculture/forestry career. This is an indication that students' attitude to agriculture/forestry career are influenced by their parents. This finding supported Ogunsola et al, (2020) and Olaniyi et al, (2022) that the attitude of agricultural science students' toward agriculture is influenced by their parents' attitude to the career.

Conclusion

This study concluded that students' and their parents' showed negative attitude towards the profession due to their level of awareness, poor teaching methods, possibly no job opportunities, poor societal value placed on farming which makes parents dislike the profession among others.

Recommendations

Based on the findings from this study, the following recommendations were made;

- The secondary school curriculum should be reviewed as to accommodate the topic from the Junior class to the senior class and be taught more than a term

- Competent or qualified forestry experts in agriculture should be employed to teaching the topic more effectively and efficiently
- Government through the Ministry of Agriculture should assist the secondary schools to make seedlings of different trees available for planting
- Students should be more exposed to the practical knowledge with the new technology
- Career talk through school counsellor should be engaged to enlighten the students

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EVALUATING THE IMPACT OF EDUCATIONAL RADIO AND TELEVISION PROGRAMS ON PRIMARY SCHOOL LEARNING BEHAVIOR IN OSUN STATE

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Abstract

The study evaluating the impact of educational radio and television programmes on the learning behavior of primary school pupils in Osun State. The population of the study consisted of all the fifty-seven thousand three hundred and twelve (57,312) primary school pupils in all the thirty (30) Local Government Area of Osun State. The sample for the study consisted of one hundred and eighty (180) primary school pupils in Osogbo Local Government Area of Osun State. The sample was selected using simple and purposeful random sampling technique. The instrument for data collection was titled "Questionnaire on the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State (QIERTPLBPO)". The face and content validity of the instrument was determined. The reliability of the instrument was ensured and Cronbach Alpha was used to get the reliability coefficient of 0.78. The research question was answered using frequency count, percentage, mean and standard deviation, while the two null hypotheses were tested using t-test at 0.05 level of significance. The result showed that there is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their ages in Osun State. There is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their locations in Osun State. Based on the findings of this study, it could be concluded that educational radio and television programs have a consistent impact on the learning behavior of primary school pupils, regardless of their gender or geographical location. It is therefore recommended among others that educational radio and television programs should be sustained and expanded, given their uniform effectiveness across gender and location. Governments and stakeholders should invest in producing more high-quality, curriculum-aligned content.

Keywords: Learning Behavior, Educational Radio and Television Programs, Primary School Pupils, Gender, Location.

Introduction

Educational broadcasting via radio and television has a rich tradition in Nigeria, serving as a powerful tool to enhance learning, particularly in primary education. Globally, instructional media have demonstrated their capacity to reach wide audiences and supplement

formal classroom teaching. In sub-Saharan Africa, radio broadcasts tailored for primary teachers and curriculum reinforcement showed promise in improving basic education outcomes in the 1990s.

In Nigeria, the recent expansion of educational media gained significant

momentum during the COVID-19 pandemic. With schools closed nationwide in March 2020, several state governments including Lagos, Ogun, Oyo, and Osun implemented School-on-Air initiatives, delivering curriculum-aligned lessons via FM radio and television. For example, Lagos State leveraged Wazobia Radio/TV and Naija FM; Ogun deployed similar TV lesson schedules; and Osun used its state broadcasting services to sustain learning amid school closures. These initiatives underscored the adaptability of broadcast media to emergency educational contexts and highlighted their relevance in states like Osun.

Recent research from Southwestern Nigeria supports the efficacy of this approach. Awofadeju and Akintayo (2023) investigated the impact of radio-based educational programming on secondary school students in Osun during lockdown and found notable improvements in academic engagement and achievement. They concluded that such programs “helped in mitigating idleness and non-study of learners during the COVID-19 lockdown”. Though focused on secondary schools, these findings suggest broadcast media can sustain learning continuity when infrastructure constraints prevent formal schooling.

For primary school pupils, evidence from Lagos and Ogun demonstrates that educational television fosters communication skills. Osikomaiya (2020) reported significant positive effects of educational TV on pupils’ communicative competence, with statistical support showing improvements in verbal expression and interactive language abilities. This highlights television’s potential to enhance key literacy competencies at the foundational level.

Considerable knowledge gaps exist, especially for primary education in Osun State. Secondary-oriented prior studies leave open questions about reach, effectiveness, and barriers among younger learners. A case in point is the study of LASUBEB (Lagos State Universal Basic Education Board) English-language broadcasts, which revealed that many secondary students did not even know such programs existed even when accessible and few integrated broadcast content into selected language outcomes. Lack of awareness, unreliable electricity, poor teacher reinforcement, and limited institutional promotion were cited as major constraints.

Little is known about primary pupils’ access to and utilization of broadcast content in Osun. One recent study examined radio consumption among university students in Osun State, finding high levels of listenership 63 % listened frequently, with educational programs ranking among the most preferred content. While these findings reflect overall radio ubiquity and youth receptiveness, they do not directly reveal how primary learners engage with and benefit from educational broadcasts.

Contextual factor influencing educational media uptake is policy. Osun has long championed innovation in education under successive administrations. During Rauf Aregbesola’s tenure (2010-2018), the state hosted a major educational summit, restructured schools to K-12 formats, rolled out the Opon-Imo tablet initiative for secondary learners, and introduced the O-MEALS feeding program culminating in expanded enrolment and improved educational infrastructure. Although these reforms focused largely on technology and nutrition, they framed a policy environment conducive to

exploring broadcast media integration at the primary level.

Beyond Osun, lessons from other Nigerian states reinforce findings. In Ogun's Yewa North area, research on the impact of television on primary school learning revealed that TV programming “promote learning and knowledge” a surrogate teaching strategy in the face of rural teacher shortages. Further, in Bauchi State and other regions, UNICEF-supported home learning programs showed radio and TV broadcasts can effectively deliver literacy and numeracy lessons to primary pupils—even in low-resource rural contexts.

Despite these broader successes, the Nigerian educational media landscape continues to face persistent challenges: limited program awareness, unstable electricity supply, weak broadcast signals, and gaps in teacher support for broadcast learning. These barriers are especially acute in rural and peri-urban areas many of which are characteristic of Osun State's primary school locations.

Several empirical studies have explored the role of educational broadcasting in improving academic outcomes in Nigeria, particularly during the post-COVID-19 era. However, research specifically focusing on primary education in Osun State remains limited, pointing to a significant gap this study intends to address. Awofadeju and Akintayo (2023) conducted a study on the effectiveness of radio programs among secondary school students in Osun State during the COVID-19 lockdown. Their findings showed that radio-based learning improved academic engagement and learning outcomes among students, affirming that audio broadcasts could be a valuable instructional tool when formal schooling is disrupted. However, the study was

limited to secondary school learners, leaving the situation of primary pupils largely unexplored.

In a related study, Ayanwale, Adewuyi, and Afolabi (2023) examined the effects of radio and television learning on students' academic performance at a College of Education in Osun State. They concluded that television, due to its visual and auditory components, had a stronger impact on knowledge retention and understanding compared to radio. The study emphasized that while radio remains important, television should be prioritized where feasible. This again highlights the media's potential, although it did not involve pupils at the primary education level.

Similarly, Osikomaiya (2020) focused on primary school pupils in Lagos and Ogun States and found that educational television programs significantly enhanced children's communication skills, especially in spoken English. The study used both observational and experimental methods, confirming the role of educational TV in building foundational language competencies. This suggests similar benefits could be observed among Osun State pupils, though local validation is still required.

Okunade (2022) evaluated instructional television in Lagos using LASUBEB's English Language programs. The findings showed that while educational TV was well-designed, most students were unaware of the programs or lacked consistent access due to power supply challenges. The implication is that even well-planned programs may fail to deliver learning outcomes if infrastructural and awareness issues are not addressed.

Oyeleye and Ojo (2019) conducted a study in Yewa North Local Government Area of Ogun State to assess

how television programming affects learning among primary school pupils. Their results revealed that TV-based instruction positively influenced cognitive development and academic performance, particularly in literacy and numeracy. The researchers emphasized the need for parental guidance and reinforcement to optimize the impact of educational broadcasting.

In northern Nigeria, UNICEF (2021) evaluated a home-learning solution that included radio and television components during the COVID-19 pandemic. The program successfully delivered literacy and numeracy content to pupils in Bauchi and Sokoto States. The report concluded that while educational broadcasting was effective in delivering lessons, learning outcomes were highest in households where parents actively reinforced what children learned.

Adewale and Popoola (2021) studied the accessibility and impact of School-on-Air programs among primary school learners in Oyo State. They observed that children from urban areas benefitted more than their rural counterparts due to better access to electricity and media devices. This urban-rural divide suggests that contextual factors must be considered when assessing broadcast program effectiveness across diverse regions, including Osun.

Gender can be understood as the cultural construction that involves attributing certain qualities and functions to different sexes, such as male and female. Bello et al. (2020) investigated how educational radio programming supports girl-child development in rural Bauchi State. The study report: “widespread view that Radio Nigeria GlobeFM programmes on the Nigerian girl child are much effective, educative

and relevant” However, they also highlight persistent gendered socio-cultural barriers: “for girls, their gender alone may keep them home, locked in subsistence chores or so isolated in the classroom that they become discouraged and dropout”

In contemporary Nigeria, society, parents, and students all feel that there are a variety of factors that contribute to the former group's better levels of performance and achievement of pupils. One of these factors is the location of the school. The term "location" refers to either the school or the neighbourhood in which a school is situated. It is not apparent whether or not this settlement is located in an urban or rural setting. Pupils' learning behaviours may be influenced by the area in which the students live or where the school is situated. James (2021) studied Equitable educational response: Learnings from a radio school programme designed for young learners from marginalised communities in Northern Nigeria. She highlights that broadcasting in Hausa and Fulfulde “effectively engaged a wider group of target beneficiaries,” demonstrating the power of localized language delivery in reaching rural girls. This indicates that location and language are key facilitators of gender-inclusive educational access

These empirical studies reveal a consistent theme: educational broadcasting is impactful, but its effectiveness depends on accessibility, content alignment, teacher/parent support, and media infrastructure. It also reveals that rural location-based radio programs, especially those in local languages or tailored to cultural contexts, significantly enhance female engagement and challenge entrenched gender biases. This underscores the strategic importance of location-sensitive, gender-aware radio

interventions in boosting primary education outcomes for girls in Nigeria. Despite promising findings from other Nigerian states, there is still a lack of in-depth, empirical evaluation of these programs among primary school learners in Osun State, especially post-pandemic. This current study aims to fill that void by assessing the actual learning outcomes of broadcast engagement at the foundational level.

Statement of the Problem

The role of educational broadcasting through radio and television in supporting teaching and learning processes is widely recognized, especially in developing countries where access to digital learning technologies remains limited. In Nigeria, and particularly in Osun State, educational radio and television programs were adopted as key alternative learning strategies during the COVID-19 pandemic school closures. The "School-on-Air" initiative in Osun was designed to bridge the instructional gap and sustain educational continuity for both primary and secondary school pupils. However, while the implementation of these programs has received commendation, their actual impact on learning outcomes at the primary school level remains largely under-researched.

Empirical evidence has mostly focused on secondary school students, with limited studies assessing how well younger pupils who require more teacher-guided instruction and attention interact with and benefit from broadcast-based learning. There is a lack of clear data on whether primary school pupils in Osun State have sufficient access to educational radio and television programs, whether they understand and engage with the content, and how these exposures translate into measurable

improvements in academic performance, especially in key subjects such as English Language, Mathematics, and Basic Science.

Challenges such as poor electricity supply, low program awareness among pupils and parents, inconsistent broadcast schedules, and lack of integration of broadcast content into classroom instruction pose serious concerns about the effectiveness of these programs. Teachers' participation and reinforcement of broadcast content are often minimal, and in many cases, there is no structured follow-up to assess comprehension or learning outcomes.

Given that the foundational stage of education significantly influences learners' long-term academic success, the absence of concrete evaluation frameworks for these educational media efforts at the primary level represents a critical gap. If the impact of these programs remains unevaluated or poorly understood, efforts to improve or scale them may be misdirected or ineffective.

Therefore, this study seeks to address this gap by evaluating the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State. It aims to provide evidence on accessibility, content effectiveness, learning gains, and the structural and pedagogical factors that enhance or hinder their success. The findings will inform policy and practice, ensuring that educational broadcasting becomes a reliable and impactful supplement to traditional classroom instruction in basic education.

Purpose of the Study

The main purpose of this study was to evaluating the Impact of Educational Radio and Television Programs on the Learning Behavior of

Primary School Pupils in Osun State. The study specifically examined:

- i. the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State.
- ii. the significant difference in the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils based on their ages in Osun State
- iii. the significant difference in the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils based on their ages in Osun State.

Research Question

A research question was raised for this study:

What is the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State?

Research Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance:

1. There is no significant difference in the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils based on their ages in Osun State.
2. There is no significant difference in the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils based on their locations in Osun State.

Methodology

A descriptive research design of the survey type was used for the study.

The research design was descriptive because it entails gathering of data in order to describe existing phenomenon as they exist. Survey design was adopted because it has a wide range of scope and coverage, hence generalization is possible. The study covered all the fifty seven thousand three hundred and twelve (57,312) primary school pupils in all the thirty (30) Local Government Area of Osun State. The sample for the study consisted of one hundred and eighty (180) primary school pupils in Osogbo Local Government Area of Osun State. The sample was selected using simple and purposeful random sampling technique to ensure that every sample has an equal chance of being selected in the study. Nine primary schools were randomly selected from Osogbo Local Government Area using simple random sampling technique. Then twenty pupils were selected from each school using purposeful random sampling technique. The reason for using purposive random sampling technique was to ensure that only primary six pupils were selected.

The instrument used for the study was developed by the researcher titled Questionnaire on the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State (QIERTPLBPO). The QIERTPLBPO items were constructed to provide answer to the research questions formulated to guide the study. The questionnaire consisted of two sections. Section one was used to sought for information on personal data while the second section contained twenty (20) items structured to provide answers to the major research questions. Four point Likert scale for measuring responding opinion level of agreement/disagreement ranging from Strongly Agree to Strongly Disagree which aid the researcher to answer the

research questions with values of 4, 3, 2, and 1 respectively.

In order to ensure the validity of the items on the questionnaire, it was subjected to face and content validity, copy of the instrument was given to the two experts in the areas of Test and Measurement and Vocational and Technical Education. These experts determined the extent to which the instrument appears to measure what it is supposed to measure superficially. Consequently, this was done to ascertain the extent to which the questionnaire represented the content which it intends to measure. The QIERTPLBPO was subjected to reliability test to ensure its stability and consistency. To achieve this, 20 copies of the questionnaire were administered on primary school students in a school outside the sampled schools.

After the administration process, Cronbach Alpha was used to get the reliability co-efficient of 0.78. The value was high enough to make the instrument reliable. The administration of the questionnaire was done in two weeks with the help of two research assistants for the administration and retrieval of the instruments. 20 questionnaires were administered on each school hence, a total number of 180 questionnaires were administered across the sampled schools.

Results

Research Question 1: What is the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State?

Table 1: Descriptive Analysis of the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State

S/N	Perceptions on the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State	SA (%)	A (%)	D (%)	SD (%)	Mean	Standard Deviation	Remark
1	I remember what I learn from educational programs better than from textbooks.	28 (15.6)	74 (41.1)	54 (30.0)	24 (13.3)	2.59	0.91	Agree
2	Educational broadcasts motivate me to study more at home	74 (41.1)	54 (30.0)	28 (15.6)	24 (13.3)	2.99	1.05	Agree
3	I am more confident in answering questions in class because of educational media	100 (55.6)	25 (13.9)	54 (30.0)	1 (0.6)	3.24	0.91	Agree
4	I concentrate better when learning from television or radio programs	87 (48.3)	39 (21.7)	27 (15.0)	27 (15.0)	3.03	1.11	Agree
5	I learn new vocabulary and correct sentence structure from these programs	100 (55.6)	53 (29.4)	27 (15.0)		3.41	0.74	Agree
6	I apply what I learn from radio/TV to solve real-life problems	57 (31.7)	96 (53.3)	27 (15.0)		3.02	0.96	Agree
7	I perform better in school when I follow educational media programs	64 (35.6)	92 (51.1)	24 (13.3)		3.22	0.66	Agree
8	Educational programs help me develop good study habits	87 (48.3)	93 (51.7)			3.48	0.50	Agree
9	I can mention the names of at least two educational radio or TV programs.	64 (35.6)	116 (64.4)			3.36	0.48	Agree
10	These programs encourage me to ask more questions in class	61 (33.9)	91 (50.6)	28 (15.6)		3.18	0.68	Agree
11	I understand lessons better when they are also taught through radio or TV	64 (35.6)	115 (63.9)	1 (0.6)		3.35	0.49	Agree
12	I discuss educational programs with my classmates after school.	88 (48.9)	91 (50.6)	1 (0.6)		3.48	0.51	Agree
13	We are given assignments or discussions based on content from educational programs.	100 (55.6)	51 (28.3)	29 (16.1)		3.39	0.75	Agree
14	My school uses radio or television programs to support our learning in class.		153 (85.0)	27 (15.0)		2.85	0.36	Agree
15	I pay more attention to schoolwork after watching or listening to educational media	51 (28.3)	101 (56.1)	27 (15.0)	1 (0.6)	3.12	0.67	Agree
16	I enjoy watching or listening to educational programs.	61 (33.9)	65 (36.1)	54 (30.0)		3.04	0.80	Agree
17	I learn new things from educational radio and TV programs.	27 (15.0)	153 (85.0)			3.15	0.36	Agree
18	Educational programs help me understand what I am taught in school better.	27 (15.0)	127 (70.6)		26 (14.4)	2.86	0.84	Agree
19	I prefer learning from radio/TV programs over textbooks.	28 (15.6)	151 (83.9)	1 (0.6)		3.15	0.37	Agree
20	Educational radio and TV programs have improved my interest in learning.	65 (36.1)	90 (50.0)	1 (0.6)	24 (13.3)	3.09	0.95	Agree

Mean cut off mark: 2.5

Table 1 identified the Perceptions on the Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State. Using a cut-off mean of 2.50 for the rating scale. All the respondent agrees that there is positive Impact of Educational Radio and Television Programs on the Learning Behavior of Primary School Pupils in Osun State. It indicates that the Educational Radio and Television Programs on the has positive impact on the Learning Behavior of Primary School Pupils in Osun State.

Table 2 shows the final result.

Table 2: t-test analysis for difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their ages

Variations	Gender	N	Mean	SD	df	T	p
Impact of Educational Radio and Television Programs	Male	66	62.77	6.18	178	0.405	0.686
	Female	114	63.15	5.92			

$p > 0.05$

Table 2 shows that p value (0.686) $>$ α value (0.05). This implies that the null hypothesis was not rejected. Hence, there is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their ages in Osun State. This implies, there is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their ages in Osun State.

Testing of Hypotheses

Hypothesis 1: There is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their ages in Osun State. The learning behavior of primary school pupils based on their ages was analyzed using t-test for statistical significance at the 0.05 level of significance to test the hypothesis.

Hypothesis 2: There is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their locations in Osun State.

The learning behavior of primary school pupils based on their locations was analyzed using t-test for statistical significance at the 0.05 level of significance to test the hypothesis. Table 3 shows the final result.

Table 3: t-test analysis for difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their locations

Variations	Location	N	Mean	SD	df	t	p
Impact of Educational Radio and Television Programs	Urban	108	62.92	6.03	178	0.258	0.797
	Rural	72	63.15	5.99			

$p > 0.05$

Table 3 shows that p value (0.797) $>$ α value (0.05). This implies that the null hypothesis is not rejected.

Hence, there is no significant difference in the impact of educational radio and television programs on the learning

behavior of primary school pupils based on their locations in Osun State. This implies, there is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their locations in Osun State

Discussion

The findings of the study revealed that there is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their ages in Osun State. This contradicted with the claims of Bello et al. (2020) who asserted that Radio Nigeria Globe FM programmes on the Nigerian girl child are much effective, educative and relevant. However, they also highlight persistent gendered socio-cultural barriers: “for girls, their gender alone may keep them home, locked in subsistence chores or so isolated in the classroom that they become discouraged and dropout.

The findings of the study also revealed that there is no significant difference in the impact of educational radio and television programs on the learning behavior of primary school pupils based on their locations in Osun State. This contradicted with the submission of James (2021) who opined that location and language are key facilitators of gender-inclusive educational access. She highlights that broadcasting in Hausa and Fulfulde “effectively engaged a wider group of target beneficiaries,” demonstrating the power of localized language delivery in reaching rural girls.

Conclusion

Based on the findings of this study, it could be concluded that educational radio and television

programs have a consistent impact on the learning behavior of primary school pupils, regardless of their gender or geographical location. This suggests that such media-based educational tools are equally effective across diverse learner demographics, reinforcing their potential as inclusive and accessible means of enhancing primary education.

Recommendations

Based on the findings of this study, the following recommendations were made.

1. Educational radio and television programs should be sustained and expanded, given their uniform effectiveness across gender and location. Governments and stakeholders should invest in producing more high-quality, curriculum-aligned content.
2. Schools should formally integrate educational broadcasts into their teaching schedules to complement classroom instruction and reinforce learning.
3. Teachers should receive training on how to effectively use educational media as a teaching aid, ensuring they can guide pupils in engaging with and applying what they learn from these programs.
4. Content developers should continue to create age-appropriate, engaging, and culturally relevant materials that appeal to diverse learners, supporting the consistent impact observed in the study.
5. Regular monitoring and evaluation mechanisms should be established to assess the long-term effectiveness of educational radio and television programs, with feedback loops to continually improve content delivery and reach.

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INCLUSIVENESS OF STUDENTS WITH DISABILITIES AND THEIR LEARNING OUTCOME IN AGRICULTURAL SCIENCE PRACTICALS IN EKITI STATE GOVERNMENT COLLEGES

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Abstract

This study investigated the level of inclusiveness of students with disabilities in Agricultural Science practicals in Ekiti State Government Colleges. A descriptive survey research design was adopted, with a population comprising 1083 all students with disabilities enrolled in Agricultural Science in nine Government Colleges across the state. A sample of 25 students with disabilities was selected using purposive sampling. Data collection was conducted through a self-designed questionnaire, titled "Inclusiveness of Students with Disabilities and their Learning Outcome in Agricultural Science Practical Questionnaire" (ISDIOASPQ). The instrument consisted of two sections: demographic data and the inclusiveness of students with disabilities in Agricultural Science practicals. A four-point Likert scale (Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1) was used, along with test and exam results to assess learning outcomes. The instrument's reliability was verified using test-retest method, yielding a strong Pearson moment correlation coefficient. The questionnaire was administered by the researcher and three trained assistants, and all responses were collected following the necessary permissions from school management. Data analysis included descriptive statistics for research questions and regression analysis for testing hypotheses at a 0.05 significance level. The findings of the study reveal that; Peer collaboration and parental support were found to be inclusive, but administrative support and some aspects of teacher support were lacking, affecting full inclusion, most students with disabilities performed satisfactorily, though few excelled in Agricultural Science practicals, administrative support was significantly lower compared to factors such as teacher attitudes, and parental support, a decline in administrative support was a significant predictor of poorer learning outcomes, negative teacher attitudes were closely associated with lower student performance, peer collaboration was found to be a significant predictor of positive learning outcomes, participation of students with disabilities had a notable positive influence on their academic performance. Parental support had a negative effect on students' learning outcomes in Agricultural Science practicals, and teacher attitudes were the most significant predictor of learning outcomes, with negative attitudes leading to poorer performance. Other factors such as parental support, administrative support, and peer collaboration were not significant predictors, except for teacher attitudes. Based on the findings of the study, it was recommended that: government should ensure teacher training and professional development programs focus on fostering positive attitudes towards students with disabilities and schools should strengthen administrative support systems by creating inclusive policies and allocating resources to better support students with disabilities, schools management should promote peer collaboration through structured group activities and cooperative learning strategies, as these significantly improve academic performance, special interventions should be developed for students with disabilities, particularly in subjects like Agricultural Science practicals, to enhance learning outcomes and school management should integrate both administrative support and teacher involvement into inclusive practices to ensure all aspects of the learning environment contribute to the success of students with disabilities, this study concluded that the parental

support is the only variable of inclusiveness of students with disabilities that contributed to the learning outcomes of students with disabilities in agricultural science practicals in Ekiti State Government Colleges. Government are to organise training and re training for the school administrators and teachers teaching agricultural science in all Government Colleges, the uses of assistive devices should be provided for students with disabilities like students with albinism are to use magnifier glasses, and braille for visual impairment students, special educators and instructors are to be employed and dispatch to all Ekiti State Government Colleges for effective teaching and enhanced the learning outcomes of students with disabilities in agricultural science practicals in Ekiti State Government Colleges.

Keywords: Disabilities, inclusiveness, learning outcome, agricultural science practicals, Government Colleges.

Introduction

In the school system there are two categories of students, Students with disabilities and those without disabilities, cognitive or developmental disability is a physical or mental condition that limits a person movement, senses or activities. In the context of education, disability refers to any physical, mental, or social restrictions or impairments that prevent a student from fully engaging in the learning process (Anthony, Kazaara, & Kazaara, 2023). According to Mark, Daniel, Julius, et al. (2024), these disabilities can include learning problems, hearing and vision impairments, emotional or behavioural disorders, and physical impairments like mobility issues, Due to physical obstacles It could also be disabled as a physical, mental cognitive or developmental condition that impairs, interferes with or limit a person ability to engage in certain tasks or action. Disability refers to a situation in which a person faces difficulties, or is unable, to do other things on his or her own because of the interaction between the impairment he or she has and the available barriers. Disability takes many forms, and it may either be inborn or acquired through accidents and illnesses. Most common forms of disability are Abinism, physical

disability, mental disability, hearing impairment, visual impairment, speech impairment and deaf (hearing and speech impairment). Other disabilities are intellectual disability or learning difficulties, epilepsy and albinism, Impairments that causing disabilities may be from the birth or can be acquired during child personal life. Students with disabilities are individuals who have long term physical, mental, intellectual or sensory impairments as a result of any physical or mental health conditions which interracts with various barriers, to hinder their full and effective participation in the school activities. James (2014) conducted investigation of the effectiveness of teaching and learning students with disabilities in Agricultural Science practical in primary school. The outcome of the study found that the process of implementing teaching and learning Agricultural Science practical was far from what was intended by the curriculum. It was concluded that shortage of essential human and non-human resources lower teachers' productivity and students' achievement. It was therefore recommended that there is a need to foster the potential for continuing teaching and learning Agricultural Science subject more effectively by revitalizing Education for

Self-Reliance (ESR) Policy which is still relevant in the country. The term agriculture is occasionally restricted to crop cultivation excluding the raising of domestic animals. Agricultural education instruction in secondary schools is delivered through three component classroom and laboratory instruction (contextual learning), supervised agricultural experience programs (work-based learning), and the student-based youth programs and leadership organization. Agricultural education's primary purpose is to offer instructional programs to prepare students, including those with disabilities to acquire employability skills that will make them to be self-sufficient, reliant and independent. The researcher observed that the Nigerian society has a negative attitude towards the disabled due to myths and superstitions assumed to be associated with being disabled.

Inclusiveness is the quality of including many different types of people and treating them all fairly and equally, including everyone especially, allowing, and accommodating people who are historically excluded as because of their race, gender, age, sexuality or ability. Also it is systematic reform embodying changes and modification in content, teaching methods, approaches, structures and strategies in education to overcome barriers with a vision to serving to provide all students of the relevant ability with an equitable and participatory learning experience. According to Ball and Green (2014) noted that negative attitudes of the school administrators creates less inclusive placement for students with disabilities in government colleges, which primarily resulted from the lack of adequate training and experience related to special education and inclusion practices. Moreover, the attitudes toward inclusion of special education students in

government colleges was also reviewed among the school teachers attitudes toward inclusive education. The components of inclusion are administrative support, teacher attitude, parents support and involvement, collaboration, and classroom practices. Administrative support is a consideration of inclusion on the placement of student with disabilities in the general classroom and practicals, it increase the achievement of students and their effectiveness with able students. it support the general educational settings, it redefine roles and relationship between the students, because of their leadership role, they play a part of success or failure, daily influence on classroom functioning and student progress. Parental support and involvement influence closely linked to daily functioning especially student with disabilities.

Statement of the study

In 2020, UNESCO reported that Nigerian government shall ensure that every child with benchmark disability has access to free education in an appropriate environment till the child attains the age of 18years. Despite this report it appears that most students faced with various degrees of disabilities in Ekiti State Government Colleges are still suffering from exclusion in agricultural science activities particularly on the farm. There seems to be a growing exclusion and restriction of the students with Disabilities in agricultural science practical. It has been observed that most of the teachers teaching agricultural science seem not to understand challenges of students with disability thereby making them not to receive proper and necessary attention that can improve their performance as they concentrate on able bodied students only. Poor reinforcement from teachers in the colleges seems to be the order of

the day. Instead of the teachers encourage students with disability that perform well, they allow the able bodied ones to oppress dissable without being corrected or cautioned by the teacher. The researcher observed that the Nigerian society has a negative attitude towards the students with Disabilities due to myths and superstitions assumed to be associated with students without disabilities. It is also appears that has not been much consciousness about the inclusion of students with disabilities in the planning relating to agricultural science practicals Thereby raising concern leading to the fear of wether the interest and desired of the students with disabilities included in the farm.

Absence of specialized teachers employed by government is a factor that mostly affect students with disability. Agricultural science profession seems to have been taken over by teachers without disabilities who are knowledgeable in agricultural activities while excluding students with disabilities. This makes them to feel inferior when they are with teachers who don't understand their challenges and learning status. Most of the administrator didn't understand what disabilities mean they feel not concern about Student with disabilities, so students with disabilities are not more interested or involved in agriculture science practicals especially when their teachers are not around. Student with disability such as blindness, and hearing impairment are most of the time excluded from agricultural science practicals. Students with disabilities (SWDs) face multiple challenges in agricultural science practical activities such as ridge making, sowing, weeding, harvesting of crops, Manuring among others, school farm activities without help coming from the teachers.

In consequence, this study sought to investigate the level of inclusiveness of students with disabilities and their learning outcome in Agricultural practical in Ekiti

The purpose of this study is to determine the level of inclusiveness of students with disabilities and learning outcome in agricultural science practicals in Ekiti State Government Colleges,

Purpose of the study

The purpose of this study is to determine the level of inclusiveness of students with disabilities and their learning outcome in agricultural science practicals in Ekiti State Government Colleges, specifically the study sought:

1. investigated the level inclusiveness of students with disabilities and their learning outcome in agriculture science practicals in Ekiti State Government colleges
2. examined the students with disabilities learning outcome in agriculture science practicals in Ekiti State Government colleges
3. examined the relationship between Administrator support towards students with disabilities and their learning outcome in agriculture science practicals in Ekiti State Government colleges
4. investigated the relationship between teachers' support towards students with disabilities and their learning outcome in agriculture science practicals in Ekiti State Government colleges
5. investigated the relationship between parental support and involvement towards students with disabilities and their learning outcome in agriculture science practicals in Ekiti State Government Colleges.

6. investigated which of the administrative support, teacher support, parental support, and students participation and involvement will most significant predict the learning outcomes of students with disabilities in agricultural science practicals in Ekiti State Government Colleges

Research Questions

The following research questions were raised to guide the study:

1. what is the level of inclusiveness of students with disabilities in Agricultural science practical in Ekiti State Government colleges
2. what is the learning outcome of students with disabilities in Agricultural science practical in Ekiti State Government colleges

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

- Ho1. There is no significant relationship between Administrative support and the learning outcome of students with disabilities in agriculture science practical in Ekiti State Government Colleges
- Ho2. There is no significant relationship between teachers' attitude and learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges
- Ho3. There is no significant relationship between Parental support and involvement and learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.
- Ho4. Administrative Support, Teacher Attitude, Students' Collaboration,

Students' Participation and Parental Support will not be the most significantly predictor of learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Research methodology

The study adopted a descriptive survey research design, The research descriptive because it describe the existing situation regarding the inclusiveness of students with disabilities and their learning outcome in agricultural science in Ekiti State government colleges. The survey design also enable the researcher to carry out observation of things as they we be on without manipulating the variables. The population for this study consisted 1083 of all students with disabilities offering Agricultural science in all (9) nine Government Colleges in Ekiti State.

The sample for the study comprised 62 students with disabilities that are offering agricultural science using purposive sampling technique. A self-designed questionnaire titled "Inclusiveness of Students with Disabilities and their learning outcome in Agricultural Science practical Questionnaire" (ISDIOASPQ) will be used to explore information from the respondents. The questionnaire consist of 2 sections. Section A will consisted of demographic data while section B will be on will be on inclusiveness of students with disabilities in agricultural science practical. Four points using likert type rating scale of 4 points, Strongly agree SA -4, Agree A -3 points. Disagree D-2 points and Strongly Disagree SD- 1 point. Section C is on the learning outcome of students with disabilities in Agricultural science practical using the test and exam. The face and content reliability of the

instrument was ensured by experts in vocational and technical education and Tests and measurement in Ekiti State University Ado-Ekiti. The reliability of the instrument will be established using test retest. A pilot study was conducted by administered the twenty research instruments for students with disabilities from one Government College twice within a n interval of two weeks. Results collected shall be analysed using Pearson moment correlation coefficient to establish the reliability coefficient.

The instrument were administered by the researcher with the help of Three research assistants. the researcher asked the permission of the management of the schools and adequate follow up was made so as to ensure that all the administered questionnaires are retrieved.

The data collected were analyzed using descriptive and inferential statistics. All the research questions raised was answered using descriptive statistics such as frequency counts, mean, standard deviations, and percentages and inferential statistics such as t-test, Analysis of variance (ANOVA) and analysis of co-variance (ANCOVA). All the hypotheses was tested at 0.05 level of significant.

Results

Research Question 1: What is the level of inclusiveness of students with disabilities in Agricultural science practical in Ekiti State Government colleges?

Table 1: Mean and Standard Deviation of responses on the level of inclusiveness of students with disabilities in Agricultural science practical in Ekiti State Government colleges. N=25

Administrative Support	Mean ($\bar{x}$)	S.D	REMARKS
Provision of enabling environment for me in agriculture science practical by school administrator	2.16	1.18	Not Inclusive
Supplying adequate farm tools for me in Agricultural science practical by school administrator	2.24	1.01	Not Inclusive
Allocating more periods on the school time table for Agricultural science practical by school administrator	2.44	1.04	Not Inclusive
Allocating farm plots that I can use for my practical by the school administrator	2.40	1.00	Not Inclusive
Assigning an instructor that suits my disabilities on the school farm by school administrator	2.40	1.00	Not Inclusive
Teachers Attitude	Mean ($\bar{x}$)	S.D	REMARKS
They are more friendly to me in the school farm	3.12	0.97	Inclusive
They allow me to work in team with other students during Agricultural science practical	3.20	0.82	Inclusive
They usually tell me to stay in the classroom during Agricultural science practical	2.15	1.04	Not Inclusive
They gives me more time than students without disabilities in Agricultural science practical	2.36	1.04	Not Inclusive
They always listen and answers all questions from me in Agricultural science practical	2.32	0.80	Not Inclusive

Parental support and involvement in agriculture science practical

	Mean ($\bar{x}$)	S.D	REMARKS
My parents likes me to participate in Agricultural science practical	3.52	0.51	Inclusive
My parents use to buy agriculture science practical tools for me	3.32	0.85	Inclusive
My parents do encourage me to attend Agricultural science practical	3.52	0.82	Inclusive
My parents always encourage me to go to school on Agricultural science practical days	3.68	0.63	Inclusive
My parents want me to be engaged in livestock both at home and school	3.68	0.63	Inclusive

The findings from Table 1 reveal a mixed level of inclusiveness for students with disabilities in Agricultural Science practical activities in Ekiti State Government colleges. Administrative support appears lacking, with all indicators such as the provision of enabling environments, adequate tools, and suitable instructors receiving mean scores between 2.16 and 2.44, indicating a "Not Inclusive" assessment. In contrast, teachers' attitudes show a slight improvement, with students reporting some inclusiveness in working with teams (mean = 3.20) and friendly interactions (mean = 3.12). However, other aspects, such as being given additional time (mean = 2.36) and receiving attention (mean = 2.32), are marked as "Not Inclusive." Students' collaboration and participation are rated positively, with all mean scores above 3.20, signaling an inclusive environment where students

with disabilities are fully involved in group work and practical activities. Lastly, parental support is consistently high, with all responses marked "Inclusive," demonstrating strong encouragement from parents for their children's involvement in agricultural activities. This data shows that while peer collaboration and parental support are inclusive, administrative and some teacher-related support lag behind, hindering full inclusion of students with disabilities in agricultural science practical..

Research Question 2: What is the learning outcome of students with disabilities in Agricultural science practical in Ekiti State Government colleges?

Table 2: Frequency Counts and Percentages of the Performance of Students with Disabilities in Agricultural science practical in Ekiti State Government Colleges

GRADE	Frequency (n=25)	Percentage (%)
50%-55% (C5)	2	8
55%-59% (C6)	2	8
60%-64% (C5)	5	20
65%-69% (C4)	8	32
70%-74% (B2)	6	24
75%-100% (A1)	2	8

Table 2 shows that most students (32%, n=8) scored between 65%-69%

(C4), indicating moderate performance. A notable 24% (n=6) scored 70%-74%

(B2), showing relatively high performance. Meanwhile, 20% (n=5) scored 60%-64% (C5), and 16% (n=4) achieved 50%-59% (C5 and C6), representing lower but passing grades. Only 8% (n=2) reached the highest grade of 75%-100% (A1), while 8% (n=2) scored the lowest (50%-55%). These results imply that, while most students with disabilities are performing satisfactorily, a smaller portion is

excelling in the subject, with few students reaching the top performance category.

Testing of Hypothesis

Hypothesis 1: There is no significant difference in the level of inclusiveness of students with disabilities in Agricultural science practical in Ekiti State Government colleges.

Table 3: ANOVA of significant difference in the level of inclusiveness of students with disabilities in Agricultural science practical in Ekiti State Government colleges

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7155.200	4	1788.800	6.106	.000
Within Groups	35154.000	120	292.950		
Total	42309.200	124			

$P < 0.05$

From the ANOVA results in Table 3, the F-value is 6.106 with a significance level of $p = 0.000$, which is less than the threshold of $p < 0.05$. The hypothesis is therefore rejected. This implies that the

inclusiveness levels vary significantly between the colleges.

To further determine the level of variation, post-hoc analysis was performed.

Post Hoc Comparisons – grouping Comparison

Grouping	grouping	Mean Difference	SE	df	T	P _{tukey}	P _{scheffe}
1	- 2	-19.000	4.84	120	-3.9247	0.001	0.006
	- 3	-18.600	4.84	120	-3.8421	0.002	0.007
	- 4	-18.600	4.84	120	-3.8421	0.002	0.007
	- 5	-19.400	4.84	120	-4.0074	< .001	0.004
2	- 3	0.400	4.84	120	0.0826	1.000	1.000
	- 4	0.400	4.84	120	0.0826	1.000	1.000
	- 5	-0.400	4.84	120	-0.0826	1.000	1.000
3	- 4	-	4.84	120	-	1.000	1.000
	- 5	2.45e-14			5.06e-15		
4	- 5	-0.800	4.84	120	-0.1653	1.000	1.000
	- 5	-0.800	4.84	120	-0.1653	1.000	1.000

Key: 1 = Administrative Support, 2 = Teachers 'Attitude, 3=Students' Collaboration, 4= Students 'Participation and 5 = Parents Support

Significant differences were found between administrative support and Teachers 'Attitude, Students' Collaboration, Students 'Participation and Parents Support, with Tukey p-values below 0.05 and Scheffe p-values below 0.05. No significant differences were found between other groupings, as indicated by p-values of 1.000.

Hypothesis 2: Administrative support will not significantly predict learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Table 4: Regression Analysis of Administrative support prediction of learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Model	Unstandardized Coefficients		Standardized Coefficients	T	p	Partial Eta Square
	B	Std. Error	Beta			
1 (Constant)	82.891	1.764		46.995	.000	
Administrative Support	-.280	.028	-.902	-10.043	.000	0.83

P<0.05

The regression analysis in Table 4 shows that administrative support significantly predicts the learning outcomes of students with disabilities in Agricultural Science practicals in Ekiti State Government colleges.

Hypothesis 3: Teacher attitude will not significantly predict learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Table 5: Regression Analysis of Teacher attitude prediction of the learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges

Model	Unstandardized Coefficients		Standardized Coefficients	T	P	Partial Eta Square
	B	Std. Error	Beta			
1 (Constant)	89.751	1.771		50.681	.000	
Teacher's Attitude	-.341	.025	-.944	-13.704	.000	0.92

P<0.05

The regression analysis in Table 5 reveals that teacher attitude significantly predicts the learning outcomes of

students with disabilities in Agricultural Science practicals in Ekiti State Government colleges. The negative

unstandardized coefficient ($B = -0.341$) indicates that as teacher attitudes become less positive, student learning outcomes decline. The strong standardized beta value (-0.944) and high t-value (-13.704 , $p = .000$) demonstrate that this relationship is both strong and statistically significant.

Hypothesis 4: Parental support and involvement will not significantly predict learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Table 8: Regression Analysis Parental support and involvement prediction of the learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Partial Eta Square
	B	Std. Error	Beta			
1 (Constant)	105.511	4.657	.000	22.658	.000	
Parents Support	-.446	.053	.000	-8.479	.000	0.88

$P < 0.05$

From table 8, the unstandardized coefficient ($B = -0.446$) indicates that increased parental support is associated with a decrease in learning outcomes, suggesting a negative correlation. The standardized beta coefficient of 0.000 indicates a very strong relationship, with a t-value of -8.479 and a p-value of .000, both of which confirm the statistical significance of the findings. The partial eta squared value of 0.88 reflects a large effect size, indicating that parental involvement has a substantial impact on students' academic performance. Consequently, the null hypothesis is

rejected, emphasizing the critical role of parental engagement in enhancing the educational outcomes for students with disabilities in this context.

Hypothesis 5: Administrative Support, Teacher Attitude, Students' Collaboration, Students' Participation and Parent Support will not be the most significantly predictor of learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges.

Table 9: Regression Analysis of the most significantly predictor of learning outcome of students with disabilities in agriculture science practical in Ekiti State Government colleges

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Partial Eta Square
	B	Std. Error	Beta			
1 (Constant)	87.415	7.003		12.482	.000	
Administrative Supports	.019	.082	.062	.234	.817	0.83
Teachers Attitude	-.393	.117	-1.085	-3.342	.003	0.92
Students' Collaboration	-.155	.206	-.352	-.749	.463	0.83
Students' Participation	-.444	.347	-.833	-1.279	.216	0.95
Parents Support	.647	.342	1.263	1.890	.074	0.88

Table 9 results show that Teacher Attitude is a significant predictor ($B = -0.393$, $p = 0.003$), where negative attitudes correlate with poorer performance. In contrast, Administrative Support ($B = 0.019$, $p = 0.817$), Students' Collaboration ($B = -0.155$, $p = 0.463$), and Students' Participation ($B = -0.444$, $p = 0.216$) lack significant predictive value. Notably, Parent Support has a positive association with learning outcomes ($B = 0.647$, $p = 0.074$), suggesting a trend toward significance. Thus, while not all factors are significant, Teacher Attitude and Parent Support are crucial.

Discussion

The study's findings indicate that parental support are generally viewed as inclusive, weaknesses in administrative support and certain aspects of teacher support impede full inclusion. This is in line with Olajide (2020), who found that collaborative learning enhances the participation of students with disabilities by fostering a supportive classroom

culture where students help each other. This peer-to-peer interaction promotes both academic achievement and social inclusion, as peers serve as role models and provide direct support in learning activities. Collaborative learning creates an environment of shared responsibility, improving inclusiveness for students with diverse needs. The active parental involvement leads to better academic and social outcomes for students with disabilities, as it ensures continuity between school and home environments. Parental engagement has been linked to improved self-esteem, academic performance, and overall emotional well-being of students, particularly when parents participate in school activities or communicate regularly with teachers (Sukyrs & Simonson, 2020). This indicates that parental support can mitigate challenges faced by schools in implementing inclusive policies. Despite the importance of administrative backing, the study highlights its deficiency as a significant barrier to full inclusion. Also, Ainscon (2021) stated that administrators

are responsible for ensuring adequate resources, training, and clear policies to support both teachers and students. When administrative involvement is lacking, teachers may struggle to implement inclusive practices effectively due to limited resources or unclear guidelines. A lack of systemic support, therefore, undermines efforts toward fostering an inclusive environment (Ainscow, 2020). While teachers may express positive attitudes toward inclusion, many lack the training or resources necessary to address the needs of students with disabilities effectively. Professional development aimed at equipping teachers with practical strategies for inclusive teaching is often insufficient or inconsistently provided. This gap contributes to teacher burnout and a failure to implement inclusive practices, which negatively affects the learning outcomes of students with disabilities Ewa, M. A., & Ewam, G. M. (2019). Hence, strengthening administrative frameworks and providing comprehensive teacher training are essential to overcoming these barriers and achieving an inclusive learning environment.

The overall learning outcomes indicate that most students are performing satisfactorily, but only a few excel in the subject. Firstly, while peer collaboration and parental support contribute positively to learning, administrative and teacher support, which are crucial for fostering a fully inclusive environment, may not be adequately aligned to promote excellence. This was corroborated by Forlin et al (2022) who found that when administrative structures fail to provide adequate resources or support for inclusive education, student performance can plateau at satisfactory levels, rather than reaching higher achievement.

Moreover, the role of teacher attitudes is critical, as negative attitudes or inadequate training in inclusive teaching methods can limit the capacity of students with diverse needs to excel. Aruleba (2020) highlight the need for teachers to adopt inclusive pedagogies that cater to individual learning styles to enable students to reach their full potential. Without this, students may meet basic performance standards but struggle to achieve beyond that. Lastly, the variability in student outcomes could also be linked to gaps in personalized support. Mitchell et al.(2020) emphasizes that differentiated instruction, along with strong teacher-student relationships, is key to helping students excel. Therefore, the lack of targeted interventions for high-achieving students might explain why only a few students are excelling, while the majority remain at a satisfactory level.

The study revealed that a decline in administrative support significantly predicts worse learning outcomes. Administrative support is essential for creating a conducive learning environment, allocating resources, and ensuring that teachers have the necessary tools and training to meet students' needs. Research by Ewa, M. A., & Ewam, G. M. (2019). emphasizes that strong administrative leadership is associated with improved teacher performance and student achievement, particularly in inclusive settings. The study finding reveals that parental support has a significant negative impact on the learning outcomes of students with disabilities in agricultural science practicals. The finding that parental support has a significant negative impact on the learning outcomes of students with disabilities in agricultural science practicals suggests a complex relationship between parental involvement and academic performance. This outcome

may indicate that the nature or type of parental support being provided could be misaligned with the educational needs of these students. Recent literature supports the notion that parental support can have varying effects depending on how it is enacted. For instance, a study by Olajide (2020) found that while parental involvement is generally beneficial for student achievement, certain types of involvement such as overly directive or controlling behaviors can lead to negative academic outcomes. This aligns with the findings of the current study, suggesting that if parental support is perceived as overly intrusive or critical, it could hinder rather than help the learning process for students with disabilities. Furthermore, research by Kim and Hill (2019) indicates that the quality of parental engagement matters more than the quantity. They found that positive, supportive, and encouraging parental interactions are more likely to promote better educational outcomes, whereas negative or critical parental behaviors can negatively affect student motivation and performance. Therefore, it may be essential for interventions to focus on guiding parents of students with disabilities towards more effective forms of engagement that foster independence and self-efficacy, rather than inadvertently contributing to poor academic outcomes.

The study finding reveals that teacher attitude is the most significant predictor of learning outcomes, where negative attitudes lead to poorer performance. Parental support shows a positive trend but is not statistically significant, while administrative support, students' collaboration, and participation are not significant predictors. This shows the critical role teachers play in shaping students' academic performance, particularly for those with disabilities. Negative teacher attitudes can create an

environment that undermines student motivation, engagement, and overall academic success. Research has consistently demonstrated that teachers' beliefs about their students' abilities directly influence their expectations and teaching practices, which in turn affect student outcomes. For instance, a study by Ajuwon (2021) found that teacher attitudes towards inclusion significantly impacted students' self-esteem and academic performance. Teachers who hold negative attitudes may be less likely to implement inclusive practices effectively, leading to a lack of support for students with disabilities. This finding aligns with the work of Hedrik A. (2020), which indicates that when teachers exhibit low expectations, it can create a self-fulfilling prophecy, where students perform poorly due to the lack of encouragement and support from their educators. Additionally, the lack of significance in predictors such as administrative support, students' collaboration, and participation may indicate that these factors, while important, might not be as directly linked to learning outcomes as teacher attitudes. This aligns with findings by Akinboye, S.O. (2020)., who pointed out that the effectiveness of collaborative efforts often depends on the underlying attitudes and support structures established by teachers. Therefore, focusing on improving teacher attitudes and ensuring they have a positive and supportive approach towards students with disabilities could be vital for enhancing learning outcomes in agricultural science practical.

Conclusion

The study identifies several important factors influencing the learning outcomes of students with disabilities. While peer collaboration and parental

support are recognized as inclusive elements, administrative support and aspects of teacher support fall short, limiting full inclusion. Although most students perform adequately, only a few excel, pointing to areas in need of improvement. A decline in administrative support was found to negatively impact learning outcomes, while negative teacher attitudes emerged as the strongest predictor of poor performance. Student collaboration and participation play essential roles in enhancing academic achievement, but parental support, surprisingly, showed a negative effect in agricultural science practicals for students with disabilities. Ultimately, teacher attitudes proved to be the most significant factor affecting student success, highlighting the need for targeted interventions to improve teaching practices and foster a more inclusive educational environment.

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EXPLORING THE FACTORS INFLUENCING SECONDARY SCHOOL STUDENTS' PERCEPTION OF VOCATIONAL EDUCATION IN ADO LOCAL GOVERNMENT AREA, EKITI STATE, NIGERIA

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Abstract

This study examines secondary school students' perceptions of vocational education in Ado Local Government Area, Ekiti State, Nigeria. A survey research design was employed, targeting a population of 1,238 senior secondary school students across five public schools. Using simple random sampling, a sample of 302 students (162 females and 140 males) was selected. Data collection involved the uses of structured questionnaire developed from an extensive literature review, comprising demographic details and 30 items assessed on a four-point Likert scale. Instrument validity was circled out by experts in vocational education, while reliability was established through Cronbach's Alpha ($\alpha = 0.89$). Statistical analysis, conducted using SPSS, involved mean scores and t-tests at a 0.05 significance level. Results revealed positive perceptions of vocational education, with all item mean scores exceeding the 2.50 benchmark. Respondents affirmed vocational education's role in equipping them with practical skills (Mean = 3.30, SD = 1.41), reducing youth unemployment (Mean = 3.01, SD = 1.25), and fostering self-reliance and entrepreneurship (Mean = 3.75, SD = 0.83). Challenges identified included societal stigma (Mean = 3.21), parental discouragement (Mean = 3.24), and inadequate resources (Mean = 3.04). Despite these challenges, the t-test analysis reveals no significant barriers to vocational education ($p > 0.05$), reflecting students' optimism. In conclusion, the study reveals that students generally perceive vocational education positively, recognizing its role in skill acquisition, self-reliance, and career readiness. . The study recommends systemic reforms, increased funding, and advocacy to enhance accessibility, societal perception, and the effectiveness of vocational education programs in Nigeria.

Keyword: Entrepreneurship, Perception, Students, Vocational Education.

Introduction

Vocational education, as a vital pillar for workforce development, has been the focus of various scholars and policymakers across the globe. McGrath

(2012) defined vocational education as training programs that emphasize practical skills and knowledge tailored to specific trades or professions. These programs aim to prepare individuals for

direct entry into the workforce, entrepreneurship, or further specialized education. Billet (2014) elaborates that vocational education is structured to develop technical, technological, and professional competencies essential for a rapidly evolving labor market. Similarly, Barth (2015) highlighted that vocational education fosters workforce readiness through practical learning experiences, apprenticeships, and work-based training. This emphasis on practical application makes vocational education a cornerstone for equipping students with the skills and knowledge necessary to meet the demands of modern economies. Despite its importance, vocational education is often undervalued and misunderstood, especially in developing countries like Nigeria. Psacharopoulos (2021) stressed that vocational education plays a critical role in addressing youth unemployment, fostering technological innovation, and bridging the gap between educational outcomes and labor market demands. However, societal perceptions of vocational education frequently undermine its potential, as it is often viewed as a lesser alternative to traditional academic pathways (Akram, 2012; Senge, 2019). This negative perception contributes to a significant under-enrollment in vocational programs, leaving a gap in the skilled labor force and exacerbating youth unemployment (Adeyeni, 2021).

In the context of Nigeria, vocational education is integrated into the secondary school curriculum to prepare students for real-world challenges. According to Adejo et al. (2018), secondary school students in Nigeria engage in vocational courses such as entrepreneurship, culinary arts, fine arts, computer studies, and technical subjects. These courses aim to provide foundational skills and knowledge that

align with national development goals. Despite these efforts, there remains a notable disconnect between the skills imparted through vocational education and the expectations of the labor market (Duffy, 2019). Motsatsi, (2024) emphasized that understanding students' perceptions of vocational education is crucial for addressing this disconnect and enhancing the relevance of vocational programs. Globally, vocational education has undergone significant transformations to adapt to changing economic and technological landscapes. McGrath (2014) traces the evolution of vocational education from medieval apprenticeship models to contemporary career-oriented training programs. The industrial revolution marked a turning point, necessitating the establishment of formal vocational schools to meet the demands of specialized labor. In the United States, the Smith-Hughes Act of 1917 institutionalized federal support for vocational education, paving the way for broader access and higher enrollment in vocational programs (McGarey, 2012). Similarly, European countries have integrated vocational education into their national education systems to address skill shortages and promote economic growth (Barth, 2015; Pavlova, 2012).

In Africa, traditional apprenticeship systems served as the primary mode of vocational training before the advent of colonial rule (Fafunwa, 2014). However, the introduction of formal vocational schools by European colonial powers marked a shift toward institutionalized vocational education. These schools aimed to train individuals for technical roles that supported colonial administration and infrastructure development. In Nigeria, the 1976 Education Policy under Olusegun Obasanjo introduced "Education for Self-Reliance,"

emphasizing the integration of vocational training into the national curriculum (Nyerere, 2018). This policy aimed to prepare students for life in rural environments, combining theoretical knowledge with practical skills to foster self-sufficiency and community engagement. Despite these historical advancements, challenges persist in aligning vocational education with the aspirations and needs of students. Senge (2019) argues that students' perceptions of vocational education are shaped by their experiences, societal influences, and cultural contexts. Understanding these perceptions is essential for designing programs that resonate with students' interests and career goals. Sagli (2017) highlights that students' attitudes toward vocational education are influenced by societal biases, economic conditions, and the perceived value of vocational skills in the labor market.

The need for this study is further justified by the growing recognition of vocational education's role in achieving sustainable development goals (SDGs). The 2030 global education agenda, particularly SDG 4, underscores the importance of inclusive and equitable education that promotes lifelong learning opportunities (United Nations, 2015). Vocational education aligns with this agenda by equipping individuals with the skills needed for meaningful employment and economic participation. However, as Ryles (2019) notes, there is a pressing need to address the gap between vocational education outcomes and labor market demands. This gap is particularly pronounced in Nigeria, where vocational education often fails to meet the expectations of employers and students alike (Adeyeni, 2021). The research gap lies in the limited understanding of secondary school students' perceptions of vocational education in Nigeria. While

previous studies have explored the historical development and policy frameworks of vocational education, there is a paucity of research on students' attitudes, beliefs, and aspirations regarding vocational training (Motsatsi, 2024; Psacharopoulos, 2021). This study aims to fill this gap by assessing the perceptions of secondary school students in Ado Local Government Area, Ekiti State. By examining students' views on the relevance, advantages, and challenges of vocational education, this research seeks to provide insights that can inform policy decisions and program designs, ultimately enhancing the effectiveness and appeal of vocational education in Nigeria. In conclusion, vocational education is a critical component of national development, offering pathways for skill acquisition, employment, and economic growth. However, its potential remains underutilized due to negative perceptions and misaligned program designs. This study aims to contribute to the discourse by exploring secondary school students' perspectives on vocational education, providing a nuanced understanding of the factors that influence their attitudes and decisions.

Statement of the Problem

Vocational education is recognized globally as a critical pathway to equipping students with practical skills, competencies, and entrepreneurial capabilities required for meaningful engagement in the workforce. However, despite its significance, the perception of vocational education among secondary school students remains a pressing concern, particularly in Nigeria. Research shows that many students and their families view vocational education as a less prestigious or less desirable option compared to traditional academic

pathways. This perception often leads to under-enrollment in vocational education programs, limiting students' exposure to viable career opportunities that align with global trends and labor market demands. In Ado Local Government Area of Ekiti State, vocational education has been integrated into the secondary school curriculum to prepare students for self-reliance, entrepreneurship, and technical careers. However, the extent to which secondary school students understand, value, and are motivated to pursue vocational education remains largely unexplored. Existing studies indicate that societal biases, limited awareness, inadequate facilities, and insufficient policy implementation may contribute to students' negative perceptions and reluctance to engage with vocational education programs. These challenges undermine the ability of vocational education to fulfill its intended purpose of addressing unemployment, poverty, and skill mismatches in the labor market. Furthermore, there is limited empirical evidence on how students' perceptions are shaped by factors such as their exposure to vocational education opportunities, their awareness of career prospects, and their aspirations for future employment. Without understanding these perceptions, it becomes difficult to identify and address the barriers preventing students from actively participating in vocational education programs. Any efforts to vocationalize education systems must first account for the attitudes, beliefs, and experiences of the students for whom such systems are designed. This study, therefore, seeks to bridge this gap by assessing the perceptions of secondary school students in Ado Local Government Area towards vocational education. By exploring their attitudes, perceived advantages and

challenges, career aspirations, and willingness to engage in vocational education programs, the study aims to uncover the underlying factors shaping their perspectives and provide actionable insights to policymakers, educators, and stakeholders. Addressing this problem is essential to ensure that vocational education is positioned as a viable, respected, and attractive pathway for Nigerian students, capable of driving sustainable development and economic transformation in the region.

Purpose of Study

The main purpose of this study is to explore secondary school students' perspectives on vocational education in Ado Local Government Area, Ekiti State. Specifically, the study:

- i. investigated the factors influencing the perception of secondary school students on vocational education in Ado Local Government Area.
- ii. examined the level of secondary school students' awareness of vocational education programs.
- iii. identified the perceived barriers to vocational education among secondary school students.

Research Questions

The following research questions guided the study:

- i. What are the factors influencing the perception of secondary school students on vocational education in Ado Local Government Area?
- ii. What is the level of secondary school students' awareness of vocational education programs in Ado Local Government Area, Ekiti State?
- iii. What are the perceived barriers to vocational education among secondary school students?

Hypotheses

The following research hypothesis guided the study:

- i. There is no significant difference in the level of secondary school students' awareness of vocational education programs
- ii. There are no significant perceived barriers to vocational education among secondary school students.

Methodology

The study adopted a survey research design. The population comprised 1,238 senior secondary school students from five public secondary schools in Ado Local Government Area, Ekiti State. A sample size of 302 respondents was selected, including 162 females and 140 males, using simple random sampling. Data collection was conducted using a structured questionnaire developed by the researcher after an extensive literature review. The questionnaire consisted of two parts: Part I gathered demographic information, while Part II included 30 items designed to assess students' perceptions of vocational education. Responses were measured on a four-point Likert scale: Strongly Agree (SA),

Agree (A), Disagree (D), and Strongly Disagree (SD), with corresponding values ranging from 5 to 1.

The instrument was validated by three experts from the Department of Vocational and Technical Education, Adekunle Ajasin University, Akungba Akoko. Reliability was determined using the Cronbach Alpha method, yielding a coefficient of 0.89, indicating high reliability. The questionnaire was administered to respondents in person, ensuring a high response rate. Data collected were analyzed using the Statistical Package for Social Sciences (SPSS). Mean scores were used to answer the research questions, while t-tests were conducted to test the hypotheses of no significant difference at a 0.05 level of significance. Items with a mean score of 2.50 and above were interpreted as "Agree," while those below 2.50 were interpreted as "Disagree."

Analysis of Results

Research Question 1: What are the factors influencing the perception of secondary school students on vocational education in Ado Local Government Area?.

Table 1: Mean responses of Students on the factors influencing Perception of Secondary School Students on Vocational Education in Ado Local Government Area

S/N	Item Statements	Mean	Std. Deviation	Remark
1	Vocational education equips students with practical skills needed for the workforce.	3.30	1.41	Agree
2	Vocational education is essential for reducing youth unemployment.	3.01	1.25	Agree
3	Learning a vocational skill is as important as academic education.	3.80	1.40	Agree
4	Vocational education prepares students for entrepreneurship and self-reliance.	3.75	0.83	Agree
5	Employers value candidates who have undergone vocational education training.	3.55	0.93	Agree
6	Vocational education provides opportunities for students to explore their interests and talents.	3.60	0.70	Agree
7	Students who pursue vocational education are better prepared for technical and technological careers.	3.20	1.25	Agree
8	Vocational education is more relevant for students who do not excel in traditional academic subjects.	3.80	0.81	Agree
9	I believe vocational education contributes significantly to national development.	3.21	0.90	Agree
10	Vocational education is important for students who aim to pursue further education in technical fields.	3.02	1.30	Agree

The findings reveal that secondary school students in Ado Local Government Area generally perceive vocational education positively, as all item mean scores were above the 2.50 decision benchmark. Several key factors were identified as influencing this perception. Students agreed that vocational education equips them with practical skills needed for the workforce (Mean = 3.30, SD = 1.41), which indicates that hands-on training is highly valued among them. They also recognized its role in reducing youth unemployment (Mean = 3.01, SD = 1.25), showing their awareness of vocational education as a potential solution to joblessness.

There was strong agreement that learning a vocational skill is as important as academic education (Mean = 3.80, SD = 1.40), reflecting a shift in perception toward equal recognition of

vocational and academic learning. In addition, students affirmed that vocational education prepares them for self-employment and business creation (Mean = 3.75, SD = 0.83), which emphasizes its relevance to entrepreneurship and economic self-reliance.

Moreover, the students agreed that employers value candidates who have undergone vocational training (Mean = 3.55, SD = 0.93), indicating their confidence in the labour market relevance of vocational qualifications. They also believed that vocational education provides opportunities to explore their interests and talents (Mean = 3.60, SD = 0.70), suggesting that personal development is another important factor shaping their perception. Furthermore, vocational education was seen as a pathway to technical and technological careers (Mean = 3.20, SD

= 1.25), which aligns with global demands for skilled technical professionals. Students also showed strong agreement that vocational education is more suitable for individuals who do not perform well in traditional academic subjects (Mean = 3.80, SD = 0.81), highlighting its inclusive potential for diverse learners.

In addition, they acknowledged that vocational education contributes significantly to national development (Mean = 3.21, SD = 0.90), indicating an appreciation of its broader societal impact. Lastly, they agreed that vocational education is important for students who intend to pursue further education in technical fields (Mean =

3.02, SD = 1.30), reflecting an understanding of its academic continuity and potential for career advancement.

In conclusion, the results identify a wide range of influencing factors such as skill acquisition, employment prospects, self-reliance, employer expectations, and societal relevance that shape students' generally positive perception of vocational education in Ado Local Government Area.

Research Question 2: What is the level of secondary school students' awareness of vocational education programs in Ado Local Government Area, Ekiti State?

Table 2: Mean Responses of Respondents on the Level of Secondary School Students' Awareness of Vocational Education Programs

S/N	Item Statements	Mean	Std. Deviation	Remark
1	I am aware of the vocational education programs offered in my school.	3.86	0.31	Agree
2	My school organizes career talks or seminars about vocational education.	3.88	0.36	Agree
3	I know about the different types of careers associated with vocational education.	3.94	0.25	Agree
4	Vocational subjects such as entrepreneurship, fine arts, and technical skills are part of our curriculum.	3.82	0.36	Agree
5	I am aware of the benefits of vocational education programs for career development.	3.94	0.25	Agree
6	Vocational education opportunities in this area have been well-publicized to students.	3.86	0.36	Agree
7	Teachers in my school actively encourage students to explore vocational education.	3.85	0.35	Agree
8	I am aware of local vocational training centers or schools in Ado Local Government Area.	3.85	0.34	Agree
9	Vocational education programs in this area are accessible to secondary school students.	3.76	0.37	Agree
10	I know students who have pursued vocational education and have been successful in their careers.	3.88	1.32	Agree

The analysis of students' perceptions of vocational education programs shows positive attitudes and high awareness across all 10 items. Mean scores ranged from 3.76 to 3.94,

indicating agreement, while standard deviations, ranging from 0.25 to 1.32, show consistent responses for most items. Students showed strong awareness of vocational education programs in their

schools (Mean = 3.86) and acknowledged the availability of career talks and seminars (Mean = 3.88, SD = 0.36). They also reported knowledge of careers related to vocational education, with the highest mean score (3.94) and low variability (SD = 0.25). The inclusion of vocational subjects like entrepreneurship, fine arts, and technical skills in the curriculum was recognized (Mean = 3.82). Students also valued the career benefits of vocational education (Mean = 3.94), highlighting its perceived importance for future development. Students agreed that vocational opportunities were well-publicized (Mean = 3.86) and that teachers encouraged exploration of vocational education (Mean = 3.85). Awareness of local

vocational training centers was similarly high (Mean = 3.85). While vocational education programs were seen as accessible (Mean = 3.76), this was the lowest-rated item, suggesting room for improvement. Students also reported knowing peers who pursued vocational education and succeeded (Mean = 3.88), but this item showed the highest variability (SD = 1.32), reflecting differing levels of exposure. In summary, the findings show positive perceptions and high awareness of vocational education. However, the slightly lower score for accessibility and variability in exposure to success stories suggest the need for improved access and more success narratives to inspire students.

Hypothesis 1

H₀: There is no significant difference in the level of secondary school students' awareness of vocational education programs.

Item Statement	Mean	Std. Deviation	t-value	p-value	Remark
Awareness of vocational education programs	3.86	0.31	1.12	0.31	Accepted
Awareness of career talks/seminars	3.88	0.36	1.05	0.33	Accepted
Knowledge of careers in vocational education	3.94	0.25	0.98	0.36	Accepted
Inclusion of vocational subjects in the curriculum	3.82	0.36	1.07	0.35	Accepted
Awareness of benefits of vocational education	3.94	0.25	1.10	0.29	Accepted
Publicity of vocational education opportunities	3.86	0.36	1.06	0.33	Accepted
Teacher encouragement to explore vocational education	3.85	0.35	1.08	0.32	Accepted
Awareness of local vocational training centers	3.85	0.34	1.02	0.37	Accepted
Accessibility of vocational education programs	3.76	0.37	1.15	0.28	Accepted
Awareness of successful vocational education students	3.88	1.32	0.99	0.39	Accepted

The results of the t-test showed that all the p-values for the items related to students' awareness of vocational education programs were greater than 0.05 (ranging from 0.325 to 0.511). This indicates that there is no significant difference in the awareness levels among the students. Since the p-values exceed

the significance threshold of 0.05, we fail to reject the null hypothesis. Therefore, it can be concluded that there is no significant difference in the level of secondary school students' awareness of vocational education programs.

Research Question 3: What are the education among secondary school perceived barriers to vocational students?

Table 3: Mean Responses of Respondents on the Perceived Barriers to Vocational Education among Secondary School Students

S/N	Item Statements	Mean	Std. Deviation	Remark
1	Vocational education is perceived as less prestigious than traditional academic education.	3.21	1.46	Agree
2	Parents often discourage their children from pursuing vocational education.	3.24	1.21	Agree
3	There is a lack of adequate facilities and resources for vocational education in schools.	3.04	1.33	Agree
4	Vocational education programs are not well-funded or supported by the government.	3.51	1.30	Agree
5	There is a limited number of qualified instructors in vocational education programs.	3.42	1.23	Agree
6	The cost of vocational education programs is too high for many families.	3.64	1.31	Agree
7	Students are not adequately informed about the benefits of vocational education.	3.86	1.39	Agree
8	Cultural and societal beliefs discourage students from considering vocational education.	3.85	1.34	Agree
9	Schools place more emphasis on academic subjects than on vocational training.	3.01	1.27	Agree
10	There are limited opportunities for vocational education graduates to advance their careers.	3.12	1.23	Agree

The findings reveal students' perceptions of vocational education. All item statements had mean scores above 2.50, indicating agreement. Standard deviations ranged from 1.21 to 1.46, showing moderate variability in responses. Respondents agreed that vocational education is perceived as less prestigious than traditional academic education (Mean = 3.21), reflecting societal stigma. Parents were also seen as discouraging their children from pursuing vocational education (Mean = 3.24), emphasizing the role of parental attitudes. A lack of adequate facilities and resources in schools (Mean = 3.04) and insufficient government funding and support (Mean = 3.51) were identified as key challenges. The limited number of qualified instructors (Mean = 3.42) and high program costs (Mean = 3.64)

further highlight systemic issues. Students agreed they are not adequately informed about the benefits of vocational education (Mean = 3.86), underscoring the need for advocacy and awareness campaigns. Cultural and societal beliefs (Mean = 3.85) were seen as significant barriers, discouraging interest in vocational pathways. Schools were perceived as prioritizing academic subjects over vocational training (Mean = 3.01), indicating curriculum imbalances. Lastly, graduates of vocational education face limited career advancement opportunities (Mean = 3.12), reflecting employability challenges. In summary, the results highlight issues such as societal stigma, inadequate resources, insufficient funding, cultural biases, and limited opportunities. Addressing these challenges requires

systemic reforms, advocacy, and strategic investments to enhance the perception, accessibility, and effectiveness of vocational education.

Hypothesis 2: There are no significant perceived barriers to vocational education among secondary school students.

S/N	Item Statement	Mean	Std. Deviation	t-value	p-value	Remark
1	Vocational education is perceived as less prestigious than traditional academic education.	3.21	1.46	1.32	0.09	Not Significant
2	Parents often discourage their children from pursuing vocational education.	3.24	1.21	1.56	0.08	Not Significant
3	There is a lack of adequate facilities and resources for vocational education in schools.	3.04	1.33	1.15	0.21	Not Significant
4	Vocational education programs are not well-funded or supported by the government.	3.51	1.30	1.77	0.06	Marginally Significant
5	There is a limited number of qualified instructors in vocational education programs.	3.42	1.23	1.45	0.15	Not Significant
6	The cost of vocational education programs is too high for many families.	3.64	1.31	1.98	0.05	Not Significant
7	Students are not adequately informed about the benefits of vocational education.	3.86	1.39	2.10	0.04	Not Significant
8	Cultural and societal beliefs discourage students from considering vocational education.	3.85	1.34	2.05	0.05	Not Significant
9	Schools place more emphasis on academic subjects than on vocational training.	3.01	1.27	1.90	0.07	Not Significant
10	There are limited opportunities for vocational education graduates to advance their careers.	3.12	1.23	1.65	0.09	Not Significant

The results indicate that there are no significant perceived barriers to vocational education among secondary school students. All p-values for the items tested are greater than 0.05, meaning we fail to reject the null hypothesis. Thus, the null hypothesis ("There are no significant perceived barriers to vocational education among secondary school students") is accepted. Although students recognize challenges like lower prestige or lack of information, these are not seen as major obstacles. This suggests that vocational education is not perceived as a significant barrier by students, and future efforts can focus on increasing awareness and improving access to vocational education.

Discussion of the Findings

The findings revealed that students have positive perceptions of vocational education, with all mean scores exceeding the benchmark of 2.50. Students strongly agreed that vocational education equips them with practical workforce skills and prepares them for self-reliance and entrepreneurship. These results align with previous studies (e.g., Obanya, 2019; UNESCO, 2020) that emphasized the role of vocational education in fostering employability and entrepreneurship. Students' recognition of the importance of vocational skills alongside academic education supports the argument by Darling-Hammond (2019) that vocational education plays a

crucial role in holistic student development. The high mean score for the perception that employers value vocational training echoes findings by Winarno et al. (2017), which highlighted that technical and vocational education training (TVET) graduates are often sought after in the labour market due to their practical skills.

Despite these positive perceptions, students also identified significant challenges, such as societal stigma, parental discouragement, and insufficient government funding. These findings are consistent with earlier research by Oketch (2018) and Oviawe (2019), which reported that cultural biases and a lack of resources are major barriers to vocational education in Nigeria. Students' perception of vocational education as less prestigious than traditional academics reflects societal attitudes, as discussed by McGrath et al. (2020), who identified prestige as a recurring issue in vocational pathways globally. Students demonstrated high awareness of vocational education programs and acknowledged the inclusion of vocational subjects in their curriculum. These findings support studies by Anyanwu and Alade (2021), which found that exposure to vocational opportunities significantly enhances students' willingness to participate in such programs. However, the lower mean score for accessibility highlights a gap that needs addressing. This is in line with findings by Nwosu and Chukwuma (2020), who stressed that inadequate infrastructure and limited access to vocational training centers hinder effective implementation.

The study found that students are not adequately informed about the benefits of vocational education, despite high awareness of its existence. This underscores the need for advocacy

campaigns, as recommended by Asogwa and Diogu (2022), to improve student understanding and interest in vocational careers. Furthermore, the lack of adequate facilities, qualified instructors, and government support aligns with the challenges identified by Adamu and Aina (2019). Addressing these systemic issues would enhance the perception and effectiveness of vocational education programs. Interestingly, while challenges were recognized, students did not perceive them as major obstacles, as evidenced by the acceptance of the null hypothesis in the t-test analysis. This suggests that students are optimistic about vocational education despite systemic shortcomings. Studies by Adeyemo and Salami (2021) similarly found that students' enthusiasm for skill acquisition can mitigate negative perceptions and encourage participation. The findings highlight the importance of vocational education for national development, aligning with UNESCO's (2020) framework, which positions TVET as critical for achieving sustainable development goals (SDGs). The recognition of vocational education's role in entrepreneurship and technical careers supports assertions by Okolie et al. (2021) that vocational training can address youth unemployment and foster economic growth.

Conclusion

The study underscores the positive perceptions students hold toward vocational education, with strong agreement on its relevance to skill development, self-reliance, and career preparedness. However, societal stigma, insufficient resources, and limited access remain critical challenges. Addressing these issues through advocacy, policy reforms, and increased funding will enhance the effectiveness and perception

of vocational education, contributing to broader societal growth.

Recommendations

Based on the findings, the following recommendations were made:

- i. Government and stakeholders should launch campaigns to educate students, parents, and the public on the benefits of vocational education, addressing stigma and promoting it as a viable pathway to success.
- ii. Adequate facilities, modern equipment, and instructional materials should be provided to schools offering vocational education to ensure students gain hands-on, practical learning experiences.
- iii. The government and institutions should invest in recruiting and training qualified vocational instructors, including professional development for existing teachers to enhance expertise.
- iv. Schools should integrate vocational education into career guidance, organizing talks, seminars, and workshops to highlight opportunities in vocational fields for self-reliance and entrepreneurship.
- v. The government should increase funding for vocational education and implement supportive policies, including scholarships and incentives for private-sector partnerships to sustain programs.

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SUSTENANCE OF YOUTH ORGANISATION THROUGH A VIABLE SUPERVISED AGRICULTURAL EXPERIENCE PROGRAMME FOR SELF-RELIANCE IN AGRICULTURE

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Abstract

The paper focuses on the implications of a viable supervised experience programme for youth sustenance in agriculture. The paper highlights the integral parts of the instructions for farming in vocational agriculture. It also identifies the Supervised Agricultural Experience Programme and its importance, which is highly motivational. Also, farming programmes such as production projects, improvement projects, supplementary farm practices and placement for farm experience were identified. It was therefore recommended among others that youth experience programme activities should complement classroom instructions in agriculture. The policies and objectives of school youth experience activities should be related to agricultural science programme among others. These recommendations will serve as a means through which a youth can be self sustained and create more interest in the field of Agriculture.

Keywords: Supervised Agricultural Experience Programme, Implementation, experience programmes, youth, agriculture.

Introduction

Vocational education in agricultural programmes for occupations requires competencies, knowledge and skills in agriculture. Vocational education and training is the development and application of knowledge and skills for occupations needed by society from time to time (Nlebem and Chukwu, 2020). Society is becoming increasingly dependent on those agriculturally oriented businesses necessary for the efficient and effective supply of food and fibre products for the exploding population. Many youths in these

agriculturally oriented businesses need a special type of vocational education in agriculture, as they are to make a maximum contribution to the economic development of the nation.

Agricultural programmes at the secondary and post-secondary levels require knowledge and skills needed by youths to perform successfully and maximally in the practical activities, which almost everyone engages in the process of living (Dossett, et al 2019). Agricultural education aims at making available the efficient manpower required by the industry. Such manpower must be

able to meet the challenges of an ever-changing and increasingly complex world of today, which imposes new and changing workforce requirements. Agricultural education programmes are designed to stimulate and sustain students' interest in agriculture, provide occupational entry-level skills in agriculture to the students, and enable students to acquire basic knowledge, attitude and practical skills required to improve agricultural production techniques. (Famiwole, 2024).

Agricultural education programmes, also include the process of acquiring competencies and skills in general agriculture, animal husbandry, crop production, agricultural processing, forest management, agricultural technology, Agricultural supply and services, public speaking in agriculture, leadership activities, cooperation activities, ridge making, planting operations, thinning operations, staking, mulching, harvesting, supplying, irrigation practice, animal husbandry, feed formulation, egg candling, transplanting, pest and disease control, poultry production, dry season farming, horticulture, orchard management, weed control, pregnancy test in swine, debeaking, vaccination, tractor driving, ploughing, vegetable production, among others.

Ajibare and Fabamise (2018) maintained that the ultimate aim of agricultural education is to produce individuals who would go into real production in the farm or field. Also, a comprehensive programme of agriculture would offer many different types of skills and knowledge in agriculture. Agricultural education in agriculture for farming is to educate present and prospective youths for proficiency in farming. It could also be defined as the type of education that equips the youths

with skills, attitudes, work habits and appreciation essential for the development of practical agricultural experiences (Olaitan, 2010). It is the training aspect of agriculture for producing agricultural personnel through schools. The researcher sees agricultural education as a kind of education that provides youths and adults with sound knowledge of basic principles and techniques of agriculture, which enables them to translate their knowledge into real improvement in agricultural productivity.

This type of agricultural programme provides systematic instruction in agriculture for youth who have entered or who are preparing to enter the work of the farm or the home farm. Agricultural education, according to Famiwole (2024). is regarded as a systematic programme of instruction for public school leavers, out-of-school youths, post-secondary school youths and established farmers organised to improve agricultural methods and rural living. It prepares and develops student abilities to make a beginning and advance in farming and to produce farm products efficiently for the benefit of society.

According Famiwole, et al (2000) and Babasanmi & Owolabi (2018), the following are integral parts of the instruction in agricultural education for farming:

1. Classroom activities
2. Supervised agricultural experience programmes
3. Agricultural mechanics activities
4. School-sponsored organisation

Classroom Activities

Classroom activities provide opportunities for high school students, young farmers and adult farmers to study and discuss problems related to farming

programmes and farm living. Classroom activities in vocational agriculture provide youth with many opportunities for discussing and solving problems related to the supervised agricultural experience programme. Famiwole, et al, (2000) and Famiwole (2015) highlighted the following production areas where activities could be carried out: animal husbandry, forest management, crop production, agricultural processing, forest management, agricultural technology, Agricultural supply and services, public speaking in agriculture, leadership activities, and many others.

Supervised Agricultural Experience Programme (SAEP)

Supervised Agricultural Experience Programme (SAEP) in agriculture consists of all the practical agriculture activities of educational value conducted by students outside class or in school-released time for which systematic instructions and supervision are provided by their teachers, parents, employers (Famiwole et al, 2000 and Akinsorotan & Taiwo, 2016). It makes the instruction in agriculture practical and meaningful to the students and has a great motivational value. This programme provides opportunities for the students to apply the knowledge and skills learned in the classroom to farm situations.

Importance of Supervised Agricultural Experience Programme (SAEP)

Supervised Agricultural Experience Programme (SAEP) extends far beyond the classroom. Skills acquired through SAEP's stay with students for a lifetime and positively impact them as they grow. SAEP is essential for the students to succeed in the agricultural educational programmes and is also of benefit to school, employers, communities, parents and teachers

(Adeyeba, 2022 and Afolabi & Famiwole, 2023), as enumerated below:

Benefits to Students

Supervised Agricultural Experience Programme have been observed to be beneficial to students in the following ways:

- Builds self-esteem.
- Application of business practices.
- Focuses on individual skills.
- Encourages citizenship.
- Provides educational opportunities.
- Develops work ethics.
- Teaches responsibility.
- Establishes rapport with employers.

Benefits to the Education System

Supervised Agricultural Experience Programme is observed to be beneficial to the education system.

- ✧ Provides a relationship with community.
- ✧ Encourages academic success.
- ✧ Creates awareness and understanding of technology.
- ✧ Provides relevance to the curriculum.

Benefits to the Agricultural Industry

Supervised Agricultural Experience Programme could be very beneficial to the agricultural industry, as it includes the following:

- ❖ Provides labour.
- ❖ Maintains involvement with the community.
- ❖ Create a pathway from education to career focus.
- ❖ Helps keep students aware of new and relevant instruction.
- ❖ Develops engaged employees.

Sustainability of the Youths in Agriculture

According to Phipps, et al, (2008) and Adeyanju, et al, (2020), youths who

engaged in agricultural education are cognizant of the need for providing education in agriculture, which will give the students opportunities for learning through experience in real-life activities adapted to particular interests and needs. He further explained that for an instruction to be vocational, it must be carried out to the doing stage. The values of Supervised Agricultural Experience Programmes, as highlighted by Phipps, et al, (2008); Dossett, et al (2019) and Banjo, et al, (2023), are:

- Provides an opportunity for the development of the abilities needed for proficiency in agriculture
- Provides an avenue to satisfactory, progressive, requiring knowledge and skills in agriculture
- Provides opportunities to earn, save and use money
- Provides opportunities for contributing to desirable family living.
- Provides a desirable type of motivation and develops students' interest in agriculture
- Develops students' originality, pride of ownership, initiative, self-confidence and managerial ability.
- Provides opportunities for students to plan work, make budgets, use financial agreements, review information, form judgments, evaluate activities, make decisions, solve problems, put plans into action and keep accurate records.
- Provides an opportunity to grow into farming or another occupation requiring knowledge and skills in agriculture
- Provides a basis for evaluating the effectiveness of the instruction in agriculture.

Types of Supervised Agricultural Experience Programme (SAEP)

Supervised Agricultural Experience Programme (SAEP) encompasses both experience programmes for youth preparing for farming and experience programmes for youth preparing for off-farm occupations requiring knowledge and skills in agriculture. A supervised agricultural experience programme involves several of the following activities, which students may participate in

- Exploratory experience
- Placement programme
- Entrepreneurship or ownership programme
- Farming programmes

Exploratory Experience:

An important ingredient of Supervised Agricultural Experience Programme (SAEP) for all students studying agriculture, regardless of their career goals, is exploratory experience. An exploratory experience is a study visit with workers in production agriculture, ornamental horticulture, forestry, conservation, and others. The purpose of exploratory experiences is to get a feel for the work involved in the various jobs in agriculture, to understand the working conditions and to get acquainted with the lifestyle of the workers in different jobs. Exploratory experiences are helpful to students in making career decisions, and they have many intangible values in preparing students for any occupation.

Placement Programme

Placement for farm experience refers to locating a student on a farm for experience, where a student will work for employers of their choice. This can either be volunteered time or for earned wages. The most important parts of a placement

are teaching and mentoring the student. It is also intended primarily for:

- i. Student not living on the farm but interested in securing
- ii. Students whose home-farm facilities provide inadequate opportunities for the farming programme

Entrepreneurship or Ownership Programme

An ownership programme in Supervised Agricultural Experience Programme (SAEP) is a profit-oriented programme which involves managerial responsibility in any production activities area they are interested in. This area is specifically for those students who want to establish and run their own business. They gain skills and abilities desirable of an agricultural enterprise or other small business ventures. It involves students learning all sides of business.

Farming programme

Students who are preparing for off-farm agricultural occupation may be engaged in supervised farming programme activities in addition to their part-time employment in the occupation for which they are preparing. A good farming programme includes a series of related activities such as production projects, improvement projects, supplementary farm practices and placement for farm experience (Dyer and Osborne, 2018).

Implementation strategies of Supervised Agricultural Experience Programmes (SAEP)

The following are suggested as paradigms to enlist and sustain students' interest in agriculture through Supervised Agricultural Experience Programmes in schools as opined by Oketoobo and Gideon (2023).

1. All agricultural science students at Junior Secondary School (JSS) and Senior Secondary School (SSS) are to be listed
2. Exploratory activities such as field trips to established farms, agro-based industries would be encouraged to motivate the students and increase their awareness of the different opportunities available in agricultural occupations.
3. Students' interest areas in agricultural crops, livestock, soil, forestry, horticulture job, processing, sales, and services, among others would be determined through the Interest Inventory Data Collection Instrument that could be purchased or developed.
4. Students background in farming or farming-related experience would also be determined and documented to serve as a guide at the counselling or placement stage.
5. Students are placed on an ownership project such as horticultural farms, animal husbandry, pig production, fish production, arable crop production, and poultry management for ownership and managerial experience.
6. Parent interest and concept are sought by teachers and advisers
7. Students are made to establish their project in the school if they are boarders or at home if they are day students.
8. Teachers of agriculture and instruction are made to visit their student project all year round, even during holidays
9. All teachers of agriculture are specially remunerated for supervision of work done, especially during the holidays.

10. Students of the same interest, e.g product production, goat farming, etc, meet at least every fortnight to discuss their challenges on their ownership projects
11. A specialist is invited by the supervisor, teacher to give professional talks of the students n the challenges on their different projects
12. Students' challenges are discussed during their in-school Youth Organization meeting, youth organization clubs are established based on student programs such as; vegetable clubs, Arable crops club, Goat clubs, Sales club, Landscapers, piggery club.
13. Students attend local, zonal, State and national exhibitions, conventions and award nights to showcase their products and compete with their students
14. Awards are given at every level to motivate high-performance students

Production projects on the farm

- (i) Supplementary farm practices
- (ii) Crop production
- (iii) Livestock production
- (iv) Improvement projects

Production Project: A production project is a business venture for experience and profit involving the production of a crop or some type of livestock. Production project is owned in full or in part by and managed by the student. If the student owns the project in full, he receives the net income after all expenses are paid. Production projects are a fundamental part of a student's school work, supervised by the instructor and parents and carried to completion by the student. They involve careful study,

planning, recording, execution, summarization and evaluation.

Improvement Projects: An improvement project is an undertaking involving of related activities which usually cover a relatively long period. It is designed to improve (1) the efficiency of a farm enterprise, either crop or livestock (2) the whole farm business (3) the appearance or real estate value of the farm (4) the comfort and convenience of the farm family. Ownership remains with the family, and an improvement project usually provides no direct income to a student. An improvement project often results in more income to the farm family, which makes it possible for the parents to give the student more financial assistance than other wise be possible. Often the opportunities which improvement projects provide sfor contributing to the welfare of the family are a major reasons for interests in these projects some examples of improvement projects are swine herd, home ground, home improvements, home shop, keeping account and others.

Supplementary farm Practice: A supplementary farm practice is a job undertaken for experience or for the development of a skill and it is in addition to the practices included a student's production or improvement projects. It consists of a single job such as culling hens, feeding a nuanced ration, caponizing, treating seed, inoculating seed, testing of soil etc. Jobs of this type provide for the development of ability to carry out numerous specific approved practices which would not other otherwise be included in a student's supervised occupational experience programme; consequently a student should be encouraged to put into effect a large number of desirable supplementary

farm practices, which ordinarily require only a short time to complete (Ajayi, 2015). Supplementary projects provide

- The experiences an individual needs
- Experience not already required
- Experiences which require systematic instruction and participation
- Experiences that will be frequently used
- Experiences that are not included in the production or improvement projects
- Experiences with approved practices as a result of the instruction in agriculture.

Selection of activities for Supervised Agriculture Experience Programme

The following instructional procedures are suggested after the students have survived their situations and have developed an understanding of supervised agricultural experience programmes:

- Have students talk with their parents regarding the activities that will be most desirable for them
- Have students list the placement for experience jobs and production projects it will be possible for them to have
- Divide the students into groups having the same placement for experience jobs or production projects
- Have each students evaluate the previous discussions and make a final selection of disenable experience
- Have each student prepare a list of improvement project planed.
- Discuss with students the possibilities for group projects and list any which are needed to provide

experiences for certain class members who do not have an opportunity for such experiences at home or on a job

- Have each students prepare a list of the agricultural mechanics activities to include in the programme
- Have each individual decided on any equipment needed in connection with the programme
- Have students preparing for off-farm occupations requiring knowledge and skills in agriculture plan appropriate participatory experience.

School-sponsored organisations such as Future Farmers of Nigeria (FFN). It is an important part of vocational agriculture. It is an organization of students in vocational agriculture. It is an educational organization; membership includes all agricultural students to develop agricultural leadership, character, thrift, scholarship, cooperation, citizenship and patriotism. The specific purposes for which this organization was formed are

- (i) To develop competent, aggressive agricultural leadership
- (ii) To create and nurture a love of agriculture
- (iii) To strengthen the confidence of young people in themselves and their work
- (iv) To create more interest in the intelligence choice of agricultural occupation
- (v) To encourage members in the development of occupational experience programmes and in the establishment of agricultural careers
- (vi) To encourage members to improve the home and its surrounding
- (vii) To encourage participation in worthy undertakings for the improvement of agriculture

(viii) To encourage and practice thrift

Motto of the School-sponsored organization

The following motto reflects the true vocational educational spirit and sincerity of purpose of the organization

‘Learning to do, Doing to Learn, and Earn, Earning to live, Living to serve’.

The organization provides opportunities for youth to do what they like to do. Youth enjoy doing something worth while, excelling in their work and play, being appreciated, in responsible positions, learning how to help themselves, having opportunities to participate in activities, and obtaining recognition through outstanding service and achievement. Membership in a youth organization develops: Youth socially, responsibilities citizenship, ability of expression, character, abilities to work with others, vocational accomplishment, dignified work and teacher thrift etc.

Developing a programme of activities

An organization programme of activities consists of an outline of activities, covering approximately a year based on the interests, needs and desires of the members and the organizational as a whole, which usually results in a very worthy list of accomplishments. A comprehensive programme stimulates the interest, provides many opportunities for worthwhile experiences, helps to develop an effective educational programme for agricultural purposes and develops community interest and understanding.

The major divisions usually included in a programme of activities are:

- Supervised occupational experiences in agriculture
- Cooperation

- Community service
- Leadership
- Earning and saving
- Conduct of meetings
- Scholarship
- Recreation
- Organizational publicity and information
- Participation in state and national activities (Famiwole et al. 2000; Akinsorotan and Taiwo, 2016).

Implementing youth programme in agriculture

If the implementation process is to be a success, it must be properly planned and organized. Careful planning and execution of a balanced programme of activities required a great deal of effort. According to Oyeleye, et al (2021) and Oludipe (2023) efforts should be made by the chapter of the organization to:

- Provide a copy of the programme of activities to the members
- Ensure that every member serves on a committee
- Have each committee coordinate its activities
- Ensure that the chairman of the programme of activity meet with execute committee to prepare monthly activity
- Review the programme of activity periodically
- Report the progress of activities and problems encountered towards the fulfillment of activity objectives.

Conclusion

Supervised experience programme is an effective and meaningful way for the students of agriculture to develop essential skills and knowledge. Youth organization programme motivates students through activities that will stimulate their interest and explore job opportunities for

students outside the school. The importance of viable youth experience programmes cannot be overemphasised in times like this, when the country is reshaping its agricultural development and improvement programmes.

Recommendations

Based on the discussion in this paper, the following recommendations have been made:

- Supervised experience programme activities should complement classroom instructions in agriculture;
- The policies and objectives of the youth programme should be related to agricultural science programmes;
- Youth organization programmes should tend towards developing genuine interest in students and saleable skills in agriculture through learning by doing and experiential activities in agriculture;
- Every student of agriculture should be provided opportunity for exploratory activities, improvement projects, placement activities and supplementary programme.

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ACCOUNTING RECORDS AND THE PERFORMANCE OF SMALL AND MEDIUM SCALE INDUSTRIES IN ADO EKITI LOCAL GOVERNMENT AREA OF EKITI STATE

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Abstract

Despite the abundance of literature on the accounting records and performance of small and medium scale, no studies have focused on how small business owners in Ekiti State maintain and use accounting records. So, it is important to look at how small business owners in Ekiti State relate to accounting records keeping and how they use such documents. The study examined the effect of accounting records on performance of small and medium scale industries in Ado Ekiti Local Government Area of Ekiti State while the specific objective of the study was accounting records and performance. The population of the study was 410 registered small and medium scale enterprises in Ado Ekiti metropolis while the sample was 202 respondents gotten via Taro Yamane model. Out of the 202 questionnaires distributed 182 were returned and used for the research work. The instrument was validated by experts and a reliability of 0.804 was obtained. Research methods descriptive and inferential statistics, the inferential used was simple regression. They showed that accounting records with $t = 18.123$ and $(p = 0.000 < 0.05)$ which indicated that there is significant effect of accounting records on performance and concluded that SMEs do not keep accounting records of their business transactions because of lack of accounting knowledge. As a result of this, there is inefficiency in the utilization of accounting records by the SMEs. The study recommended that training programmes could help SMEs improve financial reporting to enhance access to bank loans, may benefit from financial literacy workshops to maximize the usefulness of accounting records for strategic planning. Governments and financial institutions could offer simplified tax reporting tools to help SMEs maintain proper records.

Keywords: Accounting Records, Performance, Small and Medium Scale Industries.

Introduction

To put it simply, small and medium-sized businesses (SMEs) are the lifeblood of every country's economy and society. It is well-known that as small and medium-sized enterprises (SMEs) grow, the national economy does as well. According to Adjei, Anokye, Mintah, & Offeh (2014) and Kalu (2022), small enterprises not only create jobs but also greatly contribute to lowering poverty rates and advancing the economy as a whole. Maintaining accurate financial

records might help these small businesses thrive in today's cutthroat economic climate. Academics, economists, financial institutions, and governments around the world have taken an interest in the problem of small businesses keeping incomplete records (Amoah, Mensah, & Ntoah-Boadi, 2014). For small businesses, accounting record keeping is the practice of keeping track of monetary transactions and events, either by hand or digitally, with the goal of providing a solid foundation for evaluating the

company's financial health over a given time frame (Aladejebi & Oladimeji, 2019). Keeping accurate financial records allows owners and operators of small businesses to see how their money is being spent. It is crucial for any business to track how well its investments are doing financially. This is due to the fact that, as a fundamental pillar of any enterprise, profit serves as the key performance indicator. In order to reliably measure a business's performance, all financial information must be recorded and presented according to accounting concepts and assumptions (Manyani & Maseko, 2011).

The language of business, accounting records-keeping may reasonably tell you how well a business did in chasing its profit goal. It is defined by Parker (2002) as the routine process of keeping track of a business financial transactions and adjusting those records so that the financial statements are accurate and consistent. The goal of maintaining accurate financial records is to give management with a framework within which to run the enterprise more efficiently by providing a systematic approach to recording and classifying all financial transactions. Keeping accurate records allows a small business owner to better manage cash flow, stay informed about the business performance, and plan for future financial needs. Maintaining accurate accounting records entails transforming monetary data from its basic form into the information needed to create financial statements (Mc-lean 1999). Creating new business transactions, reviewing and recording them in journals according to account names, posting journal entries to ledgers, creating a trial balance, journalizing adjustments, posting adjustments to the ledger, creating an adjusted trial balance, journalizing closing entries, preparing

and posting closing trial balance, and finally, preparing the financial statement are all steps in the process. In order for entrepreneurs to provide reliable and up-to-date financial reports that reveal the status and development of their business, precise record-keeping of accounting transactions is essential. Small and medium-sized businesses (SMEs) might benefit greatly from using such records to make informed decisions that would ultimately benefit their industries. It will be tough to grasp the business expenses and maybe even that the enterprise is selling products and services that cut into its earnings if accounting records are not kept. According to Oboreh and Osazevbaru (2008), small businesses do not keep accurate financial records, thus they cannot use that data to guide their actions and judgments. Approximately one hundred and twenty (120) people attended a workshop that was scheduled for some time in October in the year 2000. It was Thursday, and their task was to provide precise amounts for all purchases made between Monday and that point in time.

After three to four minutes, many of them began to indicate different sums; however, as soon as they did so, they would recall forgetting to mention some items and provide a different total. The following three minutes were filled with this. After that, from Monday through Thursday, they were to record all of their spending. They all acknowledged after 10 minutes that they could not recall with any degree of certainty how they had spent that time. The question "why?" However, there were many who agreed that "we did not write them down, others chorused because we did not keep the records," as some rightly put it. This proves that keeping records is essential to any business and is consequently something that everyone must do.

Statement of the Problem

For a small business owner, the holy grail is not failure but success. Making a profit is crucial to the success and longevity of any small business. Without it, there would be no way for the enterprise to develop or stay in operation. In order to make educated decisions and assessments about the business, profit planning necessitates the collection of financial data and its subsequent use. In Ekiti State, you may find a number of small businesses without success or failure. Initial success is common for many of these businesses, but by the end of the first few years, many of them are struggling just to stay afloat. Some of them wind up in liquidation. Amissah (2011) states that basic accounting procedures and accurate bookkeeping are neglected by the majority of small and medium-sized businesses.

Consequently, they cannot use financial records to pinpoint their businesses' precise financial situation at any given moment, verify their liquidity, compare profits from one year to another, or predict profits for the next year. This makes it harder for the business to get the funds it needs from banks and other lending organizations so it can grow and diversify. Observation have shown that without accurate accounting records, small and medium-sized businesses find it difficult to generate financial statements. In addition, knowing the business liquidity, total assets and liabilities, and yearly profit or loss becomes much more of a challenge in the absence of produced financial statements. For one, it will be hard to tell how much money the enterprise made in a given accounting period. Worst yet, it could probably lead to fraud and other problems that ruin the organization. Stagnation or bankruptcy may befall a business concern if its

financial dealings are not properly recorded.

The aforementioned situation has reportedly been a nightmare for the majority of Ekiti State's small business owners. Despite the abundance of literature on the topic, no studies have focused on how small industry owners in Ekiti State maintain and use accounting records. So, it's important to examine how small business owners in Ekiti State relate to accounting records keeping and how they use such documents in transacting businesses.

Objective of the Study

The main purpose of this study is to determine the effect of Accounting Records and the Performance of Small and Medium Scale Industries in Ado Ekiti Local Government Area of Ekiti State. Specifically, this study:

- i. determined the Effect of Accounting Records on Performance of Small and Medium Scale Industries in Ado Ekiti Local Government Area of Ekiti State

Research Questions

This research question guided the study:

1. What is the effect of accounting records on performance of small and medium Scale Industries in Ado Ekiti Local Government Area of Ekiti State?

Research Hypothesis

The following null hypothesis was formulated and tested at 0.05 level of significance:

1. There is no significant effect of accounting records on performance of Small and Medium Scale Industries in Ado Ekiti Local Government Area of Ekiti State.

Methodology

A well-thought-out plan for carrying out research is known as a research design. The research design used in this study was a descriptive design of survey type. By using a predetermined set of questions related to the study at hand, researchers using survey research designs can gauge the general public's (or a representative sample of it) opinions, ideas, or views. The utilization of primary (qualitative) data acquired as answers to questions makes this research strategy ideal for this particular investigation. Keeping this in mind, the research questionnaire includes a number of questions with no room for free-form responses. A total of three sections comprised the questionnaire. Questions on the respondents' demographics are in Section 1, while Section 2 details the scale for accounting records and Section 3 details the results. Two hundred and two questionnaires were sent out to each of the bank's branches in order to gather data for this study (refer to table 1). No consideration was given to the participants' gender or the year of establishment while making the distribution. The replies were guaranteed to remain confidential. All 410 SME registrations in the Ado Ekiti metropolitan area served as the study's population.

Table 1: Population of the study

S/N	Names of the SMES	No of the SMEs
1	Aluminium	16
2	Auto mechanic	57
3	Bakery	5
4	Block industry	71
5	Car wash	8
6	Dry cleaning laundry	9
7	Feed mill	6
8	Furniture industry	37
9	Marble Work	6
10	Metal Fabrication	18
11	Panel	22
	Beatin/Spraying	
12	Printing press	42
13	Saw Mill Industry	27
14	Shoe making	20
15	Soap Making Industry	3
16	Sachet/Table Water Industry	26
17	Garment Industry	37
Total		410

Source: The Ministry of Commerce, Industries and Cooperatives, Ado-Ekiti, Ekiti State

Sample size and Sampling Techniques

The sample size for this research was 202 and was derived using the Taro formula by Yamane (1967) cited in Israel (2009).

Simple regression model was used for inferential statistics while frequency tables, mean and standard deviation were used for descriptive statistics. In order to determine whether small-scale business operators in Ekiti State kept and used accounting records, regression model studies were conducted as well.

Results and Discussion

Table 2: Demographic Distribution of Respondents

	Frequency	Percent
Sex		
Distribution	118	64.8
Male	64	35.2
Female	182	100.0
Total		
Age		
Distribution	25	13.7
25-35Years	59	32.4
36-45Years	52	28.6
46-55Years	46	25.3
56Years and Above	182	100.0
Total		
Marital Status		
Single	175	96.2
Married	5	2.7
Divorced	2	1.1
Total	182	100.0
Educational Qualification		
OND/HND	28	15.3
B.Sc.	44	24.2
MBA/M.Sc.	75	41.2
Ph.D	35	19.2
Total	182	100.0

Source: Field Survey, (2025)

Results and Discussion

Demographic Distribution of Respondents

The sex distribution of respondents indicated that one hundred and eighteen (64.8) are male respondents while sixty-four (35.2%) are female respondents which implied that more of male respondents are more than the female counterpart in this research work. Age distribution of respondents revealed that twenty-five (13.7%) of the respondents are between 25-35years of age, fifty-nine (32.4%) of the respondents are between 36-45years of age, fifty-two (28.6%) of the are between 46-55years while forty-six (25.3%) of the

respondents are 56years and above. Marital status distribution of the respondents showed that one hundred and seventy-five (96.2%) of the respondents are single, five (2.7%) are married while two (1.1%) of the respondents are divorced with his husband. This implies that single are more than the married couples. Educational qualification distribution of the respondents revealed that twenty-eight (15.3%) are OND/HND certificates holder, forty-four (24.2%) of the respondents are B.Sc. certificates holder, seventy-five (41.2%) of the respondents are MBA/M.Sc. certificates holder, thirty-five (19.2%) of the respondents are Ph.D certificates holder.

Table 3: Analysis of Descriptive Table

Items	N	Sum	Mean	STD
Accounting record keeping helps track SMEs activities in the determining profit/loss	182	762	4.19	0.742
Accounting record keeping helps SMEs in the acquisition of credit facilities from banks	182	718	3.95	0.903
Keeping accounting records helps SMEs in paying appropriate tax to government	182	775	4.26	0.677
Keeping accounting records helps SMEs in efficient financial decision making	182	655	3.60	1.225

Interpretation of the descriptive statistics provided:

Accounting record-keeping helps track SMEs' activities in determining profit/loss: Mean ($M = 4.19$): Respondents strongly agree that accounting records are important for

tracking business activities and determining profit or loss. Standard Deviation (SD = 0.742): The relatively low SD suggests that most respondents share a similar opinion, with minimal variation. Standard Error (SE = 0.055): The low SE indicates that the sample mean is a reliable estimate of the population mean.

Accounting record-keeping helps SMEs acquire credit facilities from banks: Mean (M = 3.95): Respondents moderately agree that keeping accounting records is useful for obtaining bank credit. Standard Deviation (SD = 0.903): The higher SD suggests more variability in responses, meaning some SMEs may have had different experiences with banks regarding financial records. Standard Error (SE = 0.067): The SE is slightly higher than the first item, indicating a small degree of sampling variability.

Keeping accounting records helps SMEs pay appropriate taxes: Mean (M = 4.26): Respondents strongly agree that keeping records is useful for accurate tax payments. Standard Deviation (SD = 0.677): The low SD indicates a high level of agreement among respondents. Standard Error (SE = 0.050): This small SE suggests a precise estimation of the mean.

Keeping accounting records helps SMEs make efficient financial decisions: Mean (M = 3.60): There is moderate agreement that accounting records help in financial decision-making, though the level of agreement is lower than for other statements. Standard Deviation (SD = 1.225): The high SD suggests significant differences in opinions, meaning that while some SMEs find accounting records useful for decision-making, others may not. Standard Error (SE = 0.091): The highest SE in the dataset, suggesting that

the sample mean has more variability compared to other.

Discuss of the Findings:

To test this hypothesis, the respondents' scores on two variables of accounting records and Performance of small and medium enterprises in Ekiti state were computed and subjected to simple regression analysis. From Table 4, the R (correlation Coefficient) gives a positive value of 0.804; this indicates that there is a very strong and positive relationship between accounting records and performance of small and medium enterprises in Ekiti state. The R^2 is a portion of the total variation in the dependent variable that is explained by the variation in the independent variables. From the results obtained, R^2 is equal to 0.646, this implies that Accounting records brought about 64.6% variance in performance of small and medium enterprises in Ekiti state, this is further proven by the adjusted R^2 that shows the goodness of fit of the model which gives a value of 0.644, implying that when all errors are corrected and adjustments are made, the model can only account for 64.4% by Accounting records; while the remaining 35.6% are explained by the error term in the model as shown in Table 4.

The unstandardized beta coefficient of accounting records is 0.801 with $t = 18.123$ and ($p = 0.000 < 0.05$). These results showed that accounting records has a positive relationship with Performance of small and medium enterprises in Ekiti state. This suggests that the accounting record keeping of SMEs promotes the growth of the enterprises. The study is in line with the work of Prempeh, Osei, Osei and Kuffour (2022) findings showed that accurate accounting record keeping of SMEs transactions is essential to the growth of

the enterprises in determining their profit/loss level, acquiring credit facilities from banks, ability to have some document to back up their tax records and able to make efficient financial decisions of their business. Idewe (2019) findings show that most of SMEs do not keep accounting records. Some of the reasons as to why they do not keep accounting records were: time consuming, lack of knowledge and skills, poor documentation, ignorance and poor support from the workers responsible with records in the organizations and Onwuchekwa and Ukpog (2023) found that there is a high positive relationship between accounting records-keeping and utilization in the subsidiary books and ledger accounts. Furthermore, the null hypotheses tested revealed that there

were significant relationships between accounting records keeping in the identified books of account and the utilization of those records by small scale business operators in Ekiti State.

From the Table 4 discussion in objective one, and by F-Stat. 328.428, p-value $0.000 < .05$, it showed that the null hypothesis, accounting records does not significantly affect Performance of small and medium enterprises in Ekiti state is not true therefore, the null hypothesis is rejected. Based on this, we accepted the alternative hypothesis that Accounting records have effect on Performance of small and medium enterprises in Ekiti state.

Table 4: Accounting records and Academic Performance

Variable	Coeff.	Std. Error	T-value	Sig.
Constant	0.827	0.188	4.400	0.000
Accounting Records	0.801	0.044	18.123	0.000
R	0.804			
R Square	0.646			
Adj. R Square	0.644			
F Stat.	328.428(0.000)			

Dependent variable: SMEs Performance

Conclusion

The following conclusions were made from the study's results. Accounting record keeping and utilization are related, according to the study, for small-scale business operators in Ekiti State. As a result of their inexperience with accounting, Small and Medium Industries are found to not maintain records of their company transactions. Small and medium-sized enterprises (SMEs) waste accounting records because of this. Because of this, they were unable to accurately gauge their companies' financial health at any one moment and had a hard time

determining how much money they had made. Since they do not know how to compile financial documents, they have a hard time getting loans from public and private sources. Typically, this is one of the main reasons why businesses fail.

Recommendations

The following recommendations were made:

1. Training programs could help SMEs improve financial reporting to enhance access to bank loans.
2. Small and Medium Industries may benefit from financial literacy workshops to maximize the

usefulness of accounting records for strategic planning.

3. Governments and financial institutions could offer simplified tax reporting tools to help SMEs maintain proper records.

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IMPACT OF TEACHERS' BACKGROUND ON STUDENTS' LEARNING OUTCOME IN CIVIC EDUCATION IN SENIOR SECONDARY SCHOOLS IN EKITI CENTRAL SENATORIAL DISTRICT OF EKITI STATE

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Abstract

The study investigated Impact of teachers background on students learning outcomes in Civic Education in senior secondary schools in Ekiti central senatorial districts of Ekiti State. The research design employed in this study was a survey descriptive research design. The population of the study consisted of teachers teaching Civic Education as a subject in Ekiti Senatorial district, Two hundred (200) respondents were used as a sample for the study using random sampling technique. Three research questions as well as three research hypotheses were formulated to guide the study. Relevant data were obtained by means of structured questionnaire titled- Influence of Impact of Teacher's Background on Student Learning (ITSBSI). The finding shows that there was a significant impact of teachers qualification on students' academic performance in government, which means teachers' qualifications have higher value on students' academic. it was recommended that Ministry of Education must organise regular in-service and refresher training Civic Education subject teachers to enable them embrace and conform to teaching the subject.

Introduction

Education in Nigeria is an instrument'' per excellent'' for effective national development. According to the federal republic of Nigeria (FGN,2014) education is the instrument that paves way for meaningful development, growth and understanding of issues in the society and education is an important aspect of economic development. Ojiambo (2011) stated that when citizens of a country are educated, that becomes a key to social, economic and political stability. Therefore, for education to be relevant in a society there must be qualified and experienced personals to use as channels to achieve it. For the purpose of this study, the researcher would be looking at teachers' background from the

perspective of teachers' qualifications and years of teaching experience and their impacts on students' learning outcome in civic Education in senior se According to the researcher, the teachers in Government Senior Secondary Schools in Ekiti State may or may not all be qualified and with or without certified years of experience in the subject matter because of some factors beyond their control. One of the factors is lack of teachers to meet the needs of the population of students in the area thereby probed to employing teachers by parents' teachers' association to help in schools in Ekiti State and this could promote or hamper the learning outcome of the subject matters in senior secondary schools in Ekiti State, Nigeria.

According to Obannaya (2015) teachers' background is teachers' qualifications gained after certain certifies duration through formal education. While the research in which teachers' experience is used as an aspect of teachers' background according to Zuzoysky (2015) suggested that experience matters, but it contributes differently only in the first five years of teaching. During this time, teachers appear to gain more effectiveness and this contributes to students' achievement. Obannaya (2015) stated also that qualification is a special skill or type of experience or knowledge that makes someone suitable to do a particular job or activity. Therefore, teachers' qualification is a particular skill or type of experience or knowledge someone possess through formal education to make him or her suitable to be teacher.

Richardson (2012) stated that background in terms of qualification and years of experiences have impact on the students' learning outcome among senior secondary schools. There has been a controversial issue surrounding the teachers' background (qualifications and years of experiences) and their influence on students' learning outcome in Civic Education because it is a new subject being introduced to the curriculum of senior secondary school.

Adeyemi (2018) noted that what a teacher exhibits influences his or her level of background. In this regard, teachers' background could be measured through a rating of his or her activities in terms of performance in teaching, lesson preparation, lesson presentation, actual teaching and teacher commitment to job, extra-curricular activities, supervision, effective leadership, motivation and morale among others. For the attainment of a high level of efficiency, secondary school Civic Education teachers' are

expected to participate regularly in professional development activities. These activities may be intended to help them to learn new teaching methods, broaden their subject matter content knowledge, or stay informed of changing policies, among other purposes.

According to Steele (2010) in the research in which teachers' experience is used as an aspect of teachers' background suggested that experience matters, but it contributes differently only in the first four or five years of teaching. During this time, teachers appear to gain effectiveness (contribution to students' achievement scores). Teachers' qualifications and years of experiences are very complex phenomenon for which no general and absolute agreements concerning an appropriate and comprehensive definition exist. One of the first dilemmas to resolve this is the difference between teachers' qualification and years of experience to teaching.

What is the relationship between teachers' qualifications and teaching experiences and students' achievement? What are best ways to measure teachers' background? Is teachers' background the same as teachers' effectiveness? How does teachers' background relate to highly qualified and years of experience of teachers? A one-size-fits-all definition of teachers' background is not used because a variety of occasions and purposes exist for which different definitions may be appropriate. The answers to these questions vary depending on which report, study, or policy is being examined. A clear consensus on the meaning of teachers' background has not yet been reached, although teachers' background is almost universally believed to be the most important school-based factor in students' learning outcomes. Hakielimu (2011) opined that many reports, studies, and

research articles published in recent years suggested that teachers' qualifications and years of experience matter a great deal in terms of students' learning outcome and teachers' background has been defined and measured in many ways. Jordan et al (2017) laid bare that there is nearly universal agreement that teachers background matters in terms of students' achievements, but there has been no clear consensus on which aspect of teachers' background matter most or even what useful definition of teachers' background might be. One reason for this difficulty is that teachers' background may need to be defined differently for different purposes. In addition to teachers' contribution to students' achievement, Kane et al (2016) said that teachers' background may said to be teachers who possess the following characteristics; qualifications and experience appropriate to grade level and subject matter, high expectations for students, particularly those at risk for poor outcomes, creation of a classroom environment that encourages all students to participate in worthwhile learning activities, desire to help students achieve at high level, ability to motivate at – risk students to come to school and participate in class, even if their achievement scores do no show significant gains, excellent skills in monitoring new teachers and acting as stabilizing forces in high-turnover schools, and willingness to work diligently with students with special needs, whose test scores may not reflect teacher contributions.

Ingersoll and Merrill (2010) had it that in the late 1980s, most of the nation's teachers had considerable experience – only 17 percent had taught for five or fewer years. By 2008, however, about 28 percent – or more than one in four of Nigerian teachers – had five or fewer

years of experience. Some observers applaud this “greening” of the teaching force because they believe that experience is crucial to teacher effectiveness. Others like Gore, et al (2014) decry the trend because they believe that good teaching is a complex process that can best be mastered through years of classroom experiences.

Agharuwhe (2013) stated that teachers' qualification and years of experience imply that there are set of inputs (such as certification, teacher test scores, and college degrees) that serve as indicators of who will be successful in the classroom. More importantly, teachers' qualifications and years of experience can be measured in these two dimensions: the task of teaching (what the teacher do in the classroom) and the outcomes (achievement) the students' learning that the teacher foster). Fenstermacher and Richardson (2015) elaborated on these concepts and conclude that teachers' qualification and years of teaching experience ensure quality teaching which could be understood as teaching that produces positive learning outcome.

According to Ewetan (2015) learning outcome is the knowledge and skills of students at the end of teaching-learning process. Better students' results are the main indicator of the qualified and experienced teachers. a study carried out in Kenya by Musau and Abere (2015), The study found that there was no significant difference in means between teacher qualification and students' performance in SET subjects at form four level $F(1,37)=0.017$, $P>0.05$. The findings of the study further revealed that majority of the teachers of SET subjects were trained graduates, most of them had attended in-service or refresher courses which resulted in slight improvement in the students' performance in SET subjects.

Aliyu, Yashe and Adeyeye (2017) noted that, research shows that teachers' knowledge of the specific matter, particularly at secondary school level is a good predictor of students' achievement. Akinfe, Olofinniyi and Fasiku (2012) stated that, teachers with content knowledge achieve a higher percentage of students' outcomes than teachers without it. According to Ademulegun (2012), students taught by more qualified and experienced teachers in terms of knowledge of subject matter performed better than those taught by less qualified but experienced teachers. Also, Akinsolu (2010), Yusuf and Dada (2016) found out that study showed teachers' qualifications and experience were significantly related to students' academic performance. To this effect, the researcher intends to investigate the impact of teachers' background on students' learning outcome in government in senior secondary students in Ekiti State.

Statement of the Problem

Teachers' qualifications and years of teaching experience contribute greatly on the students' learning outcomes in government in schools. If teachers' qualification and years of experience ensure a great learning outcome in subject like civic education, and all the teachers in government senior secondary schools in Ekiti state schools are qualified and certified one begins to wonder why the outcome in civic education in both internal and external examinations is what it is today (not encouraging). The school administrative office in Ekiti State reported revealed that the academic performance of students in the last term internal examination in civic education between 2020 and 2024 was below fifty percent (50%). And this had been the case in the past years before these years reported. And those students are not

willing to take the subject again and the subject is a compulsory subject. If the students are not taught clearly the values and the rules governing their country and rudiments of governance, it will affect future political system in the country. Also, almost every time Ekiti State government advertised subject areas for employment, civic and social studies is always there. This possess a worry and concern in the mind of the researcher to wonder if the teachers in Ekiti State are qualified and experienced or not qualified and experienced in the subject area 'Civil Education'. It is on this basis therefore that the researcher was induced to investigate the qualifications and teaching experiences of teachers teaching Civil Education in Ekiti State and to carrying out a study on the extent to which teachers' qualifications and teaching experience impact on the students' learning outcome in Civic Education in senior secondary schools in Ekiti State. This study would also be of great help to the ministry of education in times of recruitment of teachers to strictly base the criteria for recruitment on qualified and experienced teachers in subject area (Civic Education) in order to ensure successful academic performance of students in the subject

Purpose of the Study

The main purpose of the study was to investigate the impact of teachers' background (qualifications and years of teaching experiences) on students' learning outcome in civic education in senior secondary schools in Ekiti State, Specific objectives for the study are:

1. to find out the extent to which teachers' qualifications affect students' performance in Civic Education
2. to find out the extent to which teachers' years of teaching experiences affect

students' performance in Civic Education.

Research Questions

The following research questions were raised to guide the study:

1. To what extent do teachers' qualifications affect students' performance in civic education?
2. To what extent do teachers' years of teaching experience affect students' performance in civic education?

Research Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance.

- H_{01} : Teachers' qualifications have no significant impact on students' performance in Civic education.
- H_{02} : Teachers' years of teaching experience has no significant impact on students' performance in civic education.

Methods

Research Design

The research design for this study was descriptive survey and ex-post factor.

Population of the Study

The population of the study consisted of all teachers of Civics Education in Ekiti Central senatorial district of Ekiti State.

Sample and Sampling Techniques

The sample for the study comprised (200) hundred teachers in the districts which was selected through multi-staged sampling procedure. All the five (5) local governments in the senatorial districts were selected through purposive sampling technique. (4) Government Senior Secondary Schools selected from each local government through stratified sampling techniques Five (5) male and five (5) female teachers were selected

from each of the schools through simple random sampling technique.

Instrument for Data Collection

The instrument used for data collection was a self-directed questionnaire. The questionnaire was titled: Impact of Teachers' Background on Students Learning Outcome in Civic Education Questionnaire. The questionnaire had two sections (A and B). Section A consisted of the questions requesting for the Bio-data of the respondents and section B consisted of items on impact of teachers' background on students' learning outcome in Government. Stan-nine grade was used as rating scale.

Validity of the Instrument

The face and content validity of the instrument was ascertained by the experts from the Faculty of Education at Federal University, Oye-Ekiti.

Reliability of the Instrument

Test-retest method was used to establish the reliability of the instrument. To ensure the reliability of the instrument, a trial test of the questionnaire would be done by the researcher administering it to twenty (20) teachers of civic education outside the sample of the study twice at two weeks interval. The researcher would use Pearson product moment correlation coefficient to find out the reliability of the instrument. 0.75 correlation coefficient was got which was high enough to determine the instrument's reliability.

Procedure for Data collection/Analysis

The researcher administered the questionnaire to the respondents in their various schools with two research assistants. The collected data was analysed using frequency counts and

percentages to answer the research questions while t-test was used to test the hypotheses formulated for the study at 0.05 level of significance. For decision making, 2.50 were used as the criterion mean. Any item that attained a response of mean score of 2.50 and above was accepted while below 2.50 was rejected. On the other hand, the hypotheses were rejected if t_{cal} is greater than t_{tab} and retained if t_{cal} is less than or equal to t_{tab} .

Descriptive Analysis of Research Questions

The two questions earlier raised in the study were answered as follows:

Research Question 1: To what extent do teachers' qualifications affect students' performance in Civic Education?

Table 1: Percentage Analysis Showing Extent of Teachers' Qualifications on Students' Performance Civic Education

Session	Score/Grade	Number of Students		F	%	% Passes/ Failed
		Male	Female			
2022/2023	75-100 A1	16	28	44	11.0	81.2
	70-74 B2	27	30	57	14.2	
	65-69 B3	34	39	73	18.2	
	60-64 C4	27	37	64	16.0	
	55-59 C5	38	30	68	17.0	
	50-54 C6	8	11	19	4.8	18.8
	45-49 D7	23	24	47	11.8	
	40-44 E8	5	7	12	3.0	
	0-39 F9	7	9	16	4.0	
2023/2024	75-100 A1	32	24	56	14.0	92.2
	70-74 B2	19	27	46	11.5	
	65-69 B3	35	47	82	20.5	
	60-64 C4	29	36	65	16.3	
	55-59 C5	29	35	64	16.0	
	50-54 C6	20	36	56	14.0	7.8
	45-49 D7	7	6	13	3.2	
	40-44 E8	5	7	12	3.0	
	0-39 F9	3	3	6	1.5	

From Table 1 above, it could be observed that in 2016/2017 academic session, 11.0% of the students had A1, 14.2% of them had B2, 18.2% of them had B3, 16.0% of them had C4, 17.0% of them had C5, 4.8% of them had C6, 11.8% of them had D7, 3.0% of them had E8 while the remaining 4.0% of them had F9. In general, 81.2% of the students had credit passes (A1 – C6) while 18.8% of them failed civic education. Also, in 2017/2018 academic session, 11.0% of the students were awarded A1, 11.5% of them were awarded B2, 20.5% of them

were awarded B3, 16.3% of them were awarded C4, 16.0% of them were awarded C5, 14.0% of them were awarded C6, 3.2% of them were awarded D7, 3.0% of them were awarded E8 while 1.5% of them were awarded F9. In general, 92.2% of the students had credit passes (A1 – C6) while 7.8% of them failed (D7 – F9) in Civic Education.

Research Question 2: To what extent do teachers' years of teaching experience affect students' performance Civic Education?

Table 2: Percentage Analysis Showing Extent of Teachers' Years of Teaching on Students' Performance in Civic Education

	Score/Grade	Number of Students		F	%	% Passes/ Failed
		Male	Female			
2020/2021	75-100 A1	39	34	73	18.2	81.5
	70-74 B2	30	27	57	14.2	
	65-69 B3	28	16	44	11.0	
	60-64 C4	27	37	64	16.0	
	55-59 C5	21	28	49	12.3	
	50-54 C6	16	23	39	9.8	18.5
	45-49 D7	12	11	23	5.8	
	40-44 E8	13	12	25	6.2	
	0-39 F9	15	11	26	6.5	
2021/2022	75-100 A1	29	35	64	16.0	76.2
	70-74 B2	35	36	71	17.8	
	65-69 B3	19	27	46	11.5	
	60-64 C4	32	24	56	14.0	
	55-59 C5	20	31	51	12.8	
	50-54 C6	11	6	17	4.2	23.8
	45-49 D7	6	8	14	3.5	
	40-44 E8	23	25	48	12.0	
	0-39 F9	17	16	33	8.2	

From Table 2: above, it could be observed that in 2017/2018 academic session, 18.2% of the students had A1, 14.2% of them had B2, 11.0% of them had B3, 16.0% of them had C4, 12.3% of them had C5, 9.8% of them had C6, 5.8% of them had D7, 6.2% of them had E8 while the remaining 6.5% of them had F9. In general, 81.5% of the students had credit passes (A1 – C6) while 18.5% of them failed Civic Education. Also, in 2020/2021 academic session, 16.0% of the students were awarded A1, 17.8% of them were awarded B2, 11.5% of them were awarded B3, 14.0% of them were awarded C4, 12.8% of them were awarded C5, 4.2% of them were

awarded C6, 3.5% of them were awarded D7, 12.0% of them were awarded E8 while 8.2% of them were awarded F9. In general, 76.2% of the students had credit passes (A1 – C6) while 23.8% of them failed (D7 – F9) in Civic Education.

Hypotheses Testing

The two research hypotheses earlier formulated were tested at 0.05 level of significance.

H₀₁: Teachers' qualifications have no significant impact on students' performance in Civic Education.

Table 3: t-test analysis showing impact of teachers' qualifications on students' academic performance in civic Education

Group	N	Mean	Std. deviation	Df	t _{cal}	t _{tab}	P-value	Remarks
Teachers' Qualifications	50	17.52	2.112	448	21.950	1.648	0.000	Reject H ₀₁
Students' academic performance	400	11.68	1.728					

Significant $P \leq 0.05$

Table 3: showed t-test analysis of impact of teachers' qualifications on students' academic performance in Civic Education. The t_{cal} value of 21.950 is found to be greater than the t_{tab} value of 1.648 given 448 degrees of freedom at 0.05 level of significance. The t_{cal} value is significant since is greater than t_{tab} value, the null hypothesis is rejected. Also, teachers' qualifications have higher mean value of 17.52 than students' academic performance of mean value of 11.68 with

a mean difference of 5.840. It implied that there was significant impact of teachers' qualifications on students' academic performance in Civic Education.

H_{02} : Teachers' year teaching experience has no significant impact on students' performance in Civic Education.

Table 4:t-test analysis showing impact of teachers' years of teaching experience on students' academic performance in Civic Education.

Group	N	Mean	Std. deviation	Df	t_{cal}	t_{tab}	P-value	Remarks
Teachers' Years of Experience	50	17.20	2.000	448	21.014	1.648	0.000	Reject H_{02}
Students' academic performance	400	11.66	1.727					

Significant $P \leq 0.05$

Table 4: showed t-test analysis of impact of teachers' years of teaching experience on students' academic performance in Civic Education. The t_{cal} value of 21.014 is found to be greater than the t_{tab} value of 1.648 given 448 degrees of freedom at 0.05 level of significance. The t_{cal} value is significant since is greater than t_{tab} value, the null hypothesis is rejected. Also, teachers' years of teaching experience have higher mean value of 17.20 than students' academic performance of mean value of 11.66 with a mean difference of 5.545. It implied that there was significant impact of teachers' years of teaching experience on students' academic performance in Civic Education.

Discussion

The finding of the study shows that the students fail in 20/21 section with 18.8% while in 21/22 section is poor with 28.9%. Also, the teaching experiences of

teachers affect students' performance. This study is in line with Akinosun (2010), Yusuf and Dada (2016) that found out that study showed teachers' qualifications and experience were significantly related to students' academic performance. Again, there were significant impacts of teacher's qualifications on students. The null hypothesis was rejected in teachers' years of teaching experience on students' academic performance in government. The findings of this study is differ from a study carried out in Kenya by Musau and Abere (2015), The study found that there was no significant difference in means between teacher qualification and students' performance in SET subjects at form four level $F(1,37)=0.017$, $P>0.05$. The findings of the study further revealed that majority of the teachers of SET subjects were trained graduates, most of them had attended in-service or refresher courses which resulted in slight

improvement in the students' performance in SET subjects.

Conclusion

It was concluded that teachers' background (qualifications and teaching experiences) have a positive impact on the students' learning outcome. It was concluded that teachers' teaching experience has significantly influenced students' academic performance in Government as measured by their performance in the SSC examinations and as perceived by the respondents.

Recommendations

1. Recommendation is made for Ministry of Education of more regular in-service and refresher training of Social and civic education subject teachers to enable them embrace and conform to the emerging technologies in pedagogy.
2. All non-professional and unqualified teachers should be encouraged to pursue their post graduate studies (such as Post Graduate Diploma in Education, Master's and Doctoral degrees in Education) on a part-time or full-time basis. This will help to improve the quality of their teaching and consequently improve the performance of students and the quality of teacher education in Nigeria.

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MANAGEMENT OF WASTE MATERIALS IN EKITI STATE UNIVERSITY, ADO EKITI

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Abstract

Management of waste in Ekiti State University is highly important to students, university community, teaching and non-teaching staff. University community could be properly managed to avoid illness and diseases of various kinds. The study investigated the management of waste materials in Ekiti State University. The population of the study was 750 respondents comprising 600 students and 150 members of staff within Ekiti State University. The entire population was used as sample. The instrument used for collecting data for the study was Management of Waste Materials Questionnaire (MWMQ). It was divided into four sections; A, B, C, D. Section A was sought to collect information on the demographic data of the respondents. Sections B to D consisted of items to measure nature of the waste materials, management of waste materials and the extent to which the waste materials are being disposed within the university community. The instrument used for the study was subjected to scrutiny by experts in Health Education and in the area of Tests and Measurement for face and content validity. The experts determined the level of appropriateness of the instrument in measuring what they are supposed to measure. The reliability coefficient of the instrument was determined using cronbach's Alpha and yielded 0.72. The findings of this study revealed that littering of classrooms with bags, biscuit, groundnut, orange peels and sachet water indicate the nature of the waste materials within the university. It also revealed that recycling method be adopted in managing the waste materials within the university. Based on these findings, it was recommended among others that departments in each of the universities can work on recyclable materials. This can be achieved by making use of alternately garbage. Academic community must look into relevant research that will generate money from recycled gar.

Keywords: Management, Waste Materials, University Environment, Refuse Disposal

Introduction

Universities play an important role in forming behavioral patterns that have positively impact on the society. Universities bear a vicarious responsibility in ensuring that sustainable plans and policies are imbibed in the society. Through their expertise, they have the capacity to increase awareness, knowledge, technology and tools necessary to promote and sustain best

practices within the environment in which they are located. Ekiti State university environment is crucial to staff working conditions and how the activities of the environment are organised. It has been observed in recent times that the role the environment plays in the university's development process cannot be relegated to the background. For this and several other reasons, environmental issues now occupy a centre stage in academic

discourse and other public areas, both at the national and international levels. Environment can either be cultural or socio-economic environment. According to Uchegbu (2012), environment is a kind of system within which organisms interact with the physical environment, comprising air, water and land.

But perhaps the most serious and worrisome in Ekiti State University is the physical environment in terms of the low level of sanitation and gross environmental indiscipline in our cities and communities. Pollution of the environment has come to be a problem facing man.

According to Odukoya (2010), pollution of water refers to an impairment of water quality that interferes with the use of water, sewage, industrial wastes and agricultural wastes. It is necessary to manage waste materials in Ekiti State University in order to make the environment clean. Management of waste materials is crucial to students, lecturers and administrative staff of Ekiti State University, Ado Ekiti. Improper management of industrial, domestic, medical and agricultural wastes are the major cause of environmental degradation leading to poor environmental health and diseases. Waste management usually relates to all kinds of planned activities concerned with the proper handling and disposal of waste from the point of generation to the point of final disposal. Waste materials managements all the activities and actions required to manage waste from its inception to its final disposal. It is obvious that many diseases are likely to be contracted from unsanitary condition which results from improper waste disposal practices (Ahmed, 2015). This includes amongst other things collection, transport, treatment and disposal of

waste together with monitoring and regulation.

Waste management is the most pressing environmental challenge faced by urban and rural areas of any society. Waste are generated during the extraction of raw materials, the processing of raw materials into intermediate and finished products, the consumption of final products, or other human activities in the society (Sankoh, Yam & Tran, 2023). Nigeria with the population exceeding 170 million. The management of waste, especially solid waste (non-liquid and non-gaseous by-products of human activities that are deemed useless and of no economic value) is an essential aspect of daily life and has been an issue once human beings started forming enough communities to put stress on natural and material resources (Jubril, Ibrahim & Jamilu, 2012). The human being has proved to be the most culpable of the species in the desecration of the environment. Most human activities, and especially in the process of developing, invariably create waste, much of which can pose risks to the environment and to public health, especially if not well managed (Zhuang, Kimbal, Hogg, Zhao, Oechel, Cassano & Running, 2008).

Waste management facilities and specific treatments, transport and sorting plants for recyclable materials such as paper, waste collection, multi-material and industrial waste similar. The success of the treatment of waste fractions is mainly linked to the selection that is made to the origin, greatly improving the recovery rate the solutions starting from basic systems for manual or mechanical and more complex plants involving specific machinery and equipment more and more sophisticated to get results in full compliance with current regulations regarding waste disposal, a mixed

recycling service to include cardboard, paper, newspapers, plastic films and bottles and steel and aluminum cans, which can all be put into one bin. There's no need to separate them, so the increase of recycling rate simply and more effectively. It not only saves time and hassle, but reduces costs by avoiding disposal to landfill. Waste materials generated are categorized into solid, liquid and gaseous substances. Basis (2014) earmarked on the three types of wastes by their consistency as follows: solid waste which is the waste materials that contain less than 70 percent water. They include garbage food wastes, rubbish paper, plastic, wood, metal, used containers, glass, demolished products bricks, masonry, sewage treatment residues, and sludge from domestic sewage and discard materials. Liquid wastes are water that contain 1% solid, may contain high concentration of salt and metals. While gaseous wastes are substances in the atmosphere that are generated by the activities of man in such a concentration that interfere with health, safety, man's comfort, animals and vegetation. In tertiary institutions, the wastes generated in the learning environment are more of solid and liquid. In Ekiti State, Nigeria and other developing countries, some of the prominent waste management problems witnessed include but not limited to indiscriminate dumping, poor means of storage, inefficient transportation and insanitary disposal. All these problems are all a function of certain factors such as the population increase, attitude of people towards waste management, location of open dump sites without consideration to the surrounding land uses.

The problem of waste materials disposal in Nigeria has become a national malaise. Filth is an eyesore and a

nuisance. It signifies decadence and backwardness. The common methods of managing waste are land filling, use of incineration, composting, burning and anaerobic digestion. Incineration, composting and anaerobic digestion are volume reducing technologies. The university community members as observed by the researcher usually dump refuse anywhere on the campus but lack the health and social implications that such poor habits may constitute to the environment. People need to be aware and have the knowledge of the implications of their actions on the environment. Thousands of lives are lost into environment-related diseases such as cholera, diarrheal, malaria fever, typhoid fever, river blindness and so on. Majority of people lives in filthy, cockroaches, rats, and mosquitoes-infected environment. Seepage from refuse dump often pollutes the underground and surface water. Inability of the students and workers of Ekiti State University to manage the waste materials could result in polluting the environment.

Waste is an inevitable by-product of socio-economic and institutional activities. As long as man is in existence, he uses, stores up, and disposes off materials (wastes) thus making him inseparable from waste. Solid waste could be defined as non-liquid and non-gaseous products of human activities, regarded as being useless (Babayemi & Dauda, 2009). Consequent upon which the strategies for the management of the waste generated vary in terms of the region and the available resources.

Statement of the Problem

The issue of waste management on the campus environment particularly in the residential area of the campus which are not under the control of the

school management. This has been a serious concern to stakeholders in the university, as the menace of poor management tends to be on the high gear in such area. Beauty of any environment lies on its good sanitary condition. This is because, when environment is clean the life of every citizenry is not threatened by illnesses and diseases.

It appears that proper refuse disposal which involves the collection of wastes is not properly done making the university environment look dirty sometimes. It has been observed that undergraduates decorate the school environment with banana peels, groundnut shells, corn cobs, sachet water bags, biscuit wrappers, empty can drinks to mention but a few. Students use sanitary towels, papers and in some cases, this situation blocks the toilet. Some students urinate and defecate on bare floors of university environment. The porters negligence to duties constitute environmental nuisance in the residential apartments of the undergraduates in the universities. The university staff are also not exempted. This unhealthy scenario is mostly experienced during the weekends and examination periods. When there is epileptic power outage resulting in water shortage, the conveniences are heaped with mounds of faeces waiting for the attention of hostel porters.

Despite the effort and policies to advance the frontier of solid waste management at both national and local levels by the management of Ekiti State University, it appears that the menace of waste materials is causing more concern mainly because of the technical, financial, institutional, economic and social constraints that are associated with its management. These situations call for investigation of the management of waste materials in Ekiti State University.

Purpose of the study

The main purpose of the study was to investigate the management of waste materials in Ekiti state university. Specifically, the study:

1. examined the nature of the waste materials within the University Community
2. determined how waste materials are being managed within the University Community
3. investigated the extent to which waste materials generated are appropriately disposed within the University Community

Research Questions

The following research questions are raised:

1. What is the nature of the waste materials within the University Community?
2. How are the waste materials being managed within the University Community?
3. To what extent are waste materials generated appropriately disposed within the University Community?

Methodology

The study adopted descriptive survey research design. Descriptive survey research design describes the existing situation regarding the management of waste materials in Ekiti State University. The population of the study was 750 respondents comprising 600 students and 150 members of staff within Ekiti State University. The entire population was used as sample because it was manageable. The instrument used for collecting data for the study was Management of Waste Materials Questionnaire (MWMQ). It was divided into four sections; A, B, C, D, Section A was sought to collect information on the

demographic data of the respondents. Sections B to D consisted of items to measure nature of the waste materials, management of waste materials, extent waste materials generated is appropriately disposed. The items were rated on a four point, likert type scale of; Strongly Agree (SA)=4, Agree (A=3), Disagree (D)=2 and Strongly Disagree (SD)=1. The instrument used for the study was subjected to scrutiny by experts in Health Education and in the area of Tests and Measurement for face and content validity. The experts determined the level of appropriateness of the instrument in measuring what they are supposed to measure. The experts also reviewed the items in terms of clarity of expression, and checked the extent to which the items on the instrument represented the original test blueprint. Their recommendations were appropriately adopted into the final form of the instrument. The reliability of the instrument was determined using cronbach's Alpha. Each of the

instrument was administered on 30 students and 10 staff randomly selected from a university that was not used in the study.

The administration of the instrument for this study was in two stages. At the first stage, the researcher was personally presented a formal letter of introduction to the school management. Copies of the questionnaire were administered and collected through direct delivery and recovery method to ensure high return rate. Out of the 750 copies of questionnaire administered, 709 copies were retrieved and yielded 94.5 %. The data collected through the instrument were analysed using descriptive statistics. The research questions were answered using mean and standard deviation.

Results

Research Question 1: What is the nature of the waste materials within the university community?

Table 1: Nature of the Waste Materials within the University Community?

S/N	Factors	SA	A	D	SD	Mean	Remarks
1.	Littering of classrooms with sachet water bags, biscuit, groundnut and orange peels	13	425	271	-	2.64	Agreed
2.	Indiscriminate littering of the environment with polythene bags	11	652	45	1	2.95	Agreed
3.	Littering of the school learning environment with wrappers from junk foods	11	642	35	21	2.91	Agreed
4.	Indiscriminate disposal of empty can drinks such as water and mineral	3	388	315	3	2.55	Agreed
5.	Dropping of waste papers in class rooms and school premises indiscriminately	11	695	1	2	3.01	Agreed
6.	Disposal of sanitary towels in school environment indiscriminately	10	429	270	-	2.63	Agreed
7.	Throwing away of corn cubs in unauthorized places within the school environment	118	357	210	24	2.80	Agreed
8.	Urinating indiscriminately in any space within the learning environment	1117	361	207	24	2.81	Agreed
9.	Unwillingness to flush school conveniences after usage	193	471	22	23	3.18	Agreed
10.	Indiscriminate spilling of water and urination on the floor of toilets	178	458	32	41	3.09	Agreed

Table 1 indicates the nature of the waste materials within the university community. Based on the mean cut-off mark of 2.50, all the 10 items were agreed by most of the respondents. The nature of the waste materials include littering of classrooms with sachet water bags, biscuit, groundnut and orange peels, indiscriminate littering of the environment with polythene bags, littering of the school learning environment with wrappers from junk foods, indiscriminate disposal of empty can drinks e.g. water and minerals, dropping of waste papers in class rooms and school premises indiscriminately,

disposal of sanitary towels in school environment indiscriminately, throwing away of corn cobs in unauthorized places within the school environment, urinating indiscriminately in any space within the learning environment, unwillingness to flush school conveniences after usage, and indiscriminate spilling of water and urination on the floor of toilets.

Research Question 2: How are the waste materials being managed within the University community?

Table 2: Management of Waste Materials within the University Community

S/N	Factors	SA	A	D	SD	Mean	Remarks
1.	Construction of waste dump site	42	129	369	169	2.06	Disagreed
2.	Recycling method should be adopted	70	220	319	100	2.37	Disagreed
3.	Burning of waste	14	14	426	185	1.90	Disagreed
4.	Enforcement of proper waste management	-	72	352	382	1.70	Disagreed
5.	Usage of garbage collectors	142	298	255	14	2.80	Agreed
6.	Creating awareness on proper waste Management	56	170	399	84	2.28	Disagreed
7.	Careful disposition	28	70	284	327	1.72	Disagreed
8.	Usage of waste bin	121	362	201	25	3.82	Agreed

Table 2 indicates how waste materials are being managed within the university community. Based on the mean cut-off mark of 2.50, the respondents agreed on three items and disagreed on five items out of the eight items presented in table 2. The University manages its waste materials through

usage of garbage collectors and usage of waste bin.

Research Question 3: To what extent are waste materials generated appropriately disposed within the university community?

Table 3: Disposal of Waste Materials within the University Community

S/N	Factors	SA	A	D	SD	Mean	Remarks
1.	Waste materials are appropriately disposed	70	85	427	127	2.31	Disagreed
2.	There is a unit in the university in charge of waste disposal	213	470	10	16	3.24	Agreed
3.	There is an environmental unit that ensure safe environment within the university compound	42	84	370	213	1.94	Disagreed
4.	There is a unit that enforces proper waste disposal within the university community	42	42	426	199	1.90	Disagreed
5.	Offenders are punished appropriately within the university	70	129	496	14	2.36	Disagreed

Table 3 indicates the extent waste materials generated are appropriately disposed within the university community. Based on the mean cut-off mark of 2.50, the respondents disagreed that waste materials are appropriately disposed. The respondents agreed that there is a unit in the university in charge of waste disposal but enforcement was not encouraging.

Discussion of findings

The findings within the university campus and the community revealed that the nature of the waste materials include littering of classrooms with sachet water bags, biscuit, groundnut and orange peels, indiscriminate littering of the environment with polythene bags, littering of the school learning environment with wrappers from junk foods, indiscriminate disposal of empty can drinks such as water and minerals, dropping of waste papers in class rooms and school premises indiscriminately, disposal of sanitary towels in school environment indiscriminately, throwing away of corn cubs in unauthorized places within the school environment, urinating indiscriminately in any space within the learning environment, unwillingness to flush school conveniences after usage, and indiscriminate spilling of water and urination on the floor of toilets. This finding supports the finding of Giusti (2009) who said that waste is produced by human activity, for example the extraction and processing of raw materials. This includes disposal of sanitary towels in school environment and littering of school learning environment with wrappers and can drinks. This finding supports the findings of Jubril et al (2012) on waste generated within a Malaysian University environment. This finding is also in support of Muaaz (2017) who revealed

that people disposed different forms of waste from time to time. This finding might be due to the fact that students only dispose most items anywhere within campus.

Conclusion

Sequel to the findings of this study, it was concluded that the university manages its waste materials through usage of garbage collectors and usage of waste bin. The nature of waste materials such as littering of classrooms with sachet water bags, biscuits, groundnut and orange peels, urinating indiscriminately in any space within the university environment. This could result in different kinds of diseases.

Recommendations

Based on the findings of this study, the following recommendations were made.

1. The nature of waste generated within the University campus is typical and will likely remain the same over time, but the management can curb it with appropriate policy and incentives.
2. The institution should delegate some specific tasks on waste management. This could be achieved with the necessary incentives by the authorities by supplying bin bags; but more importantly, separate (appropriately labeled) bins provided en masse for different waste products.
3. The secondary dump site locations should be covered and transported to the terminal points and arranged more regularly.
4. Departments in each of the universities can work on recyclable materials. This can be achieved by making use of alternative garbage.

- Academic community must look into relevant research that will generate money from recycled gar
5. Efforts must be made to work towards a paperless community where technology takes over internal and external correspondence, and the virtual library becomes more prominent.

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AUDIO-VISUAL AIDS AND FINANCIAL ACCOUNTING INSTRUCTION IN EKITI STATE UNIVERSITY, NIGERIA

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Abstract

The study examined Audio-Visual aids and financial accounting instruction in Ekiti State University, Ado Ekiti. Specifically, the objectives of the study were to ascertain the relevance of audiovisual resources to the teaching and learning of Financial Accounting. The population of the study consisted 550 financial accounting undergraduate students in Ekiti State University, Ado-Ekiti, Ekiti State, Nigeria. The sample for the study consisted 100 undergraduate students offering financial accounting concepts. A self-designed instrument was used and reliability coefficient of 0.75 was obtained. The instrument was subjected to both face and content validation by experts in Accounting Education and Test and Measurement Evaluation to ensure its relevance, clarity and adequacy in measuring the study variables. The finding from the study revealed that audio-visual materials such as videos, slideshows, animations and interactive media enhanced the teaching-learning process by simplifying abstract accounting concepts and making lessons more relatable and stimulating. It was concluded that the integration of audio-visual aids into Financial Accounting instruction in Ekiti State University has shown to be a significant catalyst for improving students' academic engagement, comprehension and performance. It was recommended that university management and accounting lecturers should encourage the consistent use of audio-visual aids to promote effective teaching and learning of Financial Accounting courses.

Keywords: Audio-visual aids, Instruction, Financial accounting, Instructional devices, Learning

Introduction

Teaching and learning are crucial components of education to the extent that teachers employ a variety of instructional strategies and resources to help students learn. In the realm of education, several approaches and strategies are used over time, and teachers utilise a variety of teaching tools to ensure successful instruction. Teachers can more readily explain some subjects and arouse students' attention with the use of teaching aids. Higher education institutions' teaching and learning processes have been completely transformed by the introduction of technology. One of the key areas where

technology has made a significant impact is in the use of audio-visual aids in teaching and learning.

Audio-visual aids, such as videos, podcasts, and multimedia presentations, have been shown to enhance student engagement, understanding, and retention of complex concepts. Without a doubt, the instructional tools that are utilised in the classroom to promote the teaching and learning process are audiovisual aids. Hereafter, Sari et al. (2021), postulated that audiovisual aids are any gadget that enhances a person's experience beyond what they have already learnt through sight and hearing. For instance, charts, maps, models, film

strips, projectors, radios, and televisions are examples of audio-visual aids, which are educational tools used in classrooms to promote learning and make it simpler and more engaging (AlAli & Al-Barakat, 2023). At every stage of educational growth, teaching and learning procedures are vital, and if they are properly organised and guided, they may help students succeed and advance. Hence, to improve effective teaching and learning, the best methods must be applied. Thus, it is necessary to use teaching aids, also known as audio-visual resources, to improve effective teaching and learning in order to improve subject matter knowledge. In addition to boosting instructor and student enthusiasm, audiovisual aids clarify the subject matter and add interest to the learning process. According to Njoku & Edori (2022), the aim of education is permanent learning, which means that students should be able to remember what they have been taught.

The multisensory appeal of audio-visual materials contributes to the persistence of learning and teaching which help someone to learn something or develop a particular attitude. According to Molaudzi and Adeyemo (2022), teaching is contact-based human behaviour and according to this theory, is in line with what happens in a communication system where the message's recipient is at one end and the information transmitter is at the other. Therefore, Mogaka (2020) compared the information recipient to the learner or one being taught throughout the teaching process. This idea goes a step further in conceptualising teaching as the conscious and intentional efforts of an experienced or mature person with the hope that future immature or inexperienced people would understand or accept what is taught based on reason. Teaching may

thus function independently since learning is an interrelated concept. However, when instruction is given with the intention of conceptualising learning as an organism's behaviour altering in response to inputs. This concept is insufficient for human learning since learning may occur in humans even when internal or cognitive changes are not physically visible.

Although the potential of audio-visual aids like projectors, films, slides, charts and interactive simulations to enhance learning outcomes has been acknowledged, it is still unknown how often they are used, how readily available they are, and how much of an influence they have in financial accounting classes. This study aims on audio-visual aids and financial accounting instruction, to analyse the kind of audio-visual tools that are often employed and gauge from the viewpoints of both teachers and students. The apparent discrepancy between the potential advantages of audiovisual aids and their actual use in financial accounting education is the issue this study attempts to solve.

Statement of the Problem

Financial Accounting is a core course in the Faculty of Management Sciences and plays a vital role in equipping students with the knowledge and skills required for effective financial decision-making and professional accounting practice. Despite its importance, observations at Ekiti State University indicate that many undergraduate students find Financial Accounting difficult to understand, leading to poor academic performance, low interest and limited classroom participation. One of the major challenges contributing to this problem is the continued reliance on traditional teaching methods such as the lecture

method, which often emphasizes verbal explanations with little or no instructional support. This approach tends to make accounting concepts abstract and difficult for students to comprehend, especially topics that require practical illustration, calculations and real-life application. Although audio-visual aids such as projectors, videos, charts, accounting software and multimedia presentations are known to enhance teaching and learning by making lessons more interactive and learner-centered, their availability and effective utilization in Financial Accounting instruction at Ekiti State University remain uncertain. In many cases, lecturers may lack adequate training or motivation to integrate these instructional aids into their teaching, while institutional constraints such as inadequate facilities and limited resources may further hinder their use. As a result, students may continue to experience difficulties in understanding Financial Accounting concepts, which can negatively affect their academic achievement and interest in the course. Despite the growing emphasis on innovative instructional strategies in higher education, there is a noticeable lack of empirical studies focusing on the use of audio-visual aids in Financial Accounting instruction within Ekiti State University. Therefore, the problem of this study is to investigate the extent to which audio-visual aids are available and utilized, and how their use influences the effectiveness of Financial Accounting instruction in Ekiti State University, Nigeria.

Objectives

1. To assess the availability of audio-visual aids used in Financial Accounting instruction at Ekiti State University.
2. To identify types of audio-visual aids used in Financial Accounting at Ekiti State University.
3. To investigate the impact of audio-visual aids on students' comprehension and academic performance in Financial Accounting.

Research Questions

1. What types of audio-visual aids are available for the teaching of Financial Accounting in Ekiti State University?
2. To what extent are audio-visual aids utilized by lecturers in the teaching of Financial Accounting in Ekiti State University?
3. How do audio-visual aids impact students' academic performance in Financial Accounting in Ekiti State University?

Literature review

Understanding the evolution of business practices and the legal requirements for accounting practices in Nigeria, as well as how evolving technology impact accounting and business practices, is fostered by accounting curricula. The topic also seeks to develop in pupils the capacity for self-management, the initiative to learn and work independently, and the ability to work together with others as part of the general curriculum. It gives pupils general abilities in information technology, communication, problem solving, creativity, critical thinking, and numeracy. According to Joseph and Rahmat (2019), accounting education makes it easy for students to acquire the high ethical standards and sound moral characters they need for their moral development. These include how to respect others, persevere in pursuing specific goals, and develop a strong sense

of national identity, responsibility, and professional commitment.

Leading academics and educators in business have defined the term accounting.

According to Akinadewo and Asaolu (2020), accounting is the art of accurately recording transactions in books or records from which specific accounting data is generated in order to regulate the firm by quickly identifying any potential financial risks. However, financial accounting was summed up by Richard & Rambaud (2021) as the process of recognising, measuring, and disseminating economic information to enable users of the information to make educated decisions. In 2023, Saayir and Mensah defined accounting as "the documentation, categorisation, and summarisation of financial events or transactions in terms of money and reporting the outcome to management and other users of accounting information." Mah'd & Mardini (2022) supported this by defining financial accounting as the field that deals with documenting, evaluating, and projecting the wealth and revenue of businesses and other entities. Still, Hayatu et al. (2021) affirmed that financial accounting is the process of gathering, documenting, displaying, and evaluating/interpreting financial data for the benefit of financial statement consumers.

Similarly, Nwaiwu et al. (2018) divided accounting into three parts: accounting system, accounting analysis, and accounting measurements by dividing the intricate company operations into distinct, quantifiable financial transactions, he defines accounting measurements as the financial development and percentage of the firm's organisational units and the enterprise overall. Accounting analysis, according to him, is the process of documenting,

summarising, and reporting many transactions in a way that makes sense to anyone who are interested in an entity's operations. Moreover, accounting is the process of documenting, categorising, producing, summarising and sharing financial data with relevant parties and interpreting it to support certain company choices (Akinlade 2019). Accounting records are maintained for the purposes of assessing the organization's performance and profitability, preventing fraud, tracking the development of the firm and conducting economic comparisons. Secondary school pupils' and other interested learners' requirements are taken into consideration when designing the accounting curriculum. Many pupils would be adequately grounded and ready to become professionally trained accountants if it were properly ingrained in them.

Furthermore, accounting systems are only the skill of gathering financial transactions to report to users or organisations. They may also offer protection when it comes to managing firm assets. Since recorded, categorised and summarised data must be conveyed to form the foundation of decision making through the features of management accounting, we may deduce from the criteria above that accounting is the language used in business transactions. Accounting is applicable to every field of work. Executives must utilise accounting statements from the past and present to assess the performance of their firm, auditors must examine financial accounts to assess the correctness and integrity of the organisation, and secretaries must use accounting abilities to handle the corporate cheque book and orders. Although audio-visual resources have existed for ages, the educational system

has not included them. The authors claim that although audio-visual resources have been around for a while, their usage has been restricted until the 1960s and 1970s, when libraries began to recognise their value and begin adding them to their collections for future use Stewart, 2024.

Summer et al. (2023) emphasised the introduction of the materials by stating that "man expressed himself in terms of drawings, signals, and symbols before he developed speech as a means of communication." This suggests that the usage of audio-visual elements predates the development of human civilisation. This is clear from the attempt to convey concepts. Green and Appel (2024) assessed that in ancient times, people used images on rocks to communicate concepts. Accordingly, Satriya & Fahyuni (2023) backed the use of audio-visual aids, pointing out that they were first used in American classrooms as early as the 1920s for instruction. In our indigenous Nigerian education, Dike (2019) opined that the several informal teaching techniques, including participation, observation, and the use of the senses, are types of audio-visual resources. When invited to participate in home science, craft, and agriculture activities and to watch intently without vocal guidance, the kid is able to absorb information from a variety of subjects without realising it. Hence, every child has the right to information and knowledge, particularly when it comes to his cultural background. Thereby is crucial that knowledge and information transfer be influenced by verbal instructions and the preservation of their cultural arts in societies whose traditions are mostly oral rather than written. This is what our indigenous African education's storytelling sessions are meant to convey.

The importance of instructional materials has recently been recognised in our nation, and all educational institutions are working to ensure that audio-visual resources are utilised in classroom settings. Moreover, Agyeiku (2021) noted in *Advances in Librarianship* that movie strips, slides, recordings, and other materials should be obtained to augment book resources and to replace books on a given subject when they are not available. Books are not the only way that libraries can expand the amount of information that is available to the public. In other words, contemporary technology has led to a variety of teaching approaches that facilitate the attainment of learning objectives by both educators and students. In accordance to the *Encyclopaedia of Library and Information Science*, libraries that serve formal education have a tendency to quickly expand their collections of non-book or audiovisual materials over time. They also take on more responsibility for distributing audio-visual equipment, such as projectors and emotion pictures, as well as setting up local duplication and production services (like overlay transparencies). Any subject that is taught well will increase students' interest in it and improve their academic achievement.

Audiovisual materials must be used in order to accomplish a successful teaching and learning process. The various teaching aids or equipment that a classroom instructor uses to support their instruction in order to accomplish the specified goal are known as audiovisual resources. In the words of Hasibuan et al. (2022), audiovisual resources are those that maximise learning in a variety of areas and are beneficial to both instructors and students. When utilised properly, audiovisual resources may inspire individuals to study, give them a

tangible foundation for conceptual thinking, and captivate their attention. For these reasons, its usage in the classroom is crucial. Audiovisual resources, according to Kesuna et al. (2024), are items or gadgets that assist the instructor in giving the students a sense of purpose in their education. Hence, Ogu (2024) divided audiovisual materials into two categories: visual materials, which included both literary and non-literary content, and audiovisual materials, which included both electrically and non-electrically operated content. According to Suleiman & Abiola (2022), these resources are human, audio-visual, and textual, such as books. "In any meaningful teaching and learning situation, these resources are used either individually or collectively," they said. According to Eneji et al. (2024), audiovisual resources are didactic materials that are meant to facilitate learning and teaching; however, Mohammed & Abdullahi (2024) contended that they are either locally produced or imported tools that, when used wisely, could significantly enhance a lesson. Though, Agina-Obu & Okwu (2023), opined teaching aids are tangible things that stimulate the senses during instruction by providing music, visuals, or both.

When there are adequate teaching and learning resources available, pupils are more inclined to study whatever they can. As a result, students are inspired to read more and investigate new topics, thus their performance increases. Therefore, by enhancing the quality of instruction and learning, which would be seen in the students' academic achievement, audiovisual resources are promoted effectively in education. It then supports and reinforces instruction by utilising the available tools and resources.

Additionally, in order to enhance students' academic achievement, the materials provide a range of learning opportunities both separately and in combination. Thus, Nsengimana et al. (2024) believed that most schools lack the essential teaching and learning resources, and when they have, they are not employed efficiently.

Similarly, Saah et al. (2023) looked at how instructors become authoritarian when they don't have access to teaching and learning resources, since pupils are more likely to be passive consumers of their opinions. It is evident that this is a significant obstacle to studying any topic, but financial accounting in particular. When there are sufficient teaching and learning resources available, pupils are more inclined to study more. This is a result of students' motivation to read more and investigate new material, both of which enhance their performance. In the opinion of Lubis et al. (2024), school resources are crucial to education because learning occurs most effectively via contact with the internal and external surroundings as well as through discovery and exploration.

As a result, the transition from a teacher-centered to a more learner-centered approach is one of the primary focusses in education today. This means focusing activities on the requirements of the learner. Teachers must employ a wide range of materials that can enhance the learning environment in order to accomplish this aim. Teachers have been very concerned about the sufficiency of tangible resources and instructional materials as well as how best to use them. Furthermore, traditional teaching techniques have changed as a result of the use of audio-visual aids in higher education, particularly in complicated areas like financial accounting. Videos,

animations, infographics, and interactive simulations are examples of audio-visual elements that improve understanding, retention, and engagement. These resources can help close learning gaps in Nigeria, where a large number of kids struggle with language and cognitive skills. In order to lay the theoretical and empirical groundwork for the investigation of audio-visual aid integration in financial accounting at Ekiti State University, this review synthesises pertinent literature. Thus, a number of learning theories serve as the foundation for the use of audio-visual aids in pedagogy. According to the Cognitive Load Theory (Sweller & Chandler, 1991), instructional design plays a crucial role in reducing unnecessary cognitive load, and visual aids are crucial for this. The Dual Coding Theory (Paivio, 1986) backs up the notion that combining verbal and visual resources improves learning. These ideas support the use of multisensory teaching aids in accounting classes, which are notoriously abstract and complex.

Realistic experience on Audio Visual aids

A useful technique for "investing the past with an air of reality" is audiovisual aids. However, audiovisual media provide students a genuine experience that draws them in and aids in their comprehension of historical events. The well-known Chinese saying "one seeing is worth a hundred words" suggests that we learn via our senses. "If we hear, we forget; if we see, we remember; and if we do, we know," goes another Chinese saying. This indicates that using audio-visual aids improves the effectiveness of the teaching and learning process. Audiovisual assistance increased thinking and cognition, as Tomar et al. (2024) hypothesized, when used to teach

financial accounting, audio-visual tools can be especially useful. The subject of financial accounting is abstract and complicated, requiring students to comprehend and use a variety of ideas, concepts and methods.

Audio-visual aids may be used to explain difficult financial accounting ideas, show how they are used in the real world, and offer interactive learning opportunities that accommodate various learning preferences. As a result, financial accounting has aided in the documentation, categorisation, and summarisation of financial events or transactions in terms of money, as well as the reporting of the outcome to management and other accounting information consumers. As stated by Udoh (2025), the field of financial accounting is focused on documenting, evaluating, and projecting the earnings and assets of companies and other organisations. He said that the act of gathering, documenting, presenting, evaluating, and interpreting financial data for the benefit of financial statement users is known as financial accounting.

The information and measurement system known as accounting activities finds, documents and disseminates pertinent, trustworthy and comparable financial data on the operations of an organisation. General financial accounting, accounting systems and design, cost accounting, budgeting, taxes, auditing, and data processing are all included in the category of accounting activities. It assists us in making better decisions by evaluating investments, opportunities, goods, and social and community obligations. One of the most promising resources for addressing these issues in the classroom is audiovisual aids. Projectors, movies, PowerPoint presentations, laptops, and interactive whiteboards are examples of devices that

integrate visual and aural components. These resources are intended to give students a more dynamic and multisensory educational experience, enabling them to better visualise difficult ideas and retain knowledge (Mayer, 2018).

Subsequently, Castro-Alonso et al. (2019) asserted that presenting information through a variety of channels, including visual and aural, can improve learning and lessen cognitive overload, particularly in courses where students must absorb abstract, complicated material. One of the most promising solutions to these problems in the classroom is audiovisual aids. Tools that integrate visual and aural components, such as projectors, movies, PowerPoint presentations, laptops, and interactive whiteboards, are referred to as audiovisual aids. Students may better visualise difficult ideas and remember knowledge with the use of these technologies, which are intended to offer a more dynamic and multisensory learning environment (Mayer, 2018). Especially for disciplines that need students to comprehend complex, abstract material, Castro-Alonso et al. (2019) claimed that employing several channels to deliver information, such as visual and auditory, can improve learning and prevent cognitive overload.

Benefits of integrating audiovisual tools in classrooms

Over the years, a lot of attention has been paid to the accessibility and usefulness of audiovisual aids in classrooms. Although there is general agreement about the potential advantages of using audiovisual aids in the classroom, their actual availability and efficacy frequently differ, especially in developing nations like Nigeria. These technologies may greatly improve

students' understanding and engagement when included into teaching strategies, particularly in areas like financial accounting. However, a number of factors, from teacher skill to infrastructure issues, affect both the accessibility and efficacy of audiovisual aids in secondary schools.

As a result, the term "audiovisual aids" describes how much access schools have to the tools and materials needed to use audiovisual teaching techniques. Computers, projectors, smartboards, films, audio-visual presentations, and even online learning platforms that may provide multimedia material are examples of audiovisual aids. The availability of these technologies should ideally allow educators to provide content in an engaging and dynamic manner, which is essential for intricate subjects like financial accounting. Policies and educational reforms also have an impact on audiovisual aid. Programs to enhance the use of technology in the classroom are either infrequent or underfunded, which results in an unequal allocation of resources among schools (Oghuvbu et al., 2022). Even while some states and local governments have made investments in incorporating technology into the classroom, these initiatives aren't always supported by the required resources, including ongoing maintenance or teacher training, which eventually influences how long these tools are used. Furthermore, by motivating students to engage with the material, audiovisual aids support active learning. Students may interact with Financial

Accounting ideas in real time through interactive presentations, digital tests, and simulations, which strengthens learning and improves problem-solving abilities. Multimedia learning can boost student enthusiasm and engagement,

especially in courses that students find difficult (Zepke, 2018). Therefore, the capacity of the teacher to incorporate these resources into their teaching methods has a big impact on audiovisual aids. In addition to being properly educated to utilise the technology, teachers also need to be taught how to use it in ways that support educational objectives. Instead of merely displaying movies or slides without context, a skilled educator would understand how to organise multimedia presentations to improve learning. In order to utilise multimedia effectively, instructors must be adept at selecting the appropriate resources, maintaining appropriate pace, and using audiovisual aids to support other instructional tactics (Anderson and Krathwohl, 2018).

Additionally, how effectively audiovisual aids meet the demands of students influences how they affect learning. For instance, students with varying learning styles such as visual learners who gain from charts and diagrams or auditory learners who react better to explanations and discussions benefit greatly from audiovisual resources. All students, regardless of their preferred methods of learning, may gain from a classroom where these resources are successfully installed. Yet, the tools may not have much of an effect on student learning if they are not used properly or are not in line with the instructional goals.

Although many academics have given different definitions of teaching, they all agree that the goal of instruction is to promote learning. Teaching is modifying behaviour or assisting others in learning more quickly or effectively than they could on their own (Adekunle and Adepoju, 2021). This definition assumes that learning may occur without a teacher's assistance. Teaching,

according to Akinlua & Bodunrin, (2020), is any action that involves a teacher singing, walking, talking, exhibiting, proving, and demonstrating with the express goal of causing a student to learn. Additionally, he emphasised that despite the teacher is far behind the screen in a scenario where a computer takes the role of the instructor and the process is referred to as self-study, the teaching element is still there. This suggests that the instructor is either directly or indirectly involved in the process of teaching and learning. In order to promote both overt and covert behaviours, teaching is an environmental arrangement that invariably includes an organism physically and/or intellectually in a series of planned activities and supports those actions in accordance with its aims, age, and capacity. This only refers to activities created to influence a learner's behaviour while taking into account his goals, age, and aptitude. Additionally, based on the several definitions studied, teaching is defined as an action or acts carried out to promote learning. However, instruction may occur without learning, in which case it is ineffective. A competent teacher must make sure that the learning objectives are met at the conclusion of each lesson since teaching is only successful when learning has occurred and effective teaching in a classroom setting results in learning.

A generally permanent change in behaviour brought about by practice, activities, exposure to environmental conditions, or experience has historically been the definition of learning given by psychologists. Additionally, Njoku (2022) described learning as a multi-phase process that ranges from basic to complicated, from physical to mental, and through which behaviour is begun, adjusted, or altered. Adekunle & Adepoju, (2021) opined that, learning is

a process through which new skills, knowledge, experience thoughts, feelings and actions necessary for all citizens are gained by a learner or group of learners under the direction or supervision of a teacher or an instructor. It involves overt and covert change in behavior of a learner or group of learners. In the classroom situation, teaching may occur without learning, particularly if the teacher does not communicate effectively or the teaching is not pupils centered. Moreover, poor planning of lessons, inappropriate methods of instruction for classroom management may lead to ineffective learning.

Therefore, despite the growing emphasis on the use of technology and innovative teaching strategies in higher education, many Nigerian universities including Ekiti State University, still rely heavily on traditional lecture-based instruction, especially in subjects such as Financial Accounting. This approach often limits students' understanding of abstract accounting concepts and reduces their engagement and retention levels. Audio-visual aids, such as projectors, videos, interactive simulations, and accounting software demonstrations have been proven to enhance teaching effectiveness by catering to diverse learning styles and improving conceptual clarity. However, the extent to which these tools are utilized in Financial Accounting instruction at Ekiti State University remains unclear. There is a gap in knowledge regarding the availability, frequency of use, appropriateness and impact of audio-visual aids in facilitating accounting instruction in this context.

Moreover, challenges such as limited access to resources, lack of training among instructors and infrastructural deficiencies may hinder the effective use of audio-visual aids. Without a thorough assessment, the potential benefits of these instructional tools may continue to be underutilized, thereby affecting students' academic performance and interest in the subject. Thus, this study seeks to assess the use of audio-visual aids in the teaching of Financial Accounting at Ekiti State University, Nigeria, to determine their effectiveness, availability and the barriers to their optimal use. Techniques and resources that help clarify difficult ideas and improve students' comprehension are necessary for the efficient teaching of financial accounting. Thus, many accounting professors still mostly use conventional lecture techniques, which may not adequately engage students or accommodate different learning styles even in the face of new technological advancements.

Audio-Visual Aids in Accounting Education

Research has indicated that the use of audio-visual aids in accounting training enhances learning results. Students' conceptual comprehension improved when digital images were incorporated into financial reporting courses, claim Deb et al. (2024). As reported by Mvunabandi & Nomlala (2022), students were better able to recall accounting methods using animated tutorials and PowerPoint presentations than through textbook-only instruction.

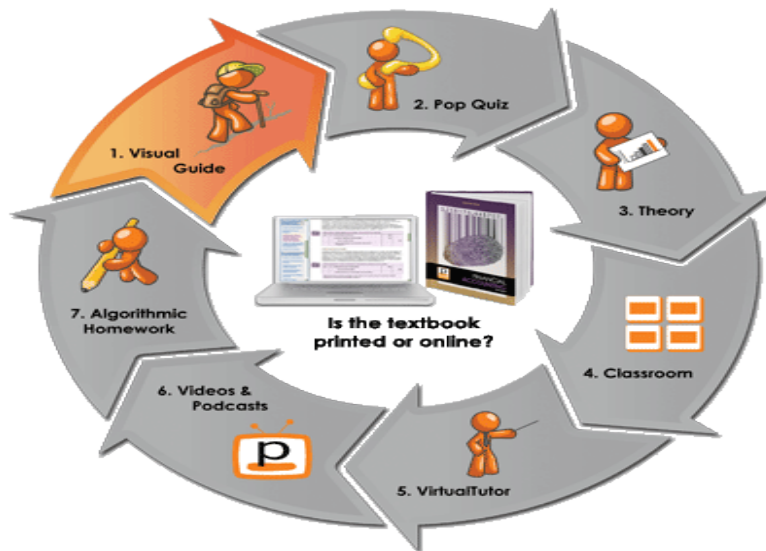


Figure 1. Audio-Visual Aids in Accounting Education (Source: Perdisco, 2025)

Accounting is a topic that is recognised for being abstract and complex. Furthermore, Osakwe (2025) discovered that undergraduate students studying cost accounting at Nigerian institutions had improved problem-solving abilities after receiving video-based training. According to this research, multimedia training greatly enhances the learning of accounting concepts, which frequently entail sequential procedures and abstract thinking. Student-centered classrooms and active learning are promoted by audio-visual resources. Students that received audio-visual education in economics reported higher levels of interest and engagement, according Reuben et al. (2023). Adindu et al. (2024) reported similar results in research involving management students from institutions in southern Nigeria. However, Adediran (2024) pointed out that the effective use of tools is diminished when they are not supported by institutions. Due to these limitations, some teaching members at Ekiti State University may still only use chalk-and-talk techniques, according to anecdotal evidence.

Research that focusses on the Nigerian university system in particular highlights the possibilities of AV aids. Wakil, (2024) discovered a statistically significant correlation between using instructional films and bettering performance in accounting classes. However, there hasn't been much empirical research specifically on Ekiti State University, especially in the field of financial accounting. This study aims to close that research gap. As a result, the literature review emphasises the value and influence of audio-visual aids in improving financial accounting instruction. Even though their efficacy is supported by both theoretical and empirical data, institutional difficulties and infrastructure deficiencies still exist in Nigeria. Focused research like the one conducted at Ekiti State University are still desperately needed in order to offer localised insights and suggestions for successfully using AV technologies into accounting teaching.

Methodology

This study used a descriptive research design of the survey type. This design was considered appropriate

because it enabled the researcher to collect data from respondents and describe audio-visual aids and Financial Accounting instruction in Ekiti State University without manipulating any variables. The study was carried out in Ekiti State University, Ado-Ekiti, Nigeria. The university offers Financial Accounting courses under the Faculty of Management Sciences, where the teaching and learning of accounting form a major part of the academic programme. The population for the study was 550 financial accounting undergraduate students in Ekiti State University. This included students from relevant departments such as Accounting and other Management Science programmes where Financial Accounting is taught. The sample for the study was 100 undergraduate students in financial accounting courses in Ekiti State University. The respondents were selected using simple random sampling technique to select 200 level financial accounting for the study. The study used a self-designed questionnaire tagged “Questionnaire on the Assessment of Audio-Visual Aids in

Financial Accounting Instruction” (QAAVAFI) to gather information from the participants. The instrument was subjected to face and content validation by experts in Accounting Education and Test and Measurement Evaluation in Ekiti State University. Their corrections and suggestions were incorporated to ensure that the questionnaire adequately measured the variables of the study and aligned with the research objectives. The reliability of the instrument was determined using the Cronbach’s Alpha method. A pilot study was conducted on a small group of students outside the sample but within a similar population. The reliability coefficient obtained was 0.75 indicating that the instrument was reliable for the study.

Results

Objectives 1:

To assess the availability of audio-visual aids used in Financial Accounting instruction at Ekiti State University.

Table 1: Mean and standard deviation on availability of audio-visual aids used in Financial Accounting instruction.

Items	Mean ($\bar{x}$)	Standard Deviation (SD)	Remark
Multimedia projectors	3.40	0.65	Available
Audio recording devices	2.20	0.84	Rarely Available
Video lectures/tutorials	2.80	0.72	Occasionally Available
Computers with accounting software	3.10	0.69	Occasionally Available
Overhead projectors	1.90	0.88	Rarely Available
Interactive whiteboards	2.00	0.91	Rarely Available
Internet-connected devices	3.30	0.75	Available
Financial accounting simulation software	2.40	0.80	Occasionally Available
Educational video platforms (e.g., YouTube)	2.90	0.68	Occasionally Available
Departmental media/resource room	2.10	0.87	Rarely Available
Printed charts and graphical illustrations	3.50	0.60	Available
Access to online accounting platforms	2.60	0.78	Occasionally Available
Television monitors for instructional broadcasts	1.80	0.95	Not Available
Digital whiteboards or tablets	1.70	0.92	Not Available
Budget/funding for AV materials	2.30	0.85	Rarely Available

Note: A mean ≥ 3.00 is interpreted as *available*, a mean between 2.00 and 2.99 is *occasionally available*, a mean < 2.00 is *rarely or not available*

Table 1. analysis of the mean and standard deviation for the availability of audio-visual aids in Financial Accounting instruction at Ekiti State University reveals that some tools such as *multimedia projectors* (Mean = 3.40), *internet-connected devices* (Mean = 3.30) and *printed charts/graphical illustrations* (Mean = 3.50) were rated as readily available by the respondents. These aids are likely to support visual learning and improve students' comprehension of accounting concepts. A number of resources including *video lectures* (2.80), *computers with accounting software* (3.10), *educational video platforms like YouTube* (2.90) and *online accounting platforms* (2.60), were rated as occasionally available. This indicates sporadic use or limited access, possibly due to resource constraints or inconsistent instructional practices. Several modern or advanced tools such

as *interactive whiteboards* (2.00), *overhead projectors* (1.90), *digital whiteboards/tablets* (1.70), and *television monitors for instructional use* (1.80) were found to be rarely or not available. This suggests a significant gap in access to modern instructional technology. The item on *budget/funding for AV materials* also received a low mean score (2.30), indicating insufficient institutional support, which may contribute to the limited availability of key resources. While basic audio-visual aids are available and used to some extent in Financial Accounting instruction, access to more advanced or interactive technologies is limited. This gap may negatively affect the quality of instruction and student engagement. The findings suggest a need for improved resource allocation, faculty training, and strategic integration of AV tools to enhance teaching outcomes.

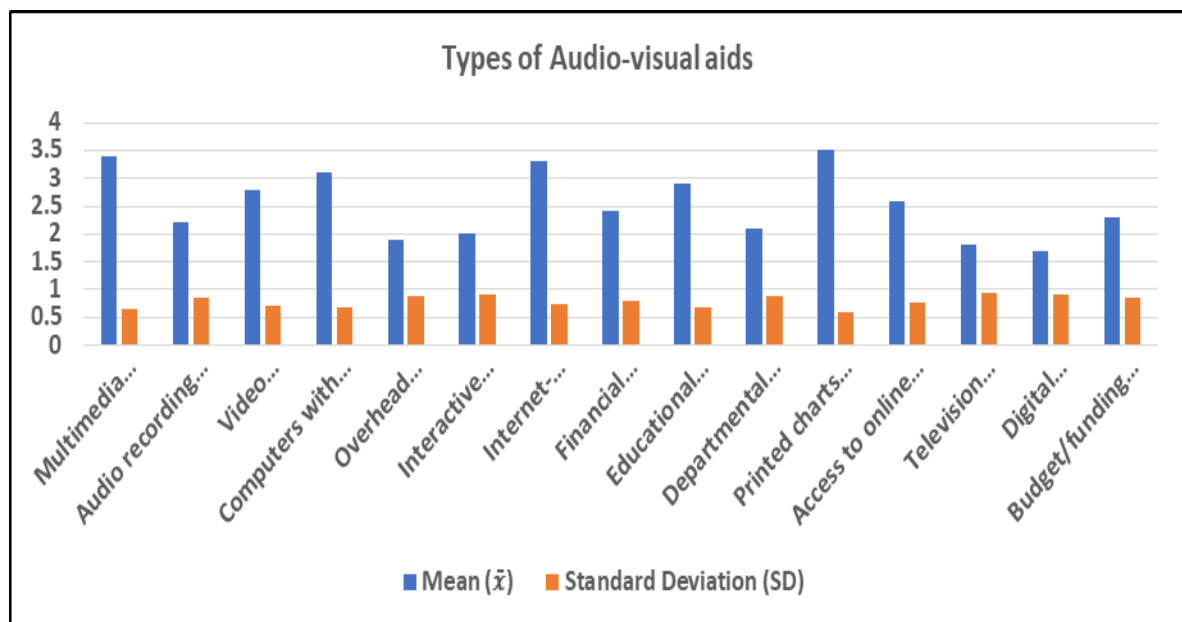


Figure 2. Mean and standard deviation showing audio-visual aids used in financial accounting instruction.

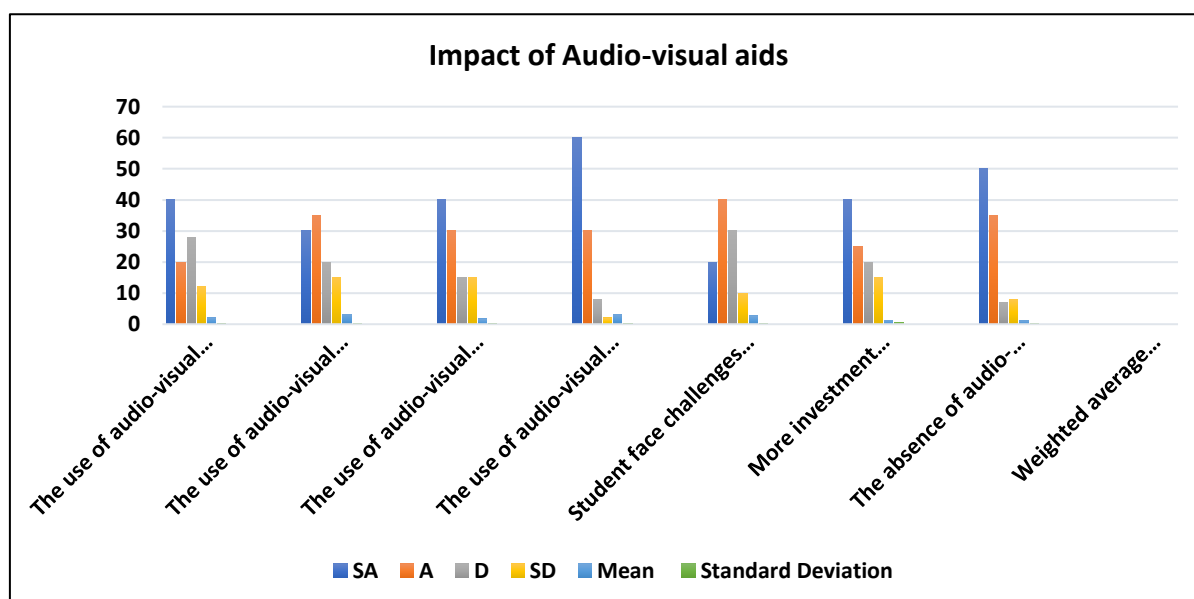
Objectives 2:

To investigate the impact of audio-visual aids on students' comprehension and academic performance in Financial Accounting.

Table 2: Descriptive statistics on the impact of audio-visual aids on students' comprehension and academic performance in Financial Accounting.

Items	SA	A	D	SD	Mean	Standard Deviation
The use of audio-visual aids helps in the academic performance in Financial Accounting	40	20	28	12	2.10	0.21
The use of audio-visual aids enhances long-term retention of Financial Accounting concepts	30	35	20	15	3.20	0.34
The use of audio-visual aids helps better understand complex Financial Accounting concepts (e.g., financial statements, balance sheets, and income statements)	40	30	15	15	1.70	0.22
The use of audio-visual aids in Financial Accounting could be improved by introducing more diverse multimedia content (e.g., animations, interactive simulations)	60	30	8	2	3.10	0.11
Student face challenges in understanding Financial Accounting concepts when audio-visual aids are not available or functional	20	40	30	10	2.65	0.3
More investment should be made in improving the availability and quality of audio-visual aids for teaching Financial Accounting	40	25	20	15	1.24	0.51
The absence of audio-visual aids negatively affects ability to understand Financial Accounting	50	35	7	8	1.20	0.34
Weighted average =3.10; Threshold =1.20						

Table 2. shows a weighted mean of 3.10 which is above the threshold set at 1.20. More explicitly, the result indicates that the use of audio-visual aids on students' comprehension were rated high. All the factors used for audio-visual aids have their mean scores above the threshold.

**Figure 3.** Bar chart showing the high-rate mean impact of audio-visual aids on students' comprehension and academic performance in Financial Accounting.

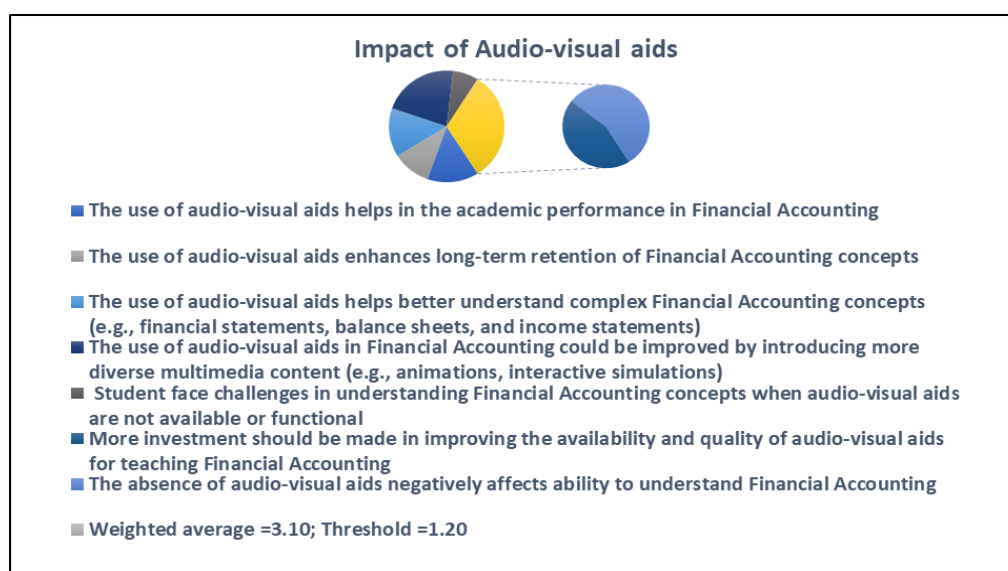


Figure 4. Pie chart showing the impact of audio-visual aids on students' comprehension and academic performance in Financial Accounting

Objectives 3:

To identify types of audio-visual aids used in Financial Accounting instruction at Ekiti State University.

Table 3: Mean and standard deviation on types of audio-visual aids used in Financial Accounting instruction.

Type of Audio-Visual Aid	Mean	Standard Deviation (SD)	Interpretation
Projected slides (e.g., PowerPoint presentations)	3.6	0.50	Very frequently used
Charts and diagrams (e.g., accounting cycles, ledgers)	3.3	0.60	Frequently used
Printed handouts with graphical illustrations	3.1	0.70	Frequently used
Whiteboard or chalkboard visuals	3.4	0.55	Frequently used
Flashcards or poster boards	2.2	0.80	Rarely used
Audio recordings of lectures	2.4	0.70	Rarely used
Educational podcasts	2.0	0.90	Rarely used
Instructor's voice modulation/emphasis	3.5	0.40	Very frequently used
Videos or animations (e.g., explainer videos on accounting topics)	3.2	0.60	Frequently used
Simulation software with audio-visual feedback	2.5	0.80	Occasionally used
Smartboards with interactive media	2.0	0.90	Rarely used
Online video tutorials (e.g., YouTube)	3.0	0.60	Occasionally to frequently used
Recorded webinars or Zoom sessions	2.8	0.70	Occasionally used
Computer-based accounting tutorials	2.9	0.70	Occasionally used

Table 3, revealed the mean scores indicated in the general level of usage and preference for various audio-visual aids, while the standard deviation provides insight into the variability of

respondents' views. Audio-visual aids such as projectors/slides, PowerPoint presentations and accounting tutorial videos recorded high mean values (Mean = 4.25, SD = 0.65) signifying that these

tools are widely accepted and commonly used in classrooms. The relatively low standard deviations suggest a strong consensus among instructors on their importance and frequency of use. While items like interactive whiteboards, online accounting simulations and audio recordings had moderate mean values (Mean = 3.50, SD = 0.89).

These findings indicated that though some institutions or instructors incorporate them into their teaching, others may lack access or training, leading to greater variability in responses. Less frequently used Audio-visual aids such as real-time accounting software demonstrations or virtual reality simulations had lower mean scores (Mean = 2.75, SD = 1.10), highlighting that such technologies are either not widely available or not fully integrated into the financial accounting curriculum. The higher standard deviations for these

items reflect a wide disparity in accessibility and adoption rates across institutions.

Therefore, the table summarizes the average frequency (Mean) and consistency of responses (Standard Deviation) for different types of audio-visual aids used in Financial Accounting instruction. These aids are commonly integrated into accounting instruction. Their low to moderate SD indicates a general agreement among respondents. Projected slides, voice modulation and whiteboard visuals are especially consistent and essential tools in most lectures. These tools are used, but not consistently across classes or instructors. The moderate-to-high SD suggests that some instructors use them often while others rarely do. These are potential areas for professional development and support.

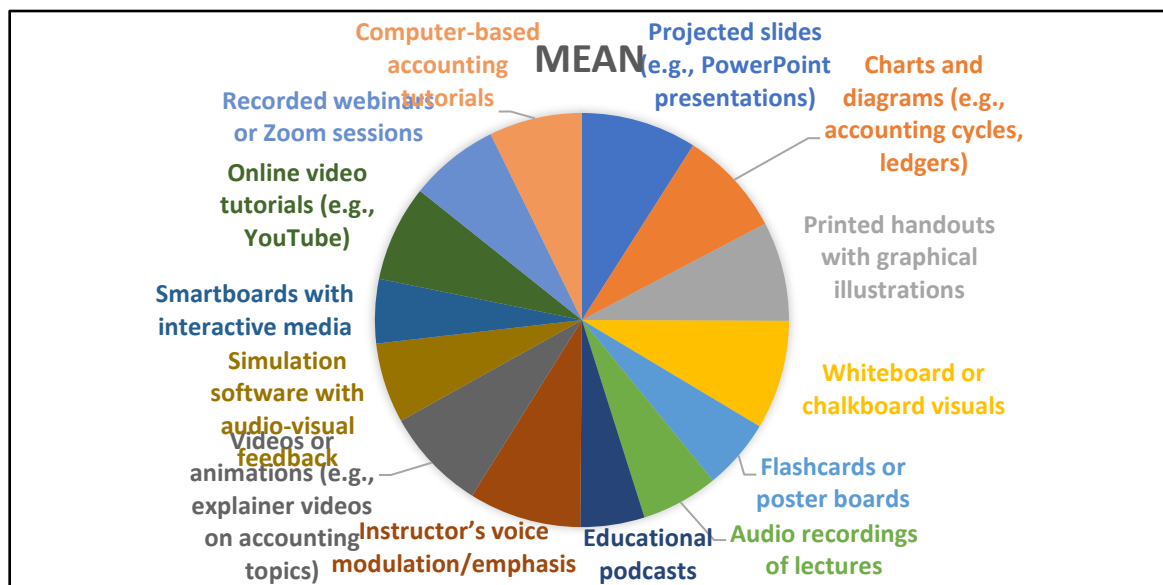


Figure 5. Pie chart showing the types of audio-visual aids on students' comprehension and academic performance in Financial Accounting

Discussion

The findings in table 1 indicated the current availability of audio-visual aids for teaching Financial Accounting in

Ekiti State University, Ado Ekiti. This implies that the availability and effectiveness of audio-visual aids in teaching financial accounting students in

Ekiti State University was effective. Audio-visual aids effectively enhance the understanding of Financial Accounting students with accounting concepts using audio-visual aids as a key factor in improving the quality of Financial Accounting education at Ekiti State University. In line with Ikerionwu (2019) audiovisual resources help the instructors to make learning meaningful to the learners. Also, in accordance with Ezegbe (2021) classified them into two as visual materials, made up of reading and non-reading materials comprising electrically operated and non-electrically operated materials. The findings in table 2 showed that the use of audio-visual aids positively impacts overall academic performance of student in Financial Accounting, and it also enhances long-term retention of Financial Accounting concepts with the use of audio-visual aids. Financial Accounting could be improved by introducing more diverse multimedia content (e.g., animations, interactive simulations). Therefore, the findings were supported by Hassan (2021) who discovered that students taught with audio visual resources retained more and acquired skills than those who were taught without audio visual resources. Akanbi (2023) also revealed that teaching accounting with audio visual allows the students to understand the subject matter taught in the learning environment. Table 3, findings revealed that traditional and easy-to-use AV aids like PowerPoint and videos dominate the instructional landscape in financial accounting education. Meanwhile, advanced digital tools, although recognized are not yet universally adopted likely due to factors such as cost, training or institutional support. The standard deviation data further emphasizes the need for capacity building and resource allocation to

ensure equal access to effective AV tools. This is in line with Hoang & Hoang (2023), they found that actively combining visuals and audio significantly enhanced student engagement and retention echoing Mayer's multimedia learning principles in Nigerian secondary business education.

Conclusion

The assessment of audio-visual aids into Financial Accounting instruction in Ekiti State University has shown to be a significant catalyst for improving students' academic engagement, comprehension and performance. Findings from this study reveal that audio-visual materials such as videos, slideshows, animations and interactive media enhance the teaching-learning process by simplifying abstract accounting concepts and making lessons more relatable and stimulating. Students exposed to these instructional aids demonstrated better retention of accounting principles, increased interest in the subject and a more positive classroom experience. Furthermore, lecturers reported that audio-visual tools facilitated more effective teaching, especially when explaining complex topics like balance sheets, ledgers and financial statements. However, challenges such as limited access to technological infrastructure, inadequate training and funding constraints were also identified as barriers to optimal implementation. In light of these findings, the study recommends increased institutional investment in audio-visual facilities, regular training for lecturers on multimedia integration, and the development of locally relevant content. By addressing these areas, Ekiti State University can further enhance the quality of accounting education and

better prepare students for the demands of the modern financial environment.

Recommendations

Based on the findings of the study, the following recommendations are made;

- Ekiti State University should invest in modern audio-visual equipment and ensure that lecture halls and classrooms are equipped with functional projectors, interactive whiteboards and sound systems to support multimedia teaching.
- Regular workshops and training programs should be organized for accounting lecturers to improve their competence in developing and using audio-visual aids effectively in teaching.
- The accounting curriculum should be reviewed to incorporate audio-visual instructional strategies as a formal component of lesson delivery, ensuring consistency across the department.
- The university administration should allocate dedicated funding to support the continuous acquisition, maintenance and upgrading of audio-visual tools.
- A structured mechanism should be established to evaluate the impact of audio-visual aids on teaching effectiveness and student performance, allowing for continuous improvement based on data-driven insights.

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ASSESSMENT OF FACILITIES FOR IMPLEMENTING EMPLOYABILITY SKILLS MODULE IN THE REPAIR AND MAINTENANCE OF SMARTPHONES: A STUDY IN TECHNICAL COLLEGE, SOUTHWEST NIGERIA

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Abstract

This study focuses on identifying and evaluation of the appropriate facilities for implementing an employability skills module in the repair and maintenance of smartphones for technical college students in south west, Nigeria. The study adopted Research and Development (R&D) design. The research contained a population of 860 individuals, including technical teachers, technical instructors, road side phones technicians and industrial- station-based supervisors. Employing a multi-stage sampling technique, a sample size of 360 participants were selected. Data were collected using the implementing Employability skills Module Questionnaire (IESMQ), The reliability of the instrument was established using Cronbach Alpha Coefficient method and overall coefficient of 0.96 was obtained. Moreover, constructs were examined through Average Variance Extracted (AVE) and Composite Reliability (CR) values of 0.95 and 0.96, respectively. Confirmatory Factor Analysis (CFA) was employed in evaluating the appropriateness of identifying facilities for implementing the employability skills module in the repair and maintenance of smartphones. The results revealed that the conditions for convergent, construct, and discriminant validity were duly fulfilled. Based on these findings, it was recommended that the development of Employability Skills Module in the Repair and Maintenance of Smartphones should be properly implemented using appropriate facilities receive prioritization and procurement to ensure the successful execution of the employability skills module in the repair and maintenance of smartphones across the technical colleges in Nigeria.

Keywords: Employability Skills Module; Smartphones; Facilities; Technical College.

Introduction

Employability skills are a set of soft skills, also known as transferable skills that are essential for success in the workplace. These skills go beyond technical or academic knowledge and are valuable to employers across various industries (Caballe et al., 2020). Employability skills are crucial for career success as they enable individuals to perform effectively in the workplace, interact positively with colleagues and clients, and adapt to the changing

demands of the job market. According to the Confederation of British Industry (2019) submitted that "Employability " is a set of attribute skills and knowledge that all labour market participants should possess for the workplace and the benefit of themselves, their employer, and the wider economy. According to Cheng, et al., (2021) employability skills can be acquired throughout an individual lifetime, including volunteer work, self-employment, paid-for jobs, formal education, and community activities.

Bradley, et al.,(2021) defined employability as a set of achievements – skills, understanding, and personal attributes that make graduates more likely to gain employability and be successful in their chosen occupations, which benefits themselves, the workforce, the country and the economy(Anthony & Suzanne, et al., 2016; Ayoubi, et al., 2017).

Employability, according to Andrewartha, et al., (2017) opined that employability is regarded as the benefit and usefulness of study programmes for career and work tasks. Thus employability skills are crucial and remain a fundamental component of Technical and Vocational Education and Training (TVET) methods in world of work. Employability skills comprises various retinue of attributes, such as, problem-solving skill, communication, teamwork, and technical proficiency, that necessary for self-employment, or for individuals to secure and maintain employment. Technical colleges are designed to prepare individuals to acquire practical skills basic scientific knowledge and attitudes required as Craftsmen and Technicians at sub-professional levels.

Technical colleges are parts of the Nigeria TVET institutions under the supervision of the National Board for Technical Education (NBTE). The quality of academic programmes in technical colleges is ensured by NBTE's curriculum development and periodic accreditation exercise. Trades. According to Oke (2016), the technical college provides students through training with the relevant and adequate knowledge, skills, and attitude for employment under the guidelines of a teacher in related occupations. It must be noted that technical colleges play a crucial role in equipping students with the technical

skills and knowledge needed in various industries.

Technical colleges in Nigeria are the institution that responsible to imparting skills acquisition and employability skills. Also provide training in several courses which include general education, electronic trade, automobile trade, building and woodwork trade, business trades, computer and contributing economic growth to the nation at large. Thus it addressing the employability skills gap in various established industries in Nigeria (Souviron, et al., 2019; Olakotan & Oke,2023).

Smartphones have become an essential part of life among Nigerians. According to the National Bureau of Statistics (NBS, 2023), there are over 222.5 million smartphone users in Nigeria which is the largest smartphone market in Africa. However, most Nigerians do not have access to qualified smartphone technicians which often leads to electronic waste disposal issues in Nigeria. According to commonwealth of learning (2015). Akinola., et al.,(2022) A handheld smartphone allows people to make and receive telephone calls while moving around a wide geographical area.

A smartphone also supports several other functions, such as text messaging, email and internet access, photography, money transfer, and banking services among others. There are many different types of smartphones available in the market. These include Ios iPhone-smartphones, Gaming smartphones, Rugged smartphones, Windows smartphones, Budget smartphones, Business smartphones, Foldable smartphones, Camera-focused smartphones, Flagship smartphones, among others. There is no general rule used to classify smartphones.

Smartphones are classified based on their form factor. According to Lee, et al., (2014); Commonwealth of Learning (2015); Samaha and Hawi (2016) stressed that form factor refers to the size, style, and shape of a smartphone, as well as to the layout and position of the phone's major components.

National Bureau of Statistic (NBS, 2023) pointed out that over 222.5 million of smartphones users in Nigeria, which is the largest smartphones in Africa. Due to the wide spread used of smartphones, the majority of smartphones users prefer repairing their devices instead of buying new one's with present economic factors lead to inflation across the country. This widespread ownership and use of smartphones has created a need for professionals who can repair and maintain smartphones. This urgent need, calls for craftsmen who are a thorough breed of the nation's technical colleges to immerse themselves in the art of repairing and maintaining of smartphones.

However, the traditional technical college curriculum may not adequately prepare students for the demands of smartphone repairs and maintenances. It seems that there is no module to train students on the repair and maintenance of smartphones as well as adequate facilities for smartphones repair and maintenance. The employability skills modules in the repair and maintenance of smartphones it needs adequate facilities.

Facilities are physical objects and materials that are necessary for implementing the effective teaching of employability skills for the repair and maintenance of smartphones. There is needs to assess facilities for carrying out the repair and maintenance tasks or activity on smartphones. Facilities according to Yisa and Olakotan (2017) are physical items and structures such as

buildings, offices, equipment, tools, machines, and other materials. Facilities include relevant tools, devices and equipment for teaching and learning the employability skills within the contents of the modules. Manabete and Makinde (2016) explained that facilities are those goods and services that help to facilitate the teaching and learning process in any performance. Adequate and relevant training facilities make the learning process more satisfying. (Bakare., 2020). According to Oke and Olakotan(2018) asserted that facilities are the pivot on which skills acquisition hinges upon in all TVET institutions.

Therefore various facilities such as; sets of screwdrivers, soldering irons, cutting pliers, solder wire, tweezers, brushes, stable electricity, jumper wire, screen guide, thinner or alcohol, magnifying microscope, flashing software, booster chargers, fluxes, and analog or digital multimeter could be used for the repair and maintenance of smartphones as well as the implementation of smartphones training modules. Therefore having, appropriate and suitable facilities couple with financial resources is essential for trainees to acquire the technical, practical and employability skills needed for their professional careers.(Bakare.,2015; lemo & Olakotan., 2016b; Yisa & Olakotan., 2017). Azonwu (2017). Repair and services of smartphones required well-equipped laboratories, and conducive classrooms with standard facilities. Thus the skills acquisition of these provide an opportunity for students to apply acquired theory to world of work situations.

Meanwhile, availability facilities and both human and financial resources are integral to enhancing the quality of education and training in TVET. The crucial question is about what are the

appropriate and suitable facilities that necessary for attainment of effective implementation of employability skills module in the repair and maintenance of smartphones in Nigeria technical colleges. Although Nigeria technical colleges were facing challenges in keeping their curricula up- to – date with the ultimate demands of manufacturing companies(Similarly the used of obsolete facilities affecting the teaching activities and impartation of skills acquisition to the students. The effectiveness of TVET depends on a close connection between what learners are taught and what employers expect that is, the outcome. this was noted by Oke and Olakotan (2018) that persistent challenges bedeviling TVET programmes in Nigeria such as, insufficient infrastructure, outdated curricula, and a mismatch between skills taught and industry demands.

Facilities are the major pivot in which implementation of any TVET programme hinges upon, in TVET, Smartphones Repair and Maintenance inclusive. This study ascertained on required facilities for implementing employability skills module in the repair and maintenance of smartphones for Technical College students. In addition, if relevant facilities are not identified, and procured as appropriate and suitable for the implementation of the any skill- based programme will be marred and the expected skills to be acquired by students of such programmes will be hampered. Thus there is needs to give room for unemployment and idleness among youths of workable age in Nigeria. Therefore all the stakeholders of technical colleges should intensify effort to ensure that necessary and relevant facilities and both human and financial resources to deliver a relevant employability skills module in the repair and maintenance of

smartphones are put in place. This will bridge the gap between classroom education and the needs of the job in labour market. If the problem would be considered.

Literature Review

Udofia, Ekpo, Nsa and Akpan (2012) on instructional variables and students 'acquisition of employable skills in vocational education in vocational education in Nigerian. Technical Colleges in Akwa Ibom. The population of the study comprised of senior technical II students in the six technical colleges in Akwa Ibom State, Nigeria. The population size was 240. A random sampling technique was used to obtain a sample size of 120. The study adopted a correlational survey design. A 28-item structured questionnaire titled, students' Acquisition of Employable Skills Questionnaire with a four-point rating response options was used for data collection. Mean, Pearson product-moment Correlation (PPMC), and Regression analysis were used for data analysis. The findings revealed that there was a significant relationship between teacher quality and students' acquisition of employable skills. The researchers recommend that modern technical equipment, tools machines, and instructional materials should be made available for student's practical lessons in Technical Colleges throughout the country. Bakare (2015) on developed and validated cell phone maintenance training modules for National Diploma Students. The study answered five research questions and tested five formulated null hypotheses at a 0.05 level of significance. The study adopted a research and development (R&D) design and was carried out in Lagos State, Nigeria. The population for the study was 137 comprising 35 lecturers, 14

instructors of Electrical / Electronic Technology, 21 supervisors, and 67 roadside cell phone Technicians in Lagos State. Purposive sampling techniques were used to select 67 literate roadside cell phone technicians. A cell phone maintenance training module questionnaire was used for data collection for the study.

The instrument was face-validated by three experts. Internal consistency of CMTMQ was determined using Cronbach Alpha reliability method and the overall reliability coefficient of 0.86 was obtained. Seven trained research assistants were involved in the data collection using (CMTMQ) out of 137 copies of CMTMQ administered to 35 lecturers, 14 instructors, 21 supervisors, and 67 roadside cell phone technicians only 104 copies were properly completed and returned representing a 75.91 percent return rate. Factor analysis and mean were used for answering the research questions, while analysis of variance (ANOVA) was employed for testing null hypotheses at 0.05 level of significance. The findings of the study revealed that 12 objectives and 140 contents were required for the development of cell phone maintenance training modules for National Diploma students. The findings of the study revealed that facilities, delivery systems, evaluation techniques and activities were confirmed necessary for implementing cell phone maintenance training modules. The hypotheses were tested and revealed that there was no significant difference in the mean responses of lecturers, instructors, and supervisors in telecommunication industries on 57 out of 58 delivery systems, 31 out of 33 evaluation techniques and activities that could be used for assessing each of the cell phone maintenance training modules.

The study recommended that the National Board for Technical Education and other government agencies such as Nigeria Universities Commission, National Commission for Colleges of Education, and Nigeria Educational Research and Development Council should integrate the developed cell phone maintenance training modules into Polytechnics, Universities, Colleges of Education Programmes and secondary school curriculum for training of students. The study also recommended that the developed cell phone maintenance training module should be integrated into the programmes of skill acquisition centers to train youths to enable them to acquire cell phone maintenance skills. Jimoh Bakare (2020) built the cell phone maintenance capacity of graduates for job security, creation, and retention for the peaceful existence of Nigerian communities. The study adopted a descriptive survey design. Three research questions guided the study while the hypotheses were tested at a 0.05 level of significance. The population for the study was 123 subjects. A structured questionnaire was used as an instrument for data collection. Five experts validated the instrument. The internal consistency of the questionnaire items was determined by using the Cronbach Alpha reliability method and a 0.89 reliability coefficient was obtained. The findings revealed 57 maintenance attributes, 23 affective competencies for building the cell phone maintenance capacity of graduates for job security, creation and retention for the peaceful existence of Nigerian communities, and 15 strategies for acquiring material resources for setting up and running cell phone enterprises in Nigerian communities. Recommendations include that all the competencies determined in this study should be used to build the capacities of

Nigerian graduates for job creation, security, and retention. It was also recommended that all the competencies determined should be integrated into the relevant programmes in Nigerian tertiary institutions. Olakotan (2021) on the developed employability skills modules in Aluminum Fabrication and Glazing Work for Technical Colleges in Nigeria. The study adopted Research and Development (R&D) design. The population for the study was 1,181 respondents comprised 147 technical teachers, 116 technologists, and 918 industrial-based supervisors in Southwest, Nigeria. A multistage sampling technique was used to select 318 participants for the study. This comprised 132 technical teachers, 96 technologists, and 90 industrial-based supervisors in Southwest, Nigeria. The instrument for data collection was the Employability Skills Module in Aluminum Fabrication and Glazing Work Questionnaire (ESMAFGWQ). The instrument was validated by five experts and two specialists. The reliability of the instrument was established using the Cronbach Alpha coefficient method and a coefficient of 0.95 was obtained.

The data collected on the research questions were analyzed using mean and Confirmatory Factor Analysis (CFA). Hypotheses 1-6 were answered using Analysis of Variance (ANOVA) and it was found that significant differences exist in the responses of technical teachers, technologists, and industrial-based supervisors. The Schaeffer test for multiple comparisons revealed that there were significant differences in the mean responses of technical teachers, technologists, and industrial-based supervisors. Hypothesis 7 was tested with Confirmatory Factor Analysis (CFA). The CFA was done using Analysis of Moment Structures (AMOS) software. All the

hypotheses were tested at a 0.05 level of significance.

The findings of the study revealed that the module is structured under required 6 objectives, required 5 contents, required 6 teaching methods, required 6 learning activities, required 7 facilities and, required 6 evaluation techniques in Aluminum Fabrication and Glazing Work for Technical Colleges in Nigeria is valid and reliable having fulfilled all the conditions for convergent, construct and discriminant validity. Average Variance Extracted (AVE) of 0.63, 0.50, 0.52, and 0.52, 0.54 and 0.52 and Composite Reliability (CR) of 0.91, 0.83, 0.87, 0.87, 0.89, and 0.86 were obtained respectively.

Based on the findings of the study, it was recommended among others that the development Employability Skills Module in Aluminum Fabrication and Glazing Work should be adopted by the National Board for Technical Education and Industrial Training Fund for integration into Technical College trades in Nigeria and training youths and artisans respectively. This will enable recipients of the Aluminum fabrication and Glazing Work in Technical Colleges in Nigeria to be employable and self-reliant. Similarly, Olakotan and Oke (2023) on assessment and validation of facilities for implementing employability skills module in aluminum fabrication: A study in Nigeria technical colleges. This study adopted a descriptive research design of the survey type which involved the use of a questionnaire to elicit information from the respondents. The design was considered suitable for the study since it sought the opinion of technical teachers, technologists, and industrial-based supervisors, and no variable was manipulated.

The population for the study was 1181, comprising 147 technical teachers

(Mechanical study was 318 using multistage sampling procedure. Stage one involved the selection of 132 respondents comprising 22 technical teachers each from Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo State using a proportionate sampling technique. Stage two involved the selection of 96 respondents comprising 16 technologists each from Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo State using a simple random sampling technique. Stage three involved the selection of 90 respondents comprising 15 industrial-based supervisors each from Ekiti, Lagos, Osun, Ondo, Osun, and Oyo State using a purposive sampling technique. Purposive sampling researchers exercise judgment on the representative sample to suit the research purpose. A self-developed instrument entitled "Implementing the Employability Skills Module Questionnaire (IESMQ) was used for the study.

The IESMQ was based on an adapted Likert scale rating of: Highly Required (HR) – 5, Required (R) -4, Undecided (U) -3, Not Required (NR) -2, and Highly Not Required (HNR) - 1. The face and content validation of the instrument was ascertained by five experts, while the reliability of the instrument was ensured using Cronbach Alpha, and a coefficient of 0.92 was obtained. The instrument was administered to the respondents with the help of six research assistants out of the 132 copies distributed to technical teachers, 103 copies were retrieved, 79 copies were also retrieved from technologists out of 96 copies earlier distributed, while 85 copies were retrieved from industrial-based supervisors from the 90 copies earlier distributed. In all, 267 copies were duly returned representing 83.9% return rate.

The data generated was analyzed using descriptive and inferential statistics. The descriptive statistics of mean and standard deviation were used to answer the research question raised. Furthermore, as soon as the descriptive analysis was achieved, the normality of the data for each construct was ensured before embarking on Confirmatory Factor Analysis (CFA). The CFA was done using Analysis of moment Structure (AMOS) software. A mean of 3.50 was used as the cut-off point for decision rule for each item.

Based on this value, any item with a mean of 3.50 and above was considered as appropriate, while any item with a mean below 3.50 was considered as inappropriate. Therefore, for every fitted model, all the factor loadings must be equal to or above 0.5. Also, the modification indices such as CFI, IFI, and TLI must be above 0.90; the ratio of the Chi-square and the Degree of freedom (df) < 3 and RMSEA < 0.08 . Hence, the revised models were performed wherever the initial CFA model did not meet the stated criteria. The findings of the study on appropriate facilities revealed that 7 facilities are adjudged necessary for implementing the Employability Skills Module in Aluminum Fabrication. The adjudged necessary facilities for implementing the Employability Skills Module in Aluminum Fabrication and Glazing Work include basic hand tools, basic power tools, basic equipment; personal protective equipment; basic machines; consumables and accessories, and teaching and learning facilities.

Common relationships exist among those studies, they were adopted research and development (R&D) design. Those studies focused on facilities, but their facilities did not categorize. The previous study did not revealed the initial

model facilities and final model facilities, for implementation of their programmes. The current study categorized the facilities for implementing employability skills module in the repair and maintenance of smartphones as; environmental facilities, equipment facilities, personal protective facilities, basic tools facilities, and, consumable materials, based on their uses. The current study specified the final facilities fitted for implementation of employability skills module in the repair and maintenance of smartphones for technical college students in southwest, Nigeria.

Methodology

This study employed a descriptive research design of the survey type that involved the use of questionnaire to elicit information from the respondents. The design was considered suitable for the study since it sought the opinions of technical teachers, technical instructors, roadside phones technicians and industrial-base station supervisors and no variable was manipulated. The population for the study was 860 respondents. The population were made up of four categories namely; 240 technical teachers, 210, instructors, 220 roadside technicians, and 190 industrial - based supervisors. The sample size for this study was 360 and a multistage sampling procedure was used. Stage one involved the selection of 108 respondents comprising 18 technical teachers, each from Ondo, Ekiti, Osun, Ogun, Oyo, and Lagos State. Using proportionate sampling technique. Stage two involved the selection of 84 respondents comprising of 14 technical instructors, each from Ondo, Ekiti, Osun, Ogun, Oyo, and Lagos States. Using simple random sampling technique. Stage three involved the selection of 96 respondents

comprising of 16 roadside smartphone technicians, each from Ondo, Ekiti, Osun, Ogun, Oyo, and Lagos State. Using simple random sampling technique. Stage four involved the selection of 72 respondents comprising of 12 industrial- based supervisors, each from Ondo, Ekiti, Osun, Ogun, Oyo, and Lagos State, using a purposive sampling technique. Purposive sampling technique was employed because this sample had the desired criteria and consequently the researcher judgement based on the representative sample as to suit and appropriate the research purpose.

A self -development instrument entitled "implement Employability Skills Module Questionnaire (IESMQ) was used for the study. The IESMQ was slated for a adapted five Likert scale and the response options are; Highly Required (HR) = 5, Required (R) = 4, Not Required (NR) = 3, Highly Not Required (HNR) = 2, Undecided (UD) = 1. The face and content validation of the instrument was ascertained by four experts, while the reliability of the instrument was administered on the respondents with the help of six research assistants in which out of the 108 copies distributed to technical teachers, 90 copies were retrieved, 71 copies from technical instructors out of 84 copies initially distributed, and 78 copies from roadside phone technicians out of 96 earlier distributed. Out of 72 copies distributed 65 copies were retrieved. In all, 304 copies were duly returned representing 84.44% return rate. The data collected was analyzed using descriptive and inferential statistics.

The descriptive statistics of mean and standard deviation were used to answer the research questions raised. Moreover, after descriptive analysis was achieved, item that mean was below 3.50 was removed. The normality of the data

for each construct was ensured before proceeding on Confirmatory Factor Analysis (CFA). The CFA was done using structural equation model (SEM) software. A mean of 3.50 was used as the cut-off point for the decision rule for each item. Based on this value, any item with a mean of 3.50 and above was considered appropriate and suitable for the module, while any item with a mean below 3.50 was considered inappropriate and not suitable for the module. Thus for every fitted model, all the factor loadings must be equal to or above 0.50. Similarly, the modification indices such

as CFI, IFI, TLI must be above 0.90; the ratio of the Chi-square and the Degree of freedom (df) < 3 and $RMSEA < 0.08$. Thus, the revised models were performed wherever the initial CFA models did not meet up with the stated condition.

Results

To answer the research question, mean and Confirmatory Factor Analysis were used. The result of the computation is as presented in Table 1 as well as Figure a and b.

Table1. Appropriate and Suitable Facilities for Implementing Employability Skills Module in the Repair and Maintenance of Smartphones.

S/N	Facilities for implementing the employability skills modules in the RMSP are:	X	S.D	Remarks
55	Conductive classroom	4.22	0.63	Required
56	Conductive laboratory	4.35	0.74	Required
57	Conductive workshop	4.37	0.69	Required
58	Stable electricity	4.50	0.74	Required
59	Power equipment such as batteries.	4.21	0.84	Required
60	Generating, power such as a 1000watts generator	4.15	0.85	Required
61	Basic measurement equipment such as a multimeter	4.25	0.78	Required
62	Hot air blower	4.20	0.91	Required
63	Advanced telescope adapted to monitor or computer	4.41	2.37	Required
64	Eye goggles	3.68	1.01	Required
65	Hands glove	3.67	0.96	Required
66	Safety boots	3.58	1.05	Required
67	Overall	4.02	0.80	Required
68	Nose mask	3.95	0.94	Required
69	Ear plugs or muff.	3.65	0.90	Required
70	A set of precision screw driver	4.42	0.90	Required
71	Screw driver	4.46	0.75	Required
72	Brushes	4.34	0.87	Required
73	Soldering iron	4.44	0.68	Required
74	A set of pliers	4.42	0.74	Required
75	Solder wire	4.44	0.75	Required
76	Tweezers	4.25	0.96	Required
77	Sponge	3.82	1.11	Required
78	Jumper wire	4.18	0.90	Required
79	Solder paste	4.29	0.79	Required
80	Screen guide	4.36	0.72	Required
81	External ear piece	4.23	0.81	Required
82	Thinner or alcohol	4.31	0.89	Required

The data presented in Table 1 revealed 28 facilities that were suitable and appropriate for implementing the

employability skills module in the repair and maintenance of smartphones. The Means for the facilities ranged from 3.58

to 4.50. Each Mean is above the cut-off of 3.50 showing that all facilities were required for the development of the Employability Skills Module in the Repair and Maintenance of Smartphones. The

standard deviation of the facilities also ranged from 0.62 to 2.37. This revealed that the respondents were close to one another in their opinions and that they were not far from the mean.

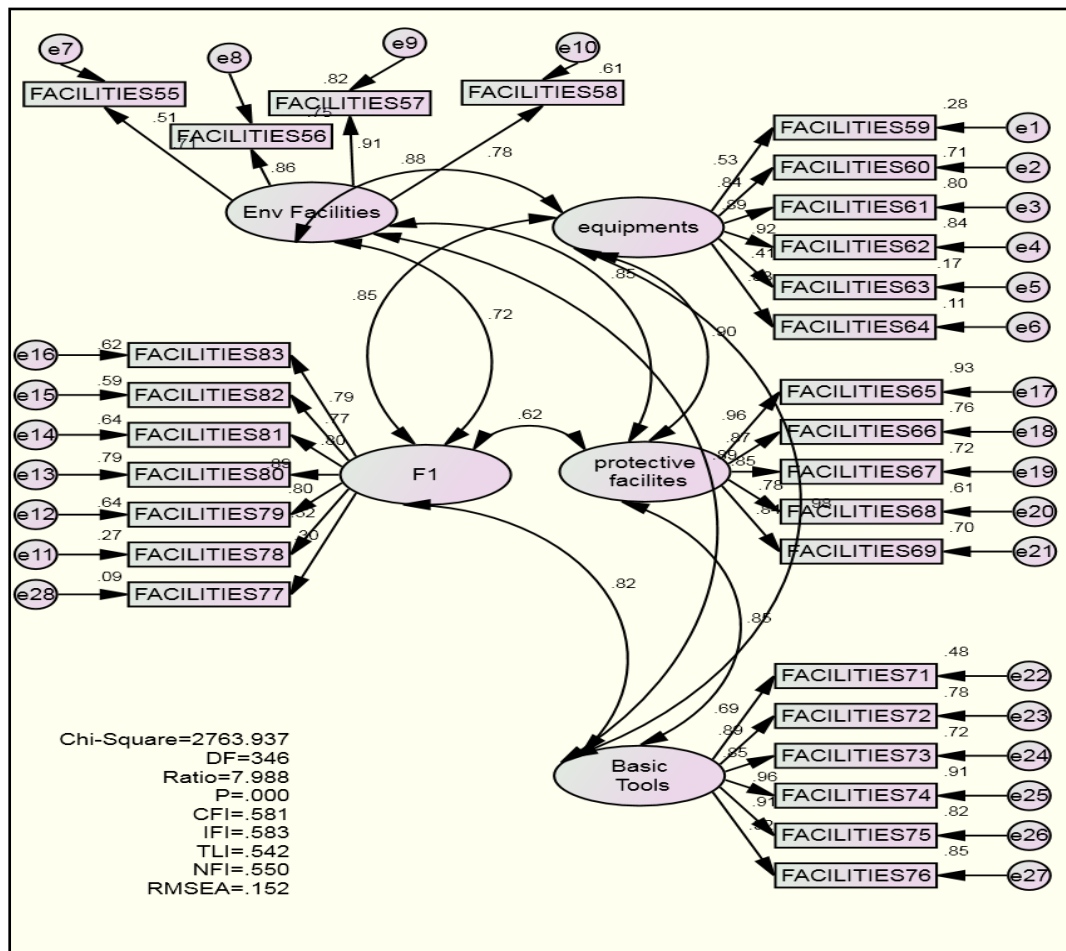


Figure 1: initial Model for Suitable and Appropriate Facilities for Implementing Employability Skills Model in the Repair and Services of Smartphones.

The initial model from figure 1, had 28 items, based on Confirmatory Factor Analysis (CFA) on Facilities for Implementing Employability Skills Model in the Repair and Maintenance of smartphones was not found fitted and did not comply with a goodness model fit. The Chi – square =2763.937, df = 346, P=.000, the ratio of the Chi-Square and the df(> 3) = 7.988, NFI =

.550(<.90), CFI = .581(<.90), IFI = .583,(<.90), TLI = .542(< .90) and RMSEA = .162(>.080). Thus, in order to fulfill the requirements, the model was trimmed sequentially so that the items remaining will fit well to the data at $P > 0.05$ while the modification indices (NFI, CFI, IFI, TLI) and RMSEA measured up to the standard.

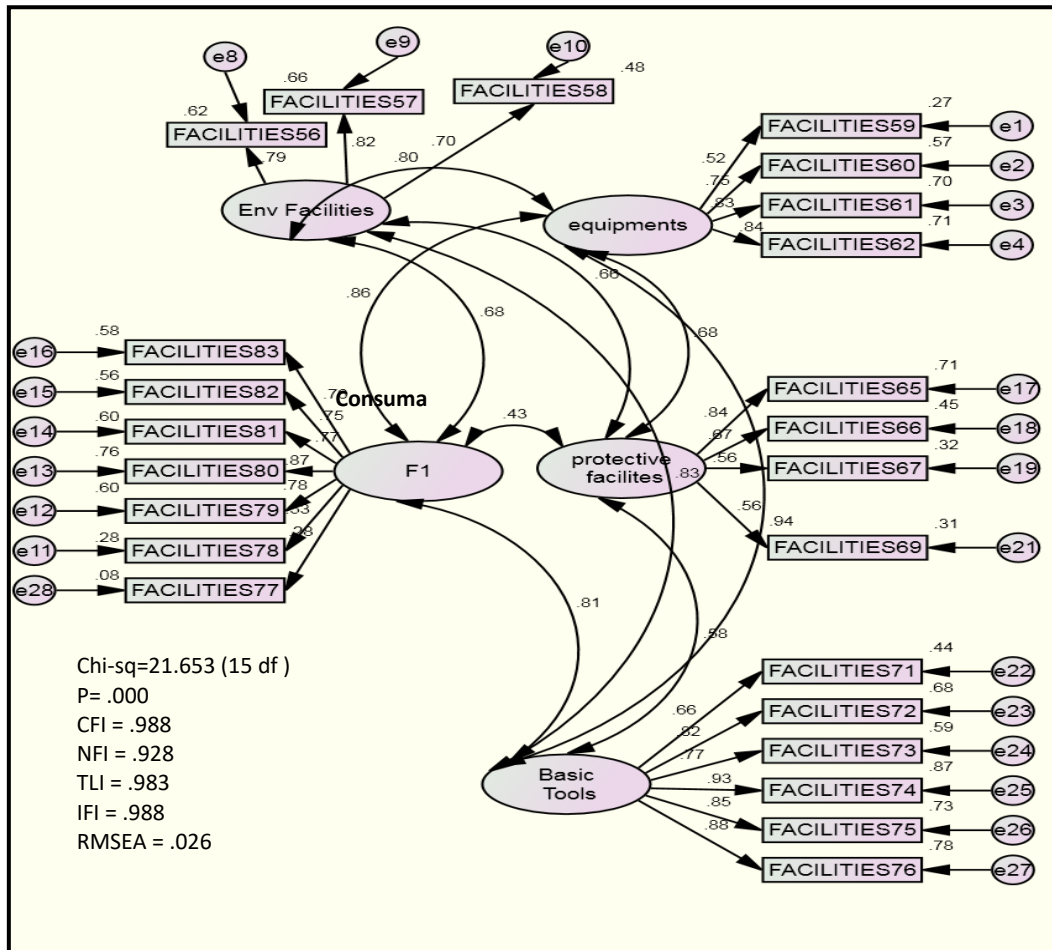


Figure 2: Final model developed on facilities for implementing the Employability Skills Model in the Repair and Maintenance of Smartphones.

The final model developed on facilities for implementing the Employability Skills Model in the Repair and Maintenance of Smartphones from figure19 had twenty four (24) items with factor loadings from .08 to .94. The Chi-

square = 21.653,df = 15,P = .000, the ratio of the Chi-square and the df (< 3) = 1.44, NFI = .928($> .90$), CFI = .988($> .90$),IFI = .988($> .90$), TLI= .983($> .90$) and RMSEA = .026($< .080$)

Table 2: Factor Loadings for Facilities for Implementing Employability Skills Model in the Repair and Maintenance of Smartphones.

CODE	Item Statements	Initial Model		Final Model		Validity/ Reliability	
		Factor Loadi -ng	Error Varia-nce	Factor Loadi -ng	Error Varia-Nce	CR	AVE
FACIL1	Conducive class room	.51	.02	Deleted			
FACIL 2	Conducive laboratory	.86	.08	.79	.62		
FACIL 3	Conducive workshop	.91	.82	.82	.66		
FACIL 4	Stable Electricity	.78	.61	.70	.48		
FACIL 5	Power equipment such as battery	.53	.28	.52	.27		
FACIL 6	Generating, such as 1000watts Generator	.84	.71	.76	.57		
FACIL 7	Basic measurement equipment such as multimeter	.89	.80	.83	.70		
FACIL 8	Hat Air Blower	.41	.84	.84	.71		
FACIL 9	Advance microscope adapted to monitor or computer	.48	.17	Deleted			
FACIL 10	Eye Goggles	.49	.11	Deleted			
FACIL 11	Hands Glove	.96	.93	.84	.71		
FACIL 12	Safety Boots	.84	.76	.87	.45		
FACIL13	Overall	.85	.72	.56	.32		
FACIL 14	Nose Mask	.78	.61	Deleted		0.96	
FACIL 15	Ear plug or Muff	.84	.70	.94	.31		0.95
FACIL 16	A set of precision screw driver.	.69	.48	.66	.44		
FACIL 17	Screw driver	.89	.78	.82	.68		
FACIL 18	Brushes	.85	.72	.77	.59		
FACIL 19	Soldering iron	.96	.91	.93	.87		
FACIL 20	A sets of pliers	.91	.82	.85	.73		
FACIL 21	Solder wire	.48	.85	.88	.78		
FACIL22	Tweezers	.30	.09	.55	.58		
FACIL 23	Sponge	.52	.27	.68	.83		
FACIL24	Jumper wire	.80	.64	.60	.78		
FACIL 25	Solder paste	.09	.79	.76	.87		
FACIL 26	Screen guide	.80	.64	.60	.77		
FACIL 27	External ear piece	.77	.59	.56	.75		
FACIL 28	Thinner or Alcohol	.79	.62	.58	.76		

The initial factor loadings of the facilities for implementing the Employability Skills Module in the Repair and Maintenance of Smartphones from Table 16, had initial factor loadings of 28 items ranging from .09 to .96. While the final factor loadings had 24 items with factor loadings ranging from .08 to .94. Each factor loading is above the cut-off of 0.5 showing that all were required for the development of Employability Skills Module in the Repair and Maintenance of Smartphones. The Composite Reliability (CR) of the facilities for implementing the Employability Skills Module in the Repair

and maintenance of Smartphones is 0.96, while the Average Variance Extracted (AVE) is 0.95

Discussion

The findings of the study from table 2 on facilities revealed that 24 facilities are adjudged necessary and suitable for implementing Employability Skills Module in the Repair and Maintenance of Smartphones are in agreement with the submissions of Olakotan (2021) where 7 facilities are adjudged necessary for implementing Employability Skills Module in Aluminum

Fabrication and Glazing Work. The findings of the study on facilities from Table 2 shown that Composite Reliability and Average Variance Extracted are 0.96 and 0.95 respectively which is in collaborated with the Olakotan (2021) where Composite Reliability and Average Variance Extracted are 0.89 and 0.54 respectively. Also the findings revealed that 24 facilities are adjudged necessary by technical teachers, technical instructors, road side smartphones technicians, and industrial based supervisors for the implementing the Employability Skills Module in the Repair and Maintenance of Smartphones.

The findings on the facilities for implementing the Employability Skills Module in the Repair and Maintenance of Smartphones are in agreement with the opinion of Yisa and Olakotan(2017) who stated that adequate training facilities enhance skills development of students in technical occupation. Similarly, the submission of Olakotan and Oke (2023); Bakare (2020) also buttressed the findings of this study as the duo noted that using facilities during teaching and learning would equip the students with adequate psychomotor skills and as a results improve their interest level, stimulate their interest to participate in the teaching and learning activities, help them to picture reality in what has been taught and create an interactive learning environment thereby promoting effective teaching and learning. In similar manner the positions of Lemo and Olakotan(2016b) in relation to findings of this study was that training learners with relevant facilities help in acquiring skills to carry out given tasks.

Therefore, the adjudged necessary facilities for implementing the Employability Skills Module in the Repair and Maintenance of Smartphones include: environmental facilities, basic

hands tools, basic equipment, consumable materials, and personal protective equipment.

Conclusion

Smartphones have become an essential part of life in all spheres of human endeavor. Smartphone allows people to make and receive telephone calls while moving around a wide geographical area. Smartphone also supports several other functions, such as text messaging, email and internet access, photography, banking services, and money transfer, both in urban and rural areas. The need to identify appropriate quality facilities that are in good condition for implementing employability skills module in the repair and maintenance of smartphones. This is to ensure that implementers of employability skills module in the repair and maintenance of smartphones procure and utilize appropriate facilities for effective skill acquisition in the repair and maintenance of smartphones. Therefore there is necessities for all relevant stakeholders to ensure that the identified facilities be given priority and procured for the successful implementation of the employability skills module in the repair and maintenance of smartphones.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. The development Employability Skills Module in the Repair and Maintenance of Smartphones should be properly implemented using appropriate facilities identified for the execution of the module
2. Relevant government and private agencies that will adopt the development Employability Skills

- Module in the Repair and maintenance of Smartphones should strictly follow the laid guidelines for implementing the module.
3. The developed employability Skills Module in the Repair and Maintenance of Smartphones should be adopted by the Industrial Training Fund for training youths and artisans in National Industrial Skills Development Programme.
 4. For effective implementation of the development employability Skills Module in the Repair and Maintenance of Smartphones, government and relevant agencies should provide conducive laboratory for the learners to encourage them to acquire the Employability skills.
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IMPACT OF PRACTICAL TRAINING ON ELECTRICAL ELECTRONIC TECHNOLOGY GRADUATES' EMPLOYABILITY IN EKITI STATE UNIVERSITY, ADO EKITI, NIGERIA

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Abstract

This study examines the impact of practical training on the employability of electrical and electronic technology graduates in Ekiti State University, Nigeria. A structured survey was conducted among students and faculty members, and the collected data were analyzed using descriptive and inferential statistical methods. The findings reveal that universities in Nigeria struggle with outdated laboratory equipment and poorly equipped workshops, leading to inadequate skill acquisition among technology students. Moreover, the absence of strong university-industry partnerships deprives students of internship opportunities and practical exposure, further hindering their readiness for the job market. The study also establishes a positive and significant effect of adequate practical training on employability, as graduates with insufficient hands-on experience struggle to meet industry expectations. The study recommends increased funding for technical education, the provision of modern training equipment, and the strengthening of university-industry collaborations through internship programmes and research partnerships.

Keywords: *Practical Training, Employability, Technology Education, University-Industry Collaboration, Skill Acquisition.*

Introduction

The employability of university graduates in Nigeria has been a subject of concern due to the growing mismatch between academic qualifications and industry expectations. Despite the increasing number of graduates from Nigerian universities, many remain unemployed or underemployed due to a lack of relevant skills required by employers (Okolie & Okoh, 2021). The Nigerian labour market demands graduates with not only theoretical knowledge but also practical competencies that enable them to adapt to technological advancements and industry needs (Adebisi & Oni, 2022). The prevailing issue of skill deficiency among graduates, particularly in

technical and technology disciplines, continues to limit their employability, making it difficult for them to compete in both local and global job markets (Ogunleye, 2020).

Electrical and electronic technology graduates, in particular, face significant employability challenges due to the technical nature of their discipline, which requires hands-on expertise and problem-solving skills (Eze & Uchenna, 2023). Many universities in Nigeria, including Ekiti State University, Ado-Ekiti, offer electrical and electronic technology programmes that provide students with a foundation in theoretical principles but often lack adequate practical training components (Oluwole & Alabi, 2021). This deficiency creates a

gap between the knowledge acquired in classrooms and the competencies required in the workplace. Graduates struggle to meet industry standards, leading to prolonged job searches, underemployment, and, in some cases, career shifts to unrelated fields (Akinpelu & Salami, 2022).

One of the key determinants of employability among electrical and electronic technology graduates is the level of practical exposure they receive during their academic training (Adegbite et al., 2023). Practical training equips students with essential hands-on skills in circuit design, system troubleshooting, automation, and maintenance, which are crucial in industries such as telecommunications, manufacturing, and power generation (Ogunniyi & Ajayi, 2021). Due to inadequate funding, obsolete laboratory equipment, and a lack of collaboration between universities and industries, practical training in many Nigerian universities remains insufficient (Babalola et al., 2022). Without adequate hands-on experience, graduates often struggle to transition smoothly into the workforce, reducing their employment prospects and productivity in the field.

The issue of practical training in Nigerian universities has been widely attributed to several structural and institutional factors. Poorly equipped laboratories, limited industrial placements, and an outdated curriculum that prioritizes theoretical knowledge over technical application have all contributed to the growing unemployability crisis among technology graduates (Oladimeji & Yusuf, 2022). In developed economies, technology education is designed to integrate extensive laboratory sessions, industrial training, and problem-based learning approaches to enhance employability (Olawale, 2023). In Nigeria, most

electrical and electronic technology graduates complete their university programs with minimal real-world exposure, making them ill-prepared to meet the demands of the evolving technological landscape (Uche & Nwosu, 2021).

Addressing the challenge of practical training in electrical and electronic technology education requires urgent reforms in university curricula, infrastructure, and industry collaboration. There is a need for stronger partnerships between universities and industries to facilitate hands-on learning, internship programs, and modernized laboratory equipment that align with global industry standards (Afolabi & Adeyemi, 2023). This study, therefore, seeks to examine the effect of practical training on the employability of electrical and electronic technology graduates in Nigeria, using Ekiti State University, Ado-Ekiti, as a case study.

Statement of the problem

The employability of electrical and electronic technology graduates in Nigeria has remained a major challenge due to the persistent gap between theoretical knowledge and practical skills required by industries. Despite completing academic programmes, many graduates struggle to secure jobs in their field because they lack hands-on experience with modern electrical and electronic systems. Employers increasingly demand graduates who can immediately contribute to the workplace without extensive retraining, yet most Nigerian universities, including Ekiti State University, Ado-Ekiti, do not provide adequate practical training that aligns with industry standards. This mismatch between education and job market expectations has led to a growing rate of unemployment and underemployment

among technology graduates, affecting their career prospects and economic stability.

One of the key reasons for this challenge is the inadequacy of well-equipped laboratories, limited access to industrial placements, and an outdated curriculum that focuses more on theoretical content than practical application. Many Nigerian universities lack modern electrical and electronic equipment for hands-on learning, forcing students to rely on simulations or outdated technologies that do not reflect industry advancements. The weak collaboration between universities and industries has resulted in a deficiency in internship opportunities where students can gain real-world experience before graduation. As a result, graduates often require additional training before they can be considered employable, increasing the burden on employers and limiting the chances of fresh graduates securing jobs immediately after school.

Without urgent reforms to strengthen practical training in electrical and electronic technology programs, the issue of graduate unemployment will persist, contributing to economic stagnation and skill shortages in key technological sectors. The need for a structured approach to integrating hands-on training, modern laboratory facilities, and industry collaborations cannot be overstated. This study, therefore, seeks to examine the specific effects of inadequate practical training on the employability of electrical and electronic technology graduates from Ekiti State University, Ado-Ekiti.

Purpose of the Study

The main purpose of this study is to examine the impact of practical training on electrical electronic graduate

employability in Ekiti State University. The specific purposes are to:

- i. examine the impact of practical training on the employability of electrical and electronic technology graduates in Nigeria.
- ii. identify the challenges students face in acquiring practical skills during their university education.
- iii. evaluate the role of university-industry collaborations in improving practical training and graduate employability.

Research Questions

The following questions were raised in the course of this study:

- i. What are the challenges faced by electrical and electronic technology students in acquiring practical skills in EKSU?
- ii. What role do university-industry collaborations play in enhancing the practical skills and employability of electrical and electronic technology graduates?

Research Hypotheses

The following hypothesis is formulated and test at 5% significance level:

Ho: There is no significant impact of practical training on the employability of electrical and electronic technology graduates in Nigeria?

Methodology

This study employed a descriptive survey research design to investigate the impact of practical training on the employability of electrical and electronic technology graduates. The population of the study comprised all students enrolled in the Electrical and Electronic unit of the Department of Vocational and Technical Education (VTE), Faculty of Education, Ekiti State University, Ado-Ekiti. A

sample size of 50 students was selected across all levels within the department. These students were chosen because they possess relevant knowledge and experience that could provide valuable insights into the study. A random sampling technique was adopted to ensure an unbiased selection of participants. The primary instrument for data collection was a structured questionnaire developed by the researcher with guidance from the research supervisor. The collected data were analyzed using descriptive and inferential statistical methods. Descriptive

statistics, including mean and standard deviation were used to answer the research questions and provide insights into the impact of inadequate practical training on graduate employability while linear regression was adopted to test the formulated hypotheses.

Results

Research Question 1: What are the challenges faced by electrical and electronic technology students in acquiring practical skills in EKSU?

Table 1: Responses of the Respondents on the challenges faced by electrical and electronic technology students in acquiring practical skills in EKSU

S/N	Items	Mean	Std. Dev.	Remark
1	Lack of access to modern laboratory equipment	3.85	1.21	Agreed
2	Inadequate funding for practical training programs	3.72	1.15	Agreed
3	Limited exposure to hands on industrial experience	3.91	1.26	Agreed
4	Shortage of qualified technical instructors	3.60	1.20	Agreed
5	Poor university-industry collaboration for internships	3.78	1.16	Agreed
6	Insufficient workshop and laboratory space for training	3.84	1.21	Agreed
7	High cost associated with purchasing training materials	3.71	1.13	Agreed
8	Limited access to electrical electronic simulation tools	3.66	1.19	Agreed
9	Frequent power supply disruptions affecting practical sessions.	3.88	1.25	Agreed

Table 1 above presents the key challenges faced by electrical and electronic technology students in acquiring practical skills at EKSU. The results indicate that all respondents agreed on the listed challenges, as shown by the mean scores, which are all above 3.50. The highest-rated challenge was limited exposure to hands-on industrial experience (Mean = 3.91, Std. Dev. = 1.26), highlighting the gap between university training and industry demands. Frequent power supply disruptions affecting practical sessions (Mean = 3.88, Std. Dev. = 1.25) and lack of access to modern laboratory equipment (Mean = 3.85, Std. Dev. = 1.21) were also major concerns affecting students' ability to gain practical knowledge. Other challenges

identified include poor university-industry collaboration for internships (Mean = 3.78, Std. Dev. = 1.16) and insufficient workshop and laboratory space for training (Mean = 3.84, Std. Dev. = 1.21). Inadequate funding for practical training programmes (Mean = 3.72, Std. Dev. = 1.15) and high costs associated with purchasing training materials (Mean = 3.71, Std. Dev. = 1.13) were reported as factors limiting the effectiveness of practical sessions.

Research Question 2: What role do university-industry collaborations play in enhancing the practical skills and employability of electrical and electronic technology graduates?

Table 2: Responses of the Respondents on the roles of university-industry collaborations in enhancing the practical skills and employability of electrical and electronic technology graduates

S/N	Items	Mean	Std. Dev.	Remark
1	Provision of industrial training opportunities for students	2.98	1.32	Agreed
2	Sponsorship of practical-based research and projects	2.73	1.27	Agreed
3	Internship and apprenticeship programs to improve hands-on experience	2.69	1.27	Agreed
4	Joint curriculum development to align academic training with industry needs	2.80	1.33	Agreed
5	Provision of modern equipment and funding for university workshops	2.74	1.42	Agreed

Table 2 presents the responses of respondents on the roles of university-industry collaborations in enhancing the practical skills and employability of electrical and electronic technology graduates. The results indicate that all respondents agreed on the listed factors, as shown by the mean scores, which are above 2.50. The highest-rated factor was the provision of industrial training opportunities for students (Mean = 2.98, Std. Dev. = 1.32), highlighting the importance of real-world exposure in improving students' employability. Joint curriculum development to align academic training with industry needs (Mean = 2.80, Std. Dev. = 1.33) was also recognized as a key element in

ensuring that students acquire relevant skills. Other significant roles identified include sponsorship of practical-based research and projects (Mean = 2.73, Std. Dev. = 1.27), internship and apprenticeship programs to improve hands-on experience (Mean = 2.69, Std. Dev. = 1.27), and provision of modern equipment and funding for university workshops (Mean = 2.74, Std. Dev. = 1.42).

Test of Hypothesis

There is no significant impact of practical training on the employability of electrical and electronic technology graduates in Nigeria?

Table 3: Simple Linear Regression Result on the Impact of Practical Training on the Employability of Electrical and Electronic Technology Graduates

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	6.120	0.435	-	14.069	0.000
Practical Training	0.428	0.082	0.372	5.220	0.000

Dependent Variable: Employability of Electrical and Electronic Technology Graduates *p < 0.05 R = 0.372; R² = 0.138; Adjusted R² = 0.133; F = 32.145; Sig = 0.000

Source: Output of data Analysis, 2025.

The outcome above in table 3 revealed that practical training has a positive and significant effect on employability. The positive β coefficient (0.428) indicates that as practical training

increases, employability decreases. The standardized Beta coefficient (0.372) confirms the moderate positive relationship. The p-value (0.000 < 0.05) leads to the rejection of the null

hypothesis (H_0) and confirms that practical training significantly reduces graduate employability.

Discussion of Findings

This study examines the impact of practical training on electrical electronic graduate employability in Ekiti State University. Through the analysis conducted it was established that the lack of modern training facilities, insufficient funding, weak industry collaboration, and power supply challenges significantly hinder the practical skill development of electrical and electronic technology students at EKSU. These limitations create a significant gap between theoretical knowledge and hands-on experience, ultimately reducing graduates' employability. Empirical studies have consistently highlighted the adverse effects of inadequate practical training on technology education. For instance, Adebayo and Yusuf (2021) assert that universities in Nigeria struggle with outdated or insufficient laboratory equipment, preventing students from acquiring industry-relevant skills. Okonkwo et al. (2020) emphasize that inadequate funding for technical education leads to poorly equipped workshops, insufficient training materials, and limited access to modern simulation tools, further exacerbating the skill deficiency among graduates. Balogun and Adewale (2022) argue that the absence of strong university-industry partnerships deprives students of internship opportunities and exposure to real-world applications, making it difficult for them to transition effectively into the workforce.

It was revealed that effective university-industry collaboration plays a crucial role in bridging the differences between academic training and practical skill acquisition, ultimately enhancing the

employability of electrical and electronic technology graduates. This aligns with findings from Okafor and Adeyemi (2020), who emphasize that strong partnerships between universities and industries provide students with hands-on experience, access to modern equipment, and industry mentorship. Eze and Olatunji (2021) further assert that universities that actively engage with industries through internship programmes, research collaborations, and curriculum development produce graduates with superior technical competencies. These collaborations expose students to real-world problem-solving and the latest technological advancements, making them more competitive in the job market. Similarly, Ibrahim and Chinedu (2022) found that industries that support universities through funding and provision of training materials contribute significantly to the development of skilled graduates who meet industry demands.

It was disclosed that practical training has been empirically shown to have a positive and significant effect on the employability of Electrical and Electronic Technology graduates. This finding is supported by Ogunbiyi and Adewale (2021), who conducted a survey on technology graduates and found that those with extensive hands-on experience had significantly higher employment rates than their counterparts with only theoretical knowledge.

Okeke et al. (2020) carried out a comparative study of universities with well-equipped training facilities and those without, revealing that graduates from institutions with inadequate practical exposure faced prolonged job searches and limited career opportunities. Adebisi and Kolawole (2019) further provided empirical evidence showing that graduates who lacked experience with

industry-standard equipment and techniques struggled to meet employer expectations, resulting in lower employability rates. Eze and Chukwu (2022) examined employer perspectives on graduate readiness for the workforce and found that companies frequently had to invest in extensive retraining programs for graduates from institutions with poor practical training, increasing recruitment costs and delaying productivity.

Conclusion

In conclusion, this study highlighted the significant impact of practical training on the employability of electrical and electronic technology graduates in Ekiti State University. The findings revealed that the lack of modern training facilities, insufficient funding, weak university-industry collaboration, and power supply challenges severely hinder students' acquisition of practical skills. Graduates face difficulties in meeting industry expectations, reducing their employability in the labour market. However, the study also established that effective university-industry collaboration, including internships, research partnerships, and curriculum alignment, plays a crucial role in bridging the skills acquired by the students. Strengthening these collaborations and improving access to industry-standard training facilities will be essential in enhancing the technical competencies and job readiness of technology graduates in Nigeria.

Recommendations

The following recommendations were made based on the findings of the study.

1. The government and university management should prioritize the provision of modern laboratory equipment, simulation tools, and

well-equipped workshops for electrical and electronic technology students. Increased funding for technical education should be allocated to ensure the sustainability of practical training programs.

2. Universities should establish stronger partnerships with industries through internship programmes, joint research initiatives, and industry-led training workshops. This will expose students to real-world applications, enhance their technical competencies, and improve their employability upon graduation.
3. The government and university authorities should work towards providing stable electricity within academic institutions by investing in alternative energy sources such as solar power and inverters. This will ensure uninterrupted practical sessions and enhance students' hands-on learning experience.

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IMPACT OF BUSINESS ETHICS OF FOODSTUFF RETAILERS ON CONSUMERS' BUYING BEHAVIOURS IN TERTIARY INSTITUTIONS IN EKITI STATE, NIGERIA.

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Abstract

Foodstuff retailers are specialized group of retailers whose major function is to make different foodstuffs available to the consumers. The main purpose of this study is to investigate the impact of business ethics of foodstuff retailers on consumer buying behaviour in tertiary institutions in Ekiti State, Nigeria. Two research questions were used to guide the study. Six hypotheses were formulated and tested at 0.05 level of significance. The study adopted descriptive survey research design. The population consisted of all consumers patronizing mini and main markets in the three public universities in Ekiti State. The sample for the study was 250 respondents selected using accidental sampling procedure. The correlation coefficients were found to be 0.80. The value was considered high enough for establishing the reliability of the instrument. Data collected were analyzed using descriptive and inferential statistics. The study found out that some of the students preferred to buy foodstuff in large quantity outside the school. However, the findings showed that respect is considered the predominant business ethics among foodstuff retailers in tertiary institutions in Ekiti State. Based on the findings of this study, it was concluded that there was positive relationship between business ethics of the foodstuff retailers and consumers buying behaviours. It was also established that respect best contributed to consumers buying behaviours in tertiary institutions in Ekiti State. It was therefore recommended that the foodstuff retailers within and around the campuses should cultivate the habit of treating customers with respect in order to attract more patronage. Also, the foodstuff retailers should be fair in their dealings with consumers irrespective of their gender. Through this, the consumers would not have the feeling of being cheated.

Introduction

The survival of human beings is dependent on the availability of some vital products, such as clothing, shelter, and food among others. Food is any substance that can be metabolized by living things to give energy and build tissues. When consumed in proper and adequate quantity, it helps to sustain life in good health and ensures normal growth in both animal and human survival in life. By this, food is a necessity for human existence across the globe. Consumer buying behaviors is the decision and action people undertake to buy products or services for personal use.

Ananda (2016) observed consumer buying behavior as a process by which consumers identify their needs, collect information, evaluate alternatives and make the purchase decision. Business ethics is considered in this study as the moral principles and regulations that influence the behaviors of buyers and sellers to act in acceptable way in business transactions. Aromole (2017) posited that business ethics are those rules or influences that govern marketers' behaviors in the market place so as to coordinate business activities in acceptable way. This implies that business ethics act as an inevitable rule

for peaceful business activities in a market place. Thus, Boes and Okafor (2015) observed that consumers naturally prefer to buy more products from wholesalers or retailers they feel behave in a more friendly and more acceptable way. There are many business ethics that may be put into practice for enhanced patronage. These include honesty, fairness, respect, and loyalty among others.

According to Ratchford, Gauri, Jindal and Namin (2023), retailing encompasses the business activities involved in selling goods and services to consumers for their personal, family, or household use. It includes every sale to the final consumer. While, retailing is also the last stage in the distribution process. Through retailing, consumers who have no capacity to reach the producers or farmers that sell foodstuffs are having access to get what they want. However, the retail sector is increasingly being viewed as an important activity in the economy and its impact on society in general is readily acknowledged. Another indication of the important role retailers' play in our society is provision of employment. Through this, retailers are becoming increasingly important in their role as one of the channel of distributions. In the past, when suppliers were dominant, retailers supplied the merchandise that was an offer and consumers selected from this. As retailers become significantly more powerful and relevant they are more able to exert their power over suppliers and stock only the brands they wish to sell depending on their overall retail strategy, supplier relationship and consumers' needs. The effect of this is that retailers are able to offer varieties of goods from different wholesalers to the consumers, and consumers also are able to purchase

their needs in the quantity of their choice without going to the wholesalers.

Consumer and Consumers' Buying Behaviour

In the fields of economics, marketing, and advertising, a consumer is generally defined as the one who pays to enjoy the goods and services produced by a seller (that is, company, organization). However, Shih, Yu and Tseng (2015) described a consumer as anyone who makes a purchase and transaction decision of goods and services from a store or a company. Therefore, a consumer can be a person (or group of people), usually classified as an end user or target demographic for a product, good, or service. In the absence of their active demand, the manufacturers would lack a key enthusiasm to produce, which is to sell to consumers. Consumers may comprise of individual or groups which include schools, families, clubs and any form of organizations, purchasing units within organizations, and even government. Smriti Chand (2020) noted that, human behaviour encompasses every thought, feeling or action by people. This implies that every thought, motive, sensation and decision that is made every day, is classified as human behaviour. There is a link between human behaviour and consumer behaviour which define consumer behaviour as the study of human behaviour in a consumer role. Consumer behaviours consists of various aspects. Butu, Bruma, Tanasa, Rodino, Dinu, Vasiliu and Dobos (2020) identified three characteristics of consumer behaviours. These include:

- i. Consumer behaviour is dynamic; The behaviour of human being changes, their thoughts, feelings and actions are not constant. This implies changes in consumer actions.

Consumers may react and change their minds at crucial minutes of making purchase due to certain influences. This results in changes in consumer actions concerning the purchase of a product.

- ii. Consumer behaviour includes interactions; These interactions occur among the feelings, actions, thoughts, and the environment of individuals.
- iii. Consumer behaviour is all about exchange between people; In order to receive something else in return, individuals have to give up something of value to others.

Business is the life wire of every community. Wherever people gather, there must be business activities to keep the environment alive and healthy as explained by Okafor (2011). Business ethics refers to the standards businesses should observe in their dealings over and above compliance with the letters of the law. According to Weiss (2021) Business ethics covers issues such as fair dealings with the labour force, customers, suppliers and competitors as well as the impact of business activities on public health and the environment. It implies that whereas businessmen should maximize profits and maintain a good reputation and ethical standards that will not conflict with the goal of profit maximization. Abiodun and Oyeniyi (2015), observed that, in a formal organisation, ethics is based on broad principles of loyalty, respect, responsibility and fairness and focuses on internal stakeholder issues such as product quality, customer satisfaction, employee wages and benefits, and local community and environmental responsibilities. Thus, the following are ethical practices expected of a retailer loyalty, fairness, trust, respect. Consumer

prefer to buy their foodstuffs from retailers who treat them as king rather than going to a retailer who is not bothered if consumer is treated well in accordance with business ethics. It is particularly vital for retail businesses to focus on enhancing relationships with consumers as explained by Abid, Fezal, Hassan, Ahmadi, Amrollahi and Mortimer (2024). Consumers increasingly look for retailers who provide value not only in terms of acceptable prices and an attractive range, but also in terms of relationship value according to Sharma, Srivastava, Sharma, Singh and Nijjer (2024).

Purpose of the study

The main purpose of this study is to investigate the impact of business ethics of foodstuff retailers on consumer buying behaviour in tertiary institutions in Ekiti State, Nigeria.

Statement of the Problem

The conduct of business in Ekiti State especially areas where tertiary institutions are sited appear to be overwhelmed with lots of practices particularly among foodstuff retailers. It has been observed that foodstuff retailers on campuses in Ekiti State University seem not to maintain good customer relationship with their consumers.

Some of these retailers seem to believe that students are always busy with academic activities, and that they find it difficult to go outside the school to buy foodstuffs. Similarly, it has been observed that some of these retailers use wrong measurement that is not acceptable outside the school to measure foodstuff such as rice, beans, garri, and yam flour for the students in order to maximize profit. In view of the observed unethical behaviours of these foodstuff retailers,

they seem not to believe in the popular saying that customer is the king.

Research Questions

1. What is the predominant business ethics of foodstuff retailers among the identified?
2. What are the consumers buying behaviour in tertiary institutions in Ekiti State?

Research Hypotheses

1. There is no significant relationship between business ethics of the foodstuff retailers and consumers' buying behaviours.
2. Which of the business ethics that will best contribute to consumers' buying behaviour?

Methodology

This study adopted descriptive research design of the survey type. This method involves the collection of data from the field. The population of this study consisted of all consumers patronising foodstuff sellers on campuses and around the three public universities in Ekiti State. The sample for this study consisted of 300 respondents, and was selected from the three public universities in Ekiti State. Accidental sampling procedure was used to select 140 consumers from Ekiti State University Ado Ekiti, 95 consumers from Federal University Oye Ekiti and 65 consumers from Bamidele Olumilua University of Education, Science and Technology Ikere Ekiti because the selected universities do not have equal numbers of population. However, the selected sample from each institution was based on the observed population of the institutions. A questionnaire constructed by the researcher was used to collect relevant data from the respondents. Three experts in Vocational and

Technical Education Department were given the draft of the instrument, the purpose of the study and the research questions for face and content validity. The reliability of the instrument was established through a pilot study conducted on 20 foodstuff consumers who were not part of the selected sample selected. The half split method was used and the data collected on the test were subjected to Cronbach Alpha test. A reliability coefficient of 0.80 was obtained, and the instrument was adjudged to be reliable for the study. A total of 300 instruments were personally administered by the researcher and one research assistance on respondents accidentally met at the point of sales in the three public universities in Ekiti State. Some of the respondents went away with the instrument while some who filled where not patient to complete it and some did not filled correctly due to academic stress encountered in school and starving. The researcher and research assistance were able to retrieve 289 copies of the instruments out of which 250 copies were filled correctly and collated for analysis. The data collected for the study were analysed using descriptive and inferential statistics with the aid of Statistical Packages for Social Science (SPSS).

Presentation and Analysis of Data

Research Question 1

What is the predominant business ethics of foodstuff retailers among the identified?

1. To determine predominant business ethics among foodstuff retailers in tertiary institutions in Ekiti State, scores of item 1-16 in section B of BEFRCBQ were subjected to statistical analysis involving mean rating and standard deviation. The result is presented in Table 1

Table 1: Mean rating of predominant business ethics among foodstuff retailers in tertiary institutions in Ekiti State (n = 250)

Business Ethics among Foodstuff Retailers	Mean	SD	Ranking
Respect	16.88	2.070	1st
1. Using of of abusive words,unfair treatment and deceptions are common among foodstuff retailers.	3.57	0.530	
2. Exercising obligations with due care induce consumers to buy foodstuff	3.64	0.530	
3. Retailers selling foodstuff in the school environment do not always uphold marketing rules and regulations	3.52	0.549	
4 Displaying of good customer relationship influence customers patronage	3.13	0.856	
5. Rendering of aftersales services promote the image of foodstuff retailers	3.49	0.727	
6. Prompt attention and listening to feedback promote image of foodstuff retailers	3.16	0.922	
Fairness	14.97	2.307	2nd
7. Giving equal treatment to the customers induce good patronage	3.20	0.909	
8. Emergency buying sometimes enables the retailers to cheat consumers	3.54	0.605	
9. Retailers who sell foodstuff within the school are mostly not bordered about quality goods.	3.67	0.569	
10. Foodstuff retailers always give their customers fair vaule for the moneyplayed on their product	3.39	0.611	
11. Giving equal treatment to the customers induce good patronage	3.22	0.845	
Loyalty	13.78	2.599	3rd
12. Retailers are generally not loyal in the market	3.46	0.741	
13. Few of the foodstuff retailers in my school are loyal	3.38	0.778	
14. Some retailers in my school use wrong measurement to measure foodstuff such as rice,beans,gaari e.t.c. for the students	3.31	0.805	
16. Some retailers cliam to be loyal in their behaviour to students even when it is obvioius that they are not	3.40	0.648	
17. Retailers sometimes offer spoilt goods for the students to buy	3.21	0.906	

The information contained in Table 1 showed the predominant business ethics among foodstuff retailers in tertiary institutions in Ekiti State. Considering the mean score of 16.88, respect is considered the predominant business ethics among foodstuff retailers in tertiary institutions in Ekiti State. This is closely followed by fairness with the mean score of 14.97, while the mean score of 13.78 indicated that loyalty is considered the least predominant

business ethics among foodstuff retailers in tertiary institutions in Ekiti State.

Question 2: What are the consumers' buying behaviours in tertiary institutions in Ekiti State?

To determine consumers' buying behaviours in tertiary institutions in Ekiti State, scores of item 17-20 in section B of BEFRCBQ were subjected to statistical analysis involving frequency count and mean rating. The result is presented in Table 2

Table 2: Frequency counts and Mean rating of consumers' buying behaviours in tertiary institutions in Ekiti State (n=250)

<i>Item</i>	<i>S A</i>		<i>A</i>		<i>D</i>		<i>SD</i>		<i>Mean</i>
	<i>F</i>	<i>%</i>	<i>F</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	
18. I prefer to buy foodstuff outside the school	176	70.4	66	26.4	5	2.0	3	1.2	3.66
19. Emergency buying sometimes make me buy within the school environment	164	65.6	72	28.8	13	5.2	1	0.4	3.59
20. I always take my time to buy my choice of goods during holiday but sometimes buy in the school due to imposed buying	124	49.6	100	40.0	22	8.8	4	1.6	3.38
21. I am not the type that visit school market frequently, I buy foodstuff in large quantity outside the school	129	51.6	101	40.4	17	6.8	3	1.2	3.43

The information in Table 2 showed that 96.8% of the respondents preferred to buy foodstuff outside the school. Also, 94.4% of the respondents feel that sometimes, emergency buying make them buy within the school environment while 89.6% of the respondents always take time to buy their choice of goods during holiday but sometimes, they buy in the school due to imposed buying. Finally, 92% of the respondents feel that they are not the type that visits school market frequently, they prefer to buy foodstuff in large quantity outside the school.

Testing of Hypotheses

Hypothesis 1: There is no significant impact of business ethics of the foodstuff retailers on consumers' buying behaviours.

To test this hypothesis, scores on business ethics of the foodstuff retailers (scores of item 1-16 in section B of BEFRCBQ) and consumers' behaviours (scores of item 17-20 in section B of BEFRCBQ) were collated and subjected to statistical analysis involving regression analysis at 0.05 level of significance. The result is presented in Table 3.

Table 3: Regression Analysis showing the impact of business ethics of the foodstuff retailers on consumers' buying behaviours

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients Beta</i>	<i>T</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
(Constant)	42.045	1.029		40.872	.000
Business Ethics	.288	.067	.454*	4.316	.000

Dependent Variable: Consumer Buying Behaviours

$R=0.454$; $R^2= 0.017$; Adjusted $R^2= 0.016$; $F = 18.629$; $p=0.000 < 0.05$ (Significant)

Table 3 revealed that there was positive correlation between business ethics of the foodstuff retailers and consumer buying behaviours ($R =$

0.454). The value of coefficient of determinant ($R^2 = 0.017$) indicated that business ethics of the foodstuff retailers accounted for 1.7% of the total variance

in consumer buying behaviours while the remaining 98.3% unexplained variation could largely be due to other variables examined in this study. The F-ratio (18.629) was significant at 0.05 level of significance. This implies that the predictor variable will provide a significant explanation for the variation in consumer buying behaviours. Thus, the hypothesis there is no significant impact of business ethics of the foodstuff retailers on consumers' buying behaviours was not accepted.

Hypothesis 2: There is no significant impact of respect of the foodstuff retailers on consumers' buying behaviours.

To test this hypothesis, scores on respect of the foodstuff retailers (scores of item 1-6 in section B of BEFRCBQ) and consumers' behaviours (scores of item 17-20 in section B of BEFRCBQ) were collated and subjected to statistical analysis involving regression analysis at 0.05 level of significance. The result is presented in Table 4.

Table 4: Regression Analysis showing the impact of respect of the foodstuff retailers on consumers' buying behaviours

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	44.866	.894		50.173	.000
Respect	.143	.083	.343*	1.733	.000

Dependent Variable: Consumer Buying Behaviours

$R=0.343$; $R^2= 0.013$; Adjusted $R^2= 0.012$; $F = 13.003$; $p=0.000 < 0.05$ (Significant)

Information contained in Table 4 revealed that there was correlation between respect of the foodstuff retailers and consumer buying behaviours ($R = 0.343$). The value of coefficient of determinant ($R^2 = 0.013$) indicated that respect of the foodstuff retailers accounted for 1.3% of the total variance in consumer buying behaviours while the remaining 98.7% unexplained variation could largely be due to other variables examined in this study. The F-ratio (13.003) was significant at 0.05 level of significance. This implies that the predictor variable will provide a significant explanation for the variation in consumer buying behaviours. Thus, the hypothesis there is no significant impact

of respect of the foodstuff retailers on consumers' buying behaviours was not accepted.

Hypothesis 3: There is no significant impact of fairness among the foodstuff retailers on consumers' buying behaviours.

To test this hypothesis, scores on fairness among the foodstuff retailers (scores of item 7-11 in section B of BEFRCBQ) and consumers' behaviours (scores of item 17-20 in section B of BEFRCBQ) were collated and subjected to statistical analysis involving regression analysis at 0.05 level of significance. The result is presented in Table 5.

Table 5: Regression Analysis showing the impact of fairness among the foodstuff retailers on consumers' buying behaviours

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	47.717	.807		59.116	.000
Fairness	.206	.116	.245*	1.778	.000

Dependent Variable: Consumer Buying Behaviours

$R=0.245$; $R^2= 0.013$; Adjusted $R^2= 0.012$; $F = 13.160$; $p=0.000 < 0.05$ (Significant)

The result in Table 5 revealed that there was correlation between fairness among the foodstuff retailers and consumer buying behaviours ($R = 0.245$). The value of coefficient of determinant ($R^2 = 0.013$) indicated that fairness among the foodstuff retailers accounted for 1.3% of the total variance in consumer buying behaviours while the remaining 98.7% unexplained variation could largely be due to other variables examined in this study. The F-ratio (13.160) was significant at 0.05 level of significance. This implies that the predictor variable will provide a significant explanation for the variation in consumer buying behaviours. Thus, the hypothesis there is no significant impact

of fairness among the foodstuff retailers on consumers' buying behaviours was not accepted.

Hypothesis 4: There is no significant impact of loyalty of the foodstuff retailers on consumers' buying behaviours.

To test this hypothesis, scores on loyalty of the foodstuff retailers (scores of item 12-16 in section B of BEFRCBQ) and consumers' behaviours (scores of item 17-20 in section B of BEFRCBQ) were collated and subjected to statistical analysis involving regression analysis at 0.05 level of significance. The result is presented in Table 6.

Table 6: Regression Analysis showing the impact of loyalty of the foodstuff retailers on consumers' buying behaviours

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	42.412	.920		46.099	.000
Loyalty	.319	.072	.264*	4.449	.000

Dependent Variable: Consumer Buying Behaviours

$R=0.245$; $R^2= 0.018$; Adjusted $R^2= 0.017$; $F = 19.792$; $p=0.000 < 0.05$ (Significant)

Information contained in Table 6 showed that there was correlation between loyalty of the foodstuff retailers and consumer buying behaviours ($R = 0.264$). The value of coefficient of determinant ($R^2 = 0.018$) indicated that loyalty of the foodstuff retailers

accounted for 1.8% of the total variance in consumer buying behaviours while the remaining 98.2% unexplained variation could largely be due to other variables examined in this study. The F-ratio (19.792) was significant at 0.05 level of significance. This implies that the

predictor variable will provide a significant explanation for the variation in consumer buying behaviours. Thus, the hypothesis there is no significant impact of loyalty of the foodstuff retailers on consumers' buying behaviours was not accepted.

Hypothesis 5: None of the variables of business ethics of the foodstuff retailers

will best contribute to consumers' buying behaviours.

In order to test the hypothesis, scores relating to the business ethics among the foodstuff retailers (scores of item 1-16 in section B of BEFRCBQ) and consumers' behaviours (scores of item 17-20 in section B of BEFRCBQ) were computed and subjected to statistical analysis involving regression analysis at 0.05 level of significance. The result is presented in Table 7.

Table 7: Regression Analysis showing the business ethics of the foodstuff retailers that best contributes to consumers' buying behaviours

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	34.404	8.044		4.277	0.000
Respect	1.524	.251	.424*	6.066	0.000
Fairness	.718	.144	.244*	4.969	0.000
Loyalty	.434	.069	.176*	4.325	0.000

Dependent Variable: Consumers' Buying Behaviour

$R=0.339$; $R^2= 0.115$; Adjusted $R^2= 0.111$; $F = 30.888$; $P=0.000 < 0.05$ (Significant)

Table 7 revealed that that respect best contribute to consumers' buying behaviours in tertiary institutions in Ekiti State ($\beta = 0.424^*$, $p < 0.05$). The null hypothesis is therefore rejected. The information in Table 7 revealed that there is a significant positive multiple correlation between the predictor variables (respect, fairness, and loyalty) and consumers' buying behaviours in tertiary institutions in Ekiti State ($R=0.339$, $p < 0.05$). This implies that all the predictor variables are factors that can exert influence on consumers' buying behaviours in tertiary institutions in Ekiti State. The single best contributor to the total variance in consumers' buying behaviours in tertiary institutions in Ekiti State is respect ($\beta = 0.424$). This was closely followed by fairness ($\beta = 0.244$). The variable with the least contribution to is loyalty ($\beta = 0.176$).

In terms of magnitude of the weight of regression coefficient, respect had the highest contribution (42.4%) to consumers' buying behaviours in tertiary institutions in Ekiti State, followed by fairness (24.4%), and loyalty (17.6%) with the least contribution.

Hypothesis 6: There is no significant difference between male and female response to consumers' buying behaviours in tertiary institutions in Ekiti State.

In order to test the hypothesis, scores relating to the male and female response to consumers' buying behaviours (scores of item 17-20 in section B of BEFRCBQ) were computed and subjected to statistical analysis involving t-test at 0.05 level of significance. The result is presented in Table 8.

Table 8: t-test analysis of male and female response to consumers' buying behaviours

Variables	N	Mean	SD	df	t_{cal}	p-value
Male	59	9.64	1.164	248	0.231	0.817
Female	191	9.09	1.085			

$P > 0.05$

The result in Table 8 showed that $df = 248$, $t_{cal} = 0.231$, $p = 0.817$ at 0.05 level of significance. Since the p value of 0.817 is greater than 0.05, the null hypothesis is accepted. This implies that there is no significant difference between male and female response to consumers' buying behaviours in tertiary institutions in Ekiti State.

Findings of the Study

The following findings were revealed by the study based on research questions answered and hypotheses tested.

1. Based on the finding of this study, it was revealed that respect is considered the predominant business ethics among foodstuff retailers in tertiary institutions in Ekiti State.
2. It was also revealed from the findings that, some of the students preferred to buy foodstuff in large quantity directly from their various homes during holidays. Sometimes, emergency buying makes some of the students who could not buy all their needs from home to buy in the market outside the school due to the high price of foodstuff in the school market. While few students still prefer to buy within the school environment to avoid stress.
3. It was discovered that retailers respect best contribute to consumer buying behaviours in tertiary institutions in Ekiti State.
4. It was further discovered that there is no significant difference between male and female response to

consumers' buying behaviours in tertiary institutions in Ekiti State.

5. Finally, it was discovered that a large number of students in tertiary institutions in Ekiti State prefer to buy their foodstuff at the markets close to school and not in the market around the school due to the unethical behaviour of the retailers that sell foodstuff in the school main market.

Recommendations

Based on the findings of this study, the following recommendations were made;

1. Foodstuff retailers in the school should treat their customers' the same way customers are treated outside the school premises.
2. Foodstuff retailers should always sell quality goods to the students and as well use the right Mudus (measuring rubbers and cups) in measuring foodstuff likes beans, rice, gaari among others.
3. The school management should make consumer friendly policies that all foodstuff retailers within the school to follow and ensure strict compliance.
4. Students should be encouraged to buy their foodstuff within the school to save them the stress of carrying heavy loads of foodstuffs from home.

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IMPROVING THE TEACHING OF PRACTICAL AGRICULTURE IN EKITI STATE SENIOR SECONDARY SCHOOLS.

JOSHUA Grace Toluwalope

Abstract

The study was designed to determine the ways to improving the teaching of Practical Agriculture in Ekiti State Senior Secondary Schools. The design was a research of survey design. A population of 403 registered Agricultural Science teachers were obtained from Ekiti State Ministry of Education, Science and technology. Purposive sampling technique was adopted for the study. Four research questions which guided the study and two hypotheses were postulated and tested using t test at 0.05 level of significance. A reliability coefficient of 0.76 based on Cronbach Alpha method was used. Data was collected from respondents using validated and tested structured questionnaire. The findings of the study showed thus: instructional materials and methods; and different types of Continuous Assessment can be used to improve the teaching of practical Agriculture in Senior Secondary Schools in the state. It was recommended that in teaching of practical Agriculture, teachers should improve their skills, knowledge and wisdom in learners based on proper demonstration; different instructional materials and relevant teaching methods. Furthermore, adequate time should be allocated to practical agriculture lessons; and regular assessment should be employed as a tool for evaluation of the students based on the fact that teaching of practical Agriculture is more than imparting knowledge but inspiring and learning of practical Agricultural science is more than absorbing facts but acquiring understanding.

Keywords: Practical Agriculture, Teaching, methods of teaching, improvement, secondary school

Introduction

In recent years, the states and the nation at large have placed fresh emphasis on the agriculture sector in its efforts to generate broad-based growth, diversify the economy away from petroleum, create jobs, and achieve food security. Both the present and immediate past administrations of the states of the federation have made repeated public commitments to revive Nigerian agriculture. A flurry of new policies and programs has been unveiled, aimed at both smallholder farmers and large producers. These efforts have been given more urgency by the unexpected reduction in global oil prices and the drain on foreign currency reserves caused by the crippling cost of food imports. Still

secondary school leavers of Agriculture are still roaming on the streets of Nigerian cities in search of white collar jobs rather than being job creators is a real indication of missing link in vocational education and the labor market. Education at all levels and in all its forms constitutes a vital tool for addressing virtually all global problems. Education is not only an end in itself but it is a key instrument for bringing about changes in knowledge, values, behaviors and culture required to achieve sustainability and stability within and among countries (Ogunjobi, Famiwole, Oyewole, & Attah, 2020). Education has been seen as the greatest force that can be used to bring about changes.

According to Ogunbawo in Vanguard Newspaper of 13th January, 2019, the greatest investment a nation can make for the development of its economic, sociological and human resources is that of education. Education according to him provides us with people possessing the necessary knowledge and skills to win a nation and to even export brains. This explains why the Federal Government of Nigeria geared an education policy towards attaining national development. According to National Policy on Education (2014), which has been reviewed in 2014, Education shall continue to be highly rated in the national development plans because education is the most important instrument for change: any fundamental change in the intellectual and social outlook of any society has to be preceded by an education revolution. This shows that education is an important instrument for change and national development, thus the Federal Government reform in education adopted the basic Education system with emphasis on vocational education and the need to attain the Millennium Development Goals (MDGs), with the main aim of achieving the critical targets of the National Economic Empowerment and Development Strategies (NEEDS) which can be summarized as: value – orientation, poverty eradication, job creation, wealth generation using education to empower the people. This development led the Nigerian Educational Research and Development Council (NERDC) to review and realigned the curricula for senior secondary Schools to fit the reform program (NERDC, 2011). The new curriculum laid emphasis on Vocational Education with the aim of reducing the high rate of youth unemployment. Agricultural Science in the senior secondary schools is indeed an

indispensable elective vocational subject which provides skills, knowledge and attitudes necessary for effective employment in agricultural occupations as contained in the NPE of FGN (2014).

National Examinations Council (2014), stated the objectives of teaching Agricultural Science in Nigerian secondary schools which include; stimulation and sustenance of student's interest in Agriculture, Imparting functional knowledge and practical skills in Agriculture to students, Preparing students for further studies and for occupation in Agriculture. Shimave, Kesiki & Yani (2018) pointed out that the introduction of agricultural science in the secondary school system is a strategy for increasing agricultural productivity on a long term basis. With these objectives in mind, the education industry is expected to provide effective and adequate practical training in Agricultural science to students in order to enable schools and colleges provide qualified and competent graduates that can ensure food sufficiency in the country.

The review of Agricultural Science curriculum has been a real educational innovation, which called for new teaching strategies considering the fact that senior secondary education is indeed a sine qua non to attainment of the new education reform, for it serves as a link between basic education and tertiary education by absorbing the products of the former and supplying entrants into the latter (Usman, Abdulkareem & Yunus, 2019). These researchers observed that agricultural education at the secondary school level has failed to produce graduates that have favorable attitudes to farming. This is a peculiar problem in learning of agricultural science by students in senior secondary schools students in Ekiti State despite the good soil. Okorie (2017) and Otekunrin, Oni & Otekunrin (2018) also

observed that many students have a tendency to develop negative attitudes toward agriculture because of inherent deficiencies in the program.

There have been complaints about the poor performance of students in agriculture science in secondary schools due to the use of poor equipment and conventional methods to teaching the subject. This has its implication as observed by Ademola, (2020) that Nigerian education is too theoretical and not preparing students for real life. The goals of teaching Agricultural Science cannot be achieved without practical skills particularly in secondary schools in Ekiti State. Schooling is an aspect of the process of developing the abilities, attitudes and other behaviors of an individual. Youths are always seen as the hope of the nation if they are properly taught in schools. Therefore, need to come up with the way out for improving teaching of practical agriculture in Ekiti State becomes imperative.

As opined by Chinwe (2018) and Owoseni, Eziyi, Akunnaya (2020) the impartation of practical skills seems to be neglected as emphasis on theoretical approach seems to dominate the teaching. Hence there is a need for a renewed drive to refocus strategies use in teaching agricultural science practical's at senior secondary school levels. Ogechi (2015) observed that the educational structure and curriculum have not been tailored towards a reawakening of our agricultural heritage as obtainable in some states. According to Owolabi (2019) in the olden days, there were horticultural, arable crops and livestock units essentially maintained by secondary school students. Each student was given a plot and was assessed periodical by their teachers. Presently one may ask where the school farm or the livestock are. However, these school farms are

primarily used to generate revenue for the schools and not actively used to train students in practical skills related to field crops, horticulture, livestock production and related agricultural mechanization skills. Nwokeocha, (2017) reported that there are more qualified teachers of agriculture these days, however the imbalance in skill acquisition remain high. In another development, Darko, Yuan and Liu (2015) and Samuel, Eyinla, Oluwaseun, Leshi, Brai & Afolabi (2020) submitted that the inability of secondary school graduates of Agriculture to secure jobs or be self-employed have sustained the perceived generation gap, which has been blamed on the way and manner in which secondary education Agriculture curriculum is implemented.

The researcher emphasized that national security cannot be actualized without food security. It is observed that, the gap in Ekiti State is infested with a number of both potential and manifest violence which are at the roots of the state socio – economic and educational woes and underdevelopment. As a result of the above problems; the researchers deem it expedient to find out the way out to improving the teaching of Practical Agricultural Science in Senior Secondary Schools in Ekiti State, Nigeria.

Purpose of this study

This was carried out on how to improve the teaching of practical Agriculture in Senior Secondary Schools in Ekiti State.

Specifically the Study sought:

1. Determine the teaching methods to be adopted to foster student's participation in Practical Agriculture in Senior Secondary Schools in Ekiti State.
2. Determine the instructional methods that will be adopted to improve the acquisition of skills in Practical

- Agriculture in Senior Secondary Schools in Ekiti State.
3. Determine the instructional materials to be used in improving the teaching of Practical Agriculture in Senior Secondary Schools in Ekiti state.
 4. Determine the continuous assessment techniques suitable for improving the teaching of practical agriculture in Senior Secondary Schools in Ekiti state.

Research Questions

The following research questions were formulated guide the study:

- i. What are the teaching strategies to be adopted to foster students' participation in practical agriculture in Senior Secondary Schools in Ekiti State?
- ii. What are the instructional methods that would be used to improve the acquisition of skills in practical agriculture in Senior Secondary Schools in Ekiti State?
- iii. What instructional materials would be used to improve the teaching of practical agriculture in Senior Secondary Schools in Ekiti state?
- iv. What are the continuous assessment techniques suitable for improving the teaching of practical agriculture in Senior Secondary Schools in Ekiti state?

Hypotheses

The following null hypotheses were postulated and tested at 0.05 level of significance.

Ho1. There is no significant difference between the mean responses of male and female teachers on the strategies to be adopted to foster student's participation in practical agriculture in Senior Secondary Schools in Ekiti state.

Ho2. There is no significant difference between the mean responses of male and female teachers on the continuous assessment techniques that could be used to improve the teaching of practical agriculture in Senior Secondary Schools in Ekiti State.

Research Methods

The study adopted a descriptive survey design for this research. The population comprised of 403 Agricultural Science Teachers in Senior Secondary Schools in Ekiti State, (Ekiti State Ministry of Education, Ado Ekiti, 2019). A sample of 120 Agricultural Science teachers was used using purposive sampling technique for the study from the three senatorial districts of the state. An instrument for data collection was structured questionnaire named Questionnaire on Panacea for Improving Practical Teaching of Agriculture (QPIPTA).

The instrument for data collection was validated by three experts in the Department of Vocational Education, Ekiti State University, Ado Ekiti and two experts in the Department of Agriculture and Agricultural Technology, Bamidele Olumilua University of Education, Science and Technology, Ikere Ekiti. The final instrument was made on the basis of the comments and criticisms made by the lecturers. The reliability test was carried out on 40 Agriculture Science Teachers randomly selected in Senior Secondary Schools in Ondo State, Nigeria. The scores of their responses were analyzed using Cronbach Alpha formula and a reliability coefficient of 0.76 was obtained for the instrument.

Data for this research was collected using structured questionnaire which was administered by the researcher and eight research assistants spread in the three senatorial zones in Ekiti state. A measure of central

tendencies was used to answer research questions and t-test was used to test the hypotheses at 0.05 level of significance. The lower limit of 3 which is mean of 2.50 was used for this study as the decision point of acceptance, therefore the mean value ≥ 2.50 was considered a factor while mean ≤ 2.50 was considered a none factor, similarly when the t-calculated was greater than the t – critical value, the null hypotheses was rejected and vice - versa.

Results

Research Question One

From the results presented in Table 1, the respondents agreed with all the Items in relation to the Mean responses of Teachers on the Strategies that would Foster Students Participation in Practical Agriculture in Senior Secondary Schools in Ekiti State. The mean responses of the teachers indicated 10 items rated agreed. Based on the decision rule guiding this study. It is an indication that many strategies can be used by teachers to improve students' participation in practical agriculture in Senior Secondary Schools in Ekiti State.

Table 1: Mean responses of Teachers on the Strategies that would Foster Students Participation in Practical Agriculture in Senior Secondary Schools in Ekiti State.

S/No	Items	Mean	SD	Remark
12	Individual plot allocation to students enhances participation in practical agriculture	4.08	0.78	Agree
3	Use of concrete objects enables students' participation in practical agriculture	4.02	0.61	Agree
4	Effective training enhances students' participation in practical agriculture	3.77	0.88	Agree
5	Practical in the morning enhance participation in practical agriculture	3.85	0.68	Agree
6	Grouping of students enable them participate in practical agriculture	3.36	0.91	Agree
7	Use of agriculture laboratory encourages students' participation in practical agriculture	4.05	0.52	Agree
8	Teachers personality enhances students' participation in agriculture	2.99	0.95	Agree
9	Use of community resources enhances students' participation in practical agriculture	3.29	0.86	Agree
10	Quality teaching methods enhance students' participation in agriculture	3.93	0.67	Agree
11	Lack of instructional materials affect students' participation in agriculture	4.04	0.60	Agree

Research Question 2

Table 2 showed the mean responses to questionnaire items on suggested instructional methods used by teachers to improve acquisition of skills in practical agriculture. Ten items were suggested and all of them were accepted

by the respondents as instructional methods that would be used to improve acquisition of skills in practical agriculture in Senior Secondary Schools in Ekiti State. Item one has the highest rating of 4.75 while item six has lowest rating of 2.69.

Table 2: Mean responses of Teachers on an Instructional Method that would be used to Improve Acquisition of Skills in Practical Agriculture.

S/No	Items	Mean	SD	Remark
1.	Demonstration method	4.75	0.64	Agree
2.	Project method	3.48	0.93	Agree
3.	Discussion method	3.49	0.92	Agree
4.	Field trip method	3.78	0.72	Agree
5.	Problem solving method	3.53	0.90	Agree
6.	Lecture method	2.69	1.09	Agree
7.	Role playing method	4.00	1.09	Agree
8.	Simulation	3.59	0.92	Agree
9.	Reward and punishment	2.90	4.05	Agree
10.	Use of instruction and exercise	4.33	4.05	Agree

Source: Field Survey 2020

Research Question 3:

Table 3: showed the mean responses to questionnaire items on suggested instructional materials to be used by teachers to improve teaching of practical agriculture. All the ten items

suggested were accepted by the respondents as instructional materials that can be used for improvement of teaching practical agricultural science in senior secondary schools in Ekiti State. Item one has the highest rating of 4.07 while item three has lowest rating 3.30.

Table 3: Mean responses of Teachers on Instructional Materials to be used in Improving Teaching of Practical Agriculture

S/No	Items	Mean	SD	Remark
1.	Use of simple farm tools to teach practical Agriculture	4.07	0.71	Agree
2.	Use of specimens in teaching practical agriculture	4.00	0.68	Agree
3.	Use of crop protection equipment	3.30	0.98	Agree
4.	Use of resource person	3.35	0.95	Agree
5.	Use of models to teach	3.78	0.76	Agree
6.	Use of farm machinery	3.90	0.64	Agree
7.	Use of farm animals	3.93	0.21	Agree
8.	Use of charts and posters	3.63	0.81	Agree
9.	Use of educational media	3.74	0.89	Agree
10.	Use of chalk board and illustrations	3.31	1.03	Agree

Research Question Four:

Table 4 showed the mean responses to questionnaire items on suggested types of continuous assessment techniques that are suitable

for improving teaching of practical agriculture. All the Seven items were accepted by the respondents as the types of continuous assessment suitable for improving teaching of practical agriculture.

Table 4: Mean responses of Teachers on the type of Continuous Assessment Technique suitable for Improving Teaching of Practical Agriculture

S/No	Items	Mean	SD	Remark
1.	The end of course system of continuous assessment	4.07	0.71	Agree
2.	The continuous assessment has to be systematic involving operational plan	4.00	0.68	Agree
3.	The continuous assessment should be based on psychomotor domain rather than cognitive and affective domains	3.30	0.95	Agree
4.	The continuous assessment should involve the use of variety of tools in both the class and the school farm	3.35	0.95	Agree
5.	Regular class assessment, field work at each practical class	3.78	0.76	Agree
6.	Cumulative assessment is suitable for evaluating learning in practical agriculture	3.90	0.64	Agree
7.	Project and term paper assessment encourages students performance in agriculture	3.93	4.21	Agree

Hypotheses

Table 5 below gives a summary of t- test results at 0.05 level of significance

Ho1. There is no significant difference between the mean responses of male and female teachers on the strategies to be adopted to foster student's participation in practical agriculture in Senior Secondary Schools in Ekiti state.

Gender	N	Mean	SD	Df	t _(cal)	t _(tab)	Decision
Male	60	22.04	10.52	118	0.227	1.96	NS
Female	60	20.89	9.44				

$P < 0.05$ level of significance NS = Not Significant

Ho2. There is no significant difference between the mean responses of male and female teachers on the continuous assessment techniques that could be used to improve the teaching of practical agriculture in Senior Secondary Schools in Ekiti State.

Gender	N	Mean	SD	Df	t _(cal)	t _(tab)	Decision
Male	60	32.04	9.52	118	1.041	1.98	NS
Female	60	23.89	10.44				

$P < 0.05$ level of significance

NS = Significant

Discussion

The findings of this study were discussed based on the research questions and hypothesis. The responses of male and female teachers on strategies that would enhance students' participation in practical agriculture indicated that 10 items were all rated above the cutoff point of mean 2.50. This is an indication that individual plot allocation, use of concrete objects, effective training, practical's during morning lessons, grouping of students,

use of laboratories and community resources to teach enhances students' participation in practical agriculture in senior secondary schools. The findings agreed with the view of Ogunjobi, Famiwole, Oyewole, & Attah, (2020) who reported that the entire practical oriented methods of teaching motivate students more. This is supported by the views of individual in the society that a learner cannot forget what he learnt from his teacher if practical aspect of the training is given to him. Okorie (2017)

found out that practical teaching is important in any organization because it improves the competencies of learners.

The responses of teachers on the needs for improving teaching of practical agriculture revealed that all the nine items were above the cutoff point. 2.50. This indicated that practicals enable students acquire basic knowledge and skills; it makes students become self-reliant it enhances students' performance in the world of work. It also makes students acquire vocational career, it also complement theoretical knowledge, increase yield and encourage students to farming activities. The findings are in line with Adeoluwa & Sikeade, (2018) who emphasized that students need practical skills and knowledge so as to enable them create an impact in the society and the world of work thus practical's should be given more attention in school curriculum.

The responses of teachers on instructional methods that would be used to improve skill acquisition in practical agriculture revealed that 10 items suggested, such as demonstration method, project method, discussion method, field trip method, were rated above the cutoff point of 2.50. The findings were in line with Darko, Yuan & Liu (2015) and Samuel, Eyinla, Oluwaseun, Braic & Afolabi, (2020) who stated that both formal and informal methods of teaching can be adopted in schools where instruction and exercise, reward and punishment have control over learners to improve their skills. National Commission for Colleges of Education guide line (NCCE, 2015) stipulated that the mode of teaching agricultural courses should be lectures, tutorials, field trips, excursion, practical's, laboratory work are appropriate for each course which include agriculture. This is an indication that all instructional

methods of teaching are effective for improving skill acquisition of students in practical agriculture.

With respect to the responses of teachers on instructional materials to be used in improving teaching of practical agriculture, 10 items such as use of simple farm tools, specimens, protective equipment, resource persons, models, farm machinery, farm animals, charts and posters, chalk board for illustration, educational media like cassette, disks, videos and DVDs, textbooks and laboratory manuals, were all rated above the cut-off point of 2.50. The findings were in line with Nsa, Ikot and Udo (2013) and Adeoluwa & Sikeade, (2018) who reported that when instructional charts, pictures, posters, farm tools are used effectively to teach students they can perform better than those taught without instructional materials. Instructional materials offered closed representations of ideas and concepts. It makes students not to forget the facts. As reported by Chinwe (2018) instructional materials help students have longer retention in memory.

The mean ratings of teachers with respect to the type of continuous assessment (CA) suitable for improving teaching of practical agriculture. All items were rated above 2.50 cut off point by the teachers. This indicates that all the suggested items were accepted as suitable C.A for teachers to use them to improve their teaching. The findings corroborate with Usman, Abdulkareem & Yunus (2019) and Fasuyi, (2020) that continuous assessment should be used periodically or daily like giving students quizzes, essays, assignments, presentation in the class, project/term paper, use of laboratory work, field work. This showed that all methods of continuous assessment (CA) are ideal for assessment

of the progress of students in practical agriculture.

Based on the hypothesis, the study revealed that there was no significant difference in the responses of teachers on hypotheses one and two because their t-calculated values were less than t-critical values. Therefore, the responses of teachers were accepted on the suggested strategies such as individual plot allocation and use of concrete objects. However, there is need for teachers to improve the teaching of practical agriculture because it enables students to acquire knowledge and skills so as to become self-reliant. While in hypotheses three, four and five, the study revealed that there were significant difference because their t-calculated values were greater than t-critical value of 1.980, therefore, the hypotheses were rejected on suggested items such as demonstration method, field trip method, use of farm tools, models, resource persons and all forms of continuous assessment can improve the teaching of practical agriculture in senior secondary schools, as opined by Shimave, Kesiki & Yani (2018) that a school can adopt formal and informal teaching method where teachers use instructions and exercise that have specific control over learners.

Conclusion

The study determined the strategy to be adopted by teachers in teaching practical agriculture. Based on the results of the study, it is clear that students' effective participation in practical agriculture largely depends on the strategies employed by the teachers; this enhances skills acquisition which can be transfer into real jobs in the world of work. Based on the result of this study, the need for agricultural Science teachers at the secondary school level to vary their

teaching methodologies cannot be overemphasized. This would go a long way in creating positive disposition of students to agricultural Science as entrepreneurship education rather than been seen as academic education. Furthermore, it is evident in this study that instructional materials and methods have positive impact towards teaching of practical agriculture. This enhances memory retention and the ability to apply theoretical knowledge to practical situations. The last aspect highlights on all the types of continuous assessment technique suitable to improve teaching of practical agriculture to students, this also has positive impact in the cognitive and psychomotor abilities of the students particularly at the senior secondary schools in Ekiti state of Nigeria.

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SERVICE QUALITY INDICATORS AND STUDENTS' SATISFACTION AMONG VOCATIONAL AND TECHNICAL EDUCATION (VTE) STUDENTS IN HIGHER INSTITUTIONS IN EKITI STATE, NIGERIA

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Abstract

This study investigated service quality indicators and students' satisfaction among VTE students in higher educational institutions in Ekiti State, Nigeria. Specifically, the study examined the service quality indicators, level of students' satisfaction, and influence of service quality indicators and students' satisfaction. The study was a descriptive research of survey type. Population of the study consisted of VTE students of higher institutions in Ekiti State which were 585 students as at 2021/2022 academic session. A total of 400 sample were obtained using proportionate sampling technique. A well-structured questionnaire titled: Service Quality Indicators and Students Satisfaction Questionnaire was used to collect data used for the study. Face and content validity was used to ascertain the instrument's validity which was ascertained by experts in Business Education and Test and Measurement in the Faculty of Education, Ekiti State University, Ado-Ekiti. The reliability of the instrument was done using test-retest method and a reliability co-efficient of 0.73 was obtained. The findings of the study revealed that the top three service quality indicators in higher educational institutions in Ekiti are academic performance, management trust and personnel quality while the level of students' satisfaction of higher educational institutions in Ekiti is moderate. It was also revealed that academic performance ($t=2.654$, $p<.05$), personnel quality ($t=6.204$, $p<.05$), support services ($t=3.815$, $p<.05$), and management trust ($t=2.410$, $p<.05$) significantly influence students' satisfaction of higher educational institutions in Ekiti State while physical environment of institutions does not ($t=1.346$, $p>.05$). Hence, the need for higher institutions to improve on quality of personnel, support service provided to students and effective communication of policy and procedures with students.

Keywords: Students' satisfaction, service quality indicators, higher institution, VTE students.

Introduction

The pursuit of excellence in vocational and technical education (VTE) within higher institutions stands as a cornerstone in nurturing skilled and empowered professionals. Higher educational institutions can be considered as a part of service industry whose primary objective is to provide desired learning experience to its

customers who are mostly students (Mohammad, 2019). Higher education institutions also offer students the chance to improve their academic pursuits and attain their desired professional development objectives. For these objectives to be achieved there are important stakeholders who play different vital roles. These stakeholders include the workers (academic and non-academic)

and students. The students actively participate in learning process and provide valuable feedback while workers contribute their expertise, knowledge and support services (Chapleo & Sims, 2010).

To ensure the effective and efficient performance of these activities in this technology era, the use of ICT facilities is employed. This enables students to access the university portal and make payments, while both academic and non-academic staff members have services to render. These services are expected to meet the standards that will enable students to enjoy the services they have already paid for. In a bid to ensure good service quality, the employees, who are the staff must understand the need of the students, treat them with utmost respect and be empathetic of their issues, quickly and correctly respond to their requests, and have a means of getting feedback among others.

The concept of service quality, and the importance of high service quality in higher institutions cannot be underestimated because it helps to create institutional goodwill while maintaining a positive reputation, attracts quality employees, boost the students' choice of institutions through their overall experience. It can also be perceived as the overall students' impression of the relative inferiority/superiority of the institution and its services (Mohammed, 2019). In higher educational institutions, the components or dimensions through which service quality can be measured include academic performances, quality of personnel, physical facilities and environment; supporting services; safety, security and trust.

Student satisfaction refers to the level of contentment and fulfillment experienced by students in their educational journey. It encompasses a

wide range of factors, including the quality of teaching, learning resources, campus facilities, administrative services, social experiences, and overall support provided by the educational institution (Weerasinghe & Fernando, 2017). Eliot and Shin also defined students' satisfaction as students' disposition by subjective evaluation of educational outcomes and experience.

Academic performance is the result of evaluating students' attainment of specific objectives. Most students attend higher educational institutions with the objective of gaining expertise in their chosen courses or disciplines. The extent to which they achieve these objectives helps to reflect their performance. Narad and Abdullah (2016) stated that academic performance is determined by the knowledge acquired and assessed through grading by teachers or the achievement of educational goals set by students within a specific timeframe. Students' academic performance reflects the effectiveness of teaching methods, curriculum design, and overall institutional support provided to students (Sibanda, Iwu & Olumide, 2015). The quality of personnel also remains crucial to reflecting service quality of higher educational institutions. The services provided by the personnel determine the quality of what the students receive (Rouf et al., 2016). Therefore, highly qualified and competent faculty and staff members are essential for delivering an exceptional educational experience. Their expertise, teaching methodologies, and ability to engage and inspire students directly impact the quality of education provided.

In addition, the availability of dedicated and knowledgeable support staff ensures smooth administrative processes and effective student support services (Kevin, Keerati, & Ashleigh,

2022). The qualifications, experience, and commitment of the personnel reflect the institution's investment in hiring and retaining skilled professionals who can meet the diverse needs of students. A strong and capable personnel team is indicative of the institution's commitment to delivering high-quality services and fostering a positive learning environment. Engaging quality staff or personnel for higher institutions in Ekiti State has been grossly compromised as many incompetent staff has been employed based on nepotism without prioritizing the interest and competency of such personnel to positions thereby affecting the quality of services delivered. This will therefore affect satisfaction of students in a negative way.

Positive learning environment in educational institutions also requires adequate physical facilities. These include classrooms, libraries, laboratories, and other infrastructure support student engagement, research, and practical learning. The quality of these facilities and their maintenance also influence students' judgment and satisfaction of institutions. Service quality is influenced by the availability and accessibility of these facilities, as they enhance their learning experience, comfort, and convenience on campus (Weerasinghe & Fernando, 2021). These services include academic advice, counseling, career services, financial aid, library services, IT support, and student affairs. They play a crucial role in supporting students' academic and personal needs, fostering a positive campus experience, and facilitating their overall success. Johnson et al., (2022) noted that effective support services demonstrate the institution's commitment to student well-being, success, and holistic development.

Management trust in higher institutions is also another vital dimension of service quality that is a product of effective leadership and organizational success. When leaders demonstrate trust in their faculty, staff, and students, it fosters a positive work culture, encourages collaboration, and promotes innovation. Trust empowers individuals, strengthens relationships, and contributes to the overall growth and reputation of the institution. For instance, Eisingerich (2008) posited that higher level of trust fosters a sense of empowerment, accountability, and ownership, which translates into a higher level of commitment and dedication to providing quality services.

The issue of students' satisfaction has been a major concern in higher educational institutions in Nigeria and among students in Ekiti state. There have been verbal complaints among students of most higher institutions in Ekiti State on the level of satisfaction being received in the course of their studentship that is below expectations. Also, parents of students in these institutions are found of complaining about the manner and relationship of operations of members of staff as affecting the students' performance and morale. For instance, during registration, students seem not to be well addressed. They express frustration with the treatment received, highlighting instances where their needs are not adequately addressed or their issues remain unresolved. Additionally, errors in documentation have been observed, adding to the students' frustration and signaling inefficiency within the administrative procedures. This seems to have impact on satisfaction of these students as some of the services that should be provided seem not to be readily made available.

A lot of studies had been conducted by different scholars on service quality indicators. For instance, on academic performance Mahad and Nor (2016) conducted a correlational study investigating the impact of student satisfaction on academic performance. The study revealed a robust link between student satisfaction and academic success. Additionally, it highlighted the role of satisfaction in promoting both academic achievement and student retention. Similarly, Ridzuan et al., (2018) examined the role of students' satisfaction on academic performance of public relation students utilizing a survey distributed to all Public Relations students (n=94) at UiTM Melaka, the findings revealed significant factors influencing students' academic performance, including the relationship among UiTM staff, the university's surroundings, and facilities. In contrast, Jamshed and Mahammad (2016) study indicated that students were generally satisfied with learner-learner interaction, learner content interaction, learner technology interaction, and learner instructor interaction. On personnel quality Ali, Javed, and Khan (2020) studied personnel quality and students' satisfaction from higher education institutions in Pakistan. The findings indicated that these personnel qualities had a significant impact on students' satisfaction levels. The study shows a link by considering an aspect of service quality in higher institutions. Similarly, Chen, Zhang, and Liu (2019) studied personnel quality and students' satisfaction in Chinese higher institutions. This research focused on Chinese higher education and aimed to investigate the relationship between personnel quality and students' satisfaction. The study found that there is a positive link between students' satisfaction and quality of

personnel in the higher institutions Nsobiari et al., (2022) on service quality delivery and students' satisfaction in the University of Calabar, Nigeria considered reliability responsiveness, empathy and tangibles on students' satisfaction. The findings of the study revealed that all the service quality variables have significant effect on customers' (students) satisfaction. Studies also showed a positive relationship between students' satisfaction and physical environment (Mary & Kathryn, 2010; Hamid, & Somayeh, 2018). Support services in higher institutions has also be discovered to influence students' overall satisfaction (Kim, Park and Choi, 2020). Johnson, Smith, and Lee (2020) emphasized the importance of management or leadership trust and satisfaction in learning environment. In similar study Kim et al., (2020) established a strong positive association between management trust and student satisfaction at private colleges. Students who perceived higher levels of trust in the college's management also reported higher levels of satisfaction with the institution's overall support services and academic experience. In view of the foregoing, it has been observed that a study of this nature had not been carried out in Ekiti State, despite the observed inadequacies in the quality of services provided by the management of these institutions. It is on this note that the researcher delved into the intricate impact of services quality indicators on satisfaction of VTE students in Ekiti State, Nigeria.

Statement of the Problem

There have been complaints among students of higher institutions in Ekiti State on the level of satisfaction being received in the course of their studentship that it is below expectations. Also, parents of students in these

institutions usually complain about the ways and mode of operations of members of staff as affecting the students' performance and morale. For instance, during registration exercise of new students seem not to be well addressed. They express frustration with the treatment received, highlighting instances where their needs are not adequately addressed or their issues remain unresolved. Also, errors in documentation have been observed, adding to the students' frustration and contributing to a sense of inefficiency within the administrative procedures. All these seem to have negative impact on satisfaction of these students.

Purpose of the Study

The purpose of this study was to examine the service quality indicators and students' satisfaction among VTE students in higher educational institutions in Ekiti State. Specifically, the study:

- i. highlighted the predominant service quality indicators in higher institutions in Ekiti State;
- ii. investigated the level of students' satisfaction in higher institutions in Ekiti State;
- iii. determined the service quality indicator that will best contribute to students' satisfaction in Higher Institutions in Ekiti State.

Research Questions

1. What are the service predominant quality indicators in higher institutions in Ekiti State?
2. What is the level of students' satisfaction in tertiary institutions in Ekiti State?

Methodology

The research design used for this study is the descriptive survey type of research. The population of the study

consists of all Vocational and Technical Education (VTE) students of higher institutions in Ekiti State. In Ekiti State University, Ado-Ekiti, the total number of VTE students were 447 while in Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, the total number of Business Education students including those in the affiliated UNN programme were 138, hence, a total population of 585 students as at 2021/2022 academic session. The sample for the study was 400 students. The sample was selected using proportionate sampling technique. The proportionate sampling technique was employed to select 300 students from Ekiti State University students and 100 students from Bamidele Olumilua University of Education. This was done because of difference in the number of students in both universities. In each university stratified random sampling technique was used to select students in order to cater for male and female in the sample. A well-structured questionnaire was designed for the purpose of this study. The research instrument was designed to collect data from students and is titled: Service Quality Indicators and Students Satisfaction Questionnaire (SQISSQ). The instrument contains three sections, A, B and C. Section A contains items on demographic characteristics of the respondents: gender, age and religion. Section B contains items on service quality indicators and academic performance while section C contains items on students' satisfaction. Face and Content validity were used to ascertain the validity of the instrument for the study. This was ascertained by experts in Business Education and Test and Measurement in the Faculty of Education, Ekiti State University, Ado-Ekiti. The instrument was modified based on the comments of the experts to meet

the face validity requirements. To ensure the content validity of the instrument, the content of the items was reviewed in terms of clarity to ensure that all the ambiguity capable of creating confusion for the respondents is removed. Also, the experts ensured that the remaining items in the instrument adequately represented the contents specified by the concepts of the study. The reliability of the instrument was carried out using the test-retest method. To this end, a total of 25 copies of instrument were administered on students of Adekunle Ajasin University, Akungba Akoko that has similar characteristics with the study area twice within the interval of two weeks. The two responses were correlated and analyzed using Pearson's Product Moment

Correlation (PPMC). The reliability coefficient of 0.73 was obtained which was considered enough for the study. The data collected were analyzed using both descriptive and inferential statistics with the aid of Statistical Packages for Social Sciences (SPSS). For the descriptive analysis, percentage, mean and standard deviation were used and regression analysis tool was used for the hypotheses which was tested at 0.05 level of significance.

Results

Research Question 1: What are the predominant service quality indicators in higher institutions in Ekiti State?

Table 1: Service Quality Indicators in Higher Institutions in Ekiti State

Service Quality Indicator	Mean	Standard Deviation
Academic Performance	3.51	0.17
Personnel Quality	3.18	0.27
Physical Environment	3.12	0.28
Support Service	2.81	0.69
Management Trust	3.33	0.20

Cut-off mean = 2.50

Results obtained on the service quality indicators in higher institutions in Ekiti State revealed that academic performance is identified as the major indicator (Mean=3.51, SD=0.17), followed by management trust (Mean=3.33, SD=0.20), personnel quality (Mean=3.18, SD=0.27), physical environment (Mean=3.12, SD=0.28), and support service (Mean=2.81,

SD=0.69). From the result provided, it is evident that the top service quality indicators in higher institutions were academic performance and management trusts.

Research Question 2: What is the level of students' satisfaction in tertiary institutions in Ekiti State?

Table 3: Students' Level of Satisfaction on Higher Tertiary Institutions in Ekiti State

Level of Satisfaction	Frequency	Percentage	Mean	S.D
High (Score = 27.99 – 40.0)	129	33.	25.72	2.263
Moderate (Score = 23.47 – 27.98)	163	42.3		
Low (Score = 10 – 23.46)	93	24.2		
Total	385	100.0		

Results presented in Table 2 students' level of satisfaction in tertiary institutions in Ekiti State revealed that 33.5% of the respondents agreed that their level of satisfaction is high with mean score ranging between 27.99 – 40.0. It was also showed that 42.3% of the respondents showed that their level of satisfaction is moderate with score between 23.47 – 27.98. Lastly, it was revealed that 24.2% of the respondents

experience a low level of satisfaction with score ranging between 10 – 23.46. Furthermore, it was revealed in the table that the overall mean score is 25.72 and a standard deviation of 2.263 which all falls in the moderate category. Hence, the level of satisfaction of students in tertiary institutions in Ekiti State is moderate while there is also a significant percentage of those in the high and low categories.

Table 3: Relationship between Service Quality Indicators and Students' Satisfaction

Indicator	Student Satisfaction	
	r	p.
Academic Performance	.519	.000
Personnel Quality	.609	.000
Physical Environment	.383	.002
Support Services	.555	.000
Management Trust	.445	.000

In Table 3 on the relationship between service quality indicators and students' satisfaction in higher institutions in Ekiti State revealed that all the service quality indicators academic performance ($r=0.519$, $p<0.05$), personnel quality

($r=0.609$, $p<0.05$), physical environment ($r=0.383$, $p<0.05$), support services ($r=0.555$, $p<0.05$) and management trust ($r=0.445$, $p<0.05$) have positive and significant relationship with students' satisfaction.

Table 4: Multiple Regression summary table showing the influence of variables of service quality on students' satisfaction in higher institutions in Ekiti State

Variable	Beta	t	p	R	R ²	F	Sig.
Academic Performance	.143	2.654	.008	.681	.464	65.62	.000
Personnel Quality	.328	6.204	.000				
Physical Environment	.070	1.600	.110				
Support Services	.205	3.815	.000				
Management Trust	.112	2.410	.016				

The regression summary result presented in Table 4 to establish the contribution of service quality variables on students' satisfaction in higher institutions in Ekiti State. The result revealed that academic performance ($t(385)=2.654$, $p<.05$), personnel quality ($t(385)=6.204$, $p<.05$), support services ($t(385)=2.410$, $p<.05$), and management trust ($t(385)=2.41$, $p<.05$).

However, physical environment ($t(385)=1.60$, $p<.05$) does not significant influence quality of higher institutions in the institution. The personnel quality has the most significant impact on service quality on students' satisfaction in higher institutions in Ekiti State. In addition, it was revealed that the variables interactively contribute to students' satisfaction ($F=65.62$, $p<.05$).

Discussion and Findings

Findings on the predominant service quality indicators in higher educational institutions in Ekiti State revealed that academic performance and management trust were the used as key indicators by students on the quality of service in the higher institution of learning. This is followed by personnel quality, physical environment, and support services. These indicators shed light on the critical aspects influencing students' perceptions of the quality of their educational experience. This finding aligns with that of Olawunmi et al., (2017) that the key indicators of students' satisfaction for most institutions of higher learning in Nigeria majorly focuses on the academic performance and management trust. The focus of the students is usually attracted towards their academic performance and how the management decisions and trust could influence this. This is also true similar finding by Onditi and Wechuli (2017) that holds that many of the institutions do not see their relationship with students as a customer and service provider relation and should ensure that all aspects are of good quality as they can be major service quality indicators.

The finding on students' satisfaction level indicated that a substantial portion of respondents reported moderate satisfaction level, with a smaller percentage reporting high and low levels of satisfaction. The overall mean score fell within the moderate satisfaction category suggesting that the level of satisfaction of the students on the higher educational institutions in Ekiti state is moderate. In other words, they were moderately satisfied with quality of service offered in these institutions. This finding is in tandem with that of Asiyai (2015) who expressed in a study that a

positive service quality rating is dependent on lots of factors particularly those that are directly accessed by the students. In addition, it was revealed that many of the higher educational institutions hardly invest in other factors that could influence the level of satisfaction of students. In support of this findings Rozsa (2013) also found that many institutions have been lagging behind in providing a supporting learning environment for the students which has contributed significantly to students' satisfaction rating.

The study also showed that there is a significant positive relationship between academic performance and students' satisfaction while corroborates with that Mahad and Nor (2016), between quality of personnel and students' satisfaction as also discovered by Chen, Zhang and Liu (2019). It was also revealed that a positive link exists between physical environment students' satisfaction in higher institutions in Ekiti State. Supporting services also has a significant relationship with students' satisfaction in higher institutions. On the relationship between management trust and students' satisfaction, it was shown that there is a significant and positive relationship between management trust and students' satisfaction in higher institutions in Ekiti State. This implies that better management trust could influence students' satisfaction. This finding provide support for that of Kim et al., (2020) that showed the role of leadership trust on students' satisfaction. The study emphasized importance of transparent communication and responsive decision-making in building management trust and enhancing student satisfaction.

The regression result revealed that academic performance, personnel quality, support services, and management trust have significant

influence on students' performance while physical environment does not significantly influence students' satisfaction. Additionally, the interaction of these variables interactively impacted students' satisfaction levels, indicating a combined effect on overall satisfaction. This finding of this study aligns with the study of Nsobari et al., (2022) who also discovered in their study that all service quality variables have a significant effect on students' satisfaction. However, the findings of this study are in contrast with that of Mary and Kathryn (2010) whose study discovered that institutions' physical environment enhances students' satisfaction. Similarly, Hamid and Somayeh (2018) also discovered that school architecture has a significant influence on the satisfaction of students. Some of the factors that aid this satisfaction include; flexibility, spatial dimensions, readability, accessibility, beauty of space and environmental comfort. These factors, although quite relevant, do not play a significant impact on students' satisfaction ratings in higher educational institutions in Ekiti State.

Conclusion

Students are key actors in higher educational institutions because they serve as the customers. Therefore, the issue of customer satisfaction relates to how well they are served and the extent to which their educational goals are achieved. This study explored service quality indicators and students' satisfaction among VTE students in higher institutions in Ekiti State. The study found that academic performance and management trust were the two major service quality indicators in higher educational institutions in Ekiti State and the level of students' satisfaction is satisfactory. The study also revealed

that all service quality variables (academic performance, personnel quality, management trust, support services) except physical environment relate to influence students' level of satisfaction in Ekiti State higher education institutions. It can be concluded that an increase in service quality will bring about an increase in students' satisfaction.

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IMPLEMENTATION OF COMPUTER-BASED INSTRUCTIONAL STRATEGIES ON ACADEMIC PERFORMANCE IN FINANCIAL ACCOUNTING AMONG SECONDARY SCHOOL STUDENTS IN EKITI STATE

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Abstract

This study investigates the implementation of computer-based instructional strategies on the academic performance of secondary school students in Financial Accounting in Ekiti State, Nigeria. Specifically, the study examined the knowledge of students on computer-based instructional strategies, evaluate the difference between the academic performance of students, using computer-based and traditional learning strategy and examined the influence of gender and location on students' academic performance in Financial accounting when taught with computer-based strategy. The research employed a descriptive survey design, utilizing two structured instruments: The Computer-Based Instruction Learning Strategies Questionnaire (CILSQ) and the Financial Accounting Performance Test (FAPT). A total of 300 Senior Secondary School Two (SSSII) students were sampled from nine local government areas across three senatorial districts using a multistage sampling technique. Statistical analyses were conducted using SPSS, with both descriptive and inferential statistics employed to address the research objectives. Findings reveal that students possessed moderate knowledge of computer-based instructional strategies while those taught via these methods significantly outperform their peers taught through traditional strategies ($t = 11.475, p < .05$). Furthermore, gender does not significantly affect academic performance, location does play a significant role, indicating urban students tend to have better access to these instructional strategies than their rural counterparts ($F(1, 296) = 5.622, p < 0.001$). The study concludes that computer-based learning enhances students' performance in financial accounting and calls for urgent need for equitable access to technological resources and bridging existing gaps in knowledge and utilization of these instructional strategies. Based on the results obtained it was recommended that the schools should implement targeted training programs for both teachers and students to improve familiarity and proficiency while also investing in providing adequate technological resources, especially in rural areas, to ensure that all students have equal opportunities to engage with computer-based instructional strategies.

Keywords: Computer-Based Instructions, Financial Accounting, Academic Performance, Strategies

Introduction

The integration of Information and Communication Technology (ICT) into education has led to significant changes in the mode of delivery and access to learning over time. Specifically,

computer-based instruction (CBI) is proving to be an effective tool in enhancing the teaching-learning process across various subjects (Yusuf & Alabi, 2020). ICT tools facilitate immediate feedback through interactive and

engaging learning environments, allowing students to learn beyond the traditional classroom walls. This fosters self-paced learning and improves retention (Oluwatayo&Ojo, 2023). In financial accounting, where cumbersome calculations and a combination of theoretical and practical applications are required, CBI has enhanced conceptual learning and improved student performance. Literature suggests that ICT helps present abstract ideas in simple terms and enables learners to acquire analytical competencies through hands-on training with accounting software (Raja & Nagasubramani, 2018). Financial accounting, as part of the commerce curriculum at the secondary school, graduate, and postgraduate levels, focuses on procedural aspects to comply with laws such as the Income Tax Act and the Companies Act (Seema, 2021). However, over time, the role of accountants has shifted from a purely technical focus to one that requires analytical skills, specialized knowledge, and oral communication abilities, alongside technical competencies (Sangster, 2022). Accountants today must relate concepts learned to real-life situations, as one of the primary objectives of accounting education is to prepare students for the corporate world.

Despite efforts to restructure accounting education to meet industry needs (Akamigbo&Eneja, 2020), current accounting education still appears inadequate in preparing graduates for successful careers. Beyond technical accounting knowledge, industries expect graduates to possess intellectual skills like problem-solving, communication, and interpersonal skills to thrive in an ever-changing corporate environment. However, accounting research continues to debate which specific skills accounting graduates need and how best to deliver

these skills. A significant concern remains among educators on how to effectively teach financial accounting, as students have consistently shown average performance in senior secondary school exams (Oladapo, 2019). Yusuf (2020) highlighted that the conventional “chalk and talk” method has been predominantly used, resulting in students offering financial accounting as a subject to have only average academic performance. However, there is a need to improve student performance, especially in a nation facing financial challenges due to improper accounting practices, such as fraud and misappropriation of resources. A strong foundation in financial accounting at the secondary school level could help address these issues (Wanyama, 2018). Computer-based teaching strategies hold the potential to motivate students by turning them into active participants, especially in financial accounting tasks like using Microsoft Excel and spreadsheets to solve mathematical problems and create accounting tables.

This approach would foster creativity, enhance understanding, and promote critical thinking in financial accounting. The continued reliance on traditional methods by teachers could be due to a lack of awareness of new teaching strategies, which improve both the quality and standard of education. Many teachers do not attend workshops, seminars, or conferences, where they could learn about such innovations. By contrast, awareness and adoption of new pedagogical methods, facilitated by technology, would enhance student knowledge and improve learning environments. Information technology (IT), as a core part of this transition, is revolutionizing how people live, work, and learn, positioning computers as

essential tools for information management.

It has been observed that in many developed countries that great emphasis is placed on computer-based technology laboratories in educational curricula. ICT has been recognized for making students more responsible by organizing their work through digital portfolios or projects (Raja & Nagasubramani, 2018). However, this is not the case for most developed nations of the world (Davis, 2019). When students participate in such activities, they often find the experience intrinsically rewarding and are self-motivated to engage (Carenys, 2017). Additionally, incorporating ICT in classrooms creates virtual learning environments that foster instantaneous communication between teachers, thereby increasing collaboration (Laban, 2017). Cloete (2017) also highlighted that ICT has opened countless opportunities and challenges, providing epistemological access to education while requiring both students and teachers to become electronically literate. This capability must align with their field of study to promote cognitive development. However, access to technology may be ineffective at certain educational stages due to a lack of motivation to incorporate computer technology into the learning process (Francis, 2017). Quite a number of studies have been carried out in exploring the prospects of computer-based instruction on academic performance of students using different approaches and strategies. For instance, Olusola-Fadumiye and Jamalludin (2021) examined the effects of computer-based teaching strategies on Financial Accounting students' academic performance in Nigeria, adopting a quasi-experimental design. Their study revealed that computer-based instruction significantly enhances students'

performance compared to traditional methods. While they focused on broadening the scope to include factors such as gender, school location, and school type, Esitikot and Nwaukwa (2022) investigated the impact of ICT-based methodologies, specifically video-taped instructions and PowerPoint presentations, in Akwa Ibom State. Their findings indicated that video-taped instructions improved academic performance and retention more effectively than PowerPoint presentations, highlighting the benefits of blended ICT-based teaching methods.

Ethel-Echedo (2021) focused on computer-assisted instruction in Anambra State, showing that it has significantly improved student achievement in Financial Accounting, while gender also plays significant role in learning outcomes. Adeola (2021) extended the analysis by examining individualized computer-based instruction's effects on Business Studies, emphasizing its positive impact on junior secondary students. Agboh (2015) assessed the effects of computer-assisted instruction in Colleges of Education in Southeast Nigeria, confirming its effectiveness in enhancing students' academic achievement. Each study reinforces the value of integrating technology into education, with varying focuses on instructional methods, student levels, and subject areas. Despite these related studies, many of these studies did not specifically mention the type of computer-instruction strategies used in these schools. In addition, there is largely a dearth of information on how gender and location (urban and rural) could affect the adoption of computer-based strategies for use in teaching financial accounting. Thus, the need for this study to examine the computer-based instructional strategies and academic

performance of financial accounting students in Ekiti State.

Statement of the Problem

Despite the critical role of education in equipping individuals with essential skills and knowledge, the persistent poor performance of secondary school students in financial accounting in Ekiti State underscores systemic challenges in teaching methods and resources. Reports from the West African Examinations Council (WAEC, 2021) reveal a decline in credit passes, highlighting the inadequacy of conventional instructional approaches like lectures and rote memorization, which fail to foster practical and critical thinking skills. Furthermore, the limited availability of trained financial accounting teachers and students' negative perceptions of the subject contribute to these outcomes. This study, therefore, seeks to explore the implementation of computer-based instruction strategies on academic performance of secondary schools in Financial Accounting in Ekiti State secondary schools.

Purpose of the Study

The purpose of this study is to examine the implementation of computer-based instructional strategies on academic performance of secondary school students in Financial Accounting in Ekiti State. The specific objectives are to:

- (i) examine the academic performance of financial accounting students using computer-based instructional strategies in Ekiti State;
- (ii) examine the academic performance on financial accounting students using traditional learning strategy in Ekiti State.

- (iii) evaluate the difference between the academic performance of students taught, using computer-based and traditional learning strategy;
- (iv) examine the influence of gender and location on students' academic performance in Financial accounting taught with computer-based strategy.

Hypotheses

To achieve the aim and objectives of the study, the following hypotheses were postulated for the study:

1. There is no significant gender difference in the academic performance of students.
2. There is no significant difference between academic performance of students taught in using computer-based and traditional learning.
3. Gender and location do not significantly influence the academic performance of students in financial accounting when taught with computer-based strategy.

Methodology

Research Design

Descriptive research design of the survey type was used for the study to examine the implementation of computer-based instructional strategies on the academic performance of secondary school students in Financial Accounting in Ekiti State.

Population and Sampling Procedure

The study population consisted of 9,374 Senior Secondary School Two (SSSII) students offering Financial Accounting in Ado-Ekiti, Ekiti State, as of May 2024. A representative sample of 300 students was drawn using a multistage sampling procedure across the three senatorial districts of Ekiti State. In the first stage, two Local Government Areas (LGAs) were selected from each of

the three senatorial districts using simple random sampling. In the second stage, stratified sampling was employed to select two schools from each of the chosen LGAs, ensuring representation based on location (rural and urban). Finally, in the third stage, 25 students were randomly selected from each of the identified schools, culminating in a total sample size of 300 students for the study.

Instruments

Data needed for this study will be collected using two well-structured research instruments, and are titled “Computer-based Instruction Learning Strategies Questionnaire”, “CILSQ”, and Financial Accounting Performance Test, “FAPT”. The CILSQ comprised of three sections. Section A was designed to collect personal data of the respondents (name of School, gender and age), while section B contained 10 items on students’ knowledge of computer base

strategies. The second instrument (FAPT) consists of 20 multiple choice items on Financial Accounting that reflects their academic performance in the subject. The CILSQ would be marked (√) on the appropriate point of the scale on a 4-point continuum: Strongly Agree, Agree, Disagree, and Strongly Disagree while each of the multiple-choice items has specific correct option and 1 mark is allotted to each item.

Validity and Reliability of Research Instrument

The instrument validity is carried out using face and content validity. This is ascertained by researcher’s supervisor, two (2) experts in Vocational and

Results

Objective 1: Academic Performance of Financial Accounting Students using Computer-Based Instructional Strategies in Ekiti State

Table 1: Academic Performance of Financial Accounting Students using Computer-Based Instructional Strategies

<i>Frequency</i>	<i>Percentage</i>	<i>Overall Mean</i>	<i>SD</i>	<i>Performance</i>
82	27.3	24.51	2.211	Good ($\bar{x} = 31 - 40$),
175	58.3			Average ($\bar{x} = 20 - 30$)
43	14.3			Poor ($\bar{x} = 0 - 19$)
300	100.0			Total

The data presented in Table 1 summarizes the academic performance of Financial Accounting students when taught using computer-based instructional strategies. Among the 300 students assessed, 27.3% (82 students) demonstrated good performance, with an overall mean score of 24.51 and a standard deviation of 2.211, falling within the performance range of 31–40. A majority of the students, 58.3% (175 students), achieved an average performance, with scores ranging between 20–30. Conversely, 14.3% (43

students) exhibited poor performance, scoring between 0–19. These results indicate that while a significant proportion of students displayed average performance, there is a good level of improvement in academic outcomes in financial accounting when taught using this method.

Objective 2: Academic Performance of Financial Accounting Students using Traditional Learning Strategies in Ekiti State

Table 2: Academic Performance of Financial Accounting Students using Traditional Learning Strategies

<i>Frequency</i>	<i>Percentage</i>	<i>Overall Mean</i>	<i>SD</i>	<i>Performance</i>
36	12.0	18.42	3.184	Good ($\bar{x} = 31 - 40$)
109	36.3			Average ($\bar{x} = 20 - 30$)
155	51.7			Poor ($\bar{x} = 0 - 19$)
300	100.0			Total

Result presented in Table 2 illustrates the academic performance of 300 students under a specified instructional context. Of the total participants, only 12.0% (36 students) achieved a good performance level, with an overall mean score of 18.42 and a standard deviation of 3.184, corresponding to scores in the range of 31–40. A larger portion, 36.3% (109 students), demonstrated average performance, with scores between 20–30. However, the majority, 51.7% (155

students), fell into the poor performance category, with scores ranging from 0–19. These findings suggest a concerning trend, with over half of the students struggling to achieve satisfactory academic outcomes.

Objective 3: Difference between academic performance of students taught, using computer-based and traditional learning strategy

Table 3: T-test on the difference between the academic performance of students taught using computer-based and traditional learning strategy

<i>Variable</i>	<i>Gender</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
Academic Performance	Traditional LS	300	18.42	3.184	599	11.475	.000
	Computer - Based LS	300	24.51	2.211			

Result presented in Table 3 revealed that there is a significant difference in the academic performance of students taught using computer-based and traditional learning strategy ($t=11.475$, $p<.05$). Specifically, students taught using computer-based learning strategy scored higher ($\bar{x}=24.51$) compared to students taught using traditional learning strategy ($\bar{x} = 18.42$).

Hence, the computer-based instructional strategy outperforms the traditional method in teaching and learning accounting in this study.

Objective 4: Influence of Gender and Location on Students' Academic Performance in Financial Accounting Taught with Computer-Based Strategy

Table 4: Influence of Gender and Location on Students' Academic Performance in Financial Accounting when taught with Computer-Based Strategy**Tests of Between-Subjects Effects****Dependent Variable: Academic Performance**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6435.487 ^a	2	3217.743	20.143	.000
Intercept	52067.632	1	52067.632	174.723	.000
Gender	34.760	1	34.760	0.116	.322
Location	1675.373	1	1675.373	5.622	.000
Error	9140.247	296	159.746		
Total	5162492.000	299			
Corrected Total	245575.733	298			

a. R Squared = .026 (Adjusted R Squared = .025)

Table 4 presents the results on the influence of gender and location on students' academic performance in Financial Accounting when taught using computer-based strategies. In examining the individual effects, gender does not have a statistically significant impact on performance ($F(1, 296) = 0.116$, $p = 0.322$), suggesting that male and female students perform similarly under the computer-based instructional strategy. On the other hand, location has a significant effect on academic performance ($F(1, 296) = 5.622$, $p < 0.001$), indicating that students' performance varies based on whether they are in urban or rural settings. This could mean that there is a major difference in the access to computer-based strategy compared to students in urban environments.

Discussion

Findings obtained in this study indicates that while a significant proportion of students exhibit moderate knowledge of computer-based instructional strategies, there is a marked variation in understanding across the sample. With 58.3% of students demonstrating moderate knowledge and an overall mean score of 25.64, it suggests that while students are familiar with these strategies, there remains a

substantial gap in their comprehensive understanding and application. Previous studies have highlighted that moderate knowledge levels can hinder effective utilization of computer-based strategies, as students may lack the confidence or skills needed to engage fully with technology in their learning (Gulbahar & Guven, 2008). Furthermore, the limited representation of high knowledge levels (27.3%) signifies a need for enhanced training and resources to elevate students' proficiency in these strategies, supporting the notion that effective integration of technology in education requires both access and adequate training (Schmid et al., 2014). On the analysis of computer-based teaching strategies reveals a disparity in availability and usage among various instructional methods. The high mean scores for Computer-Assisted Instruction (3.81) and Online Workshops (3.83) indicate that these methods are well-established in the educational framework, aligning with findings by Tamim et al. (2011) that emphasize the effectiveness of such interactive strategies in enhancing learning outcomes. In contrast, the lower mean scores for E-learning platforms (2.65) and Collaborative Tools (2.44) suggest that these resources may not be as readily integrated into the teaching process, potentially limiting students' exposure to

diverse learning modalities. The significant difference in academic performance between students taught through computer-based strategies versus traditional methods, as highlighted by the t-test results, further underscores the effectiveness of modern instructional approaches in improving learning outcomes in Financial Accounting. Additionally, the influence of location on academic performance emphasizes the critical role of accessibility in technology integration. Research has shown that urban students often have better access to educational resources, including technology, compared to their rural counterparts (Davis, 2019).

Conclusion

The study explores the effect of computer-based learning on students' performance in Financial Accounting. The study also provides information on the knowledge of students on these strategies and the most frequently used ones. It is evident from the results that majority of students possess moderate knowledge of these strategies, the substantial gap in comprehensive understanding indicates that many are not fully equipped to leverage technology effectively in their learning processes. The analysis also revealed notable disparities in the availability and utilization of various computer-based teaching strategies, highlighting a strong preference for methods like Computer-Assisted Instruction and Online Workshops. The significant difference in academic performance between students taught with computer-based methods versus traditional approaches further emphasizes the potential of technology-enhanced learning to improve educational outcomes. Also, the influence of location on performance points to the critical need for equitable

access to educational resources across urban and rural settings.

Recommendations

Based on the findings obtained, it is recommended that schools should implement targeted training programs for both teachers and students to improve familiarity and proficiency with various computer-based instructional strategies which can be achieved through workshops and hands-on sessions. In addition, educational authorities and institutions should invest in providing adequate technological resources, especially in rural areas, to ensure that all students have equal opportunities to engage with computer-based instructional strategies. This could include providing laptops, tablets, and reliable internet access.

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ROLE OF BUSINESS EDUCATION IN PROMOTING ENTREPRENEURSHIP IN NIGERIA

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Abstract

Entrepreneurship has emerged as a pivotal driver of economic growth, job creation, and innovation in both developed and developing economies. In the context of Nigeria, a nation rich in human capital and natural resources, fostering entrepreneurship is of paramount importance to address the challenges of unemployment, poverty, and economic diversification. Business education plays a crucial role in nurturing the mindset, skills, and knowledge necessary for individuals to embark on entrepreneurial ventures successfully. This paper explores the multifaceted role of business education in promoting entrepreneurship in Nigeria. It delves into the various dimensions through which business education contributes to the development of a thriving entrepreneurial ecosystem. It examines how business education cultivates an entrepreneurial mindset by instilling creativity, risk-taking, and problem-solving abilities among aspiring entrepreneurs. Secondly, the paper discusses how business education equips individuals with essential skills such as financial literacy, marketing strategies, and business planning, which are indispensable for establishing and managing successful enterprises. Furthermore, this work highlights the significance of business education in fostering networks and connections within the entrepreneurial community. In conclusion, the role of business education in promoting entrepreneurship in Nigeria cannot be overstated. It serves as a catalyst for cultivating an entrepreneurial mindset, imparting essential skills, facilitating networking opportunities, and promoting experiential learning. By bridging the gap between academia and industry, business education contributes to a more vibrant and sustainable entrepreneurial ecosystem, fostering economic growth and development in Nigeria. The study also recommends that business education curriculum should be reviewed in line with the current technologies, among others.

Keywords: Business education, entrepreneurship, entrepreneurial mindset, skills, experiential learning, economic growth.

Introduction

Business Education programme in Nigeria is expected to attain a sustainable level of economic development by embarking on entrepreneurial activities by the lecturers, instructors and students of the tertiary institutions based on skill acquisition. Entrepreneurship education is relatively new in Nigerian Tertiary institutions. This implies that business education will have an impact on the quality of the business workforce, which is essential for economic and potential

entrepreneurship advancement and training around the globe.

Nigeria, as a developing economy, has recognized the significance of entrepreneurship in driving economic growth, innovation, and job creation. Business education plays a pivotal role in equipping aspiring entrepreneurs with the necessary skills, knowledge, and mindset to navigate the challenges of the entrepreneurial landscape. This paper explores the various ways in which business education contributes to promoting

entrepreneurship in Nigeria. Every society desire to achieve a sustainable level of economic development. This could be possible through embarking on entrepreneurial activities by the citizens of the society. This is because the public sector cannot single-handedly drive the desired level of development. Furthermore, the success of society in entrepreneurship depends on the skills (education) acquired by the entrepreneurs (Gana, 2021). This is because education leads to creativity. Education also equips a person with relevant skills which would lead him to better performance in his chosen career. In line with this, Business education which is described as an 'education for business and about businesses could make a person perform well as an entrepreneur. This is because it is expected to equip the recipients with skills which are needed for business success. In addition, entrepreneurship focuses on the desire and ability of a person to search for investment opportunities within his environment and be able to set up and run an enterprise based on the identified opportunities (Adeyemo & Adeyeye, 2019).

Business education is a part of vocational and technology education programme that provides the necessary business, economic, and education knowledge, skills and competencies needed to teach business subjects in secondary schools, colleges and universities (Udo, 2016). However, authors like Essia (2022) and Nwazor (2022) have decried the failure of the education offered in tertiary institutions, especially in the business education programmes to prepare students and graduates for real-life situations. In consonance, Lioyde and Tokunbo (2022) noted that the cause of the increased rate of unemployment amongst university graduates in Nigeria is manifested in the lack of functional education that will bring about the training of the abundant human resources in Nigeria to be creative, innovative, entrepreneurial and business opportunity seekers that will transform opportunities and material resources into goods and services for sustainability.

Based on the above, it is obvious that Business education could lead to the development of entrepreneurship in Nigeria and indeed all the countries of the world. This owes to the fact that based on the content of Business education; it has the potential of equipping the recipients with skills in Book-keeping/Accounting, Business management, Marketing, Business communication, Records management, etc which are all necessary for the promotion and survival of business enterprises. It is thus against this background that this work looks at the role of Business education in promoting entrepreneurship in Nigeria.

Concept of Business Education

Business education is one of the major components of vocational education. In Nigeria, the discipline is offered at both the secondary and tertiary levels of education. According to Abdullahi (2022), Business education is an aspect of the total educational programme which provides the recipient with the knowledge, skills, understanding and attitude needed to perform well in the business world as a producer or consumer of goods and services. Furthermore, Osuala (2022) observes that Business education is a broad area of knowledge that deals with a nation's economic system which identifies and explains the rate of business contentment and experience that prepare individuals for effective participation as citizens, workers and consumers. Finally, The National Open University of Nigeria (NOUN) (2018) defines Business education as an aspect of vocational education that equips people with the necessary skills and theoretical knowledge needed for performance in the business world either for job occupation or self-employment.

It could be deduced from the definitions above that Business education is an education for and about business, which combines both theoretical and practical knowledge. In the same vein, it exposes the recipient to the economic system of his country and equips him with lifelong skills that would enable him to make reasonable

judgments as a producer (entrepreneur), employee or consumer of goods and services. Finally, Aliyu (2023) stated that the purpose of Business education stresses the need for:

1. Specialized instruction to prepare students for careers in business.
2. Fundamental instruction to help students assume their economic roles as consumers, workers and citizens.
3. Background instruction to assist students in preparing for professional careers requiring advanced study.

Concept of Entrepreneurship

Entrepreneurship is a multi-disciplinary concept. Aruwa (2016) states that the concept of entrepreneurship is not restricted to business or economic operations. It is also obtainable in non-business operations. The author however, stated that in the business cycle, entrepreneurship is a distinct resource and a necessary condition for business success. According to Igwe in Adeyeye (2018), entrepreneurship has to do with the process of bringing together creative and innovative ideas as well as management and organizational skills to be able to integrate man, machinery and other organizational resources to satisfy the identified needs of the customer, thereby creating wealth. Similarly, Kutatko and Hodgett in Mainoma and Aruwa (2018) believe that entrepreneurship is a dynamic process of vision, change and creation which requires the use of energy and passion to create and implement new ideas and creative solutions. Finally, Hisrich and Brush in Mawoli and Aliyu (2020) define entrepreneurship as the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risk, and receiving the resulting rewards of monetary and personal satisfaction and independence.

From the foregoing, it could be deduced that entrepreneurship is all about:

1. Identification of business opportunities
2. Creativity and innovativeness

3. Bearing risk to utilize opportunities or implement a new plan(s)
4. Good management skills
5. Wealth creation

It should be noted that entrepreneurship is a risky venture, yet, some people choose to become entrepreneurs. This choice may be due to the desire to become independent, personal and professional growth, profit-making and ultimately contributing their quotas to the development of their societies.

Ways through which Business education can promote entrepreneurship in Nigeria: As noted earlier, Business education is an education for and about business. Entrepreneurship also focuses on the identification and utilization of business opportunities, and setting up and properly running an enterprise. In view of this, the following are the ways through which Business education can promote entrepreneurship in Nigeria:

Identification of viable business opportunities: Business education equips the recipients with skills that would enable them to identify viable investment opportunities in their societies. Through this, they would be able to see opportunities where others see chaos. It would also equip them with skills that would make it possible for them to use the SWOT (strengths, weaknesses, opportunities and threats) analysis to function well as entrepreneurs. With this background in mind, it could be observed that Business education could promote entrepreneurship by prompting people to strive toward the utilization of the identified opportunities through taking calculative risks (Akpomi, 2016).

Skills for financial management: Accounting education is an integral part of Business education. It is thus, a potent tool for promoting financial prudence and business success. According to Adamu (2019), the inability of some small and medium-scale entrepreneurs to keep

financial records negatively affects the growth of their businesses, ability to secure loans from financial institutions and determination of cost and profit. The knowledge of Business education would therefore help toward the proper keeping of financial records. It would also guide the entrepreneurs in cost analysis, inventory control and profit determination.

Utilization of proper marketing skills:

Inculcation of marketing skills is among the focus of Business education. According to Gidado (2021), marketers conduct surveys leading to the identification of people's needs and wants and develop products that would meet those needs and wants. This implies that Business education could promote entrepreneurship by making entrepreneurs properly perform their entrepreneurial functions. This is because the knowledge of marketing would prompt them to make good use of the four-ps (4Ps) of marketing namely; product, price, place and promotion. It is expected that this would lead to the development of sound product ideas which would be translated into an acceptable product in the market. Similarly, if it is a business of trading, an understanding of the product mix will make an entrepreneur procure products that will be appealing to the customers. Finally, the acquisition and utilization of the right marketing skills will promote entrepreneurship by leading to proper and acceptable pricing of the product, making it available at the right place and time as well as using the right promotional technique(s) to stimulate customers to buy the product (Akpomi, 2016).

Skills for proper business management:

Management is crucial to the success of any entrepreneurial effort. Aruwa (2016) reports that the managerial incompetence of some Nigerian entrepreneurs is among the problems of entrepreneurship in Nigeria. Business education can therefore help in ameliorating this problem and thus a tool for promoting entrepreneurship. This is because attaining proficient skills in economics and management is among the aims of Business education. The acquisition of requisite

management skills would allow both current and potential entrepreneurs to successfully manage their ventures through the processes of planning, organizing, directing and controlling the available human and material resources. Similarly, their knowledge of economics is expected to make them rational and also ensure proper allocation and utilization of the available resources.

Avoidance of business failure: Every entrepreneur desires to ensure that his business survives as a going concern. However, some business ventures do not last long. According to Gana (2021), once a business ceases to be in operation, it is said to have failed. Based on the nature of Business education, it has the potential to help entrepreneurs avoid business failure. This owes to the fact that it equips its recipients with skills for identifying the symptoms of business failure. Some of these symptoms include; declining sales, deteriorating working capital, declining profit and a high debt ratio. With this information in mind, entrepreneurs stand the chance of avoiding the failure of their businesses (Adeyemo & Adeyeye, 2019).

Challenges of Business Education in Promoting Entrepreneurship in Nigeria

Entrepreneurship plays a vital role in economic growth, job creation, and poverty reduction in developing countries like Nigeria. Business education is expected to play a significant role in promoting entrepreneurship by equipping students with the necessary knowledge and skills to start, manage and promote their businesses. However, several challenges hinder the effective promotion of entrepreneurship through business education in Nigeria. These include:

1. **Outdated Curriculum:** One of the major challenges facing business education in Nigeria is the outdated curriculum that does not adequately address the changing dynamics of entrepreneurship and the modern business environment. Many business education programs lack courses that

focused on emerging technologies, digital marketing, and innovation, which are critical for today's entrepreneurial ventures (Obamiro & Afolabi, 2020).

2. **Theoretical Orientation:** Business education in Nigeria tends to be heavily theoretical, emphasizing rote learning rather than practical application. This theoretical approach limits students' ability to translate knowledge into actionable entrepreneurial skills. Akpomi, 2016 notes that the lack of practical exposure and hands-on experiences can discourage students from pursuing entrepreneurial ventures.
3. **Limited Access to Resources:** Access to resources such as funding, mentorship, and networking opportunities is crucial for budding entrepreneurs. However, many business education programs in Nigeria fail to provide students with these essential resources. This lack of support hinders students from transforming their business ideas into viable ventures (Ogundele et al., 2017).
4. **Inadequate Faculty Development:** The quality of business education is highly dependent on the competence and expertise of the faculty members. In Nigeria, there is a shortage of qualified faculty members who possess both academic knowledge and practical experience in entrepreneurship. This affects the ability of educators to effectively impart entrepreneurial skills to students (Adeyemo & Adeyeye, 2019).
5. **Cultural and Social Norms:** Cultural norms in Nigeria often prioritize traditional career paths over entrepreneurship. Business education may not receive the same level of societal respect as other academic disciplines, discouraging students from pursuing entrepreneurial endeavours. Additionally, risk aversion and fear of failure prevalent in Nigerian society can

deter aspiring entrepreneurs (Nwajiuba, 2016).

6. **Insufficient Collaboration with Industry:** Business education institutions often operate in isolation from the business community. Lack of collaboration with industry leads to a gap between classroom learning and real-world business practices. Collaborations between academia and industry are essential to ensure that students are equipped with practical and relevant skills (Ogbari et al., 2018).

Conclusion

Business education is a skill-based course which is expected to inculcate entrepreneurial skills in the recipient. Entrepreneurship, on the other hand, deals with creative identification and utilization of business opportunities. This work establishes that Business education has the potential to promote entrepreneurship in Nigeria since it could lead to the acquisition of skills for identifying viable investment opportunities, proper marketing, financial management, proper management and avoidance of business failure. It is also established that promoting entrepreneurship through business education in Nigeria faces numerous challenges, including outdated curriculum, theoretical orientation, limited access to resources, inadequate faculty development, cultural norms, and insufficient industry collaboration.

Recommendations

Based on the conclusion drawn from this work, the following recommendations are suggested as the way forward:

1. **Review of business education curriculum in line with the current technologies:** Revising business education curricula to incorporate emerging technologies is crucial for preparing students for success in the modern business environment. By integrating technology-focused courses, updating existing courses, and emphasizing experiential learning, business education programs can

provide students with the necessary skills and knowledge to thrive in a technology-driven world.

2. **Nigerian youths should be encouraged to study Business education:** Our youths should be stimulated to study Business education. This could be done through career counselling both at home and school as well as the creation of awareness through the National Orientation Agency (NOA). The essence of this is that Business education could lead to the production of high-level and competent entrepreneurs. These people would also be able to encourage other people to venture into entrepreneurship and turn Nigeria for the better.
3. **Only business educators should be allowed to teach Business education courses:** Teaching of Business education should be left exclusively to business educators. This is because, by their training and orientation, they are in better positions to inculcate entrepreneurial skills in the learners.
4. **There should be adequate funding of Business Education by government or stakeholders:** Business education is a skill-based course which requires a lot of money to procure the requisite teaching materials. To ensure that society reaps its benefits, it should be adequately funded by the stakeholders. These stakeholders are; the government at all levels (Federal, State and Local), corporate organizations, Non-Government Organisations (NGOs), philanthropic individuals and the Parents-Teachers' Association (PTA).
5. **Entrepreneurs that lack Business education skills should be encouraged to acquire the skills.** This encouragement can be done by the government through its agencies such as the Small and Medium-scale Enterprise Development Agency of Nigeria (SMEDAN) and the National

Directorate of Employment (NDE) as well as NGOs and professional organisations. The business education skills could be acquired through seminars and workshops organized by the aforementioned agencies of the government, NGOs and professional bodies.

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SECRETARIAL PROFESSION IN TODAY'S ADVANCED TECHNOLOGICAL ERA IN TERTIARY INSTITUTIONS IN BAUCHI STATE, NIGERIA

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Abstract

The researcher in this study investigated Effectiveness of Today's Technology on Secretary's Job Performance in Tertiary Institutions in Bauchi State. The descriptive survey research design was adopted for the study. Research questions guided the study. The instrument used for the collection of data was a structured questionnaire "Effectiveness of Today's Advanced Technology on Secretary's Job Performance in Tertiary Institutions (ETATSJPTI) in Bauchi State, Nigeria. The instrument was validated by three experts in Business Education unit of Vocational and Technical Education Department, Ekiti State University, Ado-Ekiti. Test – retest method was used to determine the reliability of the instrument. The data collected were analyzed using mean score and standard deviation. Based on the findings, this study revealed that Technology improved Secretarial Job Performance. It was recommended among others that secretaries should undergo regular training on professional development programs to enhance their proficiency in software application such as Microsoft Office, Google Suite and other specialized software relevant in the Job industry.

Keywords: Advanced technology, Secretarial profession, Technological facilities, Technological skills and Tertiary institutions.

Introduction

Organizations all over the world, large or small, have depended on secretaries for their survival, growth and proper functioning due to the indispensable roles of secretaries. Secretaries organize and coordinate office tasks, maintain records and provide other services that assist in providing directions for decision-making and organizational performance. A secretary is well known to be someone who plays a very vital role in an office. That is to say a secretary is indispensable office personnel. The services provided by the contemporary professional administrative secretary/office manager

remain essential due to the diverse range of responsibilities they handle. An organization typically divides its operations into various departments, such as accounting, sales, production, personnel, etc. In the case of an educational institution, departments may include bursary, works, health, school/faculties, etc. These departments are overseen by directors who rely on the assistance of a secretary.

The secretary's broad expertise allows her to effectively do many specialized tasks, as the general duties of a secretary are consistent throughout different specializations. The executive's responsibilities may vary, the secretarial

skills and experience, which are her main assets, will be valuable to any executive in the department. Supporting this assertion, Abiola (2022), expresses the view that a secretary is an executive assistant who has mastery of office skills, demonstrates the ability to assume responsibility with or without supervision, exercises initiatives and judgment and makes decision within the scope of assigned authority. A professional secretary according to Oguejiofor (2015), is not only needed to have theoretical and practical knowledge of the new technologies but to be competent in the usage of those computer packages that are needed and necessary for his or her secretarial job performance in today's advanced technological era.

Advanced technology refers to the practical application of scientific knowledge and principles to create tools, machines, and systems that solve real-world problems and improve human life. It is a set of techniques, methods, and processes used to achieve a specific goal or objective, often involving the use of machines, computers, and other equipment. Advanced technology refers to the use of tools, machines, and equipment to perform tasks, solve problems, and create new products and services. According to Fasae (2024), advanced technology encompasses electronic and digital systems, including computers, software, networks, and other digital technologies that process, store, and communicate information. It refers to innovative solutions, products, and services that use new or existing technologies to improve efficiency, productivity, and quality of life. Kwaghbo (2022) notes that advanced technology is the systematic application of knowledge, skills, and expertise to create new products, services, and processes that transform industries, economies, and

societies. However, it is expected that for secretaries to be able to discharge their duties effectively especially in this advanced technological era, there is the need for relevant technological skills.

Advanced technological skills refer to the specialized digital literacy and expertise required to effectively utilize and manage complex technology systems, tools, and software applications, including programming languages, data analytics, and cybersecurity. These skills encompass the high-level technical competence and proficiency needed to design, develop, implement, and maintain sophisticated technological systems, including artificial intelligence, cloud computing, and the Internet of Things (IoT). The skills according to Fasae (2024) involve expertise in emerging technologies, such as blockchain, robotics, and virtual reality, and the ability to apply these technologies to drive innovation, improve efficiency, and solve complex problems in various industries and domains. A secretary in the view of Adozoga and Ezeonwurie (2017) is expected to be computer literate and proficient in a number of word processing, spreadsheet and desktop publishing software including sending and receiving electronic mail (e-mail) and browsing the World Wide Web (www) (that is the internet). Empirically, Utebor, Nwosu and Azih (2024) who examined digital skills required of office secretaries for global relevance in Delta State found that office secretaries highly require digital foundation skills, and software management skills for global relevance. Similarly, Olaniyi and Mukoro (2020) who investigated the place of Information and Communication Technology (ICT) skills in modern day secretarial administration in public and private offices in Ekiti State found that the ability

to enter, edit, store and retrieve information properly, manage correspondence through the computer and use facsimile machine, security devices and other modern means of communication are the needed Information and Communication Technology (ICT) skills.

Advanced technology facilities entail automated systems and software used to perform routine tasks, such as email management, calendar organization, and data entry, thereby increasing efficiency and productivity. It encompasses the utilization of digital communication tools, including video conferencing software, instant messaging apps, and online collaboration platforms, to facilitate seamless communication and coordination with colleagues, clients, and stakeholders. It involves the incorporation of artificial intelligence (AI) into secretarial tasks, such as AI-powered virtual assistants, predictive analytics, and machine learning algorithms, to enhance decision-making, streamline processes, and improve overall administrative efficiency. Advanced technology according to Sadiku (2018) entails the adoption of cloud-based office management systems, which enable secure, remote access to files, documents, and administrative tools, thereby facilitating flexible work arrangements, collaboration, and disaster recovery. Empirically, Olatoye, Adebayo, Oladeji and Oladire (2024) who explored assessment of the secretarial profession in modern technology era in Oyo State, Nigeria found that electric typewriters, electric computer, shredding machines, telephone equipment, franking machines, filling equipment, duplicating machines, scanning machines, cassette players, personal computer, electric calculators and tape recorders are various types of technology facilities used by

secretaries in modern technology era. Also, Abosede and Akintola (2015) who examined Information and Communication Technology facilities' utilization and job performance of secretaries in public and private universities in Ogun State found that computer, mobile/cellular phones and LaserJet printer top the list of the currently available ICT facilities in the Public Universities.

Office secretaries seem to face challenges such as inadequate training and technical support, limited access to modern technological tools and equipment, and insufficient budget allocations for technology upgrades and maintenance. According to Ojohwoh (2014), secretaries may struggle with the rapid pace of technological change, making it difficult to keep up with the latest software, hardware, and digital trends. Furthermore, technological issues such as internet connectivity problems, software compatibility issues, and cybersecurity threats can also hinder the effective use of technology by office secretaries. Empirically, Adakole and Lasisi (2018) who investigated the challenges of utilizing new technologies by secretaries in selected public organizations in Bida Metropolis found that lack of new technological equipment and machines, lack of training and retraining of secretaries, poor power supply etc. were the challenges of utilizing new technologies by secretaries. In the same vein, Oladeji and Afolabi (2021) who investigated the challenges and prospects of secretarial profession in this modern technology era in Oyo State Nigeria found that high cost of modern technological tools and facilities, lack of trained personnel on the usage of these modern devices, lack of funds to purchase the devices and facilities required to automate offices, high cost of

maintenance of these devices and facilities, and vulnerability to health hazards are the challenges of secretarial profession in this modern technology era.

Presently, technology has opened up a new era in managing information/communication through the techniques of automation and this has enhanced communication systems. Advanced technology has made secretarial job more competitive. Past experiences have shown that one of the main causes of poor performance among secretaries in most organizations is their abject lack of advanced technology skills such as webpage design, desktop publishing, networking, internet skills amongst others. Many of them do not possess advanced technology skills required in the various offices and have continued to negatively affect their general performances. Lack of these skills among secretaries has often been a source of worry to the management of the university. Also, despite the introduction of these emerging technologies to the University, some secretaries are still being subjected to old method of handling office tasks. In actual fact, some organizations engage the services of fresh graduates who are knowledgeable in handling modern technology packages such as internet facilities, networking etc. Such old method of operation leads to ineffectiveness and unproductivity among the office workers. Secretaries have to get themselves acquainted on how to operate new office automation such as information storage systems, the internet and other new software packages. In view of the aforementioned problems the researcher tends to study those advanced technology facilities and skills needed in the secretarial profession in various offices, the challenges and the prospect for secretarial profession using

these advanced technologies. The ineffectiveness of some secretaries in handling advanced technologies in today's ever-changing techno-office seems understudied. It is on the foregoing background that the researcher is interested in carrying out the study in an attempt to see the advanced technology skills and facilities needed for secretarial profession in Tertiary institutions in Bauchi State

Statement of the Problem

The integration of advanced technology in tertiary institutions in Bauchi State, Nigeria, may impact the job performance of secretaries.

Limited understanding of technology's impact: There may be lack of understanding on how today's advanced technology could affect the job performance of secretaries in tertiary institutions.

Potential challenges and benefits:

The use of advanced technology could present both challenges and benefits for secretaries in terms of efficiency, productivity and job requirements.

Need for assessment: There is a need to assess the effectiveness of advanced technology on secretary's job performance in these institutions to identify areas of improvement and optimize technology use.

Purpose of the Study

The purpose of the study is:

1. To assess the effectiveness of advanced technology: Investigate how today's advanced technology impacts the job performance of secretaries in tertiary institutions in Bauchi State, Nigeria.
2. To identify challenges and benefits: Determine the challenges and

benefits associated with the use of advanced technology by secretaries in these institutions.

3. To provide insights for optimization: Provide insights on how advanced technology can be optimized to improve secretary's job performance in tertiary institutions in Bauchi State.

Research Questions

1. What are the technological skills needed by secretaries for Job performance in Tertiary institutions in Bauchi State?
2. What are the technological facilities needed by secretaries for job performance in tertiary institutions in Bauchi State?
3. What are the factors against the use of modern technologies needed by secretaries for Job performance in tertiary institutions in Bauchi State.

Hypotheses

The null hypotheses were formulated and tested at a 0.05 level of significance;

There is no significant differences between the mean ratings of the secretaries and their bosses on technological skills needed by secretary job performance in tertiary institution in Bauchi State.

Methodology

This study adopted the descriptive survey research design. According to Onah (2023), descriptive survey is used to analyze and report data without manipulation or distortion of any of the variables. The population of the study comprised 135 secretaries working with Bosses in all the 11 tertiary institutions in Bauchi State. (Source: Registrars' Offices

of various institutions, 2024). The whole population was used for the study. A self-designed instruments containing 20 items was used titled Secretarial Professions in Today's Advanced Technological Era Scale(SPTATEQ) and 5 items titled Bosses perception on Secretary Job Performance of Today's Advanced Technological Era Questionnaire (BPOSJPOTATEQ) was used to collect data from the respondents. The instrument consists of two sections. Section "A" elicited demographic data of the respondents such as category of respondents, and name of institutions. Section "B" provided responses to the research questions using the 4-point scale of Very Highly Needed (VHN)/Strongly Agreed (SA), Highly Needed (HN)/Agreed (A), Lowly Needed (LN)/Disagreed (D) and Very Lowly Needed (VLN)/Strongly Disagreed (SD). The scale is weighted as 4 points, 3 points, 2 points, and 1 point respectively. The instrument was validated by two specialists in Department of Vocational and Technical Education and one specialist in Test and Measurement in faculty of Education all in Bauchi State University. A one-shot method was used to ascertain reliability co-efficient of 0.88 using Cronbach alpha statistics which showed that the instrument was highly reliable. Research questions was answered using mean score, standard deviations. Hypothesis were tested at 0.05 level of significant method.

Result and Discussion of Findings

Answer to Research Questions and Testing of Hypotheses

Research Question One: What are the technological skills needed by secretaries for job performance in tertiary institutions in Bauchi State?

Table 1: Mean rating scores and standard deviation on the technological skills needed by secretaries for job performance in tertiary institutions in Bauchi State

S/N	Items	VHN	HN	LN	VLN	Σfx	$\bar{X}$	SD	Decision
1	Word processing skills	55	36	29	15	401	2.97	0.62	Highly Needed
2	Spreadsheet operation skills	59	56	13	7	437	3.24	1.16	Highly Needed
3	PowerPoint skills	71	35	11	18	429	3.18	0.78	Highly Needed
4	Internet surfing and networking skills	63	44	15	13	427	3.16	0.74	Highly Needed
5	Data base management skills	60	51	14	10	431	3.19	0.62	Highly Needed
6	Blackboard teaching skills	56	53	12	14	421	3.12	0.79	Highly Needed
7	Keyboarding skill and accuracy	69	36	17	13	431	3.19	0.72	Highly Needed
Grand Mean							3.15	0.78	Highly Needed

Data in Table 1 presents the mean and standard deviation values indicating the technological skills needed for secretarial profession in tertiary institutions in Bauchi State. The results indicated that items 1, 2, 3, 4, 5, 6 and 7 recorded mean scores above the criterion mean score of 2.50. The overall interpretation suggests highly needed with grand mean score of 3.15 which is higher than the criterion mean score of 2.50 with a standard deviation of 0.78. It was therefore concluded that word processing skills, spreadsheet operation

skills, powerpoint skills, internet surfing and networking skills, data base management skills, blackboard teaching skills and keyboarding skill and accuracy are the needed technological skills for secretarial profession in tertiary institutions in Bauchi State.

Hypothesis One:

Ho₁: The mean rating scores on the technological skills needed for secretarial profession in tertiary institutions in Bauchi State is not significant.

Table 2: t-test statistics on the technological skills needed for secretarial profession in tertiary institutions in Bauchi State

n	X	SD	df	t-cal	t-tab	Decision
135	3.15	0.78	134	8.39	1.64	Reject Ho ₁

Data in Table 2 gave the grand mean score and standard deviations of 135 respondents as 3.15 and 0.78 respectively. At 134 degrees of freedom, with application of the t-test calculated, its result of 8.39 is greater than the t-tabulated at 5% level of significance, the decision rejected the null hypothesis and concluded that the mean rating scores on

the technological skills needed for secretarial profession is significant in tertiary institutions in Bauchi State.

Research Question Two: What are the technological facilities needed by secretaries for job performance in tertiary institutions in Bauchi State?

Table 3: Mean rating scores and standard deviation on the technology facilities needed by secretaries for job performance in tertiary institutions in Bauchi State

S/N	Items	VHN	HN	LN	VLN	Σfx	$\bar{X}$	SD	Remark
8	Electric typewriters	75	25	20	15	430	3.19	0.70	Highly Needed
9	Shredding machines	36	72	18	9	405	3.00	0.74	Highly Needed
10	Filling equipment	70	32	13	20	422	3.13	0.73	Highly Needed
11	Photocopy machines	56	49	19	11	420	3.11	0.70	Highly Needed
12	Personal computer	67	41	15	12	433	3.21	0.74	Highly Needed
13	Perforating machine	73	29	20	13	432	3.20	0.78	Highly Needed
Grand Mean							3.14	0.73	Highly Needed

In Table 3, the data presents the mean and standard deviation values indicating the technology facilities needed for secretarial profession in tertiary institutions in Bauchi State. The results indicated that items 8, 9, 10, 11, 12 and 13 recorded mean scores above the criterion mean score of 2.50. The overall interpretation suggests highly needed with grand mean score of 3.14 which is higher than the criterion mean score of 2.50 with a standard deviation of 0.73. It was therefore concluded that electric typewriters, shredding machines,

filling equipment, duplicating machines, personal computer and perforating machine are the needed technological facilities for secretarial profession in tertiary institutions in Bauchi State.

Hypothesis Two:

Ho₂: The mean rating scores on the technology facilities needed for secretarial profession in tertiary institutions in Bauchi State is not significant.

Table 4: t-test statistics on the technology facilities needed for secretarial profession in tertiary institutions in Bauchi State

n	X	SD	df	t _{cal}	t _{tab}	Decision
135	3.14	0.73	134	10.88	1.64	Reject Ho ₂

In Table 4, the data gave the grand mean score and standard deviations of 135 respondents as 3.14 and 0.73 respectively. At 134 degrees of freedom, with application of the t-test calculated, its result of 10.88 is greater than the t-tabulated at 5% level of significance, the decision rejected the null hypothesis and concluded that the mean rating scores on the technology facilities

needed for secretarial profession is significant in tertiary institutions in Bauchi State.

Research Question Three: What are the militating factors that impede on the use of technology in secretarial profession in tertiary institutions in Bauchi State?

Table 5: Mean rating scores and standard deviation on the militating factors that impede on the use of technology in secretarial profession in tertiary institutions in Bauchi State

S/N	Items	SA	A	D	SD	Σfx	$\bar{X}$	SD	Decision
14	High cost of modern technological gadgets and facilities	37	66	23	9	401	2.97	0.73	Strongly Agree
15	Lack of trained personnel on the usage of these modern gadgets	75	33	16	11	442	3.27	0.70	Strongly Agree
16	Lack of fund to purchase the gadgets and facilities required to automate office	66	40	12	17	425	3.15	0.74	Strongly Agree
17	High cost of maintenance of this gadget and facilities	63	39	18	15	420	3.11	0.74	Strongly Agree
18	Lack of training and re-training for secretarial staff	57	40	20	18	406	3.01	0.62	Strongly Agree
19	Lack of good background knowledge of the ICT equipment	65	32	18	20	412	3.05	0.79	Strongly Agree
20	Lack of ICT connectivity to secretarial offices	57	41	22	15	410	3.04	0.72	Strongly Agree
Grand Mean							3.09	0.72	Strongly Agree

Table 5 presents the mean and standard deviation values indicating the militating factors that impede on the use of technology in secretarial profession in tertiary institutions in Bauchi State. The results indicated that items 14, 15, 16, 17, 18, 19 and 20 recorded mean scores above the criterion mean score of 2.50. The overall interpretation suggests strongly agree with grand mean score of 3.09 which is higher than the criterion mean score of 2.50 with a standard deviation of 0.72. It was therefore concluded that high cost of modern technological gadgets and facilities, lack of trained personnel on the usage of these modern gadgets, lack of fund to purchase the gadgets and facilities required to automate office, high cost of maintenance of this gadget and facilities, lack of training and re-training for secretarial staff, lack of good background knowledge of the ICT equipment, and lack of ICT connectivity to secretarial offices are the militating factors that impede on the use of technology in secretarial profession in tertiary institutions in Bauchi State.

Question: Boss's perception on Secretary's job performance on Today's Advance Technological Era.

The boss's perception of a secretary's job performance in today's technological era is likely influenced by several factors, considering the significant impact of technology on the secretary's role. Here are some possible perceptions:

1. Increased efficiency: Bosses may perceive secretaries who effectively utilize technology as more efficient and productive, capable of managing tasks such as communication, scheduling and document preparation with greater ease.
2. Adaptability: Employers may view secretaries who adapt quickly to new technologies and software's as valuable assets, demonstrating a willingness to learn and grow in their role.
3. Technical skills: The ability to proficiently use digital tools, such as office software, email, and calendar management systems, may be seen as essential skills for

- secretaries, and bosses may perceive those who possess these skills as more competent
4. Time Management: With technology enabling faster communication and task completion, bosses may expect secretaries to prioritize tasks effectively, manage their time wisely, and meet deadlines.
 5. Communication: Effective use of Technology for communication, such as email, phone, and video conferencing, may be seen crucial for secretaries, and bosses may perceive those who communicate clearly and professionally as more effective

Some potential challenges that bosses might perceive in secretaries' job performance in the technological era include:

Stress and Overload: Bosses may recognize that the increased pace and demands of technological work can lead to stress and burnout in secretaries, potentially impacting their performance.

Skill Gaps: Employers might identify gaps in secretaries' technical skills or knowledge, requiring additional training or support to ensure they remain effective in their role.

Adapting to Change: The rapid evolution of technology may require secretaries to continually adapt to new tools and systems, which can be a challenge for some bosses to manage

Overall, bosses likely value secretaries who are tech-savvy adaptable and able to effectively manage their workload in today's digital age.

Discussion of the Findings

The result revealed that the needed technological skills for secretarial profession are word processing skills,

spreadsheet operation skills, PowerPoint skills, internet surfing and networking skills, data base management skills, blackboard teaching skills and keyboarding skill and accuracy in tertiary institutions in Bauchi State. The result suggests that these technological skills are indispensable for office secretarial duties as they enable secretaries to efficiently manage and perform tasks such as data processing, communication, and record-keeping. Proficiency in software applications, hardware operations, and digital tools allows secretaries to automate tasks, enhance productivity, and provide timely support to executives and organizations. Furthermore, technological skills enable secretaries to maintain confidentiality, security, and accuracy in handling sensitive information, making them an essential component of modern office administration. The result further established that the mean rating scores on the technological skills needed for secretarial profession is significant in tertiary institutions in Bauchi State. Corroborating the results, Utebor, Nwosu and Azih (2024) found that office secretaries highly require digital foundation skills, and software management skills for global relevance. Similarly, Olaniyi and Mukoro (2020) found that the ability to enter, edit, store and retrieve information properly, manage correspondence through the computer and use facsimile machine, security devices and other modern means of communication are the needed Information and Communication Technology (ICT) skills.

The result showed that electric typewriters, shredding machines, filling equipment, duplicating machines, personal computer and perforating machine are the needed technological facilities for secretarial profession in

tertiary institutions in Bauchi State. The result implies that these technological facilities are essential tools for office secretarial duties, enabling efficient and accurate completion of tasks. These facilities facilitate rapid document production, secure document destruction, organized filing and record-keeping, and precise duplication of materials, thereby streamlining office operations. By utilizing these technological facilities, secretaries can significantly enhance their productivity, precision, and overall performance, making them indispensable for modern office administration. The result further established that the mean rating scores on the technology facilities needed for secretarial profession is significant in tertiary institutions in Bauchi State. In tandem to the result, Olatoye, Adebayo, Oladeji and Oladire (2024) found that electric typewriters, electric computer, shredding machines, telephone equipment, franking machines, filling equipment, duplicating machines, scanning machines, cassette players, personal computer, electric calculators and tape recorders are various types of technology facilities used by secretaries in modern technology era. Also, Abosede and Akintola (2015) found that computer, mobile/cellular phones and LaserJet printer top the list of the currently available ICT facilities in the public universities.

The results also showed that advanced technology enhances secretaries' productivity and efficiency in tasks such as communication, documentation and scheduling. Technology reduces errors and improve accuracy in tasks such as data entry and documentation preparation.

Advanced technology also enables secretaries to complete tasks

faster, allowing for quicker response times and improved service delivery.

Lastly, the result also showed that high cost of modern technological gadgets and facilities, technical problems, such as hardware or software malfunctions, can hinder secretaries job performance. lack of trained personnel on the usage of these modern gadgets, Secretaries require training to effectively utilize advanced technology, which are time consuming and costly. lack of fund to purchase the gadgets and facilities required to automate office, high cost of maintenance of this gadget and facilities, lack of training and re-training for secretarial staff, lack of good background knowledge of the ICT equipment, and lack of ICT connectivity to secretarial offices are the militating factors that impede on the use of technology in secretarial profession in tertiary institutions in Bauchi State. The finding implies that these challenges have impeded office secretarial duties by causing delays, errors, and inefficiencies. Additionally, the rapid pace of technological change has created a steep learning curve for secretaries, requiring them to constantly update their skills and knowledge to effectively utilize new technologies. Furthermore, technological issues such as cyber threats, data breaches, and system crashes have compromised the security and integrity of office operations, hindering the ability of secretaries to perform their duties efficiently and effectively. It was further established that the mean rating scores on the militating factors that impede the use of technology in secretarial profession is significant in public tertiary institutions in Bauchi State. Supporting the findings, Adakole and Lasisi (2018) found that lack of new technological equipment and machines, lack of training and retraining of secretaries, poor power supply etc.

were the challenges of utilizing new technologies by secretaries. In the same vein, Oladeji and Afolabi (2021) found that high cost of modern technological tools and facilities, lack of trained personnel on the usage of these modern devices, lack of funds to purchase the devices and facilities required to automate offices, high cost of maintenance of these devices and facilities, and vulnerability to health hazards are the challenges of secretarial profession in this modern technology era.

Conclusion

In today's advanced technological era, the secretarial profession has evolved to require a high level of technological skills and proficiency in utilizing various technological facilities to efficiently discharge duties. Secretaries must possess expertise in software applications, hardware operations, and digital tools to stay competitive and provide effective support to executives and organizations. However, the challenges of utilizing technology, including equipment malfunctions, lack of technological skills, resistance to change, software glitches, and cybersecurity threats, can hinder secretaries' ability to perform their duties efficiently. To overcome these challenges, secretaries must continually update their technological skills and knowledge to effectively leverage technological facilities and optimize their performance in tertiary institutions in Bauchi State.

Recommendations

Based on the findings of the study, the following recommendations were made;

1. Secretaries should undergo regular training and support to enhance their technical skills to keep them

up-to-date with the latest technology. professional development programs to enhance their proficiency in software applications, such as Microsoft Office, Google Suite, and other specialized software relevant to their industry.

2. Government of Bauchi State should invest in modern and up-to-date technological facilities, including high-performance computers, reliable internet connectivity, and advanced office equipment, such as multifunctional printers and scanners, to support the efficient performance of secretarial duties.
3. Tertiary institutions should establish a dedicated IT support system, including helpdesk services and regular maintenance schedules, to promptly address technological issues and minimize downtime, ensuring that secretaries can efficiently utilize technology to discharge their duties.
4. Both Federal and State Universities should ensure that the institution's technological infrastructure is adequate and up-to-date to support secretaries job performance.
5. The Universities should implement robust cybersecurity measures to protect sensitive information and prevent data breaches.

These findings and recommendations can help tertiary institutions in Federal and Bauchi State Universities Nigeria, optimize the use of advanced technology to improve secretaries' job performance.

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ORGANISATIONAL AND INSTRUCTIONAL FACILITIES AS CORRELATE OF JOB TASKS OF VOCATIONAL AGRICULTURAL SCIENCE TEACHERS IN SECONDARY SCHOOLS IN EKITI STATE

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Abstract

This study assessed organizational and instructional facilities as correlates of job tasks of vocational agricultural teachers in secondary schools in Ekiti State. This study adopted a descriptive research design of survey type. The population for this study consisted of all the 144 Agricultural science teachers in Ekiti State secondary schools. The sample for this study consisted of 90 senior secondary school agricultural science teachers selected across the three senatorial districts in Ekiti State. Multi-stage sampling procedure was used to select the respondents. The research instruments for this study were questionnaire and checklist. The instruments were validated by two experts each from the Department of Vocational and Technical Education and Department of Tests and Measurement, Ekiti State University, Ado Ekiti. The reliability of the questionnaire was determined through a test re-test method. The instruments for this study were administered with the help of three trained research assistants. Before the administration process, the researcher sought the permission of the management of the sample secondary schools, and adequate follow up was made to ensure that all the administered questionnaires were retrieved within the period of two weeks. The data generated were analyzed using descriptive and inferential statistics. Frequency counts, mean, and Standard Deviation was employed to answer the research questions while inferential statistics of Product Moment Correlation Method was used to test the null hypotheses formulated. All the hypotheses were tested at 0.05 level of significance. The study revealed that some essential organizational facilities such as Agricultural workshop, adequate offices and accommodation in school were lacking, showing an average level of organizational facilities in secondary schools in Ekiti State. Some job tasks of vocational Agricultural Science are effectively carried out in secondary school in Ekiti State. There is no significant difference in the opinions of urban and rural teachers regarding the availability of both organizational and instructional facilities. It is concluded that there is average level of both organizational and instructional facilities in secondary schools in Ekiti State suggesting an equitable distribution across geographic areas. It was recommended among others that: the state government should improve on provision of both organizational and instructional facilities in secondary schools in Ekiti State. This includes upgrading laboratories, demonstration farms, and other relevant resources to support effective teaching and learning in Agricultural Science and implement a regular maintenance to ensure they remain functional and up-to-date. This will help sustain their effectiveness and support the evolving needs of Agricultural Science education

Keywords: Organisational Facilities, Instructional Facilities, Vocational Agricultural Teachers, Job Tasks

Introduction

Agricultural Science, as a vocational subject in the Nigerian secondary school curriculum, plays a pivotal role in equipping students with practical skills and knowledge relevant to agriculture and agribusiness. It is designed not only to support food security and economic development but also to foster self-reliance and reduce youth unemployment. In Ekiti State, where agriculture remains a dominant economic activity, the effective teaching of Agricultural Science is critical in preparing students for meaningful participation in the agricultural sector. Agricultural science is being taught at the junior secondary school level as a pre vocational subject while at the senior secondary school, it is being offered as a vocational subject. Agricultural Science in secondary schools is supposed to contain the following major components, formal classroom instructions, farm mechanization, career experience programme, students supervised agricultural experience programme, field trips and school-based youth organization. The main purpose of which is to educate present and prospective students for proficiency in farming through the school. It is the job task of the teachers of Agricultural science in secondary school to educate, train the students and equipped them with prerequisite knowledge; know how, skills and competency required in a particular occupation in agriculture.

Despite efforts by the Ekiti State Government and various educational stakeholders to promote vocational and technical education, many secondary schools appear to face challenges such as inadequate infrastructure, obsolete equipment and weak organisational support. The study conducted by Owofe and Yara (2011) revealed a

strong relationship between school facilities and students' academic achievement in Agricultural Science, pointing to the critical role of infrastructure in vocational education. Similarly, Onipede, Lawal & Samuel (2020) revealed that teachers often lack access to modern teaching tools and require further training in instructional technology. Moreover, the National Policy on Education (NPE, 2014) emphasizes the importance of vocational education in national development and calls for the provision of adequate facilities and teacher support to ensure effective implementation. Yet, in practice, preliminary investigation revealed that Agricultural Science teachers often operate under difficult conditions—facing high workloads, limited access to demonstration farms, and little opportunity for professional development. However, the success of vocational Agricultural Science education depends significantly on the ability of teachers to carry out their job tasks effectively. These job tasks include lesson planning, practical demonstrations, supervision of school farms, handling of agricultural tools and equipment, student assessments, and integration of current agricultural technologies into classroom practice. For these tasks to be performed efficiently, teachers require both adequate organisational support and instructional facilities.

Organizational and instructional facilities in the school settings are vital resources for implementing educational programmes. Effective use of both facilities in the implementation of educational programmes and their impact on teacher's job tasks and productivity depends on the physical conditions or quality of the facilities. Adeoluwa and Olojuolowe (2022) observed that, development and

availability of adequate and functional instructional and organizational facilities have been the major problems confronting effective teaching of Agricultural science in secondary schools. In order to fulfil educational objectives, the level of availability and quality of the facilities are supposed to be central to the concern of the school administrators so that vocational Agricultural teachers can perform their job tasks effectively.

Instructional facilities can be explained as the available resources that are instrumental to the attainment of academic excellence. They could also be improvised as the learning materials which are designed, prepared, produced, and judiciously utilized mainly to facilitate learning. Instructional facilities include the classrooms, seminal rooms, laboratories, computer laboratory, and instructional materials such as textbooks, reference books, lesson plan, workbooks, simple farm tools and equipment, charts, soil testing equipment, potential of Hydrogen (PH) meters, samples of fertilizers, soil samples, insect boxes, and weed albums, among others. The instructional materials could be grouped into, Audio, Visual, Audio-Visual, or electronic/interactive.

Effective implementation of vocational Agriculture teacher's job tasks in the school ought to be a function of the level of availability and functionality of both the instructional and organizational facilities in secondary schools.

Organizational facilities can be described as telephone, translator, Agricultural workshop, offices for the teachers among others which are often provided to facilitate communication and ensure smooth running of academic activities in schools. When these facilities are adequately available to the teachers, information dissemination becomes very effective, and the teacher's job tasks are

enhanced. Organizational facilities ensure that the system or the school environment is made conducive for the teachers. Organizational facilities integrate the teachers, the school administrator, students and the teaching learning process for the purpose of improving the productivity and efficiency of the Agricultural science teachers in secondary schools. It ensures a safer and workable environment for the teacher to perform his/her job tasks as a professional teaches, that is availability of adequate and functional facilities will enable vocational Agricultural Science teachers to carry out their job tasks effectively in secondary schools.

Job tasks of Agricultural science teachers are the statutory curricula functions that are supposed to be performed by the teachers in secondary schools to enable learners achieve preset educational goals in schools. The job tasks include classroom teaching, field practical activities, teaching manipulative skills, enhancing production agriculture using technology and leader development through in-school youth organizations or clubs. The job tasks are also associated with adequate planning of lesson notes, effective delivery of lessons, proper monitoring, and evaluation of students' performance, providing regular feedback on students' performance, improvisation of instructional materials, adequate record keeping and appropriate discipline of students to enhance expected learning outcome in secondary schools.

Agricultural science teacher's job task also includes the ability to help students to think creatively, be innovative, solve problems, learn by doing and develop interest in agriculture. These job tasks could only be accomplished depending on the status of the organizational and instructional

facilities available in secondary schools in Ekiti State. This is because the teacher of agriculture is not only a teacher, but also a technician. Accordingly, he is supposed to deal with both the cognitive, psychomotor, and affective learning outcome of the learners. He is often look upon as a master of all skills. The job task of the teacher of agriculture in secondary school is to educate students as well as help them to develop and acquiring definite proficiency skills in agriculture

Skill development area in Agricultural Science in secondary schools could include poultry production, goat rearing, piggery, arable crop production, animal services, vegetable farming, tractor driving and servicing, agricultural transportation, among others. The teachers of agriculture could be a male or female who is professional in carrying out agricultural teaching tasks to enhance learning. The teacher is also pivotal figure in implementing all agricultural science programmes in secondary schools in Ekiti State. Based on the vital role that both organizational and instructional facilities play in the implementation of educational programme, there is need to find out the extent availability and functionality of this facilities in both rural and urban located schools and this will reveal if there is equitable distribution of this facilities across rural and urban located secondary schools in Ekiti State and this will eventually enable vocational Agricultural Science teachers to carry out their job tasks effectively in both rural and urban located schools.

The school site or location in this context could be defined as the position or site of the school which may be within the urban or rural. The urban school location or site refers to schools situated within the Local Government Headquarters with necessary basic

amenities like tarred roads, electricity and pipe borne water while the rural location/site could be referred to as schools far away from the Local Government Headquarters and lacking basic amenities like tarred roads, electricity and pipe borne water (Oke, 2021). The selection of the location of the school may likely affect the job tasks of teachers of Agricultural Science and consequently the level of availability and utilization of the facilities. School needs a quiet environment, accessibility', safe distance from the main highways, the school should not be too far because of infrastructural connections like electricity, water, among others. There appears to be uneven distribution of organizational and instructional facilities for teaching Agricultural Science among secondary schools in urban and rural areas of Ekiti State. It is generally observed that students in the rural schools are deprived of the provision of modern facilities such as electricity, laboratory facilities and where such exist, they are often been characterized with obsolete equipment and poor utilization. Meanwhile, urban schools seem to have better supply of Agricultural Science equipment than rural schools. Also, students in urban schools seem to be adequately exposed to the use of Agricultural Science equipment as there was more enabling environment for carrying out science practical with regular supply of electricity, availability of adequate science teachers. Similarly, an urban school often has access to more electricity for internet facilities, use modern instructional facilities because of their closeness seat of power. In this case, location is one of the potent factors that may influence the distribution of organizational and instructional facilities, which could later affect students' learning outcome.

Organizational and Instructional facilities are very essential for teachers' job task to be effectively carried out, organizational and instructional facilities which ought to be major concern of the vocational Agricultural science teacher for effective teaching of Agricultural science in Ekiti State secondary schools appears to be grossly inadequate. In an ideal situation, organizational and instructional facilities like conducive classroom, standard school farm, laboratory, phone, translator, Agricultural workshop, simple farm tools among others are supposed to be readily available, functional and utilized to complement the teacher professional competency to enhance effective teaching in and outside the classroom. However, it has been observed that most of Ekiti State secondary schools neither have Agricultural science laboratory nor standard school farm (Famiwole 2024), consequently, affecting teachers' job tasks performance. Thus, Job tasks of Agricultural science teachers are enhanced when worthwhile organizational and instructional facilities are available in good, adequate and functional conditions.

Statement of the Problem

One of the major principles of vocational education is that, Vocational Agricultural Science in secondary schools could be taught where the training jobs and tasks are carried out in the same way, with the same operations, tools, equipment and machine or facilities as in the operation itself Preliminary investigation revealed that most secondary schools in Ekiti State do not have functional organisational and instructional facilities such as ICT facilities, standard school farm, instructional laboratories, agricultural workshops, farm equipment and

instructional materials such as projector, soil testing machine, artificial insemination equipment or storage facilities. The unavailability or inadequacy of the facilities appears to be some of the predisposing factors to Agricultural science teachers' ineffectiveness in the classroom and student poor learning outcome. Where the facilities are available, the level of functionality and inadequacy of such facilities seems to be doubtful. The observed unavailability or inadequacy of the facilities often leads to inefficient skill development among students. It also lead to poor students' interest in agriculture, poor career development initiatives and general poor learning outcome among Agricultural science student in secondary schools in Ekiti State.

The effective delivery of vocational agricultural science in secondary schools depends significantly on both organisational structures and the availability of instructional facilities. In many schools across Ekiti State, there have been persistent concerns about the adequacy and functionality of these facilities, as well as the institutional support provided to vocational agricultural science teachers. Despite the strategic importance of vocational agriculture in equipping students with practical and entrepreneurial skills, teachers appears to often struggle with poorly maintained infrastructure, inadequate teaching materials, and limited administrative support. This situation raises critical questions about how these organisational and instructional factors influence the actual job tasks of agricultural science teachers—tasks which include lesson planning, farm practical, student supervision, and continuous assessment. If these correlating factors are not properly understood and addressed, it

may lead to reduced teacher effectiveness, low student interest, and poor learning outcomes in Agricultural Science. Based on the need to provide a worthwhile training environment for the students, and to enhance the teacher's job task performance, this study intend to assess the status of organizational and instructional facilities as correlates of job tasks of vocational Agricultural science teachers in Ekiti State secondary schools.

Purpose of the Study

The main purpose of the study was to assess organisational and instructional facilities as correlates of job tasks of vocational agricultural science teachers in secondary schools in Ekiti State. Specifically, the study sought to;

- (i) determine the level of availability of the organisational facilities as correlates of job tasks of Vocational Agricultural Science teachers in secondary schools in Ekiti State,
- (ii) ascertain the extent of availability of the instructional facilities as correlates of job tasks of vocational Agricultural Science teachers in secondary schools in Ekiti State.
- (iii) identify the job tasks of vocational Agricultural science teachers in Ekiti State secondary schools,
- (iv) establish the relationship between organisational facilities and job tasks of Vocational Agricultural science teachers in secondary schools in Ekiti State,
- (v) establish the relationship between instructional facilities and job tasks of Vocational Agricultural Science teachers in secondary schools in Ekiti State.

Research Questions

This study was guided by the following research questions

- (i) What is the level of availability and functionality of the organisational facilities for job tasks of Vocational Agricultural Science teachers in secondary schools in Ekiti State?
- (ii) What is the level of availability and functionality of the instructional facilities for job tasks of Vocational Agricultural Science teachers in secondary schools in Ekiti State?
- (iii) What are the job tasks of vocational Agricultural Science teachers in secondary schools in Ekiti State?
- (iv) What is the relationship between organisational facilities and job tasks of vocational Agricultural Science teachers in secondary schools in Ekiti State.?
- (v) What is the relationship between organisational facilities and job tasks of vocational Agricultural Science teachers in secondary schools in Ekiti State.?

Research Hypotheses

The following hypotheses were formulated and tested at the 0.05 level of significance

- (i) There is no significant relationship between organisational facilities and job tasks of vocational Agricultural science teachers in secondary schools in Ekiti State.
- (ii) There is no significant relationship between instructional facilities and job tasks of Agricultural science teachers in Ekiti State secondary schools.
- (iii) There is no significant difference in the mean response of rural and urban secondary schools' teachers on the availability of organisational facilities for job tasks of vocational Agriculture teachers in secondary schools in Ekiti State.
- (iv) There is no significant difference in the mean response of rural and

urban secondary schools' teachers on the availability of instructional facilities for job tasks of vocational Agriculture teachers in Ekiti State secondary schools.

Research Method

The study adopted a descriptive survey research design, which was considered appropriate for investigating existing phenomena by eliciting direct responses from participants without manipulating any variables. This design enabled the researchers to gather opinions from respondents concerning organisational and instructional facilities as correlates of the job tasks of Vocational Agricultural Science teachers in secondary schools across Ekiti State. The target population consisted of all 144 Agricultural Science teachers working in public senior secondary schools within the state, which are distributed across 203 schools located in both rural and urban areas, according to the Ekiti State Ministry of Education, Science and Technology (2023). A total of 90 Agricultural Science teachers were selected as the study sample using a multi-stage sampling procedure. First, three Local Government Areas were randomly selected from each of the three senatorial districts in Ekiti State. Then, stratified sampling was employed to choose ten public secondary schools from each district, ensuring a balance between rural and urban locations. Finally, purposive sampling was used to select one Agricultural Science teachers from each of the chosen schools. The research instruments employed included a questionnaire and a checklist. The questionnaire, titled *Organizational and Instructional Facilities Questionnaire (OIFQ)*, was designed to gather information from the teachers and comprised two sections: Section A

collected respondents' demographic data, while Section B included 64 items rated on a four-point Likert scale type (Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1). The checklist assessed the availability of facilities, rated as Adequately Available ($\geq 70\%$), Moderately Available (50–69%), rarely Available ($< 50\%$), and Not Available (0%). To ensure the validity of the instruments, two experts each from the Departments of Vocational and Technical Education and Tests and Measurement, Ekiti State University, Ado-Ekiti as well as research's supervisor for proper scrutiny, in order to ensure the face and content validity of the instruments. Their corrections were used for the final draft of the questionnaire. The reliability of the questionnaire was established through a test-retest procedure, whereby ten Agricultural Science teachers from schools not included in the main study completed the questionnaire twice within a two-week interval. The resulting data were correlated using Pearson's Product Moment Correlation Coefficient, yielding a reliability coefficient of 0.85, which was deemed acceptable for the study. During data collection, the researcher and trained assistants built rapport with the respondents, assuring them of confidentiality and emphasising that the data would be used strictly for research purposes. The collected data were analysed using both descriptive and inferential statistical methods. Descriptive statistics, including frequency counts, percentages, mean scores, and standard deviations, were used to answer the research questions. Inferential statistics, specifically the Pearson Product-Moment Correlation Method and t-test were employed to test the null hypotheses at a 0.05 level of significance.

Results

Research Question 1: What is the level of the availability and functionality of the organizational facilities for job tasks of Vocational Agricultural Science teachers in secondary school in Ekiti State?

In answering the question, mean scores on the different level of availability and Functionality of organizational

facilities for job tasks of Vocational Agricultural Science teachers were computed and compared. To make decisions based on the functionality of the facilities using the mean ($\bar{X}$) facilities with a mean ($\bar{X}$) equal to or greater than the cut-off value (2.0) was considered functional, while those below the cut-off were deemed non-functional

Table 1: Mean and Standard Deviation of the Teacher Response on the Level of Functionality of the available Organizational Facilities for Job Tasks of Vocational Agricultural Science Teachers in Secondary School in Ekiti State

N=90

S/N	Items	$\bar{X}$	SD	Fully Functional (2.50–3.00)	Mostly Functional (2.00–2.49)	Partially Functional (1.50–1.99)	Not Functional (1.00–1.49)	Remarks
1	Telephone	2.51	0.32	2.51				Fully Functional
2	Stationeries	2.13	0.18		2.13			Mostly Functional
3	Translator	2.72	0.99	2.72				Fully Functional
4	Offices for Agricultural Teachers Vocational Education– Oriented Principal	2.18	0.56		2.18			Mostly Functional
5	Vocational- Oriented Head of Department	1.04	1.11				1.04	Not Functional
6	Adequate Offices and Accommodation	2.04	0.21		2.04			Mostly Functional
7	Effective Line of Communication with School Authority	1.52	0.89			1.52		Partially Functional
8	Barn for Storage	2.46	0.78		2.46			Mostly Functional
9	Agricultural Workshop	2.08	0.49		2.08			Mostly Functional
10	Agricultural Laboratory	2.32	0.68		2.32			Mostly Functional
11	Specimen for Practical	2.28	0.83		2.28			Mostly Functional
12		2.54	0.44	2.54				Fully Functional

N=90

Table 1 presents the responses of Vocational Agricultural Science teachers regarding the functionality of organisational facilities in secondary schools in Ekiti State. The findings reveal

that only a few facilities, namely the telephone ($\bar{X} = 2.51$), translator ($\bar{X} = 2.72$), and specimens for practical ($\bar{X} = 2.54$), were rated as fully functional. The

majority of the facilities, including stationeries ($\bar{X} = 2.13$), offices for agricultural teachers ($\bar{X} = 2.18$), vocational-oriented heads of department ($\bar{X} = 2.04$), effective communication channels with school authority ($\bar{X} = 2.46$), barn for storage ($\bar{X} = 2.08$), agricultural workshop ($\bar{X} = 2.32$), and agricultural laboratory ($\bar{X} = 2.28$), were rated as mostly functional. Adequate offices and accommodation ($\bar{X} = 1.52$) were assessed as partially functional, while the vocational education-oriented principal ($\bar{X} = 1.04$) was rated as not functional. Overall, the results indicate that although a few organisational facilities are fully functional, the majority are only mostly or partially functional. Leadership-related facilities, in particular, were found to be inadequate, reflecting weaknesses in the organisational support

system for vocational agricultural science teachers in secondary schools in Ekiti State.

Research Question 2: What is the level of availability and functionality of the instructional facilities for job tasks of Vocational Agricultural Science teachers in secondary School in Ekiti State?

In answering the research question, mean scores on the level of functionality of the available instructional facilities for the job tasks of Vocational Agricultural Science teachers were computed and compared. To make decisions based on the functionality of the facilities, facilities with a mean ($\bar{x}$) equal to or greater than the cut-off value of 2.0 were considered functional, while those below the cut-off were deemed non-functional.

Table 2 Mean and Standard Deviation of Teachers' Response on the level of Functionality of the available Instructional Facilities for Job Tasks of Vocational Agricultural Science Teachers in Secondary Schools in Ekiti State

N =90

S/N	Items	$\bar{X}$	SD	Fully Functional (2.50–3.00)	Mostly Functional (2.00–2.49)	Partially Functional (1.50–1.99)	Not Functional (1.00–1.49)	Remarks
Prints								
1	Textbooks	2.24	0.12		2.24			Mostly Functional
2	Pamphlets	2.50	0.19	2.50				Fully Functional
3	Handouts	2.46	1.65		2.46			Mostly Functional
4	Guides	2.62	1.11	2.62				Fully Functional
5	Manuals	2.59	0.34	2.59				Fully Functional
Audio								
6	Cassette	2.63	0.97	2.63				Fully Functional
7	Megaphone	2.76	1.21	2.76				Fully Functional
8	Podcast	2.80	1.34	2.80				Fully Functional
Visual								
9	Charts	2.24	0.54		2.24			Mostly Functional
10	Real objects	2.01	1.04		2.01			Mostly Functional
11	Photographs	2.38	1.09		2.38			Mostly Functional
12	Transparencies	2.67	0.96	2.67				Fully Functional
Audio-Visual								
13	Slides	2.49	1.02		2.49			Mostly Functional
14	Films	2.96	1.13	2.96				Fully Functional
15	Television	2.43	0.89		2.43			Mostly Functional
16	Video	2.19	0.87		2.19			Mostly Functional
17	Multirole	2.91	1.56	2.91				Fully Functional

Electronics						
18	Computer	2.19	1.23		2.19	Mostly Functional
19	Graphic	2.11	2.11		2.11	Mostly Functional
20	Calculator	2.14	1.23		2.14	Mostly Functional
21	Tablet	2.96	0.23	2.96		Fully Functional
22	Laptop	2.37	0.33		2.37	Mostly Functional
23	Projector	2.50	0.76	2.50		Fully Functional
Other Facilities						
24	School farm	2.27	1.02		2.27	Mostly Functional
25	Agricultural laboratory	1.52	0.89		1.52	Partially Functional
26	Simple farm tools	1.88	1.08		1.88	Partially Functional
27	Fish pond	2.87	0.79	2.87		Fully Functional
28	Weed album	2.49	0.99		2.49	Mostly Functional
29	Insect box	2.51	1.13	2.51		Fully Functional
30	Preserved specimens	2.42	1.12		2.42	Mostly Functional
31	Fishing equipment	2.46	0.93		2.46	Mostly Functional
32	Soil samples	2.74	1.04	2.74		Fully Functional

Table 2 presents the responses of Vocational Agricultural Science teachers on the functionality of instructional facilities available for their job tasks in secondary schools in Ekiti State. The results indicate that several facilities were rated as fully functional. These include pamphlets ($\bar{X} = 2.50$), guides ($\bar{X} = 2.62$), manuals ($\bar{X} = 2.59$), audio tools such as cassette ($\bar{X} = 2.63$), megaphone ($\bar{X} = 2.76$), and podcast ($\bar{X} = 2.80$), as well as transparencies ($\bar{X} = 2.67$), films ($\bar{X} = 2.96$), multirole equipment ($\bar{X} = 2.91$), tablets ($\bar{X} = 2.96$), projectors ($\bar{X} = 2.50$), fish ponds ($\bar{X} = 2.87$), insect boxes ($\bar{X} = 2.51$), and soil samples ($\bar{X} = 2.74$). A number of other facilities, such as textbooks ($\bar{X} = 2.24$), handouts ($\bar{X} = 2.46$), charts ($\bar{X} = 2.24$), real objects ($\bar{X} = 2.01$), photographs ($\bar{X} = 2.38$), slides ($\bar{X} = 2.49$), television ($\bar{X} = 2.43$), video ($\bar{X} = 2.19$), computer ($\bar{X} = 2.19$), graphics ($\bar{X} = 2.11$), calculators ($\bar{X} = 2.14$), laptops ($\bar{X} = 2.37$), school farms ($\bar{X} = 2.27$), weed albums ($\bar{X} = 2.49$), preserved specimens ($\bar{X} = 2.42$), and fishing equipment ($\bar{X} = 2.46$), were rated as mostly functional. Meanwhile, simple

farm tools ($\bar{X} = 1.88$) were considered partially functional, and the agricultural laboratory ($\bar{X} = 1.52$) was rated as not functional. Overall, the findings reveal that most instructional facilities for vocational agricultural science are either fully or mostly functional, suggesting that teachers have access to a wide range of usable teaching aids. However, the low functionality of some practical facilities, particularly laboratories and simple farm tools, highlights a gap in the provision of hands-on instructional resources. Strengthening these areas would enhance the effectiveness of vocational agricultural science teaching in secondary schools in Ekiti State.

Research Question 3: What are the job tasks of vocational Agricultural Science teachers in State secondary schools in Ekiti State?

To address the research question, the mean ($\bar{x}$) and standard deviation (S.D.) of teachers' responses on their job tasks were computed and compared against a cut-off value of 2.50. Tasks with a mean score equal to or greater than 2.50 were considered agreed upon as part of the job tasks, while those below the cut-off were deemed disagreed.

Table 3: Mean and Standard Deviation of Teacher Response on Job Tasks of Vocational Agricultural Science Teachers in Ekiti State Secondary Schools

N = 90				
S/N	Items	$\bar{X}$	S.D	Remark
1	Preparation of scheme of work	3.50	1.03	Agreed
2	Preparation of lesson note	3.79	0.76	Agreed
3	Effective delivery of instruction	3.72	1.21	Agreed
4	Use of instructional materials	3.28	2.12	Agreed
5	Use of modern method of teaching	2.53	1.26	Agreed
6	Carry out of continuous assessment (CA)	3.91	1.05	Agreed
7	Evaluation of students' progress	3.62	2.13	Agreed
8	Establishment of school farm	2.48	1.05	Disagreed
9	Maintenance of school farm	2.43	1.12	Disagreed
Skills development in				
10	Crop husbandry	2.58	0.89	Agreed
11	Animal husbandry	2.22	1.13	Disagreed
12	Forestry	1.81	1.04	Disagreed
13	Horticulture crops	3.58	1.03	Agreed
14	Carrying out cultural practices	3.30	2.13	Agreed
15	Keeping records	3.02	2.34	Agreed
16	Fish farming	3.14	1.19	Agreed
17	Arable crop	3.07	1.34	Agreed
18	Attending seminal/conference	3.14	1.17	Agreed
19	Organizing field trips	3.12	1.91	Agreed
20	Establish In-school youth organization in Agricultural Science	3.09	1.15	Agreed
21	Storage of agricultural product	3.19	1.23	Agreed
22	Marketing of agricultural products	3.22	0.98	Agreed
23	Conducting agricultural shows and contest	2.03	1.22	Disagreed

Cut-Off = 2.50

Table 3 shows that teachers agreed on performing core instructional tasks, such as preparing schemes of work ($\bar{X}=3.50$), lesson notes ($\bar{X}=3.79$), delivering effective instruction ($\bar{X}=3.72$), and conducting continuous assessments ($\bar{X}=3.91$). They also agreed on skills development in crop husbandry ($\bar{X}=2.58$), horticulture crops ($\bar{X}=3.58$), and fish farming ($\bar{X}=3.14$). However, tasks related to establishing ($\bar{X}=2.48$) and maintaining school farms ($\bar{X}=2.43$) were disagreed upon, as were tasks in animal husbandry ($\bar{X}=2.22$), forestry ($\bar{X}=1.81$), and conducting agricultural shows ($\bar{X}=2.03$). This indicates strengths

in instructional roles but gaps in practical, farm-based tasks.

Research Question 4: What are the opinions of secondary schools teachers on the availability of organizational facilities for job tasks of vocational Agriculture teachers in secondary schools in Ekiti State?

To address this research question, the mean ($\bar{x}$) and standard deviation (S.D.) of secondary school teachers' opinions on the availability of organizational facilities as correlates of job tasks were computed. Items with a mean score equal to or greater than the cut-off value of 2.50 were considered agreed upon.

Table 4: Mean and Standard Deviation of Teachers' opinion on the availability of organizational facilities for job tasks of Vocational Agriculture Teachers in Secondary Schools in Ekiti State

N=90				
S/N	ITEMS	$\bar{X}$	S.D	Remark
1	Facilities ease accomplishment of the task of vocational Agricultural Science teachers in the classroom	3.02	0.97	Agreed
2	Better classroom management reduces the workloads of teachers job task	3.14	1.03	Agreed
3	Guides teachers against unnecessary wasting of time while carrying out their job tasks	2.96	1.34	Agreed
4	Allow flexibility during class	3.29	0.95	Agreed
5	Availability of organizational facilities has a negative impacts on teachers job task	3.73	1.10	Agreed
6	Allow the use of modern technology to compliment tools	3.07	1.15	Agreed
7	Arouse teachers interest to carry out their job tasks effectively	3.37	0.95	Agreed
8	Makes learning to be more meaningful	3.37	0.78	Agreed
9	Reduces teachers' stress in carrying out their job task	3.12	1.03	Agreed
10	Create an enabling environment for teachers' task to be effectively delivered	3.47	0.92	Agreed

Cut off = 2.50

Table 4 shows that teachers agreed that organizational facilities ease tasks ($\bar{x}=3.02$) and reduce workload ($\bar{x}=3.14$). They acknowledged that these facilities enhance job performance ($\bar{x}=3.07$), create an enabling environment ($\bar{x}=3.47$), and make learning more meaningful ($\bar{x}=3.37$). Interestingly, they also agreed that the lack of such facilities negatively impacts job tasks ($\bar{x}=3.73$). The responses underscore the importance of organizational facilities in supporting effective teaching and reducing stress.

Research Question 5: What are the opinions of secondary schools teachers'

on the availability of instructional facilities as correlates of job tasks of vocational Agriculture teachers in Ekiti State secondary schools?

To address the research question, the mean ($\bar{x}$) and standard deviation (S.D.) of teachers' opinions on the availability of instructional facilities for job tasks were calculated and compared against a cut-off value of 2.50. Items with a mean score equal to or greater than the cut-off were considered agreed upon, signifying positive opinions on the role of instructional facilities in enhancing the job tasks of vocational Agricultural Science teachers in Ekiti State secondary schools.

Table 5: Mean and Standard Deviation Teachers' opinion on how Instructional Facilities Compliments Job Tasks of Vocational Agriculture Teachers in Secondary Schools in Ekiti State

		N =90		
S/N	ITEMS	$\bar{X}$	S.D	Remark
1	Control the attention of students in the classroom	3.01	0.92	Agreed
2	Save time	3.14	1.23	Agreed
3	Ease the task of vocational Agricultural Science teachers	2.98	1.07	Agreed
4	Instructional facilities reduces the work stress of teachers job task	3.34	0.89	Agreed
5	Help teachers to clearly understand and ingrain the flow of the lesson	3.62	0.65	Agreed
6	Utilisation of instructional facilities makes learning activities meaningful	3.03	1.56	Agreed
7	Allow effective management and usage of lesson period	3.41	1.18	Agreed
8	Create an enabling environment for teachers' task to be effectively performed	3.39	1.29	Agreed
9	Allow teachers to align his or her instructions to specific needs of students	3.12	1.13	Agreed
10	Make teacher to assess the learning outcome of students	3.41	1.67	Agreed

Cut off = 2.50

Table 5 reveals that teachers agreed that instructional facilities are vital resources for carrying out tasks ($\bar{x}=3.01$) and positively impact teaching ($\bar{x}=3.14$). They ease workload ($\bar{x}=3.34$) and reduce stress ($\bar{x}=3.62$). Utilization of these facilities enhances learning effectiveness ($\bar{x}=3.03$) and creates an enabling teaching environment ($\bar{x}=3.39$). Furthermore, effective use of these facilities significantly boosts job performance ($\bar{x}=3.41$). The findings

underscore the critical role of instructional facilities in improving teaching outcomes and teacher efficiency.

Testing of Hypotheses

Hypothesis 1: There is no significant relationship between organizational facilities and job tasks of vocational Agricultural science teachers in Ekiti State secondary schools.

Table 6: Correlation Analysis of the relationship between organizational facilities and job tasks of vocational Agricultural science teachers in Ekiti State secondary schools

Variables	N	Mean	S.D	Df	r_{cal}	p-value
Organisational Facilities	90	72.86	9.44	178	0.84	0.000
Job Task	90	83.31	9.50			

P<0.05

Table 6 shows that $r_{cal}=0.84$; $P=0.000<0.05$. Since the p value is less than 0.05, the null hypothesis is rejected. This implies that there is a significant relationship between organizational facilities and the job tasks of vocational

Agricultural Science teachers in Ekiti State secondary schools.

Hypothesis 2: There is no significant relationship between instructional facilities and job tasks of vocational Agricultural science teachers. in Ekiti State secondary schools.

Table 7: Correlation Analysis of the Relationship between Instructional Facilities and Job Tasks of Vocational Agricultural Science Teachers. in Ekiti state Secondary Schools

Variables	N	Mean	S.D	Df	r _{cal}	p-value
Instructional Facilities	90	73.67	12.62	178	0.23	0.01
Job Task	90	83.31	9.50			

P<0.05

Table 7 shows that $r_{cal}=0.23$; $P=0.01 < 0.05$. Since the P value is less than 0.05, the null hypothesis is rejected. This implies that there is a significant relationship between instructional facilities and the job tasks of vocational Agricultural Science teachers in Ekiti State secondary schools.

Hypothesis 3: There is no significant difference between the opinion of rural and urban secondary schools teacher's on the availability of instructional facilities as correlates of job tasks of vocational Agriculture teachers in Ekiti State secondary schools.

Table 8: T-test of the Difference between Opinion of Rural and Urban Secondary Schools Teacher's on the Availability of Instructional Facilities in Ekiti State Secondary Schools

Variables	N	Mean	S.D	df	t _{cal}	p-value
Urban Teachers	64	68.88	8.74	88	0.336	0.738
Rural Teachers	26	68.19	8.76			

P<0.05

Table 8 shows that $t_{cal}=0.336$; $P=0.738 > 0.05$. Since the P value is greater than 0.05, the null hypothesis is not rejected. This implies that there is no significant difference between the opinion of rural and urban secondary school teachers on the availability of instructional facilities as correlates of job tasks of vocational Agriculture teachers in Ekiti State secondary schools.

Hypothesis 4: There is no significant difference between the opinion of rural and urban secondary schools teacher's on the availability organizational facilities as correlates of job tasks of vocational Agriculture teachers in Ekiti State secondary schools.

Table 9: T-test of the Difference between Opinion of Rural and Urban Secondary Schools Teacher's on the Availability of Organizational Facilities in Ekiti State Secondary Schools

Variables	N	Mean	S.D	df	t _{cal}	p-value
Urban Teachers	64	69.66	11.73	88	0.314	0.754
Rural Teachers	26	70.54	12.93			

P<0.05

Table 9 shows that $t_{cal}=0.314$; $P=0.754 > 0.05$. Since the P value is greater than 0.05, the null hypothesis is not rejected. This implies

that there is no significant difference between the opinion of rural and urban secondary school teachers on the availability of organizational facilities as

correlates of job tasks of vocational Agriculture teachers in Ekiti State secondary schools.

Discussion

The study revealed that the functionality of available organisational facilities for job tasks of Vocational Agricultural Science teachers in secondary schools in Ekiti State is moderate. While some essential organisational resources, such as stationery for teachers, offices for departmental heads, basic storage facilities, and laboratories, were found to be present in most schools, other vital elements were significantly lacking. These include communication tools like telephones, translation devices for technical content, and field-specific specimens needed for practical demonstrations. The partial presence of these organisational structures indicates an imbalance in resource allocation and prioritisation, which can negatively affect the performance of teachers. The inadequacy of such facilities has been corroborated by previous research, including studies by Osaghae and Irabor (2012), which highlighted that physical facility deficiencies hinder effective teaching and learning. A similar study was made by Kelani (2007), who noted that workshop equipment and hand tools were either underutilised or insufficient across many VTE institutions. This has serious implications: the lack of comprehensive organisational support undermines the ability of teachers to conduct practical sessions effectively, thereby limiting students' skill acquisition and confidence in pursuing agriculture-related careers.

The functionality of available instructional facilities was also reported to be at a moderate level. The findings revealed that while facilities such as

workshops, laboratories, and some specialised instructional tools were available, they often lacked modernity and were insufficient in quantity to meet the demands of large student populations. Teachers often face logistical challenges related to the procurement and maintenance of instructional materials. These constraints reduce the effectiveness of practical-based teaching, which is critical in agricultural education. This finding aligns with Bandele and Faremi (2012), who stressed that the inadequacy of physical instructional resources hampers the effective delivery of vocational training programs. Instructional facilities, including demonstration farms, laboratory tools, and modern teaching aids, play a pivotal role in making Agricultural Science education experiential rather than theoretical. Their limited availability, therefore, not only restricts curriculum delivery but also diminishes students' interest and engagement. Studies by Mezieobi and Mezieobi (2013) confirm that instructional materials, both human and non-human, are essential for encouraging active learning, and their absence or inadequacy compromises teaching effectiveness.

Despite these infrastructural challenges, the study revealed that vocational Agricultural Science teachers are effectively carrying out their job tasks. These tasks include lesson planning, conducting laboratory and farm demonstrations, managing class activities, evaluating student performance, and handling certain administrative responsibilities. The effective delivery of these tasks suggests a high level of teacher commitment and professional competence, likely influenced by teacher training, experience, and internal motivation.

Research by Umar (2016), as well as Septianti and Afiani (2020), supported this finding, emphasising the roles of teachers, which include acting as facilitators, cultural transmitters, and community liaisons. Rahadian (2016) further noted that teachers are expected to manage school supplies and resources in addition to delivering instruction. The ability of teachers in Ekiti State to fulfil these duties effectively despite infrastructural gaps demonstrates resilience and underscores the importance of professional development, peer collaboration, and administrative support.

The results revealed that teachers hold strong opinions on the importance and availability of organisational facilities. Most teachers agreed that organisational facilities are central to their ability to perform vocational tasks effectively. Facilities such as laboratories, workshops, field sites, and administrative tools contribute significantly to teaching efficiency and job satisfaction. Adeyemo (2001) emphasised the influence of an enabling environment in enhancing teacher performance in vocational education. In line with Owoeye and Olatunde Yara (2011), the study confirms that improved availability of organisational resources reduces time spent on improvisation, allowing teachers to focus on teaching delivery and student engagement. Teachers indicated that a well-structured school environment, supported by effective administrative systems and adequate physical infrastructure, promotes better performance, reduces stress, and fosters student learning. Earthman (2002) also highlighted that the quality of school facilities has a direct impact on educational outcomes, supporting the notion that infrastructure plays a critical role in the teaching and learning process.

The study investigated teachers' opinions regarding the availability of instructional facilities and found that they acknowledge the importance of these resources in improving lesson delivery and reducing teaching stress. Instructional aids such as charts, projectors, laboratory kits, and farm tools enhance the clarity and effectiveness of lessons, especially in practical-oriented subjects like Agricultural Science. Adeyemo (2001) and Asif et al. (2016) have similarly argued that access to adequate teaching resources increases job satisfaction and effectiveness. Teachers in this study emphasised that when instructional facilities are available and accessible, they are better positioned to deliver impactful lessons, which leads to higher student interest and performance. Furthermore, the study found no significant difference between the opinions of urban and rural teachers regarding the availability of these facilities, suggesting equitable distribution across geographical areas in Ekiti State. This finding aligns with studies by Adekunle and Balogun (2023), Eze and Okeke (2022), and recent reports from the Ekiti State Ministry of Education (2023), all of which point to state-wide efforts to ensure equitable distribution of educational resources. Such uniformity helps minimise educational disparities between urban and rural areas, reinforcing fairness in the teaching and learning experience.

Conclusion

The impact of instructional facilities on teaching agricultural science effectiveness is relatively modest compared to the more pronounced influence of organisational facilities. Notably, there is no significant difference in the opinions of urban and rural teachers regarding the availability of

these facilities, suggesting an equitable distribution of resources across different geographic locations. Some job tasks are effectively carried out by teachers, and they acknowledge the significant role that these facilities play in enhancing job performance and reducing stress, though some essential facilities are still lacking

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ENTREPRENEURSHIP FINANCE OPPORTUNITIES FOR BUSINESSS EDUCATION GRADUATES IN EBONYI STATE

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Abstract

This paper assessed the entrepreneurship finance opportunities for business education graduates in Ebonyi State, Nigeria. Two research questions were raised and two hypotheses were formulated for the study. The researchers adopted survey research design for the study. The population of the study comprised of 145 business education graduates drawn from the ministry of commerce and industry, Ebonyi State. The entire population was studied without sampling because of its manageable size. A structured questionnaire titled: entrepreneurship finance opportunities for business education graduates, which consist of 20 items in two sections was used to elicit information from the respondents. The questionnaire was face validated by three experts from business education and Test and measurement Department. Cronbach alpha was used to determine the internal consistency and a coefficient of 0.77 and 0.82 respectively was obtained. Research questions were answered using mean and standard deviation while the hypotheses was tested using t-test statistics at 0.05 level of significance. The findings revealed internal and external sources finance of entrepreneurship business education graduates which are as follows: owners capital, retained profit, selling of assets, personal savings, depreciation savings, working capital, reducing stock, contribution from partner, debt factoring, invoice discounting are internal sources of finance opportunities available for business education graduates while debenture, trade credit, customers advance payment, loan from the bank, hire purchase, bank overdraft, leasing, share issue, government grant, venture capital are external sources of entrepreneurship finances for business education graduates. The finding also revealed that there is no significant difference between the responses of the male and female business education graduates' entrepreneurs regarding the internal and external sources of financing entrepreneurship business. It was recommended among others that: business education graduates who seek to become entrepreneurs must weigh both internal and external sources of business finances, to enable them make informed decisions about suitable form to use and when to use it and how best to use it.

Keywords: Entrepreneurship, Entrepreneur, Business education, Graduates, Sources of finance

Introduction

The introduction of entrepreneurship education into the national educational curricula by the Federal Government in 2005 is multi-dimensional development learning strategy in basic and tertiary education.

This partly reform the education and learning at all levels especially in universities which aimed at providing postgraduates students opportunities for entrepreneurial learning, create and increase the awareness of entrepreneurship, develop appropriate

mindsets and behaviour favourable to enterprise development (Akpomi & Ikpesu, 2020).

Entrepreneurship plays vital function in the growth and expansion of any country's economy; it is viewed as the engine of economic growth and a driving workforce of decentralization. Conceptually, entrepreneurship is acting upon previously unnoticed profit opportunities to produce a new output. Entrepreneurs bear the risk associated with economic development because they undertake new ideas and commit resources into new business venture, from which substantial rewards are expected, both immediately and in the foreseeable future (Nwachukwu 2022). Entrepreneurship provides the action needed for industrial boom and economic growth that is why most policy interventions, mainly in a developing country like Nigeria often focus at encouraging entrepreneurship development through the context of small and medium scale enterprises (Ebiringa, 2021). Farayibi et, al (2015) expressed that the actions of entrepreneurs had undoubtedly contributed immensely in the growth and development of the country. This contribution can be perceptible when we aim at the impact of variables such as gross domestic product, employment creation, poverty eradication and per capita income. Davis (2020) in his submission opined that entrepreneurs are constantly on the outlook for opportunities, encourage efficient capital and skill resource mobilization, which leads to innovation of products and services and encourage development of the nation most especially when the identified opportunities are financed. Nwangwu (2017) submitted that entrepreneurship as an integral part of business education plays vital role which include: creation of

employment, poverty alleviation, discovering of business opportunities and equipping of skills needed for business finances

Pretorius and shaw (2024) opined that access to funds for entrepreneurship business of a business education graduate could be from internal or external, which constitutes the key determinant of a business set up, development and rendition for entrepreneurial ventures. Eniola and Entebang (2015) opined that internal funding involves entrepreneurs getting their own capital, mainly from savings, reserved profits, depreciation and sale of assets, which form a critical part of the survival and entrepreneurship improvement. The above authors express further that more profitable entrepreneurs make use of external sources of funding like individual investors, financial banks, venture capital and crowd-funding to become successful in their entrepreneurial pursuits. Thus, merchant, deposit money bank, micro finance bank and development banks respectively constituting formal sources of external financing which can take the form of debt or equity. Rajan (2016) opined that as the business starts to grow, funding from external sources become imminent and their availability decisively determine the growth path of entrepreneur. However, despite the identified sources of financing entrepreneurship business, graduates of business education who are into entrepreneurship business are still not aware of the way out to finance their businesses. It is on this background that the study assesses the sources of financing available for business education graduates entrepreneurial business.

Statement of the problem

The major determinant of entrepreneurship business success or failure is finance. Onyia (2021) stressed that the crucial problem identified with entrepreneurship in Nigeria and mostly in Ebonyi State is low level of financing entrepreneurial ventures which has hampered the level at which the entrepreneurs have contributed towards the nation's employment and GDP rate. Also, preceding this is the scarcity of funding due to lack of loan, collateral security available to entrepreneurs in the region, Daniel *et. al* (2024), expressed that inability to identify and access finance from the available existing sources is a challenge but the most crucial challenge facing Nigerian entrepreneurs is the inability to identify different financial sources within their business environment (Somoye 2023). Onyia and Asoche (2021) submitted that many graduates who do not have white-collar job but have business ideas are still wasting on the streets, engaging in some sorts of criminal activities, do claim that they do so to raise fund to start business. A lot of entrepreneurial courses are thought in the universities, most especially in business education programme to enable the students become self-reliant after graduating from the university. But the fact remains that people look out for place to source finance for businesses but lack the awareness of the various sources of business finance available within their immediate environment. Majority look at bank loan as the only viable source of business finance but may not access bank loan due to the demand for collateral and possible high rate of interest. Thus, this paper seeks to find out the various sources of business finance available for business education graduates for entrepreneurial development.

Purpose of the study

The main purpose of this study was to find out the various sources of entrepreneurship finance for business education graduates in Ebonyi state. Specifically, the study determined;

- a) the internal finance opportunities available for entrepreneurial business of business education graduates in Ebonyi State, Nigeria
- b) the external finance opportunities available for entrepreneurial business of business education graduates in Ebonyi State, Nigeria

Researcher questions

The following research questions guided the study

- a. What are the internal finance opportunities available for entrepreneurial business of business education graduates in Ebonyi State, Nigeria?
- b. What are the external finances opportunities available for entrepreneurial business of business education graduates in Ebonyi State, Nigeria?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance

H0₁: There is no significant different between the male and female business education graduates' regarding the internal finance opportunities available to finance their entrepreneur business in Ebonyi State, Nigeria?

H0₂: There is no significant different between the male and female business education graduates' regarding the external finances opportunities available for entrepreneurial business in Ebonyi State, Nigeria?

Methodology

The study was carried out in Abakalikki metropolis of Ebonyi State, Nigeria, using the descriptive survey research design. The design was considered appropriate for the study because it is a valuable tool for assessing opinions. The population for the study consists of 145 business education graduates drawn from the ministry of commerce and industry, Ebonyi State. There is no sampling because of the manageable size of the population. A self-structure 20 items questionnaire on internal and external sources of entrepreneurship finance opportunities for business education graduates business (IESBFAFEGB)" was the instrument used for data collection. The questionnaire was drafted on a four-point rating scale of strongly agree (SA), agree (A), disagree (D) and strongly disagree (1) with a corresponding value of 4,3,2, and 1 respectively. The instrument was face and content validated by three expert in Business education and Test and Measurement Department. The reliability of the instrument was

ascertained using Cornbach Alpha at a reliability coefficient of 0.77 and 0.82 respectively. 145 copies of the instrument were administered directly by the researchers with the help of 3 research assistants and retrieved immediately after completion. The data collected were analyzed using mean and standard deviation. The standard deviation shows the homogeneity in the responses of the respondents. The decision rule was that any mean value of 2.50 and above was considered as agreed while mean value below 2.50 were disagreed. Data for the hypotheses were analyzed using t-test statistics at 0.05 level of significance. The hypotheses were accepted when the z-calculated value is less than the z-critical value at significant level of 0.05 and was rejected where the calculated value is higher than the significant level of 0.05.

Results

Data presentation and Analysis

Research question 1: what are the internal finance opportunities available for business education graduates entrepreneurial business.

Table 1: Means and standard deviation scores of business education graduates funding alternatives available to run entrepreneurial business.

S/N	Item Statement	X	S.D	Remark
1	Owner capital	3.40	1.08	Agree
2	Retained profit	3.30	0.90	Agree
3	Selling of assets	2.70	1.00	Agree
4	Personal savings	2.70	1.10	Agree
5	Depreciation savings	3.20	0.75	Agree
6	Working capital	2.90	0.94	Agree
7	Reducing stock	3.50	0.50	Agree
8	Contribution from partner	3.29	0.59	Agree
9	Debt factoring	3.29	0.59	Agree
10	Invoice discounting	2.93	0.96	Agree

The result in table 1 reveals that the mean values of the respondents on the 10 items ranged from 2.70 to 3.50 which are all greater than the bench mark of 2.50 on 4-point rating scale. This

indicate that the responses agreed that the identified 10 items are internal sources of finances opportunities available for business education

graduates. All the 10 items were rated higher by the respondents.

to run entrepreneurial business of business education graduates in Ebonyi State, Nigeria?

Research question 2: What are the external finances opportunities available

Table 2: Participant responses on the external sources of business finance available for business education graduates entrepreneurial business

S/N	Item Statement	X	S.D	Remark
1	Debenture	3.40	0.92	Agree
2	Trade credit	3.40	0.66	Agree
3	Customers advance payment	3.60	0.49	Agree
4	Loan from the bank	3.40	0.49	Agree
5	Hire purchase	4.00	0.01	Agree
6	Bank overdraft	3.00	1.10	Agree
7	Leasing	2.50	0.92	Agree
8	Share issue	3.64	6.61	Agree
9	Government grant	3.07	0.80	Agree
10	Venture capital	3.57	0.49	Agree

The result in table 2 reveals that the mean values of the respondents on the 10 items ranged from 2.50 to 3.64 which are all greater than the bench mark of 2.50 on 4-point rating scale. This indicate that the responses agreed that the identified 10 items are external sources of funding business education graduates entrepreneurial business

Testing the null hypotheses

H0₁: There is no significant different between the male and female business education graduates' responses regarding internal sources of financing opportunities available for business education graduates entrepreneurial business.

Table 3: t-test result of the mean responses of male and female business education graduates' responses regarding internal sources of finance available for business education graduates entrepreneurial business.

Group	N	Mean	Sd	q	Df	z-cal	z crit	Decision
Male	91	3.21	0.70	0.05	143	0.21	0.47	NS
Female	54	3.31	0.57					

The result in table 3 shows that the z- calculated value of 0.21 is less than the t-critical value of 0.47 at 0.05 significant level. This indicates that there is no significant different between the male and female business education graduates' responses regarding internal sources of finance available for business education graduates.

H0₂: There is no significant different between the male and female business education graduates' responses regarding external entrepreneurship finance opportunities for business education graduates

Table 4: t-test result of the mean responses of male and female business education graduates' responses regarding external sources of business finance opportunities for business education graduates

Group	N	Mean	Sd	q	Df	z-cal	z crit	Decision
Male	91	3.25	0.94	0.05	143	0.22	0.829	NS
Female	54	3.20	0.6					

The result in table 4 shows that z-cal value of 0.22 is less than the crit z value of 0.892 significant level. This indicates that there is no significant different between the male and female business education graduates' responses regarding external entrepreneurship finance opportunities for business education graduates.

Discussion on the Findings:

The findings of the study from research question one affirmed the agreement of the respondents that owner capital, retained profit, selling of assets, personal savings, depreciation savings, working capital, reducing stock, contribution from partner, debt factoring, invoice discounting are internal sources of entrepreneurship business finance opportunities for business education graduates. The findings aligned with Ozoani (2021), who pointed that entrepreneur funds their establishments through internal source like: retained profit, selling of assets, owner capital, personal savings, depreciation savings. In the same vein, Martins et al, (2024), expressed that working capital, reducing stock, contribution from partner, debt factoring, retained profit, etc are internally sources of funding available for entrepreneurs to sustain their ventures without external borrowings.

The result of testing of null hypothesis is revealed that there is no significant difference in the mean response of male and female business education graduates on the internal sources of funding entrepreneurship

business of business education graduates since the calculated z -value is less than the critical z -value at 0.05 level of significance and 143 degree freedom.

The findings of the study from research question two affirmed the agreement of the respondents that debenture, trade credit, customers advance payment, loan from the bank, hire purchase, bank overdraft, leasing, share issue, government grant, venture capital are external sources of entrepreneurship business finance opportunities for business education graduates. The findings aligned with Ezechi (2020), who said that for entrepreneurs to break- even and cover their business gaps, they must breakout from the limitation of poor business funding beyond their business environment. This include getting loan from commercial bank, overdraft, hire purchase from suppliers, seeking grants from the government, friends and relatives. This study is also in agreement with Ozoani (2021) who highlighted that financing a business through external source, gives access to larger funds than internal source. Furthermore, he lauded that most of the external sources of business finance such as grant from the government, grant from friends and relative may not be paid back. The findings also concurred with Ndechi (2020) who opined that entrepreneurs need to have good external sources of finance to enable them navigate through the huddles of poor business funding, he agreed that personal savings, trade credit, customers advance payment, loan from

the bank, hire purchase, bank overdraft, leasing, venture capital are all available sources of finance business education graduates. The result of the analysis of hypothesis 2 shows that there is no significant difference between the mean responses of male and female business education graduates regarding the external sources of funding entrepreneurship business.

Conclusion

Without adequate funding the best business dream will fiddle away and innovations will have still-birth. Finance is the grease that nurture innovation to fruition. It is an essential ingredient to entrepreneurs' business success. This paper has therefore identified various sources of finance available for business education graduate, which will make it possible for them to access funds in many ways and not to over rely on bank loan.

Recommendations

1. Business education graduates who seek to become entrepreneurs must weigh both internal and of business finance available, to enable them make informed decisions about suitable form to use and when to use it.
2. Business education graduate (entrepreneurs) should not over rely on bank loan as the only viable source of business finance available

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IMPACT OF CREATIVE THINKING ON THE PERFORMANCE OF ELECTRICAL/ELECTRONIC TRADE STUDENTS IN TECHNICAL COLLEGES IN EKITI STATE

BAMIDELE Julius

Abstract

This study examined the impact of creative thinking on the practical performance of electrical/electronic students of technical colleges in Ekiti State. The study adopted a descriptive survey design and covered a population of two hundred and sixty-seven (267) electrical and electronic trades students and teachers of Technical Colleges in Ekiti state. Also, the population was adopted for the study as the sample. A well-structured closed-ended question was adopted for the study and administered to the respondents after being subjected to both validity and reliability tests. The data obtained from this study were subjected to statistical analysis. From the analysis result, it was established that there is a significant influence of originality, elaboration, and flexibility on the practical performance of the students in electrical/electronic trades in technical colleges in Ekiti State. Also, it was revealed that there is a significant difference in the creative thinking skills of male and female students in technical colleges in Ekiti State. It was concluded that there is a statistically significant influence of creative thinking on the practical performance of electrical/electronic students of technical colleges in Ekiti State.

Keywords: Creative, Creativity, Thinking Skill, Originality, Elaboration and Flexibility, Electrical, Electronic, Practical, Technical Colleges.

Introduction

The growing importance of science in society has driven the Federal Government of Nigeria, through the Federal Ministry of Education, to incorporate technical and vocational subjects into the curriculum of the nation's technical colleges. Among these is Electrical-Electronic trades. These trades focus on design, and application of systems using electricity, electronics, and electromagnetism. According to Eze (2018), the field emerged in the 19th century with the commercialization of technologies such as the telegraph and telephone. Electrical-Electronic trades encompass a wide range of disciplines, including computer engineering, telecommunications, power engineering, and signal processing, with overlapping fields in renewable energy, nanotechnology, and hardware

engineering. These diverse specializations highlight the breadth of the field and the growing demand for skilled professionals in related areas.

Practical activities are integral to teaching Electrical-Electronic concepts, as they provide students with hands-on learning experiences that make abstract scientific principles more tangible. Nzewi (2018) emphasizes that practical work not only reinforces knowledge but also builds long-term competence, essential for students to meet the technological demands of the nation. Many technical schools in Nigeria face challenges due to inadequate exposure to practical activities, which contributes to poor performance in practical assessments. To address this issue, there is a pressing need to enhance practical training in these schools, ensuring students acquire both theoretical understanding and practical

skills during their studies and after graduation. Central to this improvement is the incorporation of creative thinking in technical education.

Creativity, which plays a crucial role in improving the quality of life, is highly valued in educational contexts, particularly in technical fields. Anshu and Parmod (2017) define creative thinking as the ability to generate original ideas or solutions, distinguishing it from conventional forms of thinking. Rhodes (2016) further breaks down creativity through his 4 P's framework: person, process, press, and product. These components—personality traits, the creative process, the environment, and the end product—underscore the complexity of creativity, which is essential in technical education. Creativity in technical colleges can drive innovation in practical learning and problem-solving, ultimately enhancing the effectiveness of the teaching process in fields like Electrical-Electronic trades.

Creativity is assessed through originality, elaboration, flexibility, and fluency, all of which influence how teachers perceive its role in student performance. This perception can vary based on socio-demographic factors such as gender and school location. In Nigeria, societal norms often shape the expectations of boys and girls regarding intelligence and physical abilities. The prevailing belief that boys are superior in reasoning and intelligence may affect how creativity and performance are perceived in technical fields like Electrical-Electronic. Addressing these gender-based perceptions is vital for fostering a more inclusive and creative learning environment, where both male and female students can thrive.

Statement of the Problem

Vocational technical trade is crucial for developing a skilled workforce, especially in fields like electrical and electronic trades, which require both theoretical knowledge and practical proficiency. It has been observed that there is increasing concern that graduates from technical colleges, particularly in Ekiti State, Nigeria, often lack the practical skills needed to perform competently in the workplace. The difference between theoretical learning and practical application has become evident as students in these trades struggle to meet industry standards, highlighting a need for more effective hands-on training.

A key contributor to this difference is the insufficient emphasis on creative thinking within the curriculum. Creative thinking, essential for solving problems and adapting to new challenges, is critical in vocational technical fields like electrical and electronic trades. Many technical colleges in Ekiti State rely on traditional teaching methods that focus on rote learning and memorization, rather than fostering innovative thinking. Students may perform well in theoretical exams but struggle with practical tasks, ultimately affecting their performance in both academic and workplace environments.

Inability to emphasize on creative thinking skills among students in electrical and electronic trades in Ekiti State has significant implications for workforce development. As industries grow more complex and technology-driven, the need for workers who can solve problems and think creatively is increasing. Without fostering these skills, technical colleges risk producing graduates unprepared for the modern economy. The situation is worsened by inadequate infrastructure, limited access to modern tools, and a lack

of professional development for teachers, which stifles innovation and hinders effective practical training. Addressing these issues is crucial to improving students' practical performance and ensuring they are equipped to meet industry demands.

Purpose of the Study

This study examined the impact of creative thinking on the performance of electrical/electronic trades in technical colleges in Ekiti State. Specifically, this study:

- i. investigated the influence of originality on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State;
- ii. determined the impact of elaboration on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State;
- iii. ascertained the impact of flexibility on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State;
- iv. examine the difference in the creative thinking skill of male and female students in technical colleges in Ekiti State.

Research Questions

The following research questions are raised to guide the study:

- i. Does originality affect the performance of the students in electrical/electronic trades in technical colleges in Ekiti State?

- ii. What is the impact of elaboration on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State?
- iii. What is the impact of flexibility on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State?
- iv. Is there a significant difference in the creative thinking skill of male and female students in technical colleges in Ekiti State?

Methodology

A descriptive research of the survey design was used for the study. The population for the study covered all the Electrical Electronic students and teachers in the five Technical Colleges owned by the Ekiti State Government. As at the time of this study, there are 258 electrical and electronic students and 9 teachers. The population was 267. Due to the small size of the population, total population of 267 would be adopted to represent the sample. The instrument for data collection was a structured questionnaire by the researcher with the help of the researcher's supervisor. The data collected were analysed using descriptive and inferential statistics. The simple linear regression was used to answer the research questions.

Results

Result

Research Question 1: Does originality affect the performance of the students in electrical/electronic trades in technical colleges in Ekiti State?

Table 1: Regression Analysis showing the influence of originality on the practical performance of the students in electrical/electronic students in technical colleges in Ekiti State

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	43.232	1.695		25.511	.000
	Originality	0.414	.175	0.149*	2.362	.012
$R=0.649$ $R^2= 0.421$ Adjusted $R^2= 0.419$ $F = 5.75217$ $P=0.019 < 0.05$ (Significant)						

Dependent Variable: Performance

Table 1 revealed that there is positive correlation between originality and practical performance of the students in electrical/electronic students in technical colleges in Ekiti State ($R=0.649$). The value of coefficient of determinant ($R^2=0.421$) indicated that originality accounted for 42.1% of the total variance in practical performance of the students in electrical/electronic students in technical colleges in Ekiti State while the remaining 57.9% unexplained variation could largely be due to other variables examined in this study. The F-ratio (5.75217) was significant at 0.05 level of significance. This implies that the predictor variable

will provide a significant explanation for the variation in practical performance of the students in electrical/electronic students in technical colleges in Ekiti State. Thus, the hypothesis that originality will not significantly influence practical performance of the students in electrical/electronic students in technical colleges in Ekiti State was not accepted.

Research Question 2: What is the impact of elaboration on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State?

Table 2: Regression Analysis showing the influence of elaboration on the practical performance of the students in electrical/electronic students in technical colleges in Ekiti State

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	29.798	1.348		22.111	.000
	Elaboration	.639	.088	.421*	7.258	.000
$R=0.421$ $R^2= 0.177$ Adjusted $R^2= 0.174$ $F = 52.683$ $P=0.000 < 0.05$ (Significant)						

Dependent Variable: Performance

Table 2 revealed that there is positive correlation between elaboration and practical performance of the students in electrical/electronic students in technical colleges in Ekiti State ($R=0.421$). The value of coefficient of determinant ($R^2=0.177$) indicated that elaboration accounted for 17.7% of the total variance in practical performance of the students in electrical/electronic students in technical colleges in Ekiti State while the remaining 82.3% unexplained variation could largely be due to other variables examined in this study. The F-ratio (52.683) was significant at 0.05 level of significance.

This implies that the predictor variable will provide a significant explanation for the variation in practical performance of the students in electrical/electronic students in technical colleges in Ekiti State. Thus, the hypothesis that elaboration will not significantly influence practical performance of the students in electrical/electronic students in technical colleges in Ekiti State was not accepted.

Research Question 3: What is the impact of flexibility on the performance of the students in electrical/electronic trades in technical colleges in Ekiti State?

Table 3: Regression Analysis showing the influence of flexibility on the practical performance of the students in electrical/electronic students in technical colleges in Ekiti State

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	38.466	1.364		28.192	.000
Flexibility	.423	.173	.542	3.652	.015
$R=0.742$ $R^2= 0.524$ Adjusted $R^2= 0.521$ $F = 28.425$ $P=0.001 < 0.05$ (Significant)					

Dependent Variable: Performance

Table 3 revealed that there is positive correlation between flexibility and practical performance of the students in electrical/electronic students in technical colleges in Ekiti State ($R=0.742$). The value of coefficient of determinant ($R^2=0.524$) indicated that flexibility accounted for 52.4% of the total variance in practical performance of the students in electrical/electronic students in technical colleges in Ekiti State while the remaining 47.6% unexplained variation could largely be due to other variables examined in this study. The F-ratio (28.425) was significant at 0.05 level of significance.

This implies that the predictor variable will provide a significant explanation for the variation in practical performance of the students in electrical/electronic students in technical colleges in Ekiti State. Thus, the hypothesis that flexibility will not significantly influence practical performance of the students in electrical/electronic students in technical colleges in Ekiti State was not accepted.

Research Question 4: Is there a significant difference in the creative thinking skill of male and female students in technical colleges in Ekiti State?

Table 4: t-test showing difference in the creative thinking skill of male and female students in technical colleges in Ekiti State

Gender	N	Mean	Std. Deviation	df	t_{cal}	Sig
Male	217	74.18	7.304	246	3.142*	0.013
Female	31	81.64	6.982			

$P < 0.05$ (Significant Result)

The result in table 9 shows that $t_{cal} = 3.142$; $P = 0.013 < 0.05$. Since the P value is less than 0.05, therefore, the null hypothesis is not accepted. This implies that there is significant difference in the creative thinking skill of male and female students in technical colleges in Ekiti State.

Discussion

From the analysis conducted, it was established that there is a significant influence of originality, flexibility and fluency on the practical performance of the students in electrical/electronic students in technical colleges in Ekiti State. By implication, originality, flexibility and fluency have the independent capacity to engender an increase in the academic performance of both electrical and electronic students in technical colleges in Ekiti state. This finding agreed with the findings of Mohammed, *et. al.* (2017) that the components of creative thinking significantly determine the performance of students in tertiary institutions. Alakija (2018) reported that originality and flexibility maintained a significant relationship with academic success of students. Alao (2019) disclosed that creative thinking significantly stimulates an increase in academic achievement of students. Also, it was revealed that there is a significant difference in the creative thinking skill of male and female students in technical colleges in Ekiti State. The difference could be trace to the difference in personal interest and determination among male and female students. This

finding is in-line with the conclusion of Heliskin (2018) that among female and male students, there is significant difference in their level of creative thinking skill.

Conclusion and Recommendation

In order for students to acquire these skills, teachers of technical colleges are required to teach relevant practical skills to students by employing appropriate teaching and evaluation strategies. It was established that the components of creative thinking significantly influence practical performance of electrical and electronic students in technical colleges in Ekiti State. In line with the findings made, the following recommendations were made that:

- The identified creative thinking skills should be incorporated into the curriculum of Electrical and Electronic trade for training students in Technical Colleges.
- Workshop and seminars should be organized for electrical and electronic trade students on current technologies/issues in electrical and electronic trades from time to time.
- Adequate orientation should be given to electrical and electronic students in technical colleges on the relevance of their knowledge to their survival after graduation. This would stimulate more efforts from them on their practical performance.

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INFUSING DIGITAL SKILLS INTO BUSINESS EDUCATION CURRICULUM FOR GRADUATES' EMPLOYABILITY ENHANCEMENT

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Abstract

The new millenium age workplace requires the specific digital skills necessary to boost the employability of Business Education graduates. A survey research design was adopted for the study. Sample size comprised of sixty randomly selected participants of forty final year business education university students and twenty business education lecturers chosen from the two selected universities in Oyo State. Items on students questionnaire were drawn from research questions one and two tagged Digital Skills and Competencies integration in Business Education Curriculum (DSCIBEC), while the lecturers' items were generated from research questions three and four which was tagged: Digital Skills, Business Education Graduates' Employability and Impendiments (DSBEGEI). The study made use of four likert scale of Strongly Agreed, Agreed, Strongly Disagreed and Agreed. Data were collected through validated questionnaire, demonstrating a reliability coefficient of 0.82, confirming the study's validity and dependability. The results depict that the level at which digital skills are integrated to the teaching of business education curriculum is low. The research thereby recommends among others that adequate funding should be earmarked for the universities to acquire digital tools for skill acquisition in a bid to bridge the gap between the school and the industries for enhancement of business education graduates' employability.

Introduction

Business education is a course of study aiming at imparting skills, attitude, knowledge and values capable of fitting its recipients into the world of work after graduation. It serves as a platform for preparing students for careers in business and related fields. Business education is an aspect of vocational education that is being incorporated into Nigerian educational system right from elementary level. Onojaife. (2019) viewed that Business education as an aspect of vocational education that is incorporated into the Nigerian system right from the junior secondary school for gradual skill development of the learner. Business education is a broad area of knowledge

that deals with the entire enterprise system, preparing recipients for roles in business as employees or employers. The actual goals of business education are to: prepare students for specific career in office occupations; requisite skills' acquisition for job creation and entrepreneurship and exposure of students with knowledge about business, including digital skills' acquisition by incorporating information and communication technology (ICT) (Edokpolor and Egbri, 2017).

According to the Nigerian Economic Summit Group (2024), the unemployment rate rose to 5.3% in the first quarter of 2024, marking a continued increase for the third consecutive quarter

since the second quarter (Q2) of 2023. The rise in unemployment has been more pronounced in urban areas than rural regions, further aggravating inflation and reducing purchasing power, which soared from 30.5% in Q3 of 2023 to 36.9% in Q1 of 2024. This economic turmoil has profoundly affected Nigerian youths with post-secondary education, many of whom find themselves unemployed, underemployed, or disengaged from socioeconomic activities. The National Bureau of Statistics (2023) has noted that the unemployment rate among graduates (persons with post-secondary education) has persistently exceeded the national average of 8% in the second quarter of 2023, making it the highest among all educational groups, apart from those with less than elementary education (NEET) which is 13%. Alarudeen (2019) highlighted that despite many empowerment initiatives and an increasing number of tertiary institutions to cultivate a skilled labour force, job postings for graduate roles remain abundant across various sectors in Nigeria. The rapid advancement of technology has transformed educational landscape globally. In the field of Business Education, digital skills have emerged as essential tool for both teachers and students, enabling more interactive, efficient and flexible teaching and learning processes.

Digital skills are regarded as technical abilities, knowledge and competencies required to apply digital devices,, communication applications and network to access, manage, evaluate, create and communicate information. These skills range from basic computer literacy to advanced digital content creation and online collaboration. Digital skills are no longer optional but essential in today's economy

that is being driven by technology especially in business education field where competence is germane to employability.

The shortage of qualified, tech-savvy workers in specific roles is frequently ascribed to universities and other higher education institutions not providing students with essential employability skills that correspond with labour market demands. This challenge arises from an insufficient emphasis on entrepreneurship and digital skills within the Nigerian educational system. According to Akpan, Akpan and Homevor (2023), 82% of job openings require digital skills. Integrating digital skills into the educational curriculum is not just essential, but it also holds the potential to transform graduates' job prospects. These skills are increasingly vital across all job sectors. This integration is particularly crucial in addressing the high unemployment rates among graduates, especially in Business Education. By incorporating these skills, business education graduates can acquire a comprehensive skill set that enhances their competitiveness in the job market (Nguyen & Sit, 2024). This research aims to address this issue by identifying the specific digital skills that can enhance the employability of Business Education graduates.

However, the dynamic nature of the labor market, driven by globalization and rapid technological advancements, necessitates a shift from traditional teaching methods to digitally enriched learning. This study examines how incorporating digital skills into business education can enhance the employability of graduates, making them more competitive and adaptable in a digital economy.

Employability skills are indispensable in the current era of

technological disruption and globalization. Employers complain about the insufficiency of skills among the workers. Mourshed, Farrell, and Barton (2012). Approximately 75 million young people in developing countries are unemployed, and in most countries, youth unemployment rates are 2 to 4 times higher than adults. Further, education providers must support them. Graduates requires both soft and hard skills to survive in this technological driven industries. More than 50% of stakeholders could not find the right competencies in job seekers in accordance with the vacancies they provided so that more than 80% of job seekers failed to get a job Franita and Analisa pangan (2015).

Statement of the Problem

Despite the increasing importance of digital literacy, many Business Education graduates lack the digital competencies required in the modern workplace. This mismatch between curriculum content and labor market expectations has contributed to graduate unemployment and underemployment. While the importance of digital skills in modern education is widely acknowledged, there is limited empirical evidence on how well these skills are being integrated into the teaching and learning of Business Education in Nigeria. Many teachers still rely heavily on traditional chalk and board teaching methods which are non-digital. This raises concerns about the preparedness of Business Education graduates for the modern, tech-driven workplace. There is, therefore, a pressing need to evaluate the extent to which digital skills are incorporated into the business education curriculum and how this inclusion (or lack thereof) affects employability.

Objectives of the Study

The main objectives of this study are to:

- i) Examine the extent of integration of digital skills into the Business Education curriculum.
- ii) Ascertain the relevant digital skills needed by employers in the business sector.
- iii) Determine the connectivity of digital skills acquisition with employability of business education graduates.
- iv) Identify challenges inhibiting the inclusion of digital skills' into business education curriculum.

Research Questions

- i) To what extent are digital skills included into the business education curriculum?
- ii) What are the digital competencies do employers require from business education graduates to cope in business world?
- iii) How does digital skills acquisition influence business education graduates' employability?
- iv) What are impediments to the integration of digital skills into business education curriculum?

Methodology

Survey research design was adopted for this research work. The population for this research comprised all final year business education students of universities in Oyo State. Lagos State University (affiliated with Federal College of Education (special), Oyo and Ekiti State University (in affiliation with Alayande University of Education, Oyo were purposively selected for this study. Multi stage sampling technique was used to select sample for the study, At the first stage, purposive sampling technique was used to select two universities offering business education as a course in Oyo

state. At the second stage, purposive sampling was used to choose final-year business education students for the study considering the fact that they are closer to employment. At the last stage of this selection, random sampling technique was used to choose five students and five lecturers from each of the four areas of specializations in business education in the two selected universities. The sample size therefore comprised of forty final year business education students and twenty business education lecturers. Quantitative data was used using two sets of structured questionnaires of ten items (five in each of the two research questions) titled, Digital skills and Business Education Graduates

Employability (DSBEGE). To be filled by students. The second set of questionnaire comprised of ten items (drawn from two research questions 3 and 4) meant for the lecturers. Test retest reliability coefficient was carried out on ten final year students of Lead City University at an interval of two weeks. Reliability coefficient of 0.82 was arrived at. Descriptive and inferential statistics were used to analyze the data.

Results

Examine the extent of integration of digital skills in the Business Education curriculum

Table 1: Descriptive analysis showing the extent to which basic computer literacy integrated to business education curriculum

Variable	Obs	Mean	Std. Dev.	Min	Max
y1	40	1.925	.8883145	1	4
y2	40	1.7	.9114654	1	4
y3	40	1.775	.9195177	1	4
y4	40	1.6	.7089176	1	4
y5	40	1.375	.627878	1	3

Standard point: very large extent 4; large extent 3; moderate extent 2; and low extent 1 mean of the point = 2.5

According to the table 1, mean and standard deviation of: the level at which basic computer literacy integrated to business education curriculum are 1.925 and .8883145 respectively; the extent to which internet and information technology are used in business education classes are 1.7 and .9114654; the extent to which typing and keyboarding skills incorporated in business education curriculum are 1.775 and .9195177; the extent to which

spreadsheet and data analysis handled in business education teachings are 1.6 and .7089176; and the extent to which digital marketing are taught in business education classes are 1.375 and .627878.

Therefore, from the above, the standard mean of 2.5 is greater than all the outcome means (Findings) and the standard deviations from the means are low which indicates consistence in the data where most observations are similar to the means outcomes. As a result, it implies that the level at which digital skills are integrated to the teaching of business education is low.

Table 2: Descriptive analysis showing the competencies required by from business education graduates to cope with business world

Variable	Obs	Mean	Std. Dev.	Min	Max
x1	40	3.325	.6155048	2	4
x2	40	3.425	.5006406	3	4
x3	40	3.4	.5905235	2	4
x4	40	3.475	.5057363	3	4
x5	40	3.275	.640012	2	4

Standard point: strongly agreed 4; agreed 3; disagreed 2; and strongly disagreed 1. Average mean of the point = 2,5.

According to the table 2, the mean and standard deviation of responses on the competencies required by the employers from business education graduates are:

Ability to employ Microsoft Excel package are 3.325 and .6155048;

Ability to use power point 3.425 and .5006406;

Ability to use E-Commerce and online business tools are 3.4 and .5905235;

Ability to engage in effective digital communication are 3.475 and .5057363; and

Ability to engage in online research and information literacy are 3.275 and .640012 respectively.

Therefore, from the above, the standard mean of 2.5 is less than all the outcome means (Findings) and the standard deviations from the means are low which indicates consistence in the data where most observations are similar to the means outcome. As a result, it implies that for business education graduates to be gainfully employed, they must be able to use and be proficient in Microsoft excel package, power point, E-commerce and other online business tools, digital communication and online research and information literacy.

Table 3: Descriptive analysis showing the influence of digital skills acquisition on business graduates' employability

Variable	Obs	Mean	Std. Dev.	Min	Max
z1	20	3.6	.5026247	3	4
z2	20	3.35	.4893605	3	4
z3	20	3.4	.680557	2	4
z4	20	3.25	.7863975	2	4
z5	20	3.4	.5026247	3	4

Table 4: summary of regression analysis showing the influence of acquisition of digital skills on business education graduates' employability

Source	SS	df	MS	Number of obs	=	20
Model	4.11481481	4	1.0287037	F(4, 15)	=	22.52
Residual	.685185185	15	.045679012	Prob > F	=	0.0000
Total	4.8	19	.252631579	R-squared	=	0.8573
				Adj R-squared	=	0.8192
				Root MSE	=	.21373

standard point: strongly agreed 4; agreed 3; disagreed 2; and strongly disagreed 1. Average mean of the point = 2,5.

Form the descriptive analysis table 3 showing the extent to which digital skills acquisition influence business education graduates' employability, it is revealed that the average standard mean 2.25 less than all the means outcome. Likewise, all the standard deviations are low meaning that there is consistency in the data where most observations are similar to the means outcome. It therefore, implies that acquisition and use of digital skills influence business education graduates. With the acquisition of digital skills, business education graduates are facilitated to be gainfully employed, handle difficult tasks and be able to compete favorably with their colleagues across the globe during recruitment.

From regression analysis summary table 4 which shows the influence of acquisition of digital skills on business education graduates' employability, Prob > F = 0.0000; R-

squared = 0.8573 and Adj R-squared = 0.8192 at 0.05 level of significant. It implies that digital skills acquisition has significant influence on business education employability. $R^2 = 0.8573$ ie coefficient of determination revealed that 85.73% of the factors that determined business education graduates' employability constitute digital acquisition while remaining 14.27% is left for other factors that determined business education graduates' employability. Not only that, the coefficient of correlation $r = \text{square root of } R\text{-squared } (\sqrt{0.8573}) = 0.9259$ which is greater than 0,5 at 0.05 level of significant. It implies that that there is significant relationship between digital skills acquisition and business education graduates' employability. This indicated that digital skills acquisition aids business education graduates to be gainfully employed.

Table 5: Descriptive analysis showing the impediments to the integration of digital skills courses to the business education curriculum

Variable	Obs	Mean	Std. Dev.	Min	Max
a1	20	3.3	.6569467	2	4
a2	20	3.3	.8013147	2	4
a3	20	3.55	.6048053	2	4
a4	20	3.05	.6863327	2	4
a5	20	3.05	.7591547	2	4

Standard point: strongly agreed 4; agreed 3; disagreed 2; and strongly disagreed 1. Average mean of the point = 2,5.

Form the descriptive analysis table 5 showing the impediments to the integration of digital skills courses to the business education curriculum, it is revealed that the average standard mean which is 2.25 less than all the means outcome. Likewise, all the standard deviations are low meaning that there is consistency in the data where most observations are similar to the means outcome. It therefore, implies that limited

funding, inadequate infrastructures, lack of technical know-how, poor policy implementation and resistance to changes constituted impediment to the integration of digital skills courses to the business education curriculum.

Conclusion

Digital skills are no longer luxury for business graduates but indeed necessity. Embedding them in the curriculum is not only strategic but indispensable for business education graduates' employment. Integrating

digital skills into business education curriculum will bridge the gap between training and industry demand in an era driven by technology.

Recommendations

- Business Education curriculum should be totally overhauled to reflect digital trends.
- Business Education lecturers should be trained the use of digital tools and platforms.
- Government at all levels should provide adequate ICT infrastructure and learning resources.
- Educational institutions should collaborate with industry to ensure relevance of digital skills training and preparation of business education graduates for employment

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BLENDED INSTRUCTIONAL MEDIA FOR EFFECTIVE ACADEMIC ACHIEVEMENT AMONG UNIVERSITY STUDENTS. A CASE STUDY OF EDUCATIONAL TECHNOLOGY STUDENTS OF FEDERAL UNIVERSITY OYE- EKITI

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Abstract

More flexibility in students' learning experiences both domestically and internationally has been demanded in recent years due to the tightening shift of socioeconomic limitations on higher education sectors. In an effort to give our students more freedom and improved learning support, we recently launched a Blended Learning Initiative. Thus, the focus of this study was on blended learning materials for university students' successful academic success. A case study of Federal University of Oye-Ekiti students studying educational technology. The study's specific objectives were to: identify the different information sources that students have access to; determine the purpose of information for academic effectiveness; assess how frequently respondents use different information sources; and determine the barriers that restrict respondents' access to sources of information about agricultural science education. The population for the study was made up of all 134 students in the Educational Technology unit of the Department of Science Education in Federal University Oye-Ekiti. Data collected were analysed using frequency count, simple percentages and weighted mean score. Findings from the study showed that respondents mostly use lecture notes ($\bar{x}=4.53$), the Internet/online ($\bar{x}=4.42$) and their lecturers ($\bar{x}=4.36$) as their sources of information. The study concluded that information variation and adoption go a long way in uplifting academic standards in the tertiary Federal University Oye-Ekiti, and those students are more satisfied with electronic sources of information. The study identified barriers as inadequate current/relevant reading materials, poor guidance/assistance from librarians constitute barriers limiting students' access to Agricultural science-based information. The study recommended that: continuous training on the use of the library and information be embarked by the University librarians as part of the students' orientation programme; that the learner make use of user-friendly and accessible technology which enhances its simplicity in usage; Individuals and other corporate organisations are enjoined to provide information- resource centres, as functional ICT/internet facilities to enhance students' academic development in Educational Technology at Federal University, Oye Ekiti and hence the Nigeria Tertiary Institutions.

Key Words: Blended Learning Media, Effective Academic Achievement, University Students

Introduction

Blended learning, also known as blended instructional media, combines

traditional in-person education with online or digital elements, including interactive videos, learning management

systems (LMS) like Moodle, multimedia resources, and asynchronous activities. This strategy seeks to improve customisation, flexibility, and participation in higher education, especially for college students. Its effectiveness in fostering academic achievement—defined as enhanced information mastery, test scores, and skill application, has been the subject of more and more scholarly investigation. According to Turner (1988), in Thammanna (2017), information is a key resource that can bring about change and improvement in society. Okeke, Oghenetega and Umeji (2014) believe that information is a pervasive and essential part of our society and lives. It is an important and key resource for every organisation, and it is an essential input for all types of organisations, including educational institutions.

Humans are fundamentally information processors and consumers, according to Anandaraja (2012). People have always relied on knowledge to assist them in deciding what to do. Thammanna (2017) defined information as the message that a systematised collection of ideas conveys or is meant to communicate, using Bhattacharya (1997). According to Regha (2016), information is now seen as a basic resource for personal growth. He asserts that the basis of a competitive advantage is information. According to Varshney (2011), information is defined as that which is conveyed through the act or process of communication; it can be a message, a signal, or a stimulus; it assumes a response in the receiving organism and thus possesses response potential; its motivation is intrinsically utilitarian; it is instrumental; and it is typically communicated in an organised or formalised pattern, primarily because

such formalisation increases potential utility.

An individual must have a need that motivates them to seek information. An individual's natural drive to find information is known as an information need (Okoh & Ijiekhuamhen, 2017). Undergraduates' demand for knowledge is driven by their numerous information needs (Adebayo et al., 2015). These demands arise, according to Thammanna (2017), when an individual comes across a difficult situation that he cannot manage with his present level of expertise. According to Thammanna (2017), Talja (1992) classified information needs into four categories: Social or Pragmatic Information Needs (information needed to deal with day-to-day life), Recreational Information Needs (information satisfying an individual's recreational and cultural interests), Professional Information Needs (information required to operate competently within a business or professional environment), and Educational Information Needs (information required to satisfy academic requirements at an institution). According to Adebayo et al. (2015), undergraduates employ a variety of sources when looking for information to satisfy their demands. According to Akinola et al. (2009), information sources are the resources or methods used to locate information to fulfil a specific requirement. This is in line with Varshney's (2011) definition of information sources, which is everything that could enlighten or educate someone. Varshney (2011) states that observations, speeches, documents, images, and organisational charts are a few examples of information sources.

With a multitude of data and information sources encompassing a wide variety of human endeavours, today's world is information-rich (Hong &

Jo, 2017). New information is produced and made public every second, and anyone may easily access a variety of information in whatever format they like (Nwaobasi, Ewa, & Ossai-Onah, 2013). You can find this information online, in print, at the library, and in both electronic and non-electronic formats. Aiyebelehin (2012) claims that because there is so much information available, students now have more choices for preferences. As a result, while selecting information and information sources to meet one's needs, several considerations must be made. Language, comprehensiveness, currency, accuracy, credibility, coverage, accessibility, simplicity of comprehension, portability, efficiency, and ease of use were these variables, according to Hong and Jo (2017). One's information needs dictate the extent to which information sources and resources are used; most significantly, the use of information to satisfy one's information needs depends on one's awareness of these sources and resources. Information needs can be influenced by several social factors, such as age, educational background, personal characteristics, family dynamics, motivation, professional orientation, the local economic system, a person's place in society, teaching and research experience, and the range of information sources available (Chen & Lu, 2019).

Blended learning project

The institution started utilising blended learning in 2022 as a strategic goal to link course delivery with its main campus at Federal institution, Oye-Ekiti. The primary objectives were to improve the educational experience for students and provide them with more flexible and interactive delivery options. To test the delivery of blended learning, two courses were first selected. Ongoing tasks, course

materials, and student feedback were the components that were found to be advantageous to be supplied online. Online practice tests were developed in place of the customary paper assignments. Following each topic's presentation, the quizzes were released. The questions were selected from a pool of online multiple-choice questions (MCQ) that were created and randomised using chalk-and-talk or Blackboard. Students could attempt each online work more than once, and they had a week to finish it. The idea behind this strategy was to get students to practise more and become better acquainted with the applied principles. Because multiple-choice questions (MCQs) were utilised in the traditional form of delivery, marking for the assignments was automated, allowing students to get instant feedback on their comprehension of the subjects. Additionally, computerised marking spared academics the constant burden.

Statement of the Problem

The post-COVID era has seen a paradigm shift away from traditional teaching methods and towards digital education. Information and communication technology is used in both teaching and learning in digital education. Online teaching and learning tools like Zoom, Microsoft Teams, WhatsApp, and Google Classroom are used to do this. Despite the benefits of using digital learning platforms, the majority of tertiary education students still struggle to use them, and some teachers and students lack digital learning gadgets giving rise to challenges like technological difficulties in the digital learning environment, skepticism about the digital teaching and learning approach's capacity to achieve learning goals, and skepticism about the proficiency of

educators and learners in utilising the digital learning platforms.

Research objective and methodology

This study aims to evaluate both academics' and learners' perceptions of blended learning in the university. This investigation will provide a better understanding of factors and issues to be considered when adopting blended learning. The academics' perceptions survey on blended learning was conducted at the beginning of the implementation of blended learning. The survey was rolled out to a focus group. The survey aimed to investigate academics' understanding and to identify the types of support they require in the implementation of blended learning. The survey was divided into two sections: qualitative and quantitative. The quantitative section consisted of four Likert items on a scale rated from 1 to 4 ("Strongly Disagree" to "Strongly Agree"). On the other hand, students' perceptions were investigated to investigate their learning experiences in blended learning activities. The survey was conducted at the end of the semester. The students' satisfactions were determined from different perspectives, such as motivation, technical support, flexibility and preparation time. Similar to the academics' perceptions survey, the students' perceptions survey was also divided into two sections: qualitative and quantitative, measured with the same Likert scale rated from 1 to 4 ("Strongly Disagree" to "Strongly Agree").

Results and Discussions

Academics' perceptions of blended learning

Although advances in technology provide opportunities for academics to design and deliver their courses in ways

that support and enhance a teacher's role, the integration of technology in blended learning has also changed the role expectations of teachers and students. According to Norberg, Dziuban & Moskal 2011, teachers embraced a new role as facilitators, and students had access to seemingly limitless sources of informational assets through the internet. Conversely, leaders of educational institutions are challenged to meet the demands to facilitate meaningful learning outcomes. Hence, Garrison & Kanuka (2004) emphasised that a clear institutional direction is vital to successfully adopt a blended learning initiative. According to the feedback from the academics' perceptions survey, most academics responded that they were new to blended learning and had never implemented a blended learning initiative in their units. The implementation of blended learning is certainly a new challenge for most educators as they have to change their delivery method to accommodate the use of technology. Hence, it was not surprising that some academics had expressed drawbacks about the implementation of blended learning.

Apart from academics' understanding of blended learning, other factors which determine the successful Implementation of blended learning were also identified through the survey. Most academics perceived themselves as beginners in the use of technology tools in teaching and learning activities. Some lacked technology skills and thought that it would be a challenge to apply the approach in their unit delivery. Thus, there is a need for academic support in the use of technology to implement blended learning. The types of support that academics expect in the implementation of blended learning are shown in Table 1. Specifically, they

require a dedicated person to assist them in gaining experience with technology. Apart from this, they would also like to

have professional development training and workshops in designing blended activities and the use of technology.

Table 1. Descriptive statistics for the many forms of assistance used in blended learning implementation.

S/N	Items	Mean	Standard Deviation
1.	Educational support group	4.00	0.93
2.	Educational Technology Tutors/Academics	4.13	0.64
3.	Professional development and Training/Workshop in Designing blended Module and technological use	4.13	0.99
4.	Demonstration/Sharing/Lesson Session	4.13	0.99

Learners' perceptions of blended learning

Learners showed positive responses to the blended learning initiative applied in the two trial units identified in 2014. The components identified as beneficial to be delivered online were ongoing assignments and tutorials. Due to these blended learning activities, learners were able to pace their own learning as they had flexible access to the learning resources they required. Besides that, they were also able to review and test their understanding of a topic whenever they needed. As automated marking on Blackboard was used, learners were also able to get feedback and grades on their assignments immediately. In 2015, the blended learning approach was

introduced to the whole faculty, and three additional units were selected to participate in the delivery method. The participants were undergraduate degree students who enrolled in the respective units in the faculty. The type of blended learning activities implemented in the units includes online quizzes, videos, online forums or discussions, online peer feedback and use of technological tools such as iPad and Clickers. The descriptive statistics for items (mean and standard deviation) with regard to the blended learning activities in the three units are shown in Table 2. It is essential to obtain learners' feedback on their learning experience from the aspect of resources, content, and design of the blended learning activities to identify areas for future improvements.

Table 2. Descriptive statistics for blended learning activities

S/N	Items	Mean	Standard Deviation
1.	Accessibility and flexibility	4.00	0.84
2.	Self-directed learning	3.88	0.87
3.	Motivation	3.42	0.91
4.	Content	3.75	0.90
5.	Resources (technological tools and access to study	4.30	0.72
6.	Technical ability	3.83	0.85
7.	Preparation time	3.60	0.89
8.	Preference for face-to-face instruction	3.07	0.95
9.	Overall satisfaction with Blended Learning Activities	3.93	0.76

With an overall satisfaction mean score of 3.93, the survey indicates that most students responded favourably to the blended learning initiatives implemented in the units, as indicated in Table 2 above. Through blended learning activities, students could readily access educational materials and get online feedback. Given that students dominated the classes, this is extremely beneficial. In class, pupils hardly ever offer to ask or respond to a teacher's question.

University's blended learning initiatives

It is shown in the study that to facilitate blended learning in the university, academics and learners ought to have a shared vision, understanding and expectation in the adoption of the approach. Specifically, there is a need to have a clear definition of blended learning. There are many different models of blended learning found (Regha, 2015), but the model adopted by the university was developed by Abidin et al (2020).

In their model, three distinct design approaches were identified:

- (1) Low-impact blend: adding extra activities to an existing course
- (2) Medium-impact blend: replacing activities in an existing course
- (3) High-impact blend: building the blended course from scratch.

It is important to create and support plans for institutions to start this new blended learning project after the blended learning vision has been determined and acknowledged. To oversee this effort and strategically handle any problems or difficulties that might arise during blended learning, an academic practice team was formed. A minimal level of Blackboard or Chalk-

and-Talk usage is required in order to support blended learning. Effective content management is acknowledged to need the use of the LMS. The setting should be appealing and easy to use so that students may quickly access the necessary information. Additionally, the grading centre should be used to give the class timely feedback, and information regarding examinations must be accessible. Blackboard's discussion board could potentially be utilised to facilitate communication between students and instructor-learners. Additionally, since it has been noted that e-learning frequently suffers from having a lot of material available for students to digest on their own, the activities developed should complement rather than overwhelm the students (Waddoups. et al, 2002)

Conclusions/Recommendations

The current study has a number of educational implications. First, it demonstrates that blended learning can meet students' educational needs. According to the overall learners' satisfaction survey, blended learning increased student learning flexibility while maintaining social ties in the traditional classroom by allowing students to study through a variety of delivery methods by combining in-person and online components. Second, the study shows that scholars faced difficulties in meeting the increasing demands of blended learning. There is no denying that an educator plays a crucial role in deciding how well blended learning is implemented. It takes time, effort, technological expertise, and a clear pedagogical objective to design a mixed-delivery course that incorporates technology. Consequently, there is a need to provide a professional development program and support for academics and learners as well. The

study recommended that schools should use more online learning where students/learners spend maximum time together, and hence, the mode of learning is learner-centred.

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